December 2020 Forecast

Kate M. Watkins
Chief Economist
Colorado Legislative Council Staff

Colorado School Finance Project
January 15, 2021
Economic Outlook
Presentation Overview

- Economic Outlook
- General Fund Revenue Forecast & Budget Outlook
- K-12 Enrollment Forecast
- Assessed Values Forecast
We’ve learned a lot since May…

Real U.S. Gross Domestic Product

_Dollars in Trillions_

Current Contraction

May forecast update

Great Recession

2008: -0.1%
2009: -2.5%

2020 Projections
May: -5.7%

Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.
Economic activity rebounded faster than expected in May, when the current year budget was set.

Real U.S. Gross Domestic Product

Dollars in Trillions

Current Contraction

December forecast

May forecast update

Great Recession

2008: -0.1%
2009: -2.5%

2020 Projections

May: -5.7%
December: -3.4%

Source: U.S. Bureau of Economic Analysis and Legislative Council Staff May and December 2020 projections. Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.
The “K-shaped” nature of the pandemic explains some of the higher than expected state revenue growth.

Real U.S. Gross Domestic Product

*Dollars in Trillions*

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>-0.1%</td>
</tr>
<tr>
<td>2009</td>
<td>-2.5%</td>
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</tbody>
</table>

Many industries have rebounded to pre-recessionary levels of activity.

Those most impacted by the pandemic continue to suffer, including low-wage service workers; travel, tourism, leisure and hospitality, and oil and gas industries.

Source: U.S. Bureau of Economic Analysis and Legislative Council Staff May and December 2020 projections. Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.
Retail sales were boosted above pre-pandemic levels with shifts to in-home consumption

Monthly U.S. Retail Sales

*Dollars in Billions*

Source: U.S. Census Bureau, Advanced Retail Trade Report. Data are through November.
Similarly, state sales taxes have rebounded to pre-pandemic levels

Colorado Monthly Sales Tax Collections
*Dollars in Millions*

Source: Colorado Office of the State Controller with Legislative Council Staff seasonal adjustments
While high-wage employment is at pre-recessionary levels, low-wage workers remain severely impacted.

Wage withholding continued to grow throughout the pandemic, consistent with a K-shaped recovery.

Colorado Monthly Wage Withholding Collections

Dollars in Millions

Source: Colorado Office of the State Controller with Legislative Council Staff seasonal adjustments
Federal stimulus supported economic activity by more than offsetting wage losses and boosting consumption.

U.S. Personal Income
Indexed to Pre-Recession Levels

Source: U.S. Bureau of Economic Analysis. Indexed to January 2008 and 2020, respectively. Seasonally adjusted annual rates.
Inflationary pressure remains subdued

U.S. City Average CPI-U Inflation

Year-over-Year Change in Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Denver-Aurora-Lakewood CPI-U Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>2.0%</td>
</tr>
<tr>
<td>2021</td>
<td>2.2%</td>
</tr>
<tr>
<td>2022</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Selected Components, December 2020

- Headline: 1.3%
- Core: 1.6%
- Energy: -7.3%
- Food: 3.9%
- Housing: 2.0%
- Apparel: -4.0%
- Transportation: -2.6%
- Medical Care: 1.8%
- Recreation: 1.0%
- Education: 1.4%
- Other: 2.4%


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.
Reduced travel activity continues to keep downward pressure on oil prices and new exploration in Colorado and nationally.

West Texas Intermediate
Crude Oil Prices
*Dollars per Barrel*

Active Rig Counts in Colorado

Source: Energy Information Administration and Baker Hughes.
Outlook Summary

• The economic recovery continues to outpace expectations, yet softening at the end of the year with the rise in COVID-19 cases poses near-term downside risks
• While many households and businesses have recovered, others continue to be hit hard in this K-shaped recovery
• Vaccine distribution heightened optimism and is expected to boost economic activity starting in the second half of 2021
• Consistent with past recessions, labor markets will lag recovery in other parts of the economy
• Inflationary pressures will remain subdued as low energy prices, low global demand offset global supply constraints
Risks to the Forecast

**Downside**

- Weakening with the resurgence of COVID-19
- Pullback in consumption and investment as stimulus ends
- Long-term damage from the pandemic ("scarring")

**Upside**

- COVID-19 vaccines
- Additional federal stimulus
- Structural shifts resulting in innovations
General Fund Budget Outlook
General Fund collections were increased on higher than expected collections to date, vaccine distribution

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

Change Relative to September
FY 2020-21: +$775.7 million
FY 2021-22: +$590.9 million
FY 2022-23: +$498.8 million

Source: Colorado Office of the State Controller and Legislative Council Staff December 2020 forecast.
Revenue expectations have increased considerably as data have become available and suggested a much stronger economic landscape than imagined in May.

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

Source: Colorado Office of the State Controller and Legislative Council Staff December and May 2020 forecasts.
The 2020 regular income tax filing season will show the impact of the COVID recession. However, these collections won’t start to come in until at least February 2020.

Share of General Fund Revenue*

- **Individual**: 60.7%
- **Sales & Use**: 27.1%
- **Corporate**: 6.8%
- **All Other**: 5.5%

Risks to the Income Tax Forecast
- Economic uncertainty
- Delayed filing deadlines
- Unemployment insurance benefits
- State and federal policy changes

Source: Colorado Office of the State Controller and Legislative Council Staff calculations.
*Based on FY 2018-19 collections. Income taxes net of the State Education Fund diversion.
Projections for FY 2020-21 are still based on limited data

How Much Do We Know About FY 2020-21?
Available General Fund Collections Data as a Share of Total Fiscal Year Collections*

- Jul: 7%
- Aug: 23%
- Sep: 31%
- Oct: 31%
- Nov: 38% December Forecast
- Dec: 46%
- Jan: 57%
- Feb: 62% March Forecast
- Mar: 69%
- Apr: 83%
- May: 90% June Forecast
- Jun: 99%
- Period 13: 100%

Source: Colorado Office of the State Controller and Legislative Council Staff calculations.
*Six-year average of actual collections data, FY 2013-14 to FY 2018-19.
TABOR Outlook

Revenue Subject to TABOR

Dollars in Billions

Source: Colorado Office of the State Controller and Legislative Council Staff December 2020 forecast.
Changes across forecasts:

Revenue: 2019 incomes tax collections came in much stronger than expected

Appropriations: Reduced with budget balancing actions in May

Net transfers from the General Fund also reduced with budget balancing legislation

Source: Legislative Council Staff forecasts based on current law. See Table 2 in the December 2020 forecast for more information.
### Current Year | FY 2020-21 General Fund Revenue

<table>
<thead>
<tr>
<th></th>
<th>June Forecast</th>
<th>September Forecast</th>
<th>December Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess Reserve</td>
<td>$272.7 million</td>
<td>$1.67 billion</td>
<td>$2.56 billion</td>
</tr>
<tr>
<td>Reserve</td>
<td>5.4%</td>
<td>18.6%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Required Reserve</td>
<td>Required 2.86%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Changes across forecasts:**

- **Beginning balance:** +$1.8 billion carried over from FY 2019-20

- Revenue expectations increased considerably on higher 2019 collections and increased economic expectations

- Net transfers reduced with budget balancing legislation

- Net transfers and appropriations subsequently increased with special session legislation, November election outcomes

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Source: Legislative Council Staff forecasts based on current law. See Table 2 in the December 2020 forecast for more information.
Next Year | FY 2021-22 Budget Outlook

Additional revenue available to spend or save above FY 2020-21 spending levels. Amounts hold FY 2020-21 appropriations constant and incorporate the revenue forecast, current law transfers, rebates and expenditures, and the 2.86% reserve requirement.

Amounts do not account for caseload growth, inflationary, or other budgetary pressures

Other considerations
• Any changes made to FY 2020-21 budget will impact this amount
• Elevated uncertainty
• CARES Act CRF moneys no longer available

Source: Legislative Council Staff forecasts.
General Fund Budget (Spending or Saving)

Dollars in Billions

Source: Legislative Council Staff December 2020 forecast and current law.

- TABOR Refund
- Excess Reserve
- Required Reserve
- Transfers
- Rebates & Expenditures
- Appropriations
  - FY 2021-22 amounts hold
  - FY 2020-21 constant
  - $3.75 Billion
    - Additional Revenue to
    - Spend or Save

FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22
Risks to the Forecast

Unknowns

• Extent of economic damage and its lasting effects ("scarring")
• Impacts of coming off of the federal stimulus; Additional stimulus?
• Influence of the recession and policy changes on 2020 income taxes

Downside risk: Greater than expected weakening with the rise in COVID-19 cases, long-term damage ("scarring") from the pandemic

Upside risk: Additional stimulus, resiliency and innovation
K-12 Enrollment Forecast
## K-12 Public School Enrollment

*Full-Time Equivalent (FTE) Students*

<table>
<thead>
<tr>
<th>Region</th>
<th>Actual 2020-21</th>
<th>Percent Change</th>
<th>Estimated 2021-22</th>
<th>Percent Change</th>
<th>Estimated 2022-23</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Denver</td>
<td>479,633</td>
<td>-2.9%</td>
<td>489,740</td>
<td>2.1%</td>
<td>489,485</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Northern</td>
<td>89,704</td>
<td>-2.2%</td>
<td>92,639</td>
<td>3.3%</td>
<td>93,322</td>
<td>0.7%</td>
</tr>
<tr>
<td>Colorado Springs</td>
<td>122,299</td>
<td>-1.3%</td>
<td>124,660</td>
<td>1.9%</td>
<td>123,643</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Pueblo</td>
<td>32,172</td>
<td>-3.5%</td>
<td>33,299</td>
<td>3.5%</td>
<td>32,863</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Eastern Plains</td>
<td>26,430</td>
<td>-1.7%</td>
<td>26,946</td>
<td>2.0%</td>
<td>26,698</td>
<td>-0.9%</td>
</tr>
<tr>
<td>San Luis Valley</td>
<td>7,121</td>
<td>-4.0%</td>
<td>7,371</td>
<td>3.5%</td>
<td>7,271</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Mountain</td>
<td>24,305</td>
<td>-4.6%</td>
<td>25,124</td>
<td>3.4%</td>
<td>24,886</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Southwest Mountain</td>
<td>14,583</td>
<td>7.6%</td>
<td>14,750</td>
<td>1.2%</td>
<td>14,435</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Western</td>
<td>49,671</td>
<td>-4.3%</td>
<td>51,332</td>
<td>3.3%</td>
<td>51,391</td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Statewide Total</strong></td>
<td><strong>845,916</strong></td>
<td><strong>-2.6%</strong></td>
<td><strong>865,860</strong></td>
<td><strong>2.4%</strong></td>
<td><strong>863,994</strong></td>
<td><strong>-0.2%</strong></td>
</tr>
</tbody>
</table>

Source: Colorado Department of Education and Legislative Council Staff December 2020 forecast.
Enrollment Forecast Assumptions

• Students not enrolled in public school this year were either:
  o Homeschooled
  o In learning-pods
  o In private school
  o Held back (mostly for kindergarten)

• Most school districts will return to in-person learning for the 2021-22 school year

• Most students will return to their prior school districts next year

• Longer-term pressures on enrollment remain (lower birth rates, housing affordability issues, slowing net in-migration)
Risks to the K-12 Enrollment Forecast

• Uncertainty around vaccine roll out timelines

• Stickiness of current alternative education choices

• “Redshirt” kindergarteners: enroll in K or move to 1st?

• Relocation of families for employment, health concerns, or housing affordability
Assessed Valuation Forecast
Assessed Values in Colorado

Dollars in Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Assessed Value</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$91.6</td>
<td>3.3%</td>
</tr>
<tr>
<td>2015</td>
<td>$105.3</td>
<td>15.0%</td>
</tr>
<tr>
<td>2016</td>
<td>$101.4</td>
<td>-3.7%</td>
</tr>
<tr>
<td>2017</td>
<td>$111.6</td>
<td>10.1%</td>
</tr>
<tr>
<td>2018</td>
<td>$115.9</td>
<td>3.8%</td>
</tr>
<tr>
<td>2019</td>
<td>$135.6</td>
<td>17.0%</td>
</tr>
<tr>
<td>2020</td>
<td>$136.2</td>
<td>0.5%</td>
</tr>
<tr>
<td>2021f</td>
<td>$136.9</td>
<td>0.5%</td>
</tr>
<tr>
<td>2022f</td>
<td>$139.6</td>
<td>2.0%</td>
</tr>
<tr>
<td>2023f</td>
<td>$152.0</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Source: Colorado Division of Property Taxation and Legislative Council Staff December 2020 forecast (f).
Change in Total Assessed Values by School District
2020 to 2021

Source: Colorado Legislative Council Staff December 2020 Forecast.
Questions?

Kate Watkins
Chief Economist • Legislative Council Staff
kate.watkins@state.co.us • 303-866-3446
www.leg.colorado.gov/lcs