



December 2020 | Legislative Council Staff

Economic & Revenue Forecast

Presentation to the Joint Budget Committee

December 18, 2020

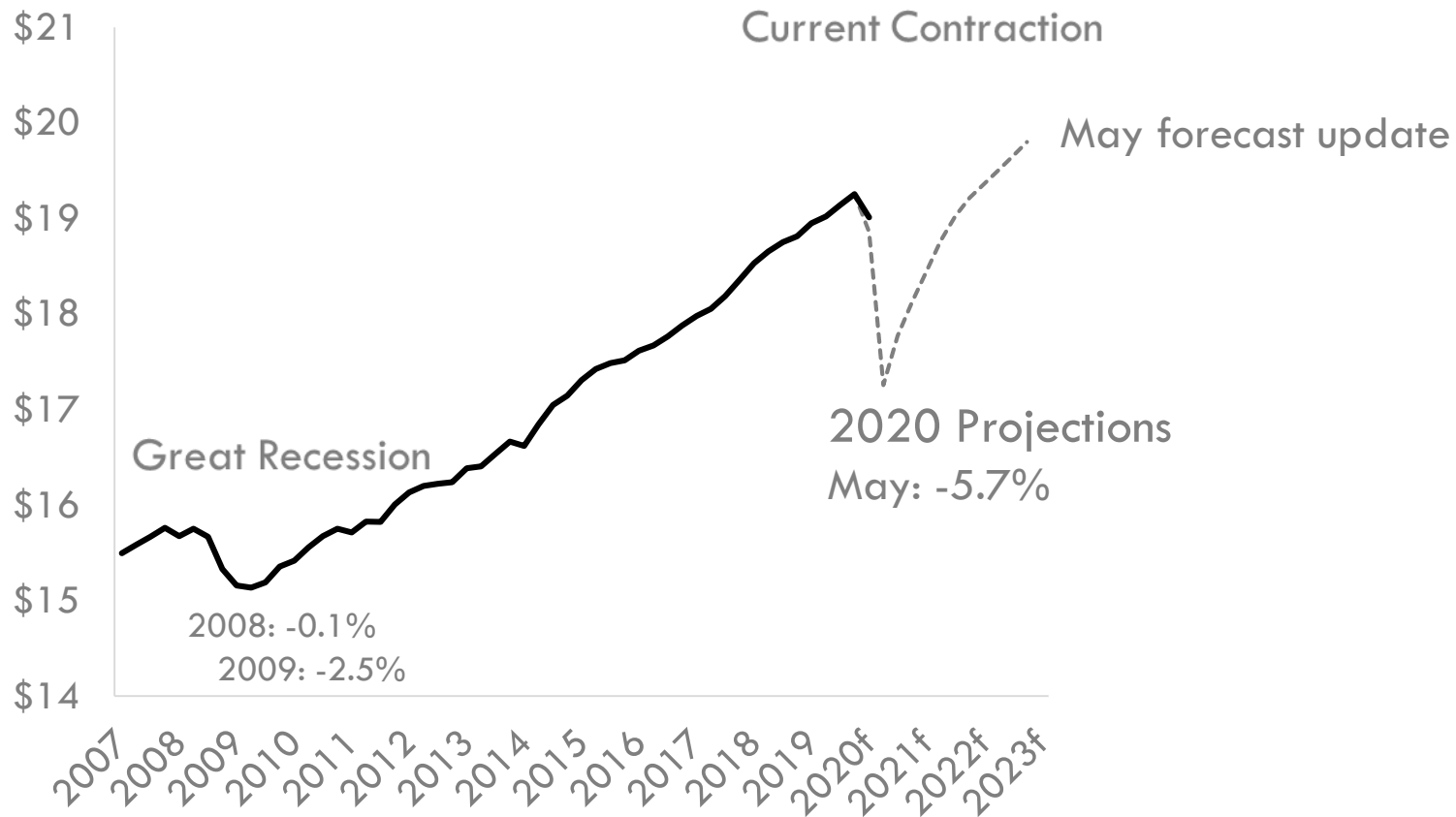
Economic Outlook



We've learned a lot since May...

Real U.S. Gross Domestic Product

Dollars in Trillions



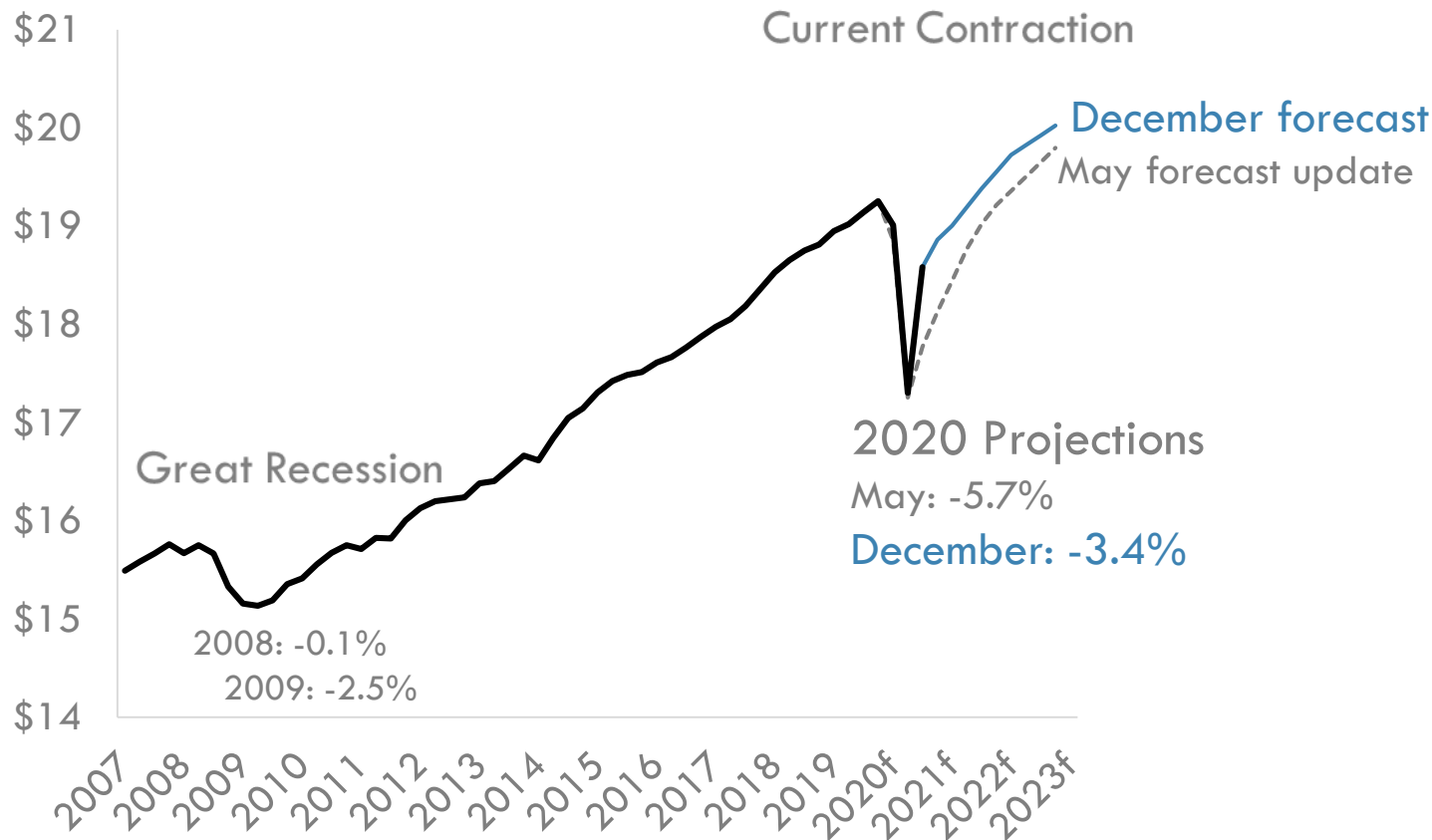
Source: U.S. Bureau of Economic Analysis and Legislative Council Staff May 2020 projections.

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

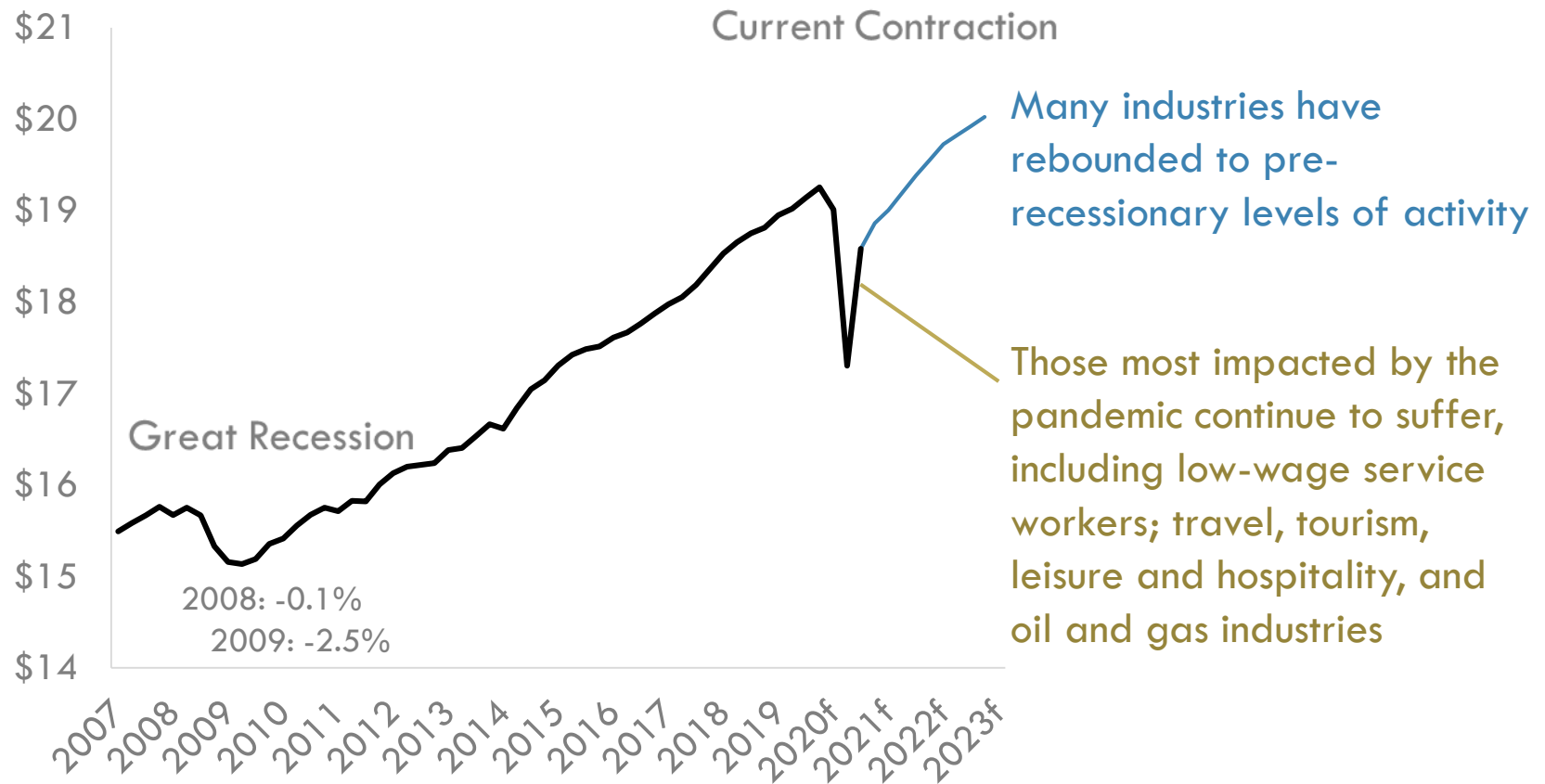


Source: U.S. Bureau of Economic Analysis and Legislative Council Staff May and December 2020 projections. Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.

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

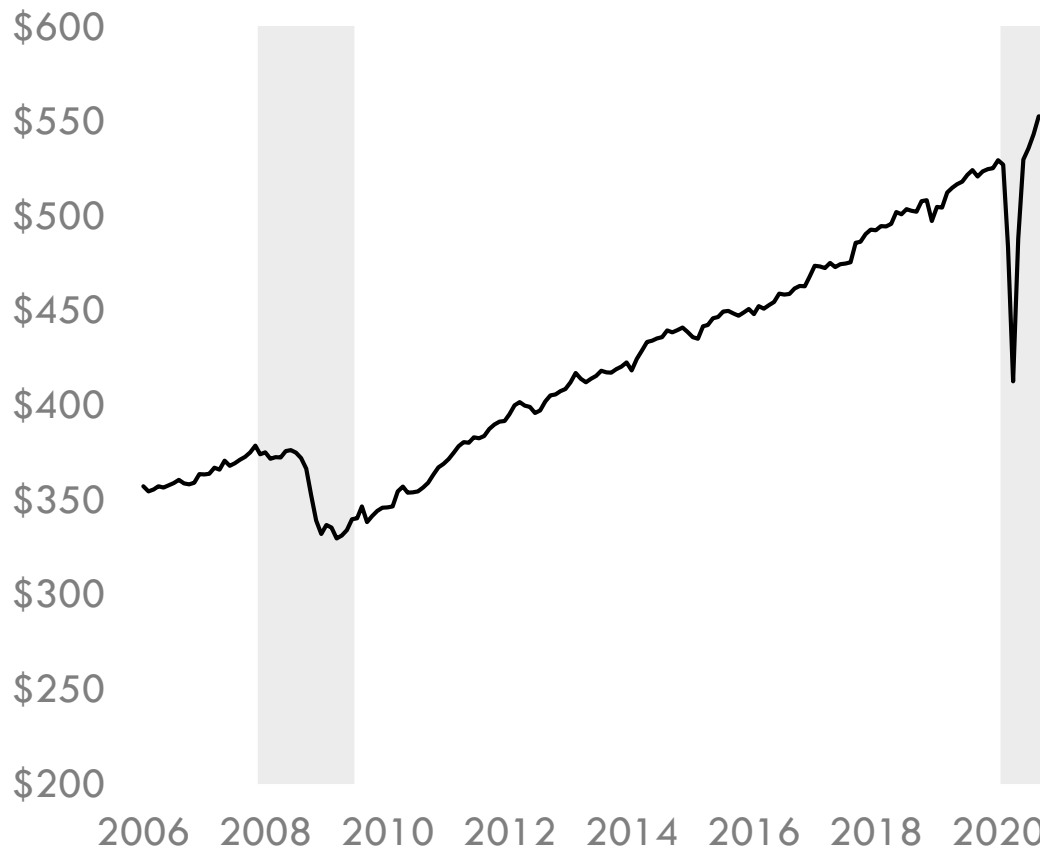


Source: U.S. Bureau of Economic Analysis and Legislative Council Staff May and December 2020 projections. Real GDP is inflation-adjusted to chained 2012 levels and shown at seasonally adjusted annualized rates.

Retail sales were boosted above pre-pandemic levels with shifts to in-home consumption

Monthly U.S. Retail Sales

Dollars in Billions

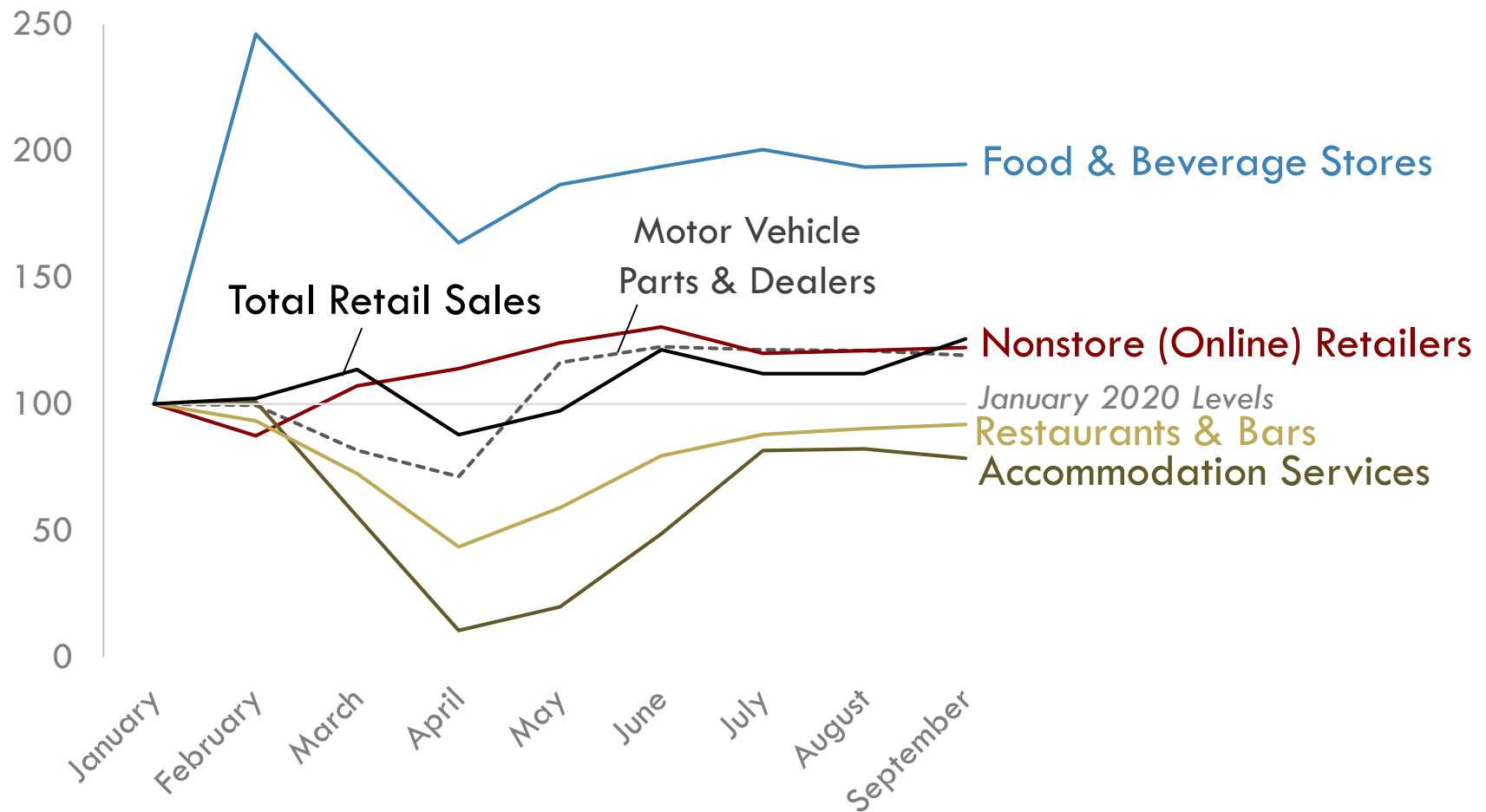


Source: U.S. Census Bureau, Advanced Retail Trade Report. Data are through November.

Retail sales were boosted above pre-pandemic levels with shifts to in-home consumption

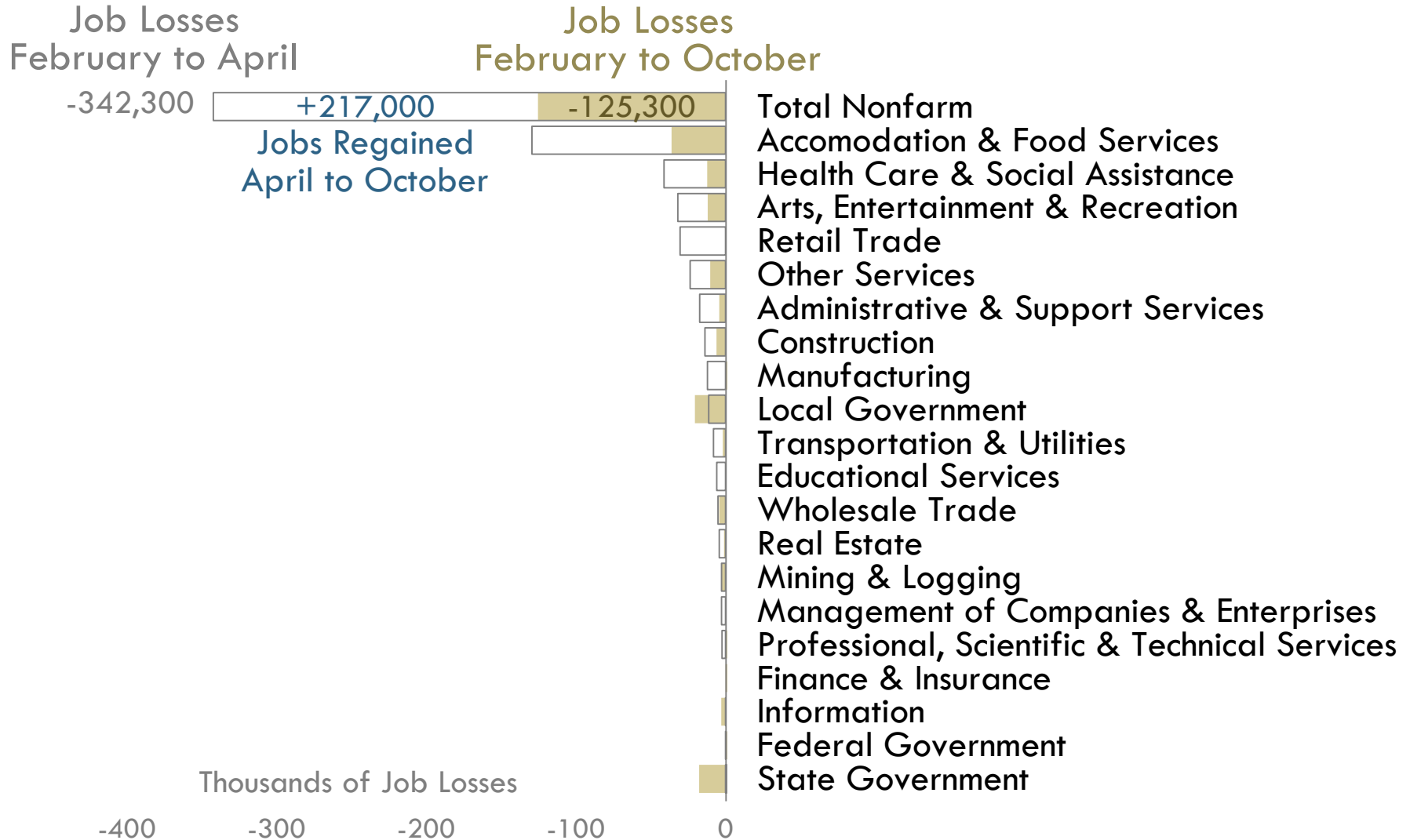
Colorado Retail Sales Relative to January 2020 Levels

Index January 2020 = 100



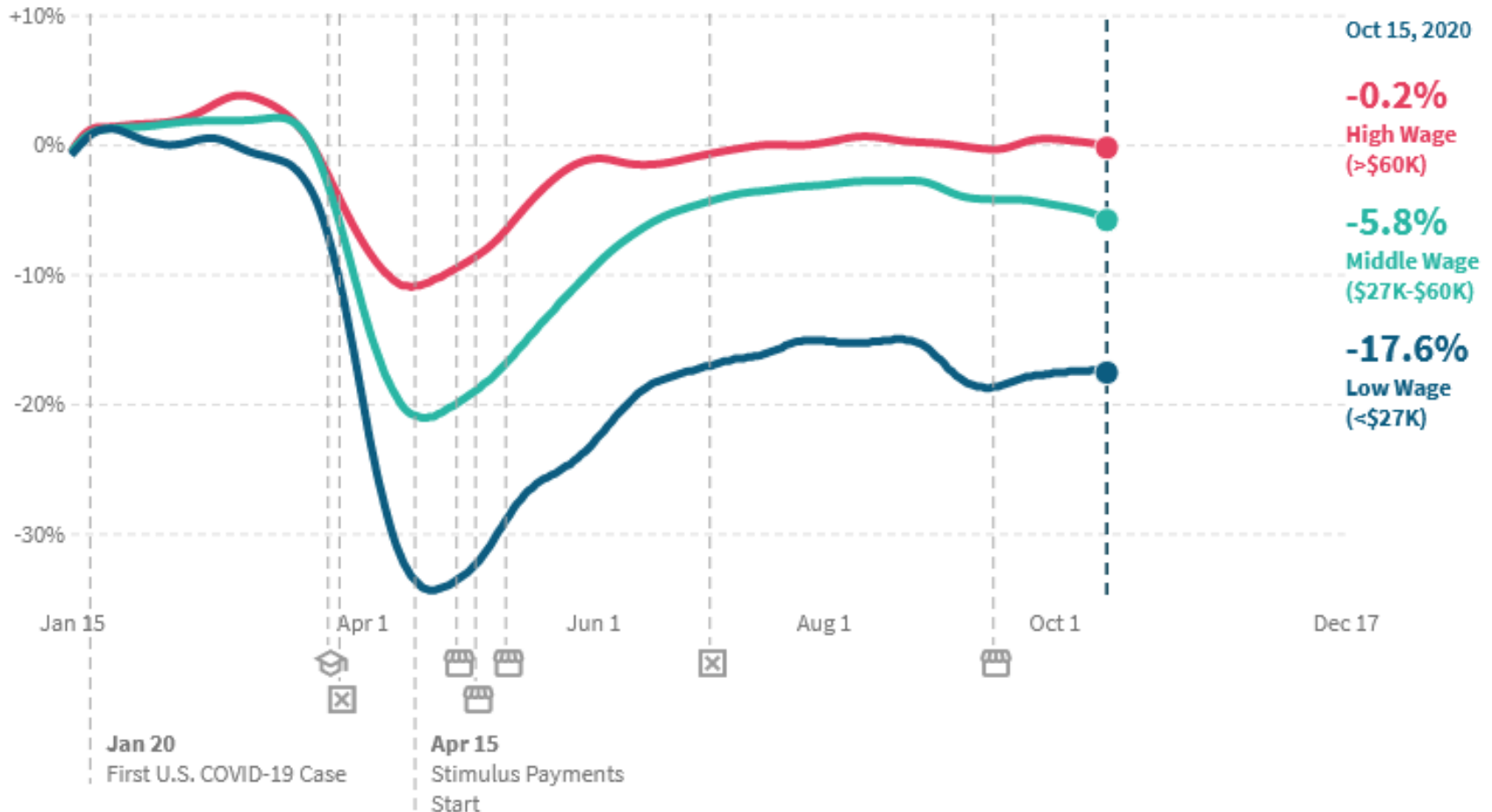
Source: Colorado Department of Revenue.

As of October, Colorado had regained 63 percent of jobs lost since the pandemic began



While high-wage employment is at pre-recessionary levels, low-wage workers remain severely impacted

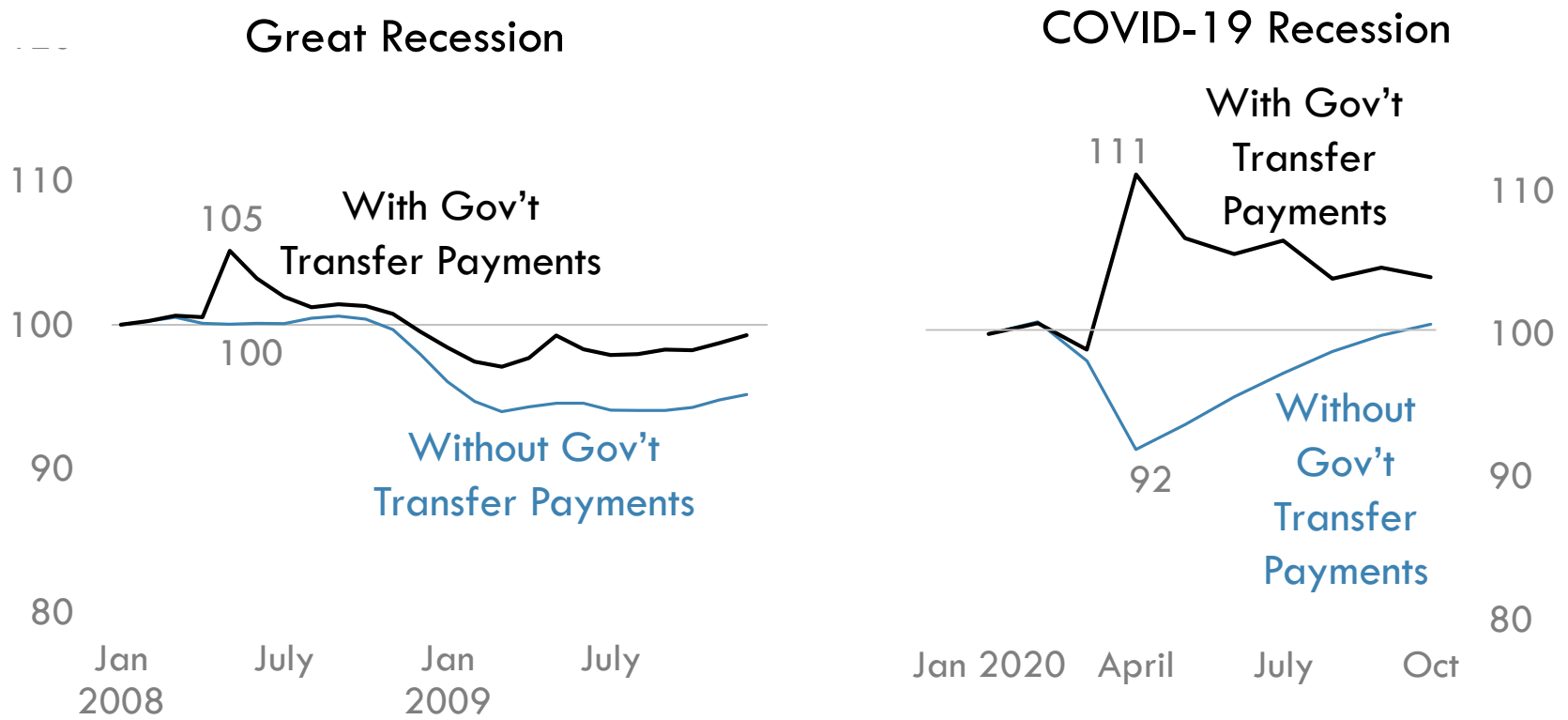
Percent change in Colorado employment since January 2020



Federal stimulus supported economic activity by more than offsetting wage losses and boosting consumption

U.S. Personal Income

Indexed to Pre-Recession Levels

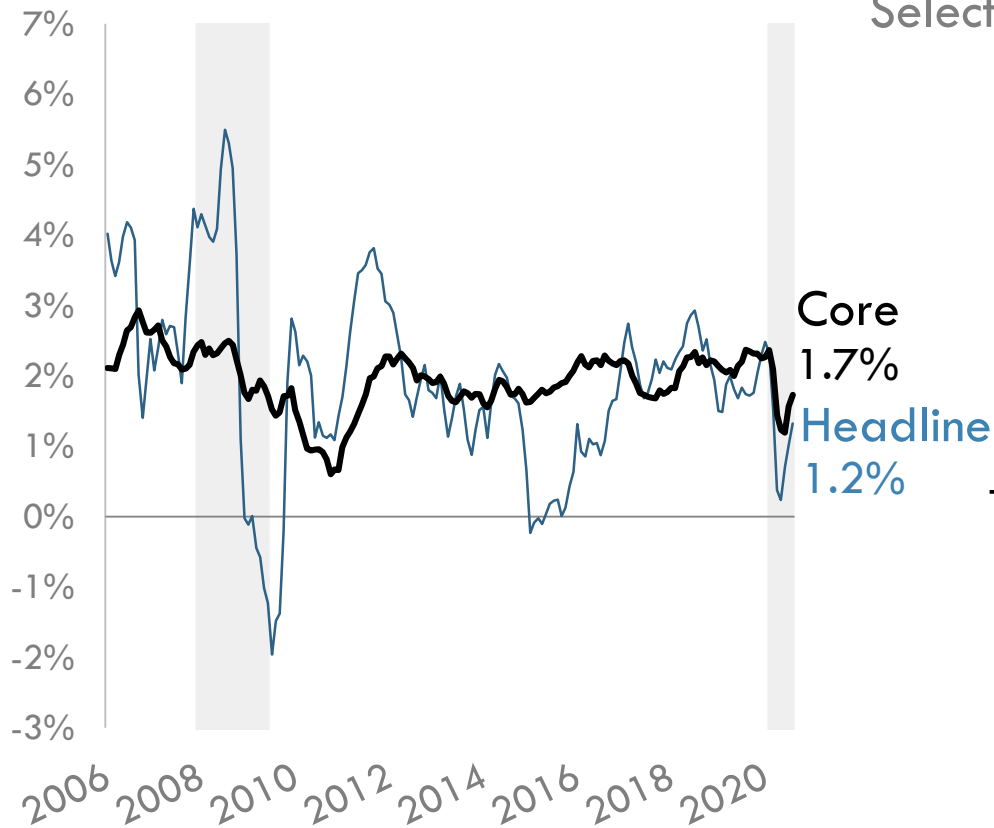


Source: U.S. Bureau of Economic Analysis. Indexed to January 2008 and 2020, respectively. Seasonally adjusted annual rates.

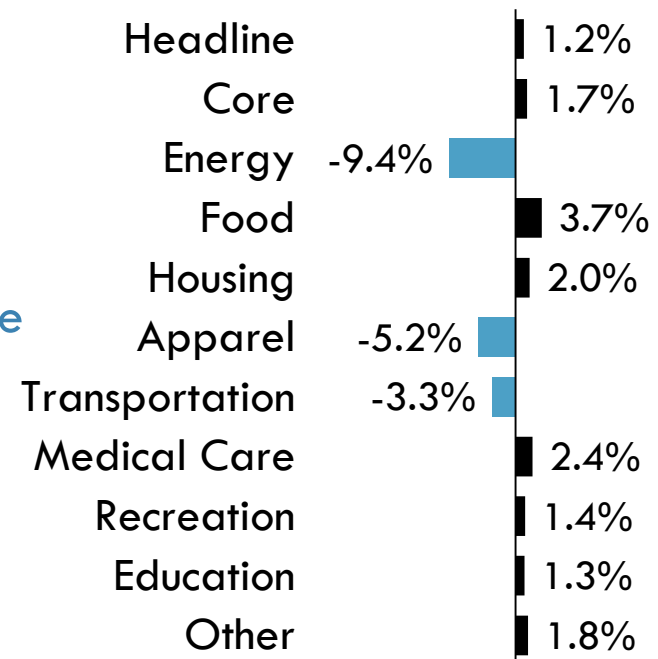
Inflationary pressure remains subdued

U.S. City Average CPI-U Inflation

Year-over-Year Change in Prices



Selected Components, November 2020



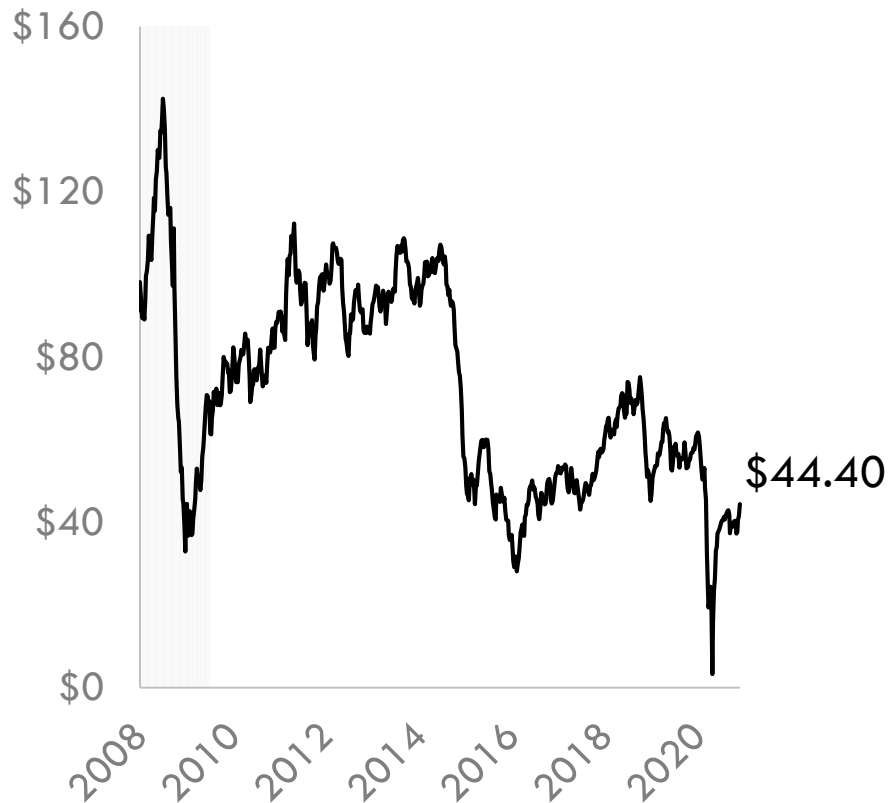
Source: U.S. Bureau of Labor Statistics.

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

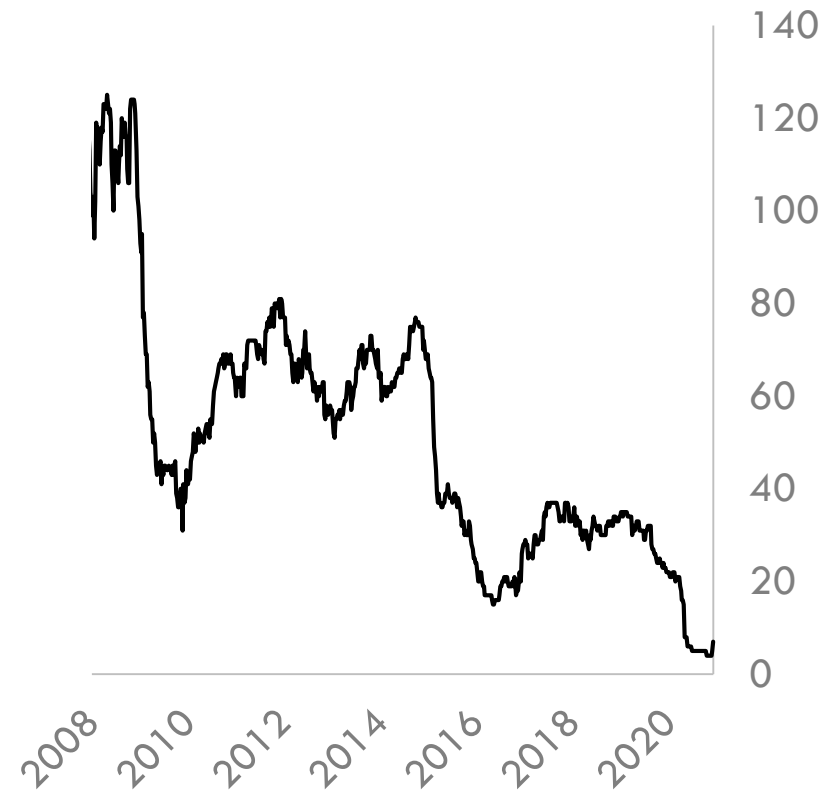
*Headline inflation includes all products and services. **Core inflation excludes food and energy prices.

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



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

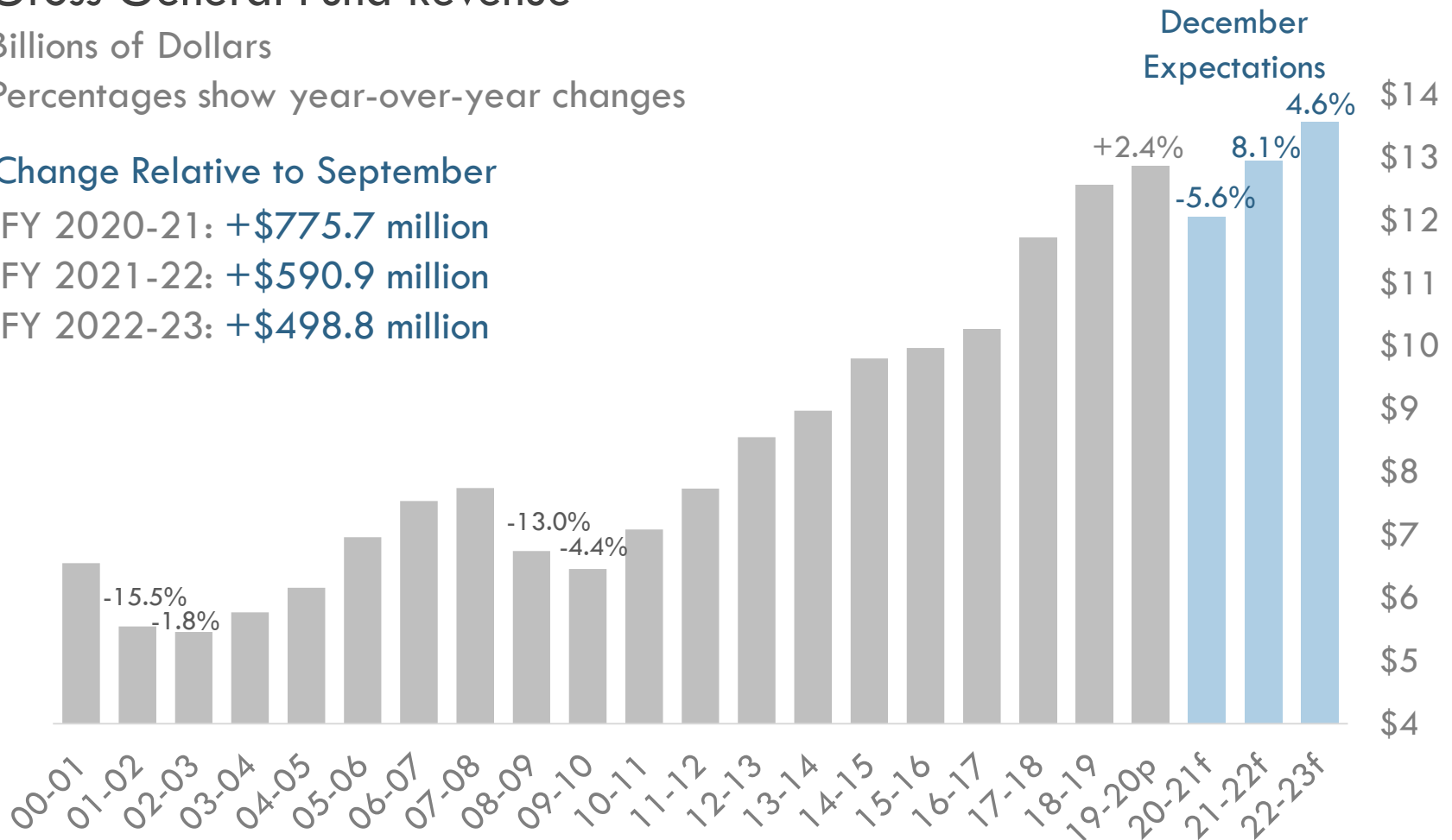
Percentages show year-over-year changes

Change Relative to September

FY 2020-21: +\$775.7 million

FY 2021-22: +\$590.9 million

FY 2022-23: +\$498.8 million

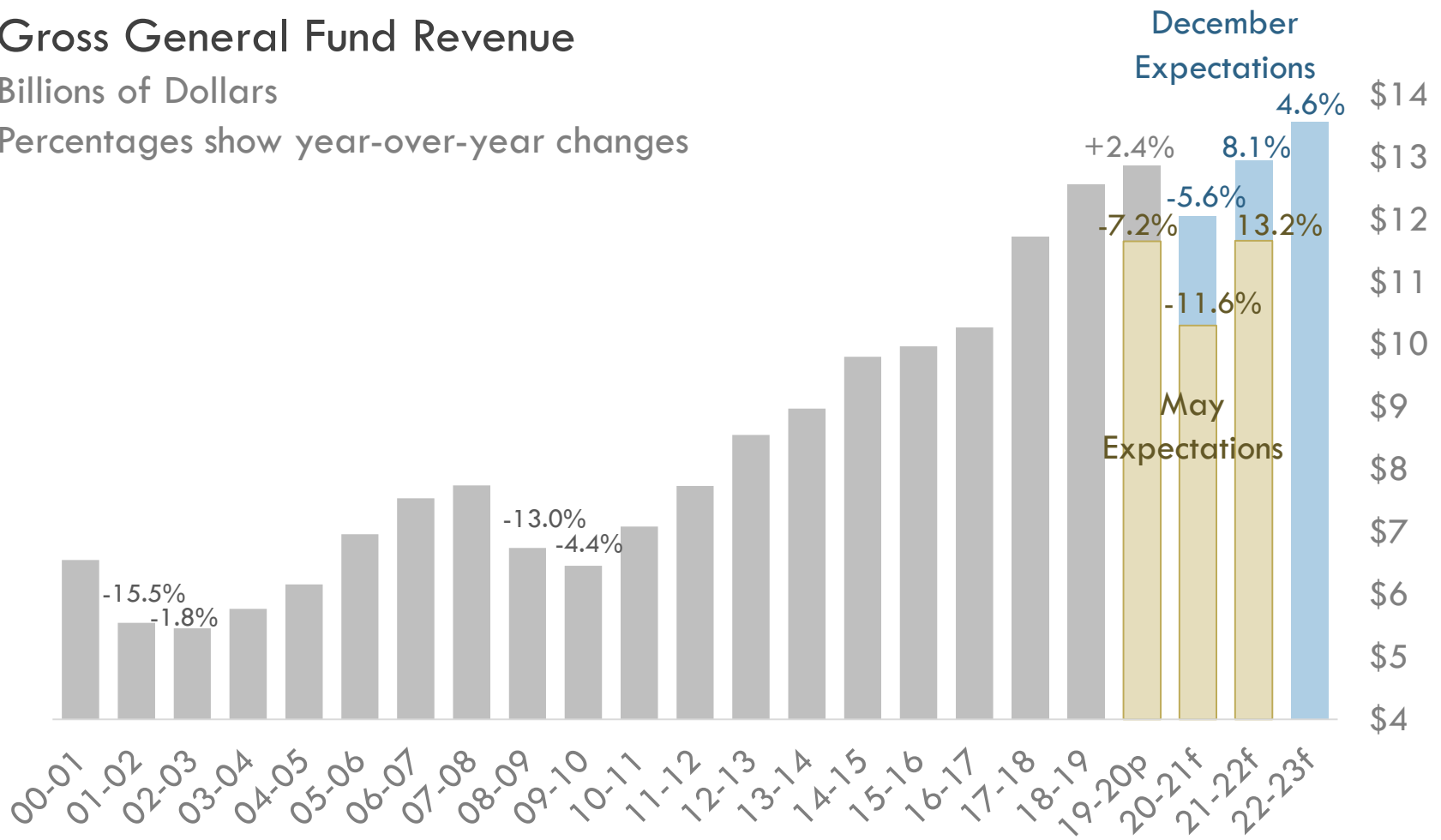


Revenue expectations have increased considerably as data have become available and suggested a much stronger economic landscape than imagined in May

Gross General Fund Revenue

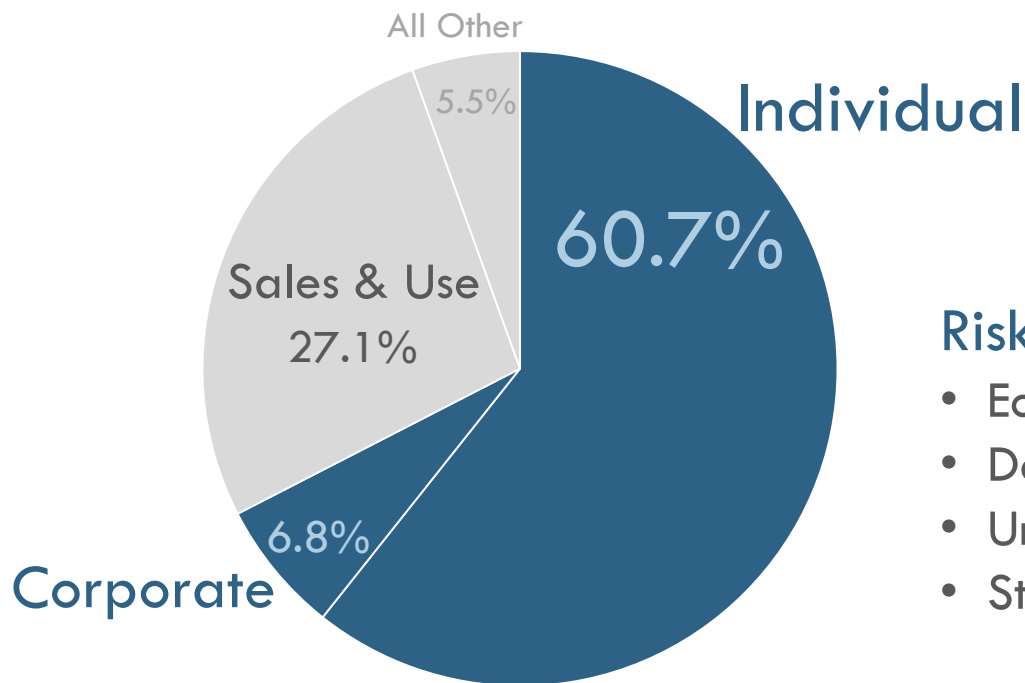
Billions of Dollars

Percentages show year-over-year changes



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*



Risks to the Income Tax Forecast

- Economic uncertainty
- Delayed filing deadlines
- Unemployment insurance benefits
- State and federal policy changes

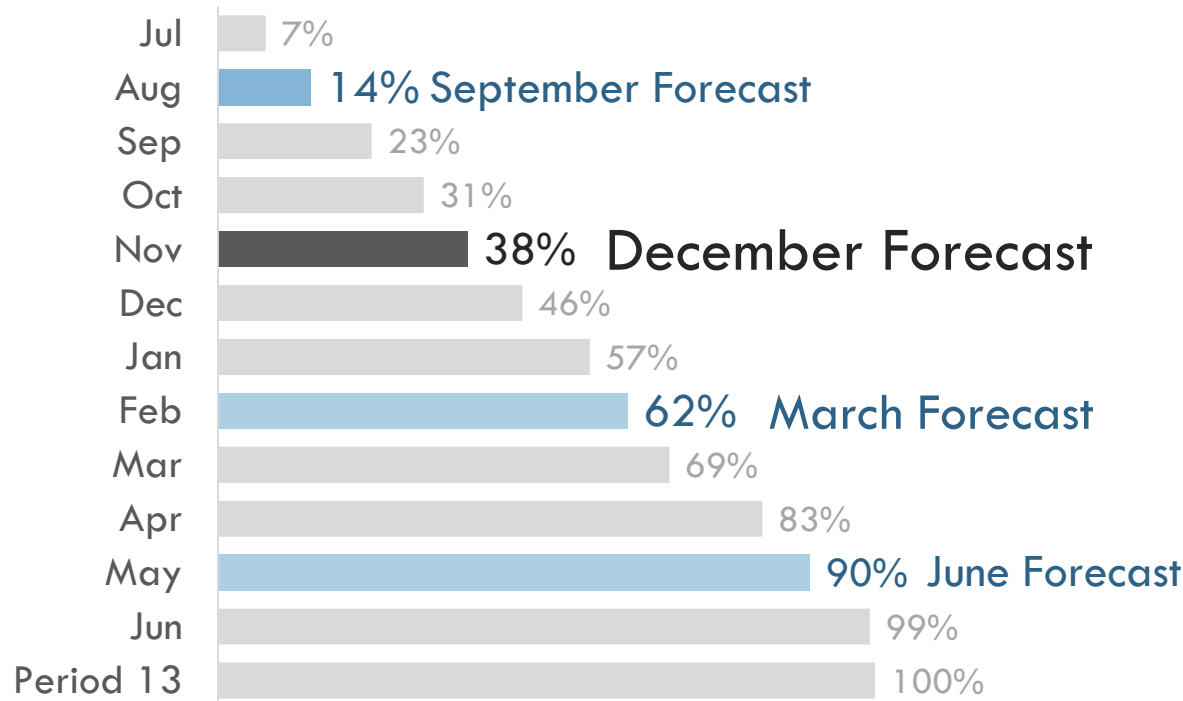
Source: Colorado Office of the State Controller and Legislative Council Staff calculations.

*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*



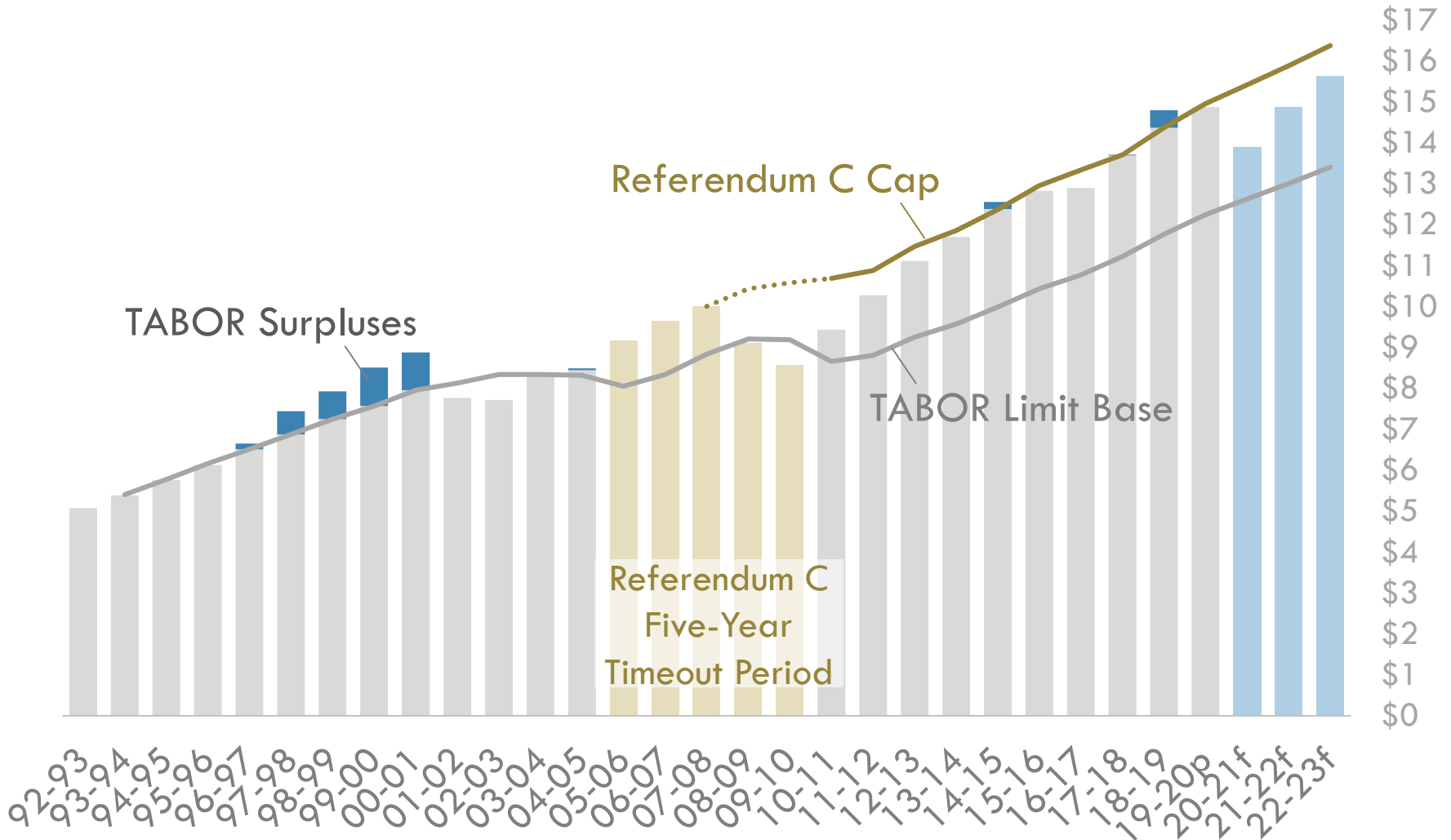
Source: Colorado Office of the State Controller and Legislative Council Staff calculations.

*Six-year average of actual collections data, FY 2013-14 to FY 2018-19.

TABOR Outlook

Revenue Subject to TABOR

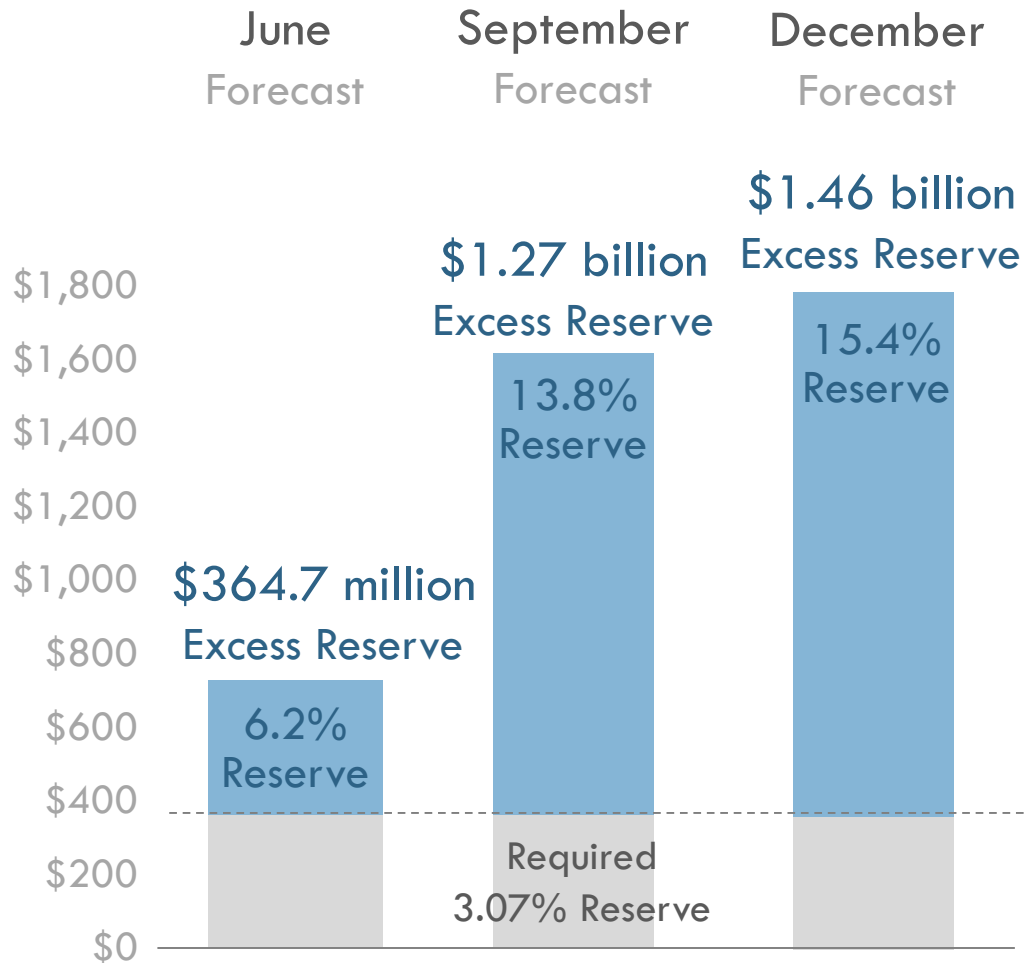
Dollars in Billions



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

Completed Year | FY 2019-20 General Fund Reserve

Dollars in Millions



Changes across forecasts:

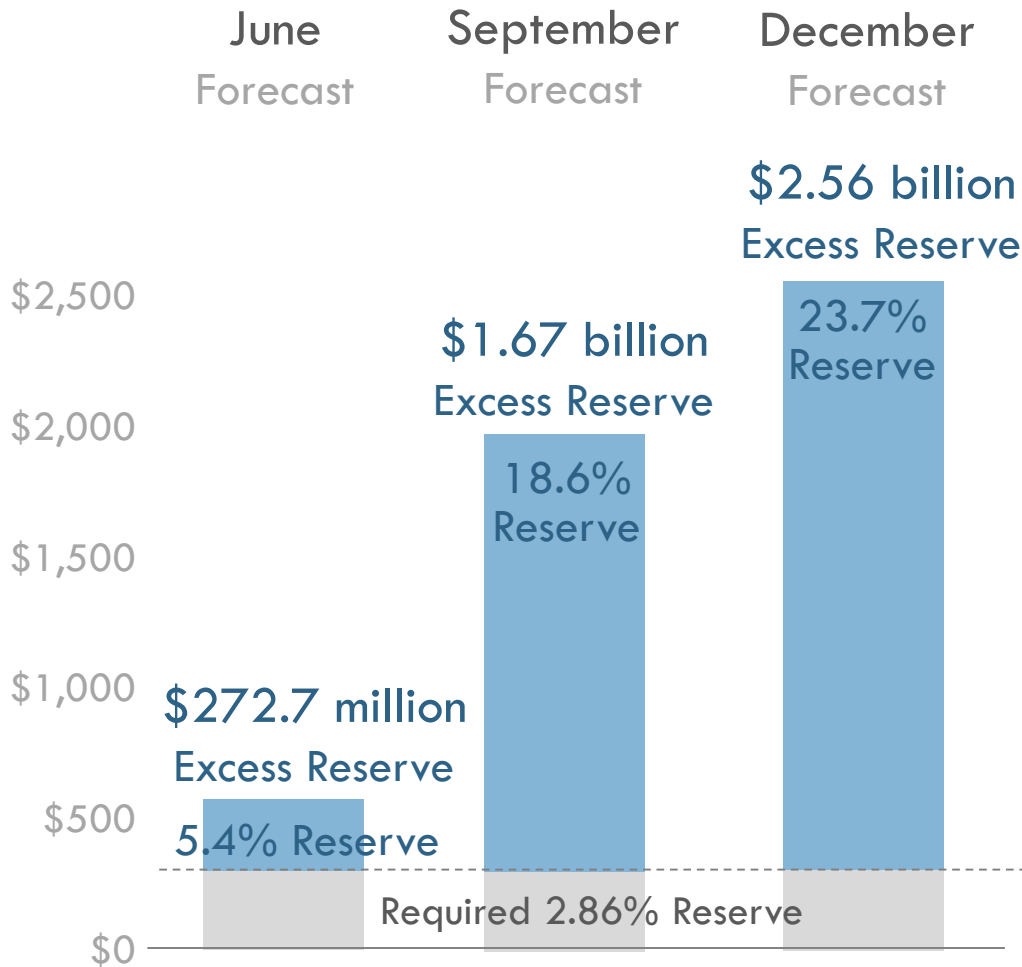
Revenue: 2019 incomes tax collections came in much stronger than expected

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



Changes across forecasts:

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

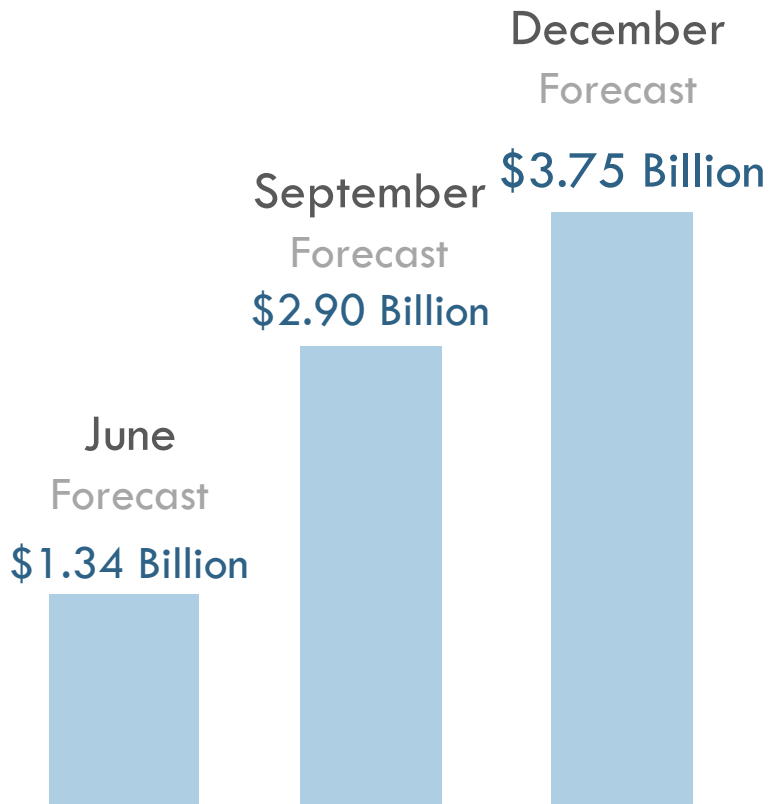
Revenue expectations increased considerably on higher 2019 collections and increased economic expectations

Net transfers reduced with budget balancing legislation

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

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.



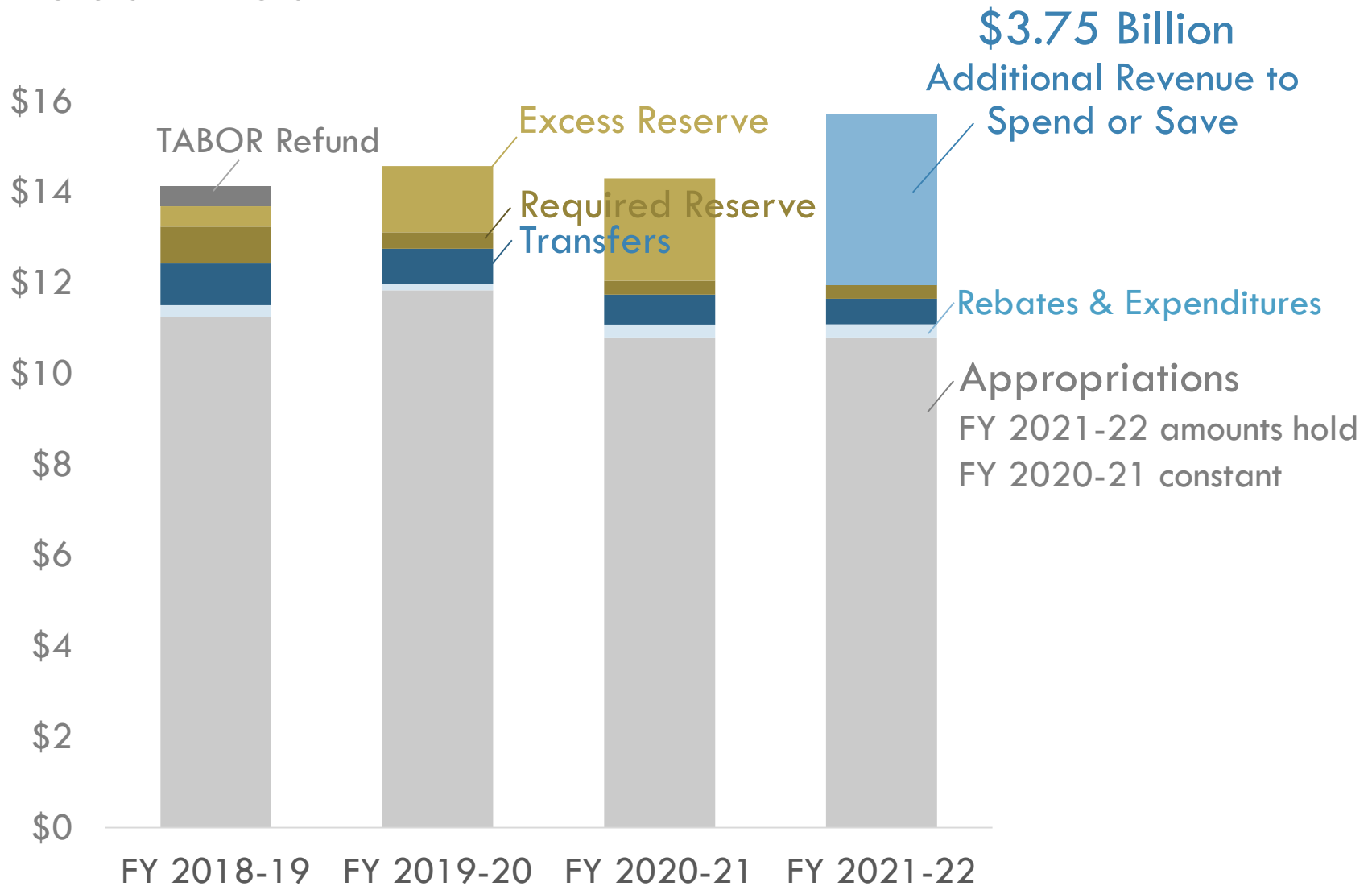
Amounts do not account for caseload growth, inflationary, or other budgetary pressures

Other considerations

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

General Fund Budget (Spending or Saving)

Dollars in Billions



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

Risks to the Forecast

New Information

- Five months of FY 2020-21 collections reflecting stronger than expected economic fundamentals
- COVID-19 vaccines in distribution

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: Further 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



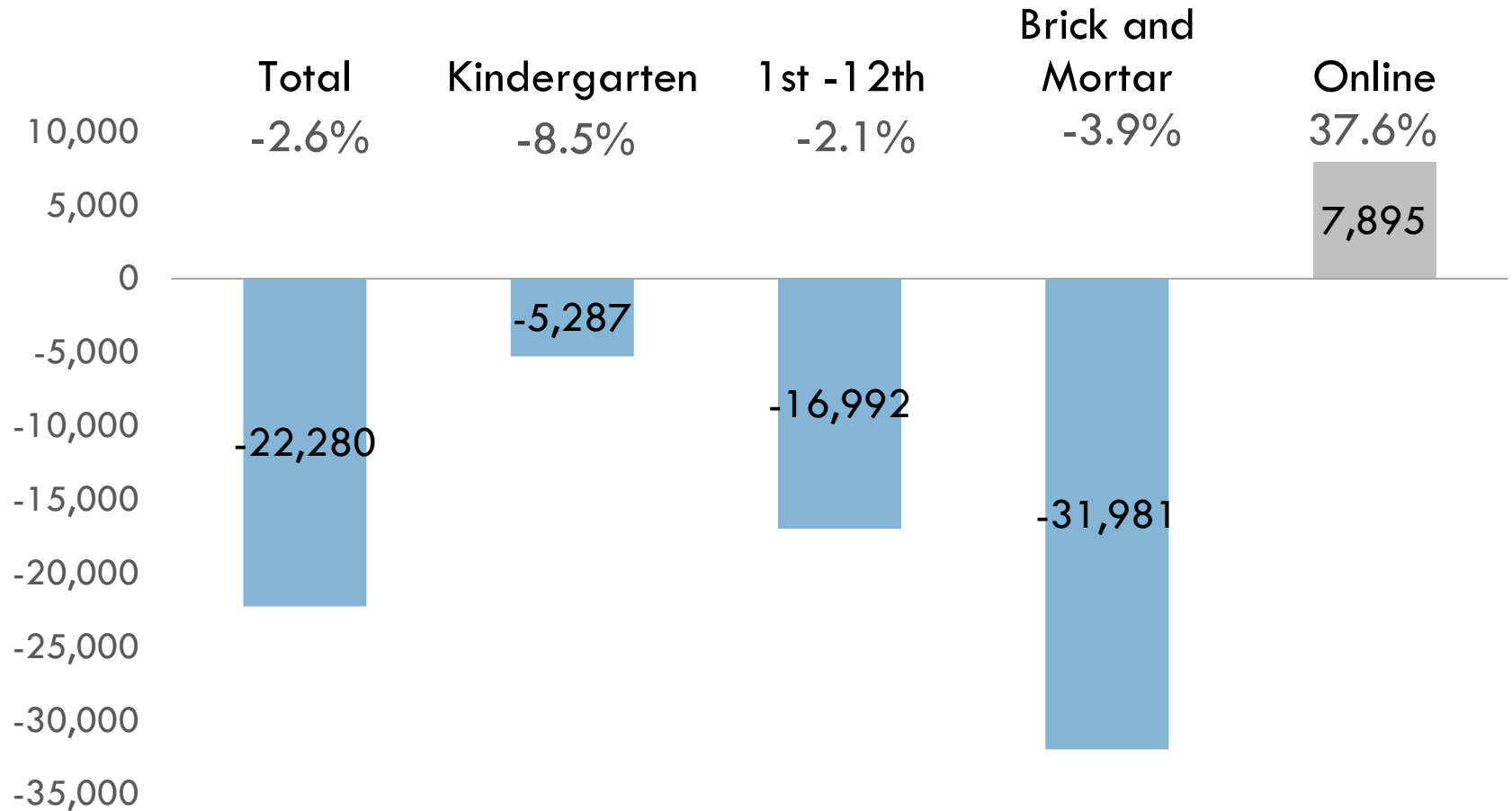
K-12 Public School Enrollment

Full-Time Equivalent (FTE) Students

Region	Actual 2020-21	Percent Change
Metro Denver	479,633	-2.9%
Northern	89,704	-2.2%
Colorado Springs	122,299	-1.3%
Pueblo	32,172	-3.5%
Eastern Plains	26,430	-1.7%
San Luis Valley	7,121	-4.0%
Mountain	24,305	-4.6%
Southwest Mountain	14,583	7.6%
Western	49,671	-4.3%
Statewide Total	845,916	-2.6%

**Total Decline in
 Enrollment in 2020-21:
 22,280 FTE**

2020-21 School Year Change in Enrollment



Enrollment Forecast Assumptions

- Students not enrolled in public school this year were either:
 - Homeschooled
 - In learning-pods
 - In private school
 - 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)

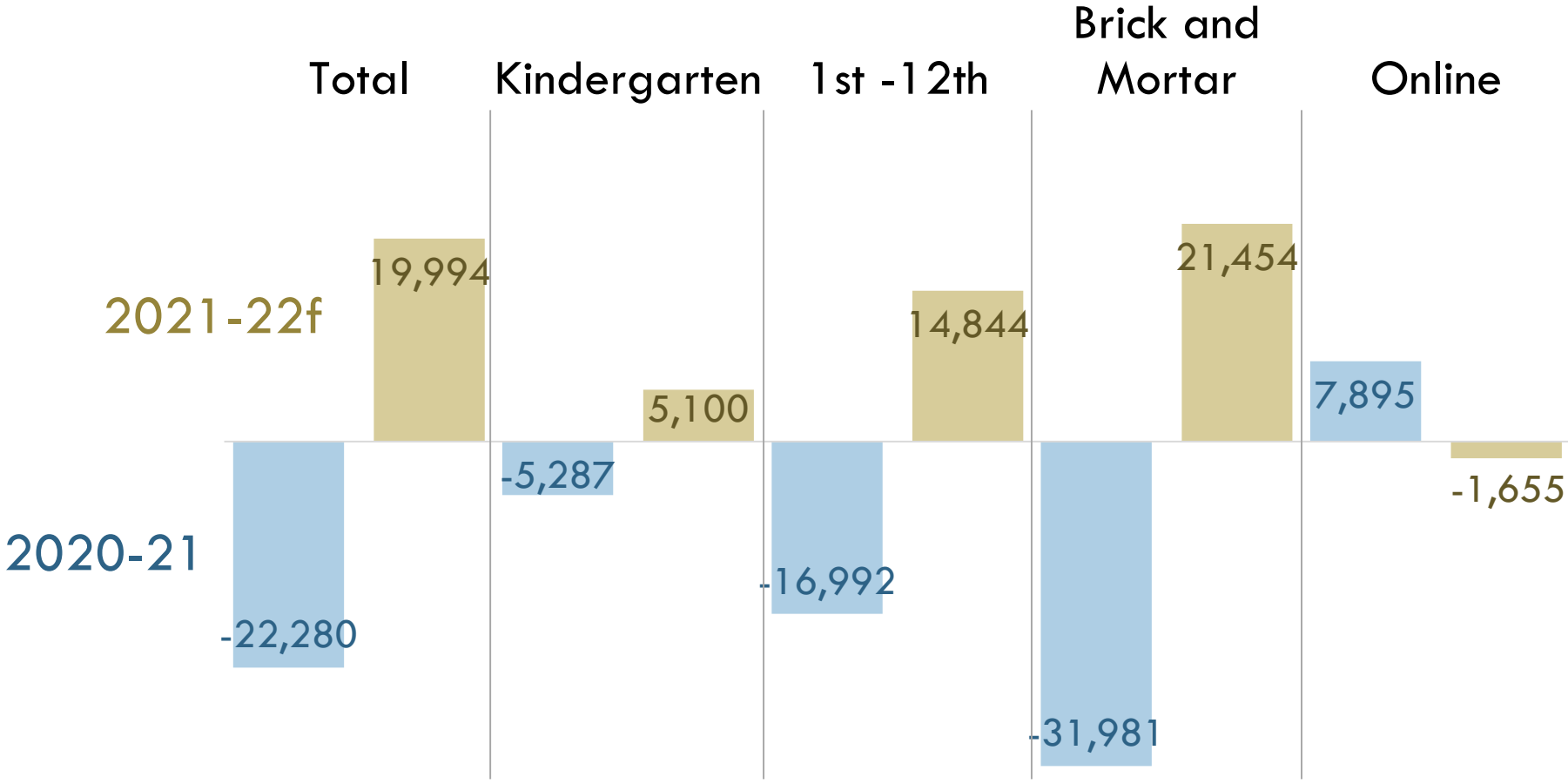
K-12 Public School Enrollment

Full-Time Equivalent (FTE) Students

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

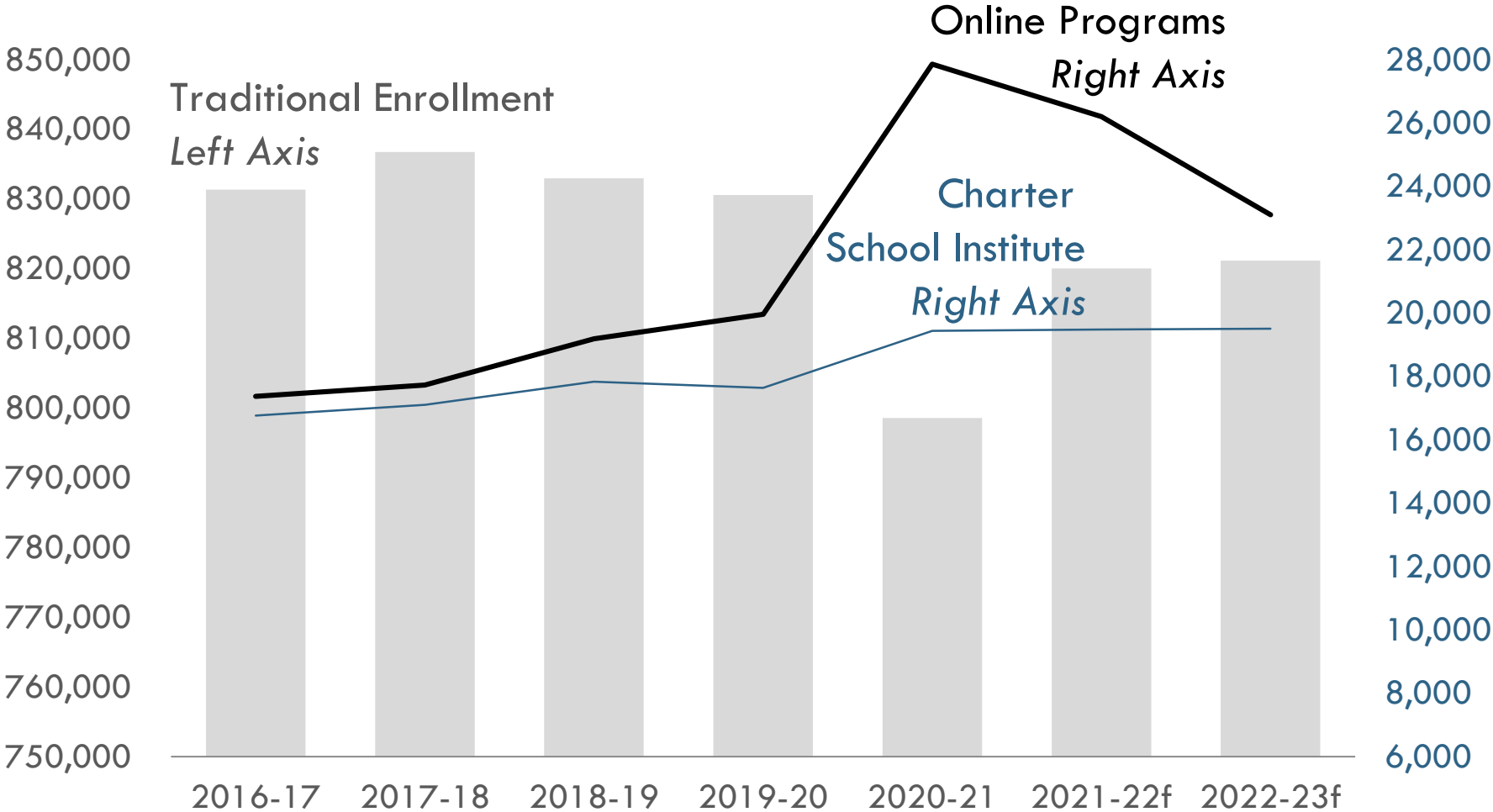
Change in Enrollment:

2020-21 October Count to 2021-22 Forecast



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

Total K-12 Enrollment



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

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

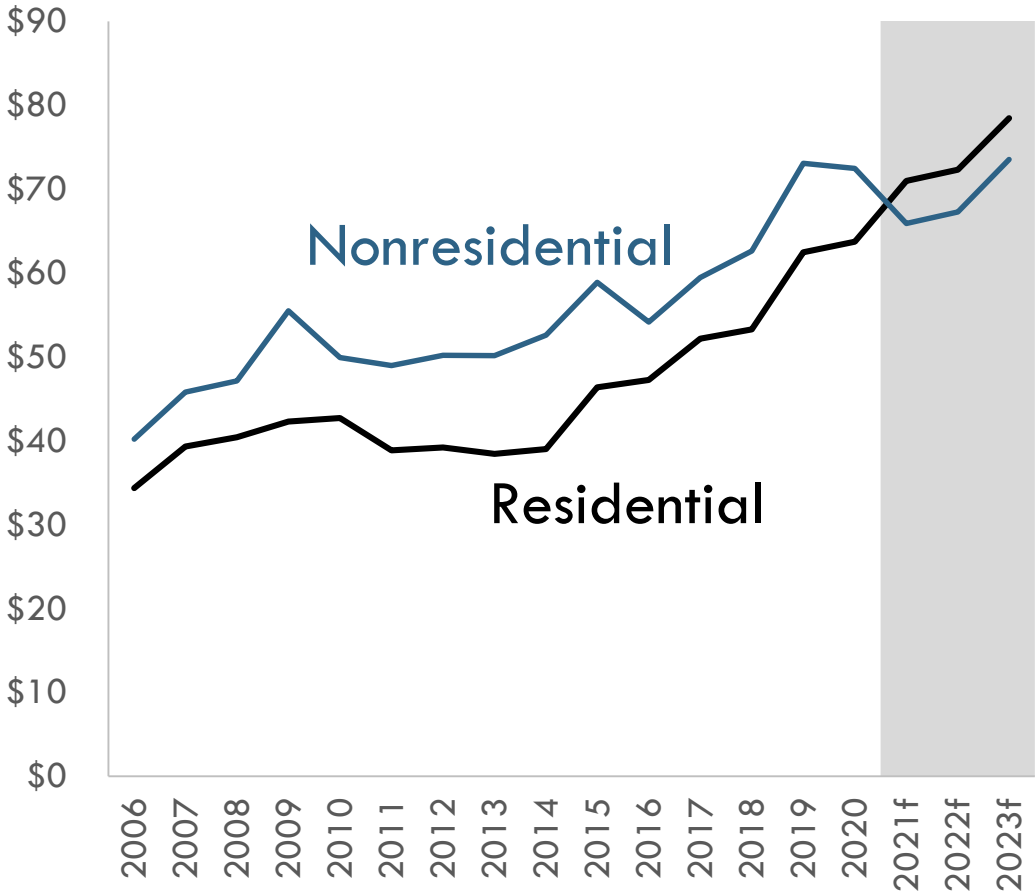


2021 is a reassessment year

- **Residential, commercial, and industrial** actual values as of June 30, 2020
 - Assessors may not consider changes to market conditions after the assessment date
 - Next reassessment in 2023, based on values as of June 30, 2022
- **Natural resource** production for calendar year 2020
- **Gallagher Amendment** would have required a new residential assessment rate to be set for the 2021-2022 reassessment cycle this session

Assessed Values in Colorado

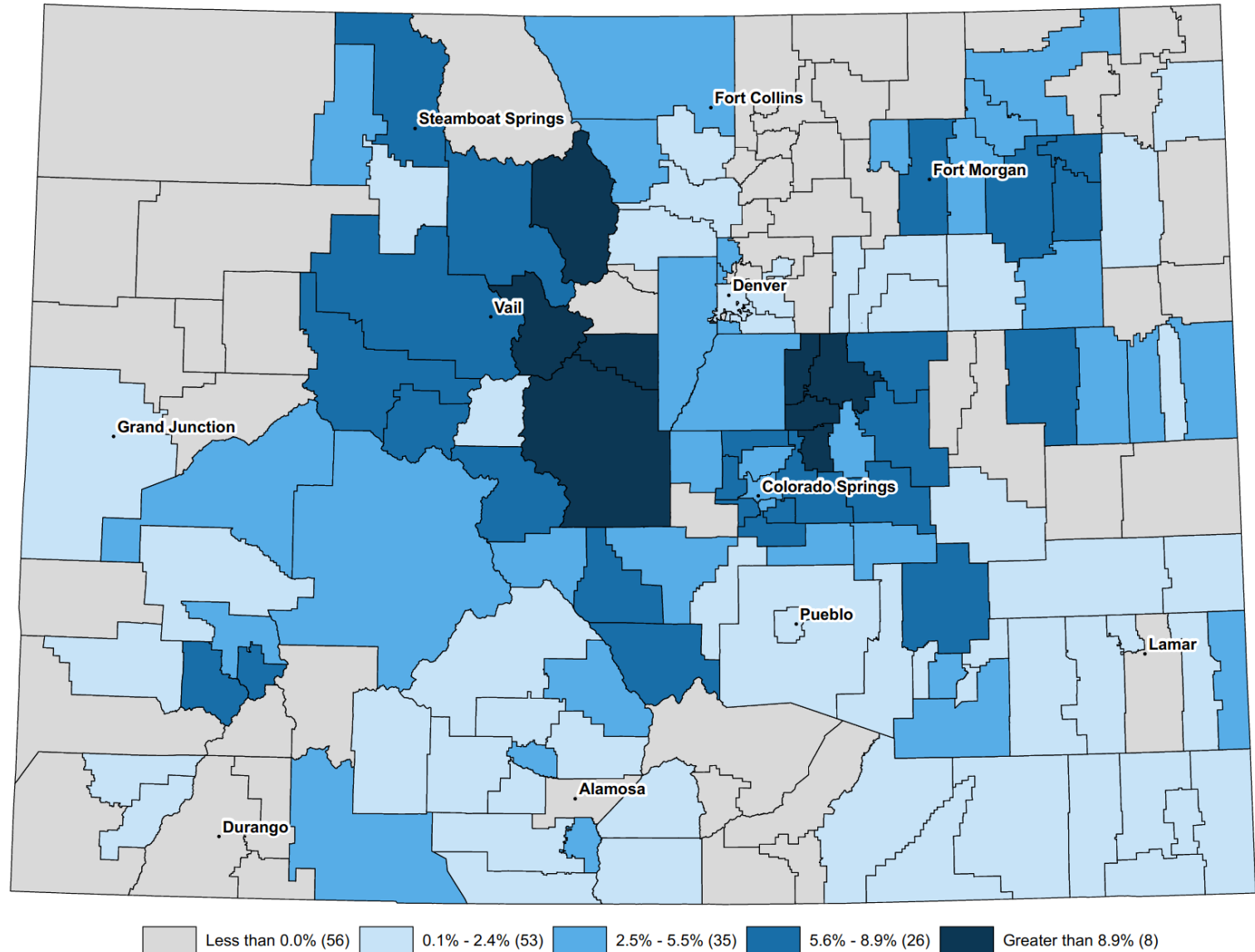
Dollars in Billions



Year	Total Assessed Value	Percent Change
2014	\$91.6	3.3%
2015	\$105.3	15.0%
2016	\$101.4	-3.7%
2017	\$111.6	10.1%
2018	\$115.9	3.8%
2019	\$135.6	17.0%
2020	\$136.2	0.5%
2021f	\$136.9	0.5%
2022f	\$139.6	2.0%
2023f	\$152.0	8.9%

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



School Finance Outlook



School Finance Basics

- **Funded Pupil Count** is the statutory student count metric used to allocate funding.
- **State Aid** = **Total Program** - **Local Share**.
- General Assembly sets the **Budget Stabilization Factor** to establish Total Program and State Aid.
- General Assembly balances contributions to State Aid from **General Fund** and **State Education Fund**.

Change in Expectations for FY 2020-21 School Finance Funding

Dollars in Millions

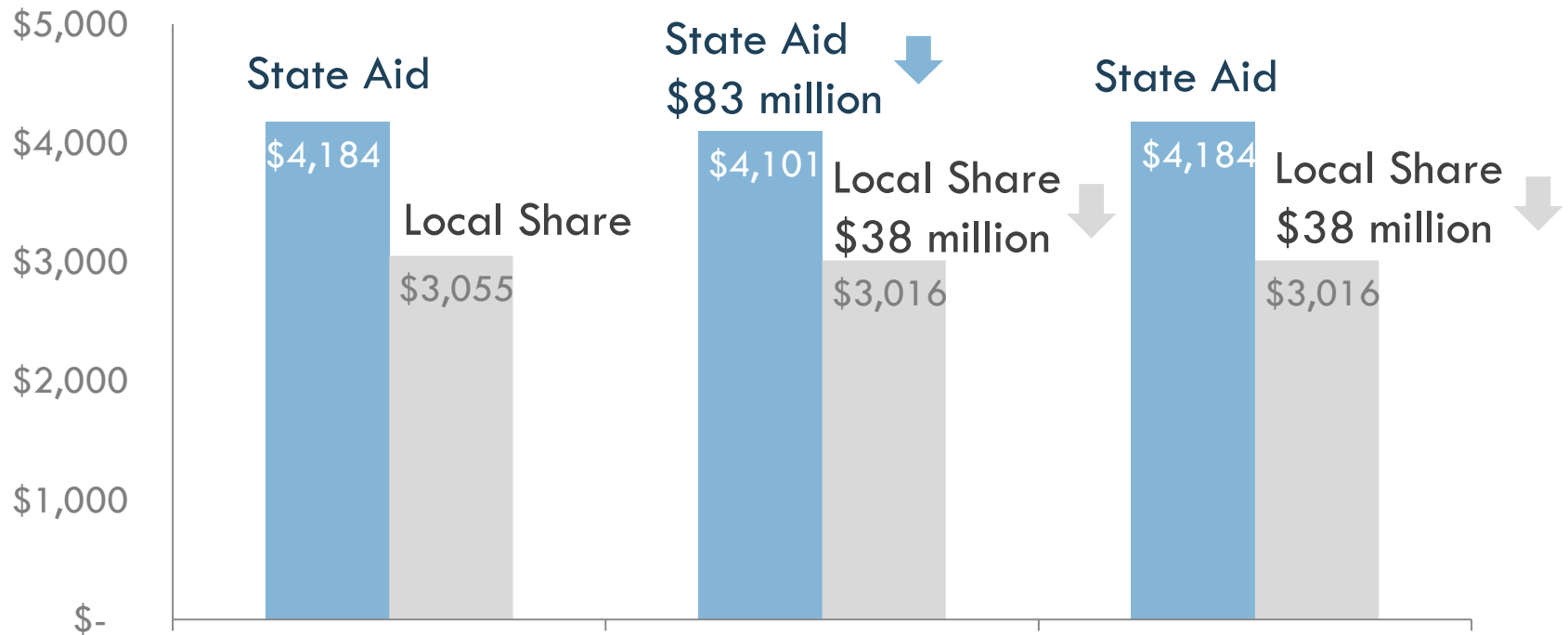
**Current Law
Appropriation***

December 2020 Expectations
The General Assembly's Choices Range From:

BS Factor: \$1,173 million

Hold at \$1,173 million

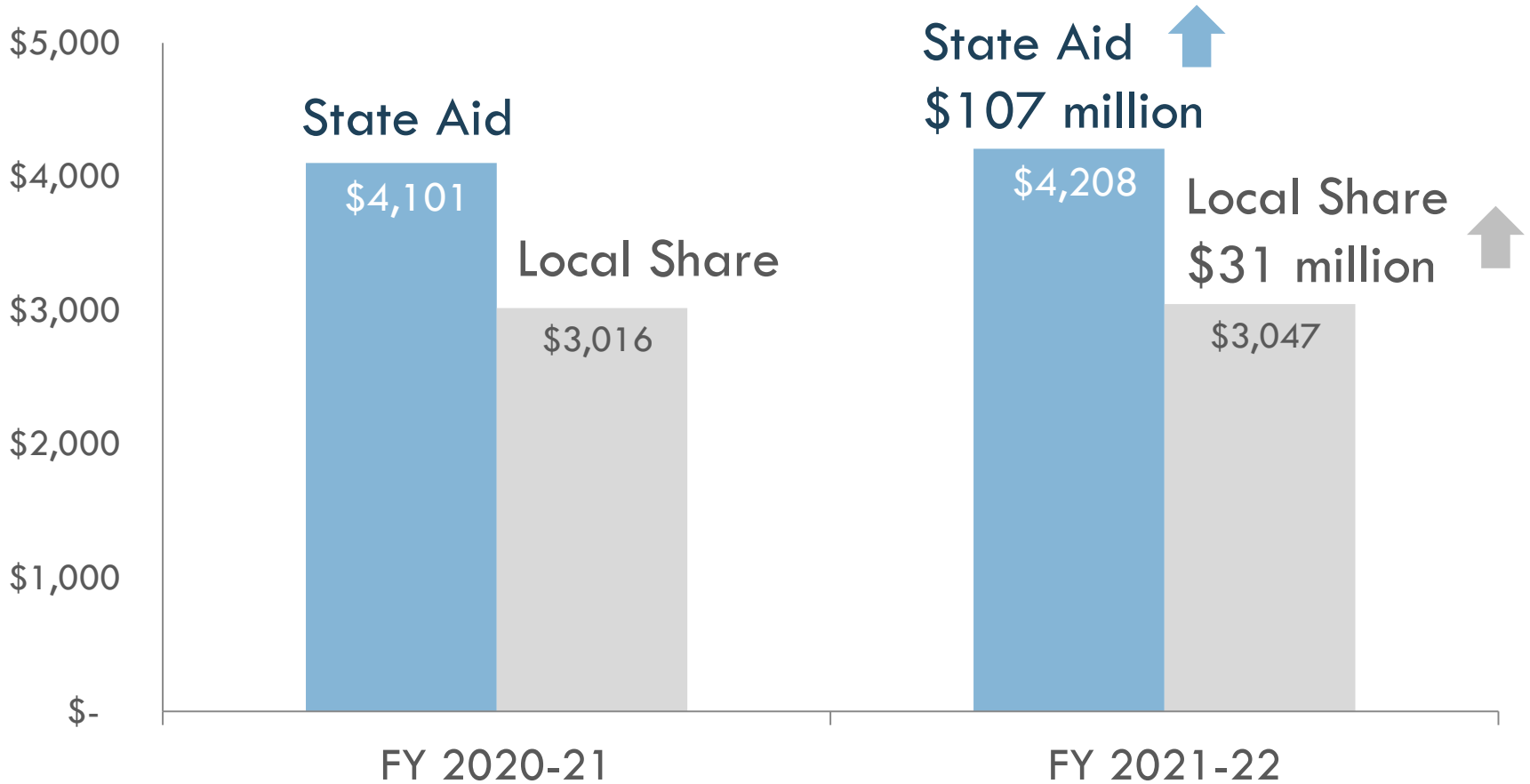
Reduce to \$1,090 million



Source: Legislative Council Staff December 2020 forecast
* Current Law appropriation uses December 2019 forecast..

Year-over-Year Change in School Finance Funding FY 2020-21 to FY 2021-22

Dollars in Millions



Source: Legislative Council Staff December 2020 forecast.

*Assumes a constant Budget Stabilization Factor.

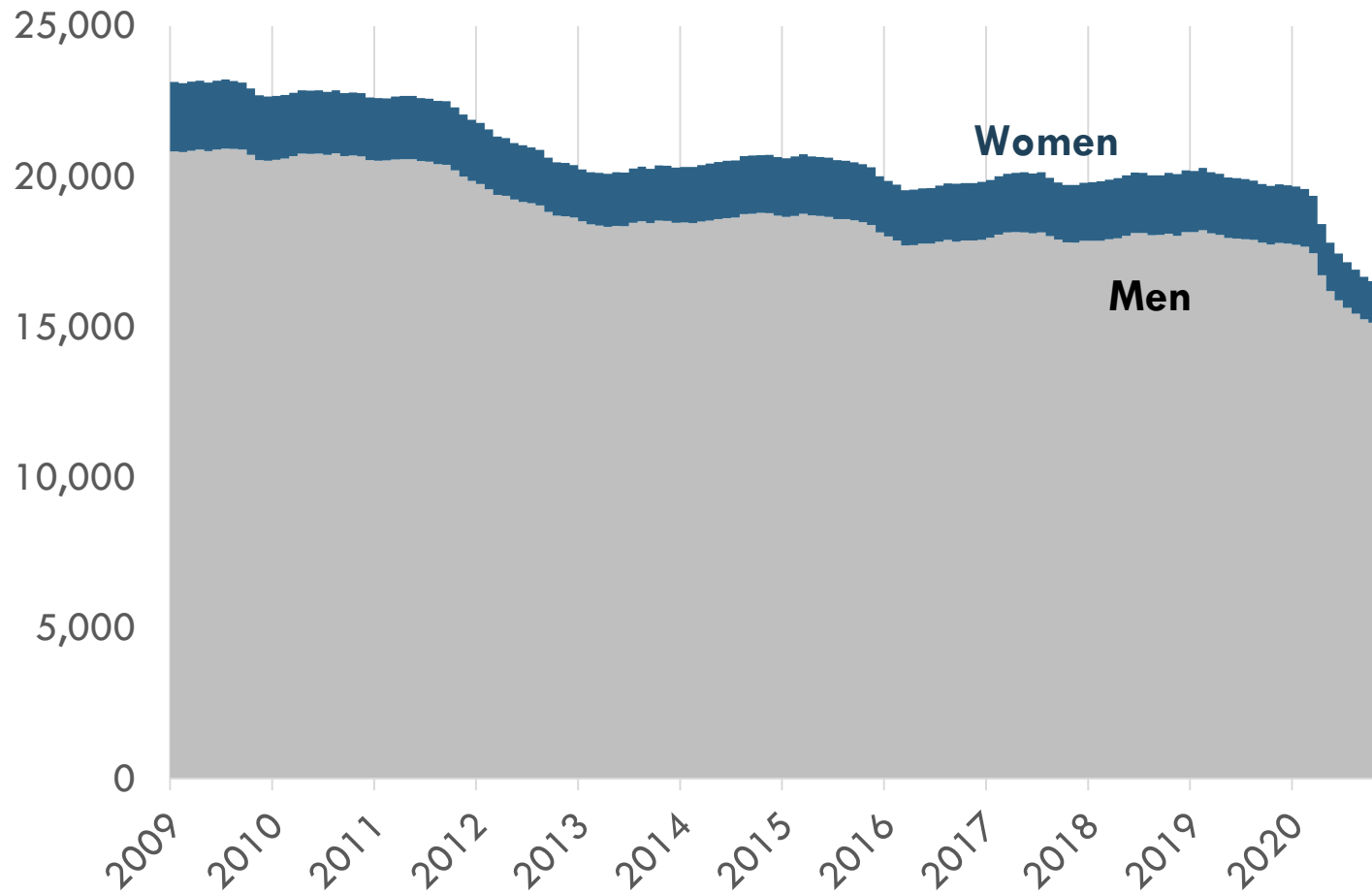
Implications for Balancing General Fund (GF) and State Education Fund (SEF) Contributions in 2021-22

- \$83M reduced obligation in 2020-21; \$107M increase in state aid requirement in 2021-22 year-over-year.
- In 2020-21, could decrease GF or SEF spending by \$83M or reduce BS Factor or some combination.
- In 2021-22, Governor's request reduces BS Factor to \$572.4 million and requires SEF ending balance of \$140 million.
- Request implies one-time spending increase of \$522 million from SEF; \$139 million increase in GF appropriation.
- SEF expenditure can't be sustained. GF appropriation will increase by \$512 million in 2022-23 in this scenario to maintain the BS Factor at current levels.

Adult Corrections Population Forecast

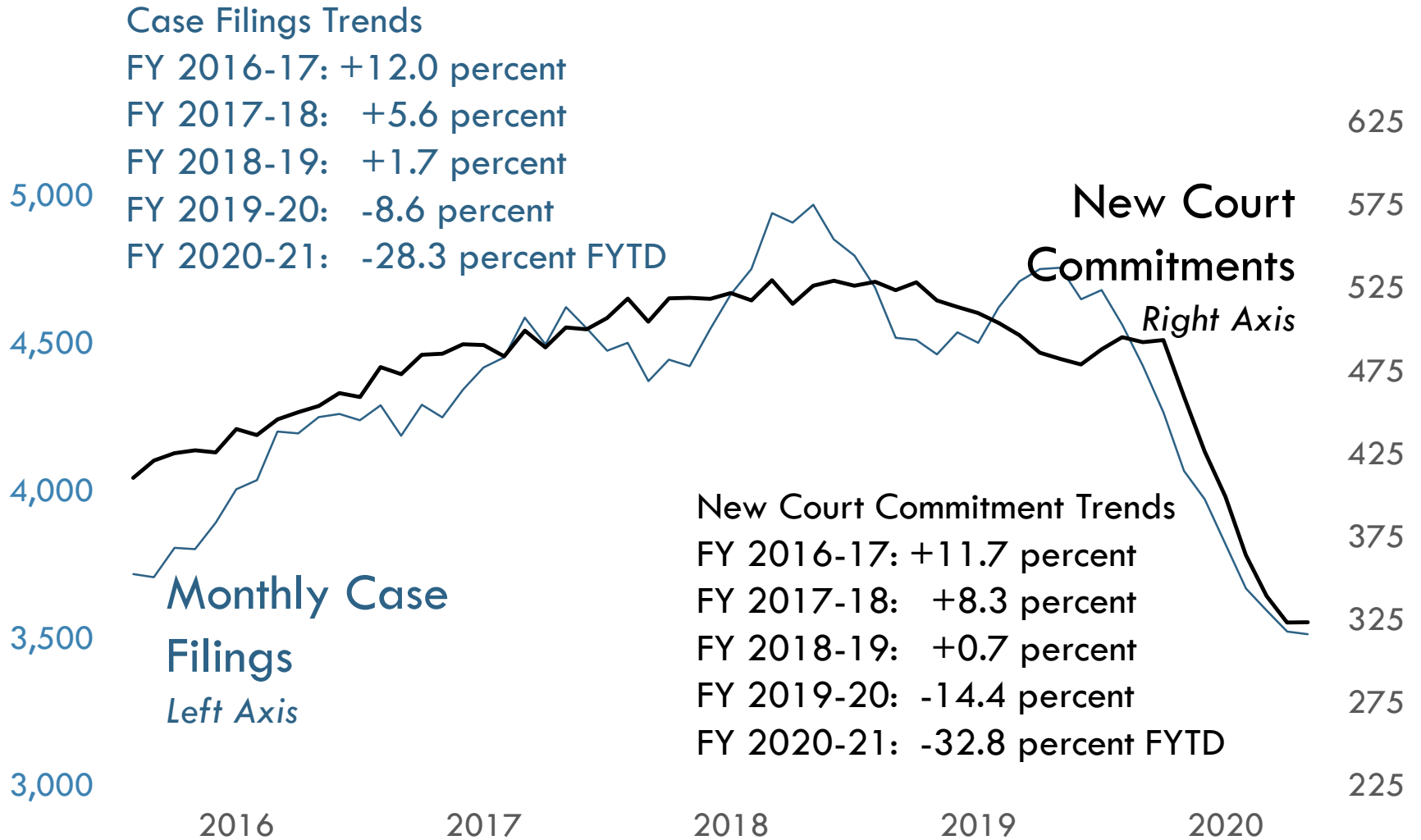


The prison population is down 16.4 percent since February



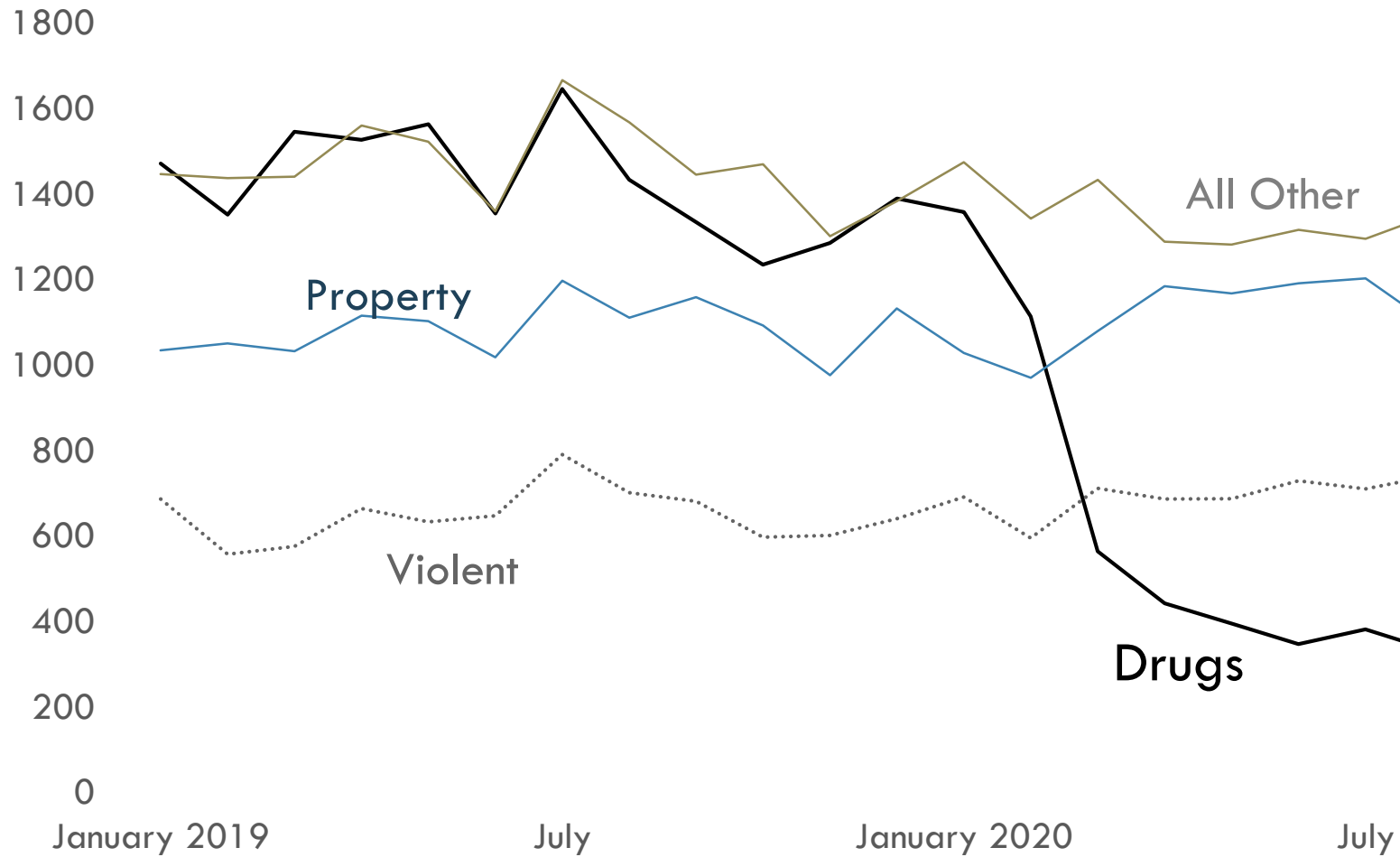
Source: Department of Corrections, Office of Planning and Analysis. Monthly data.

Case filings and commitments are down

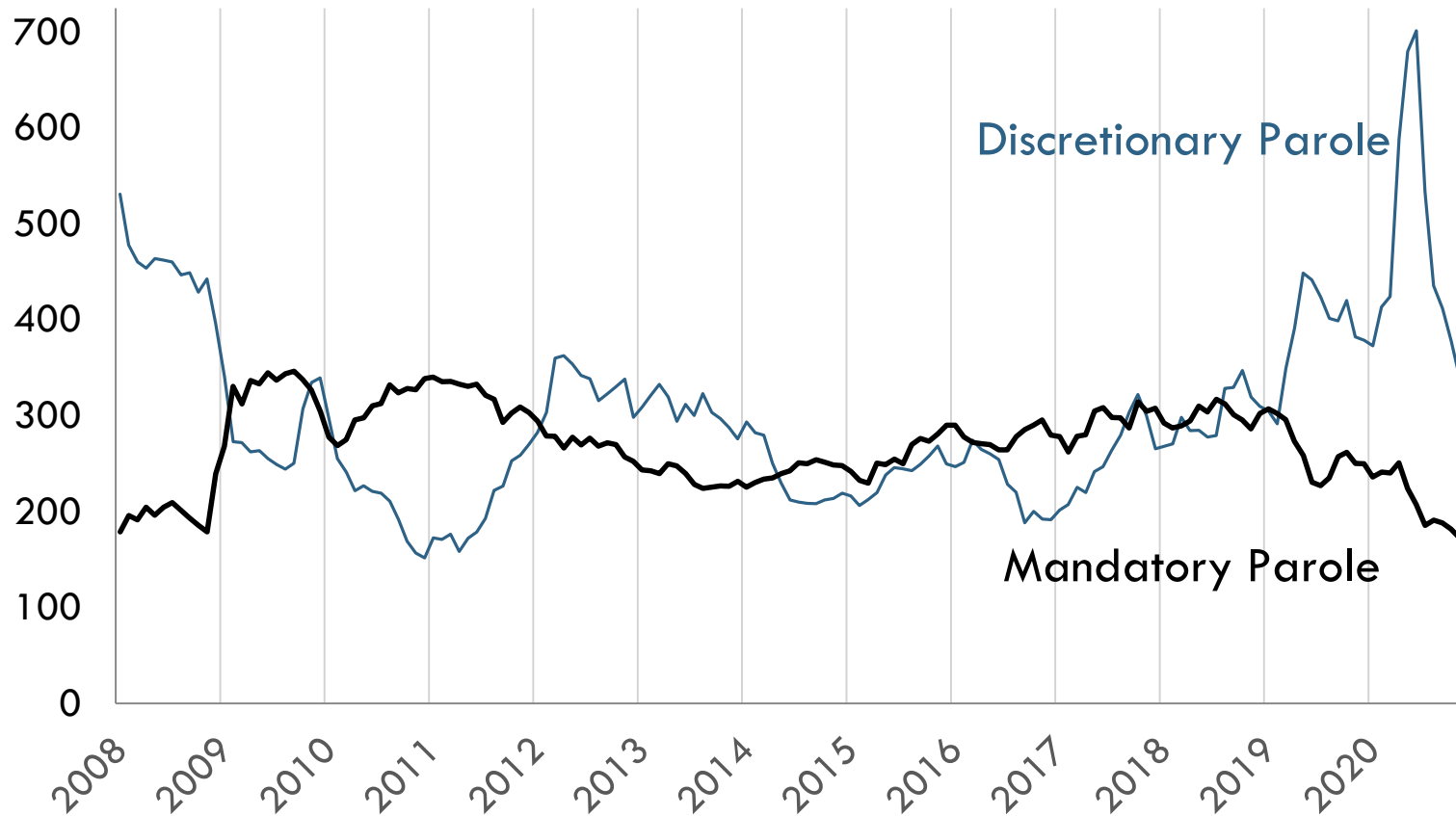


Source: Office of the State Court Administrator (case filings) and Department of Corrections, Office of Planning and Analysis (new court commitments). Monthly data; both series shown as six-month moving averages.

State district court drug felony case filings are down 61.7 percent since February

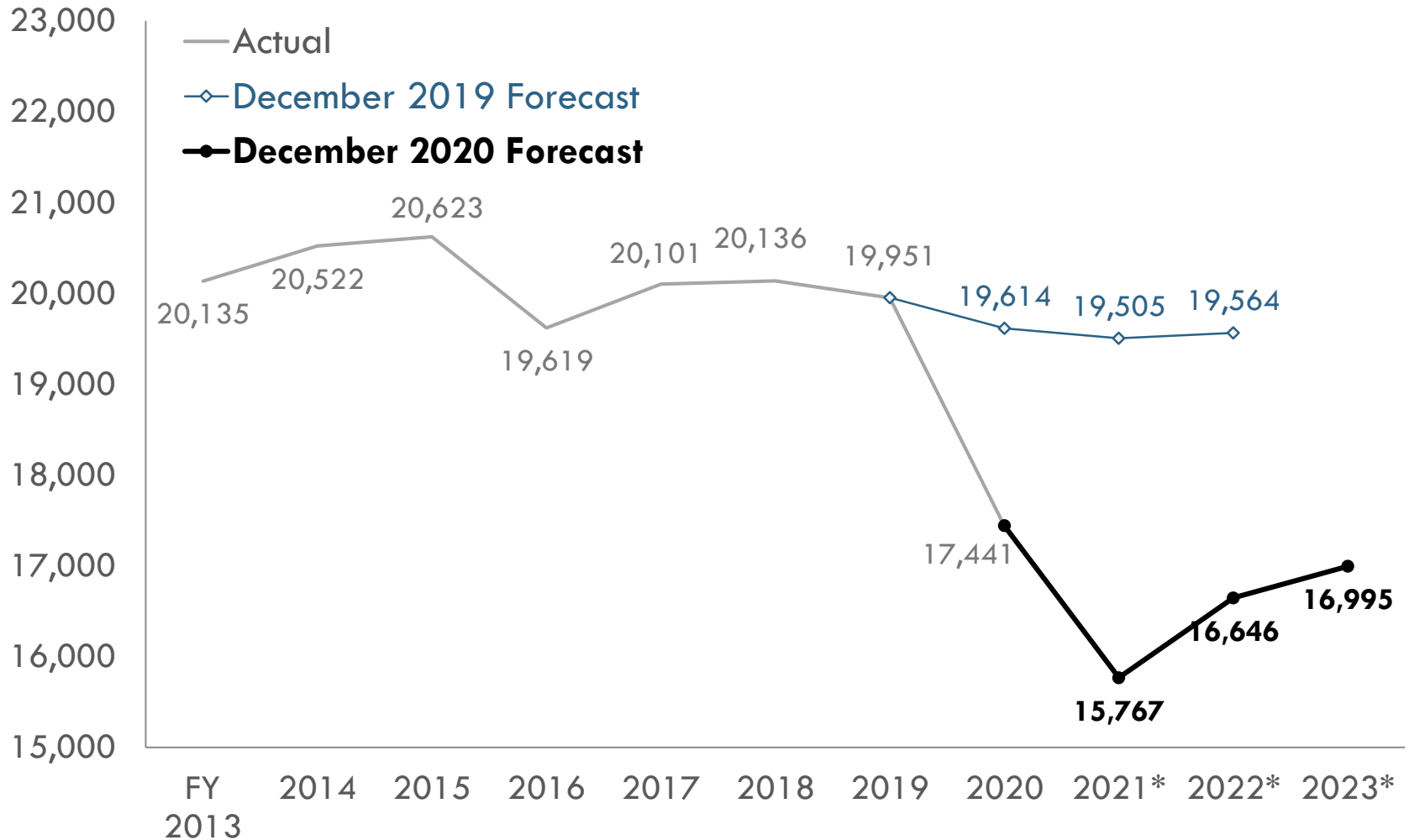


Discretionary parole spiked in 2020



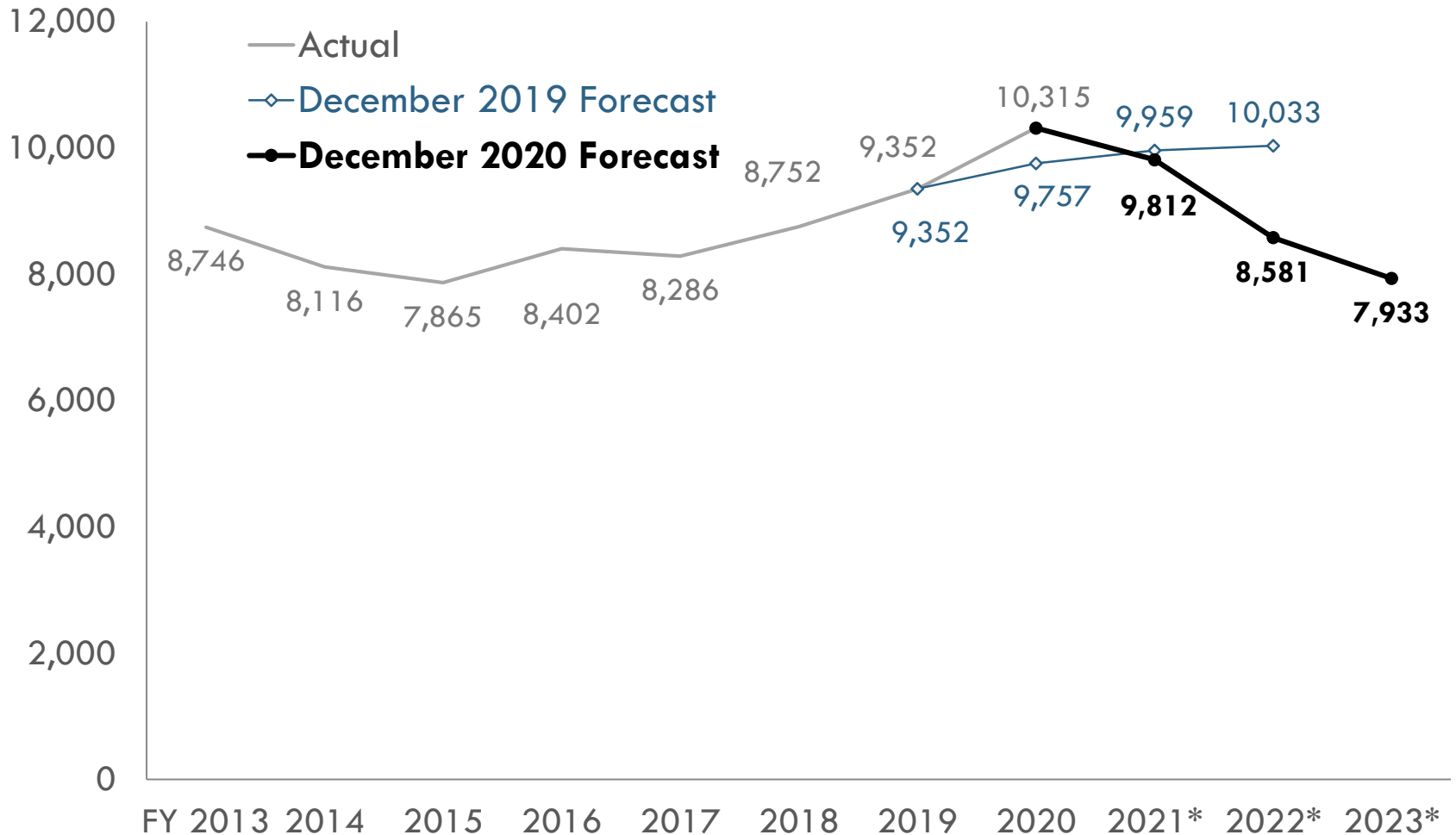
The prison population will continue to decline into 2021

Adult Inmate Population Forecasts as of June 30



Parole caseload peaked in June 2020 and will continue to decline

Adult Parole Caseload Forecasts as of June 30



Forecast uncertainty remains elevated

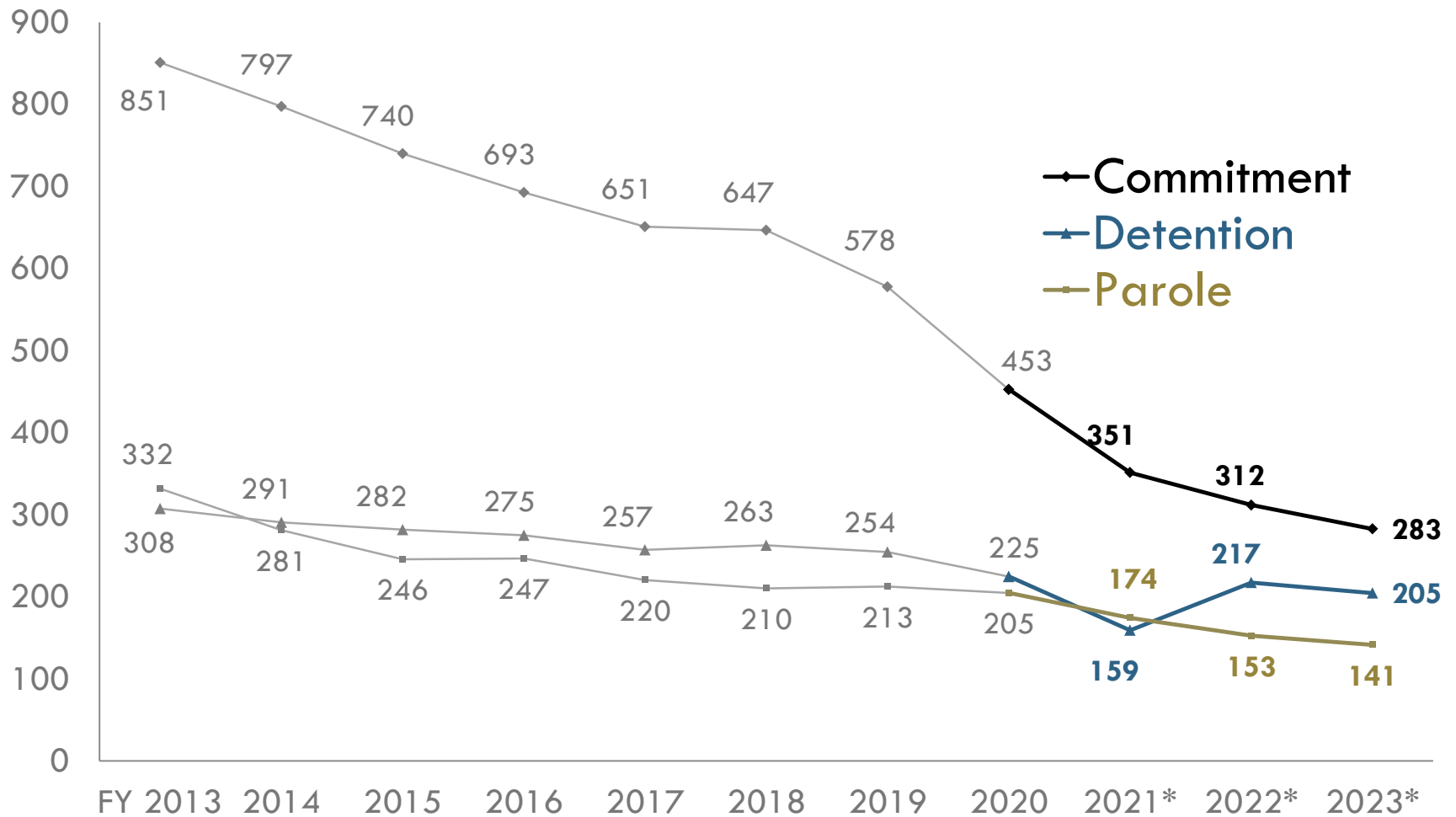
- This forecast always contains (bidirectional) error
 - Before 2020, current year forecast error averages about 1.7 percent, or 328 inmates
 - Budget year forecast error is about 2.1 percent, or 413 inmates
- Trajectory of COVID-19 pandemic and efforts to contain it is the most important risk to the forecast
- Conflating permanent impacts from behavioral or policy changes from temporary impacts from the pandemic raises the possibility of forecast error

Juvenile Corrections Population Forecast



All DYS Populations are Falling

Average Daily Populations through FY 2022-23



Questions?

Kate Watkins

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

