



December 2019 | Legislative Council Staff
Economic & Revenue Forecast

Presentation to the Joint Budget Committee

December 20, 2019

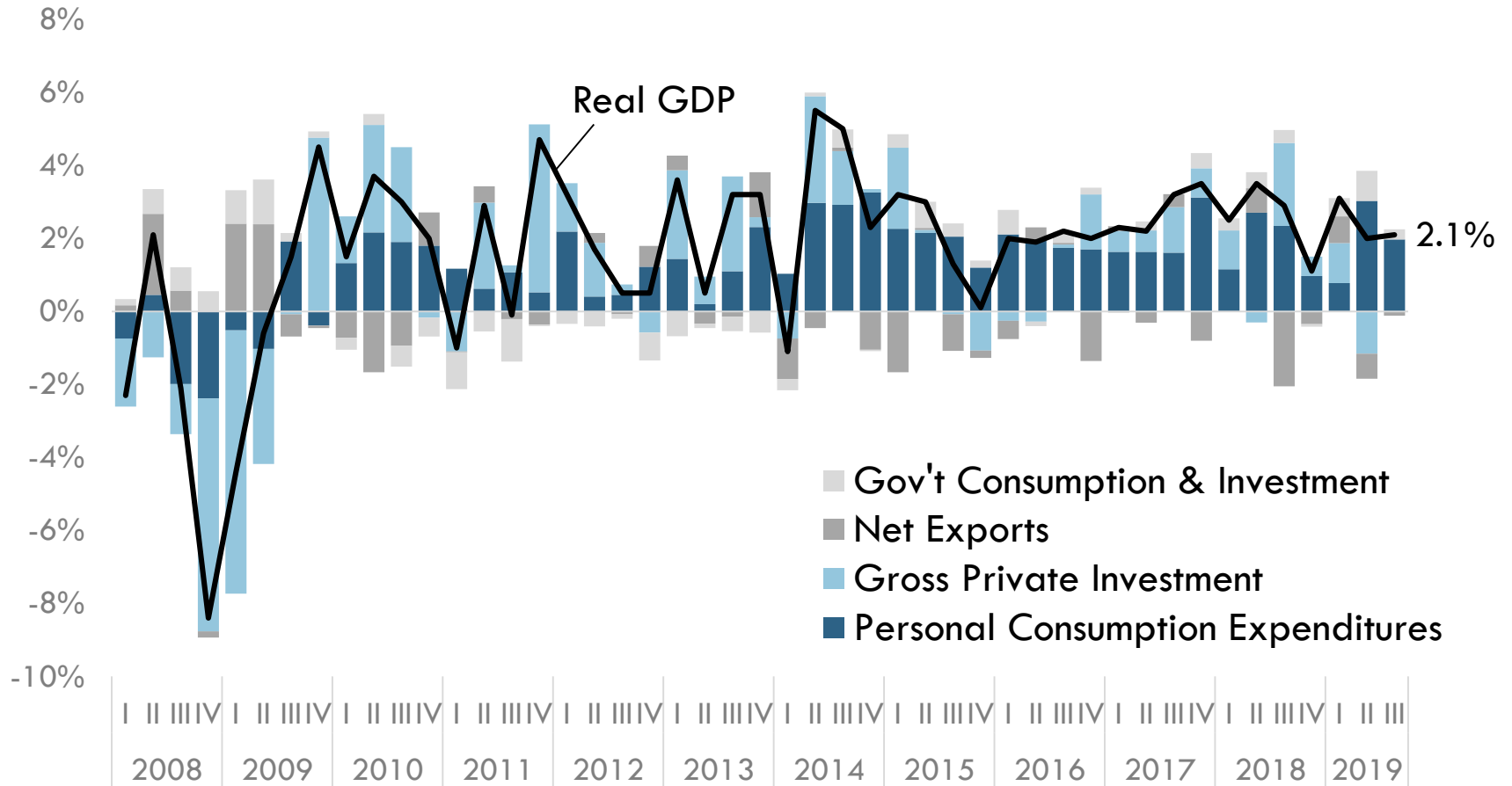
Economic Outlook



Consumers continue to drive growth in economic activity

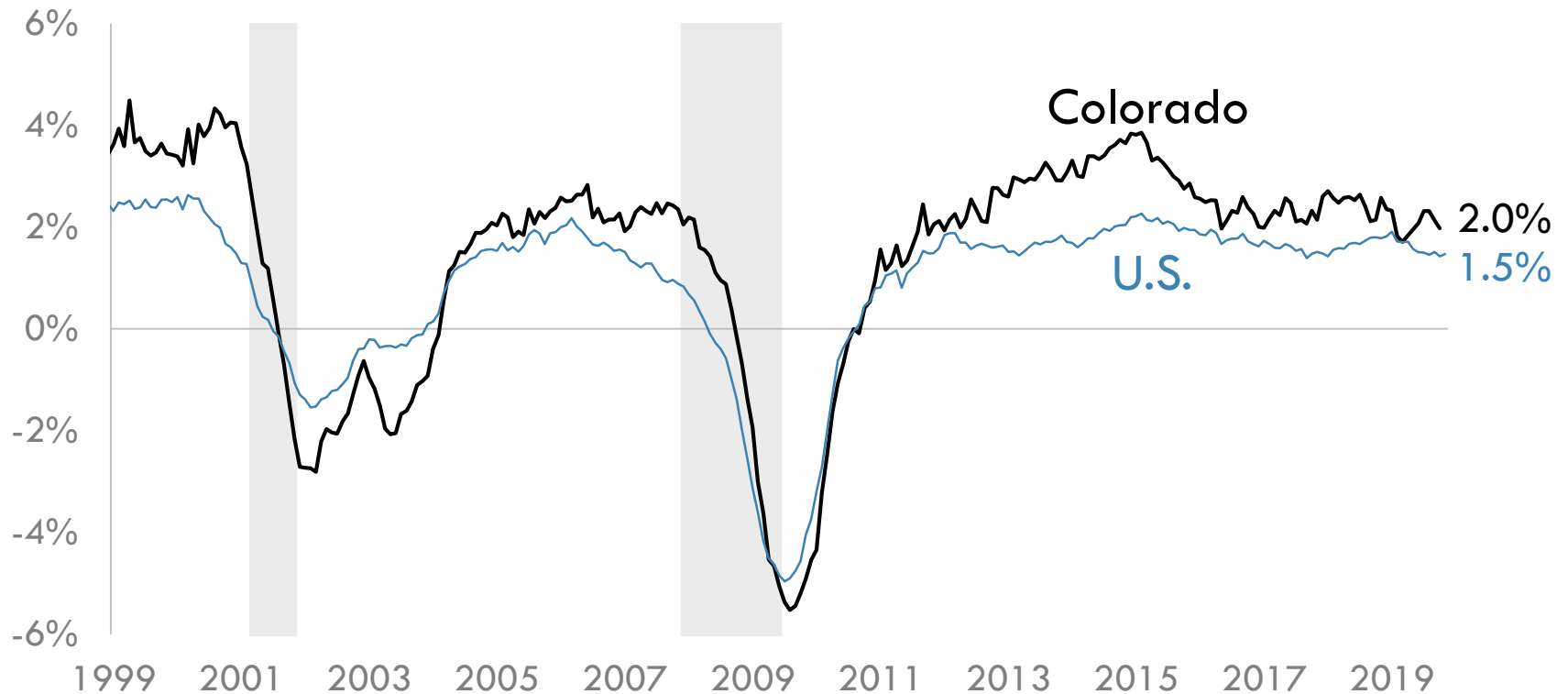
Contributions to Real Gross Domestic Product (GDP)

Annualized Change over the Prior Quarter



Employment growth continues, but will slow further as the labor market tightens

Year-over-Year Change in Nonfarm Employment

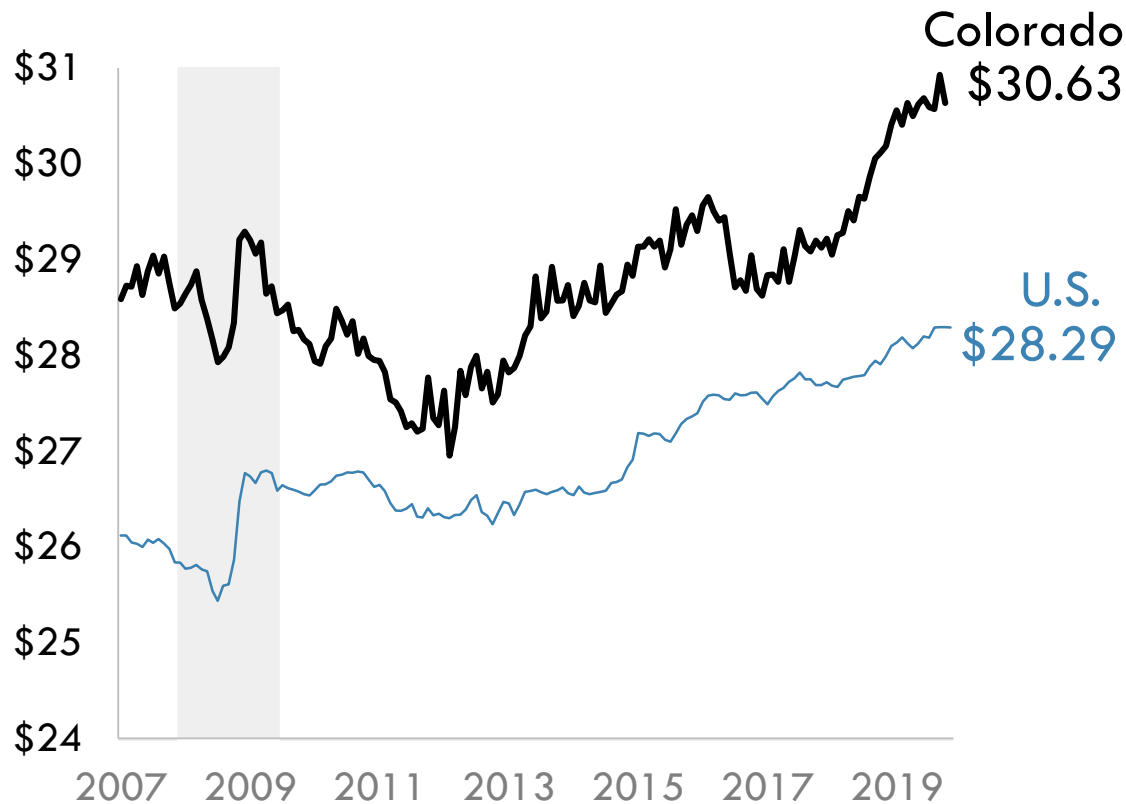


Source: U.S. Bureau of Labor Statistics. Seasonally adjusted. Colorado nonfarm employment estimates include estimates of revisions expected by Legislative Council Staff as a part of the annual rebenchmark process.

Wages will continue to rise as labor shortages in many industries persist, constraining business growth and profits

Real Average Hourly Earnings

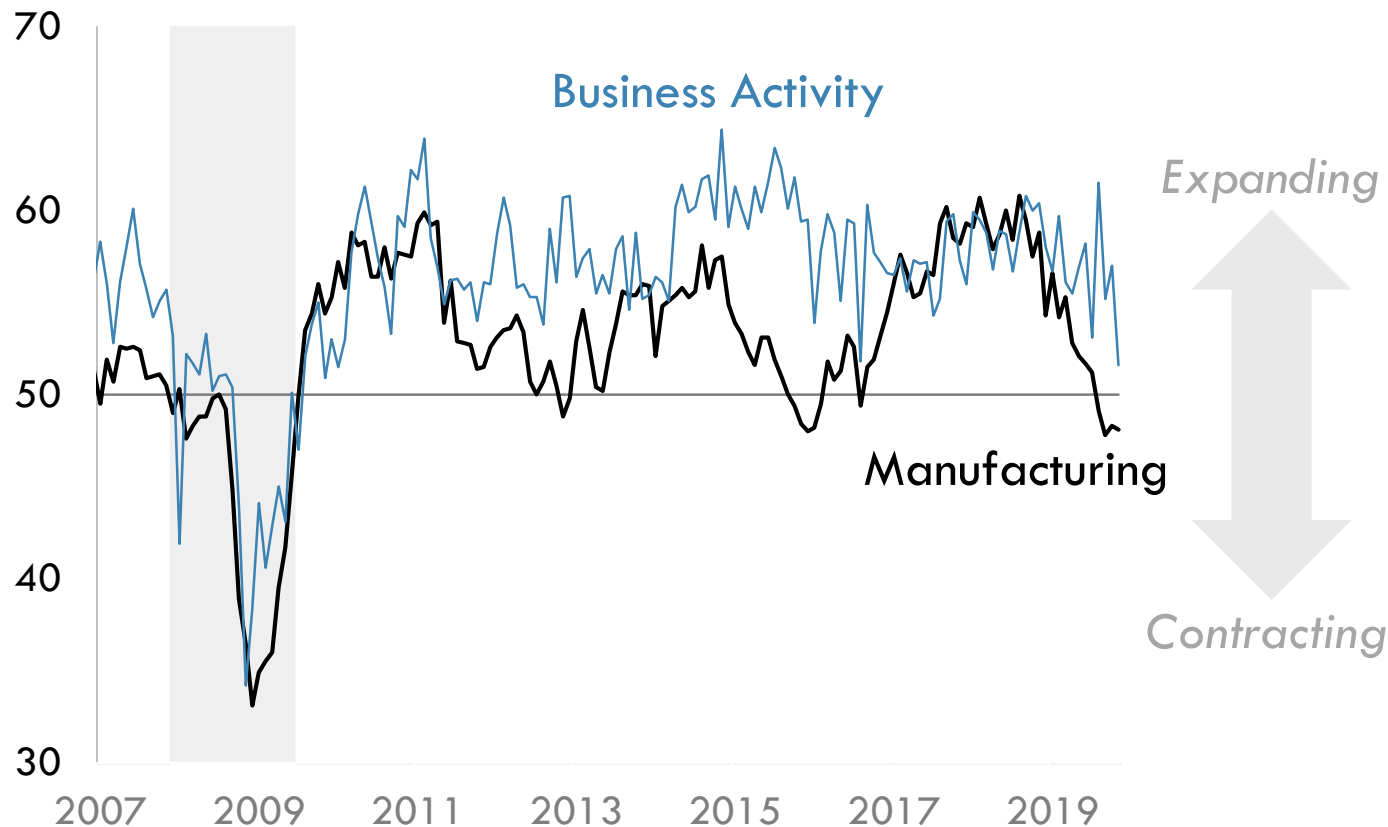
2019 Dollars



Manufacturing activity remains in contractionary territory and business activity has slowed

Institute for Supply Management Indices

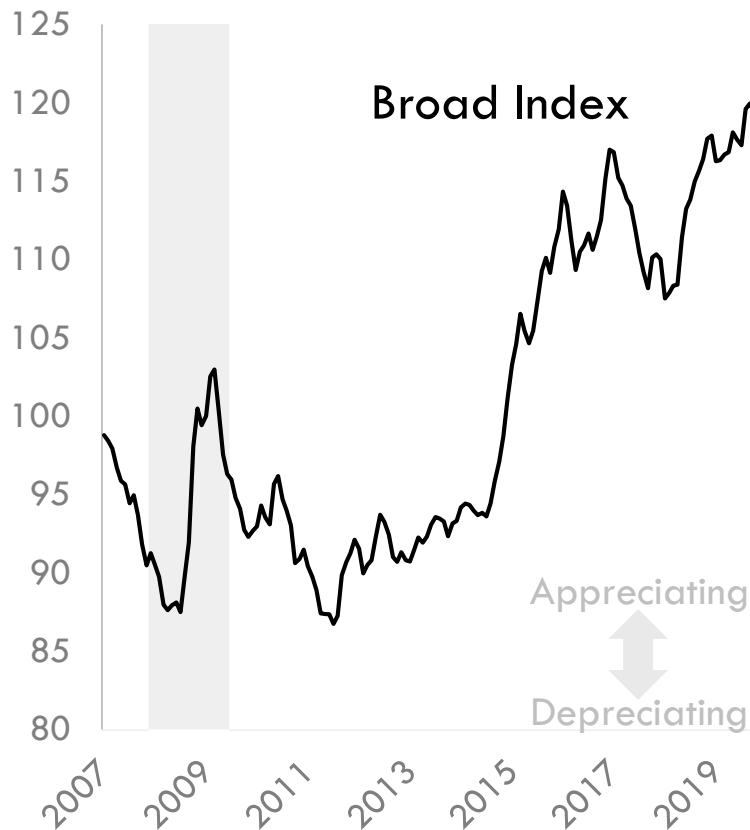
Diffusion Index



A strong dollar makes imports cheaper, but exports more expensive

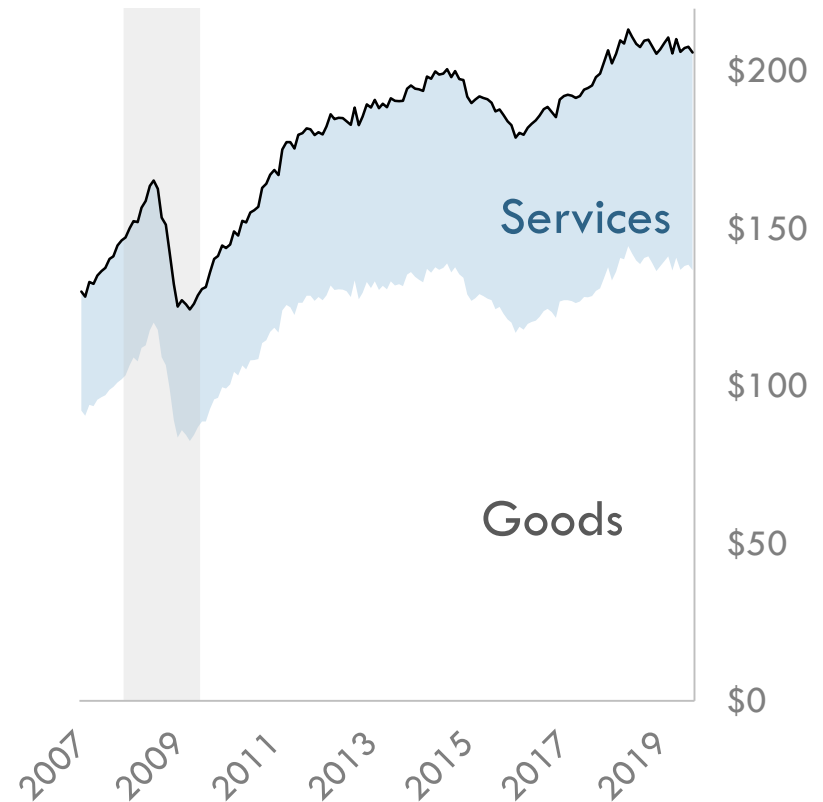
Trade Weighted U.S. Dollar

Index of the Dollar to Foreign Currencies



U.S. Exports

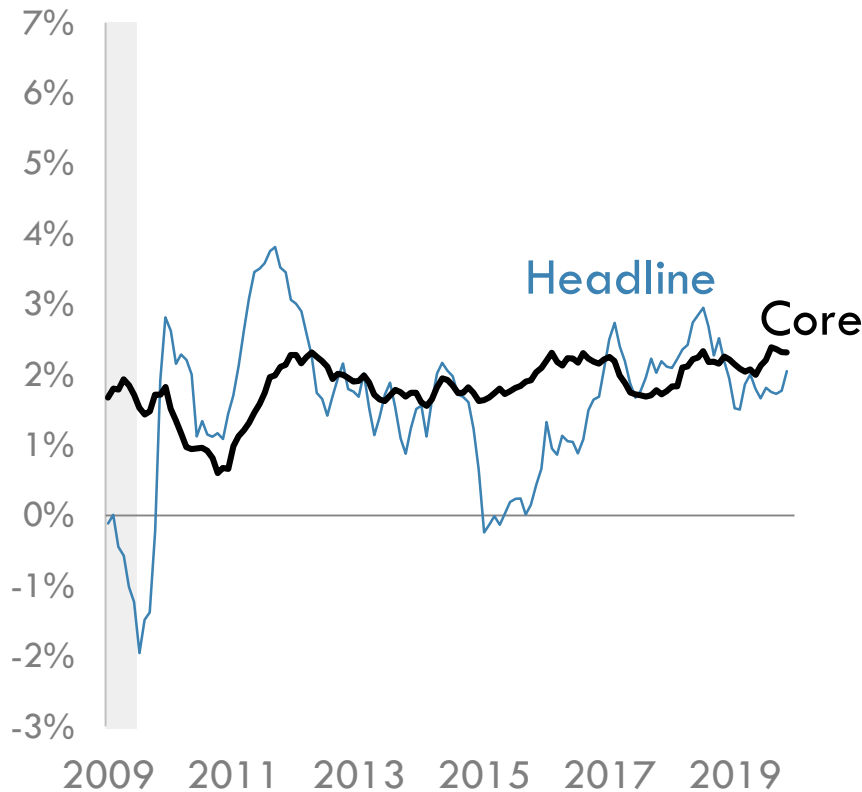
Millions of Dollars



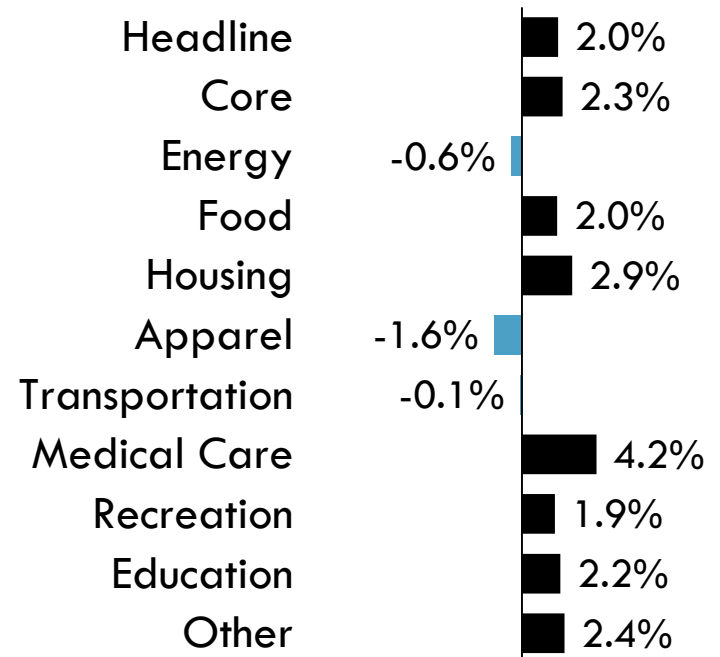
Inflationary pressures remain fairly subdued

CPI-U Inflation, U.S. City Average

Year-over-Year Change in Prices

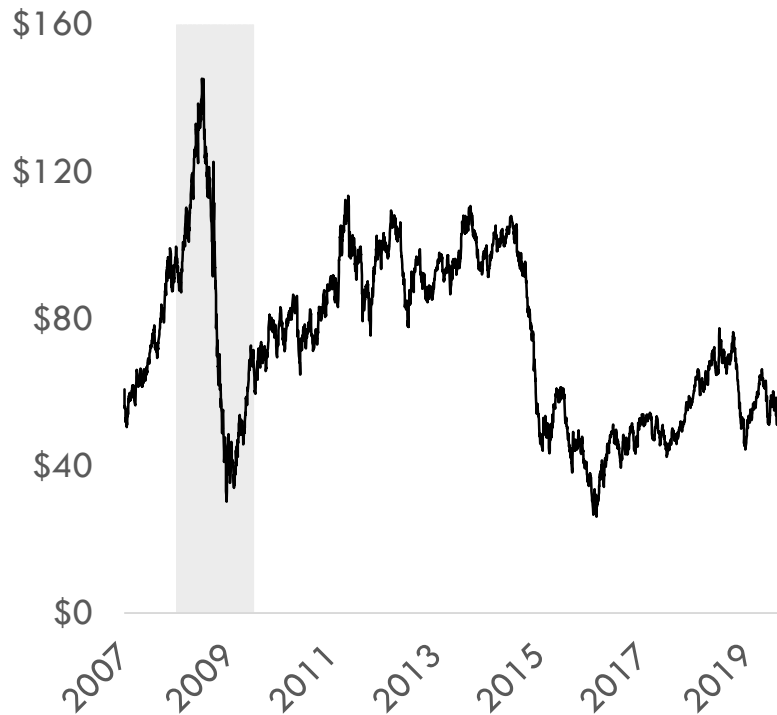


November 2019 over November 2018



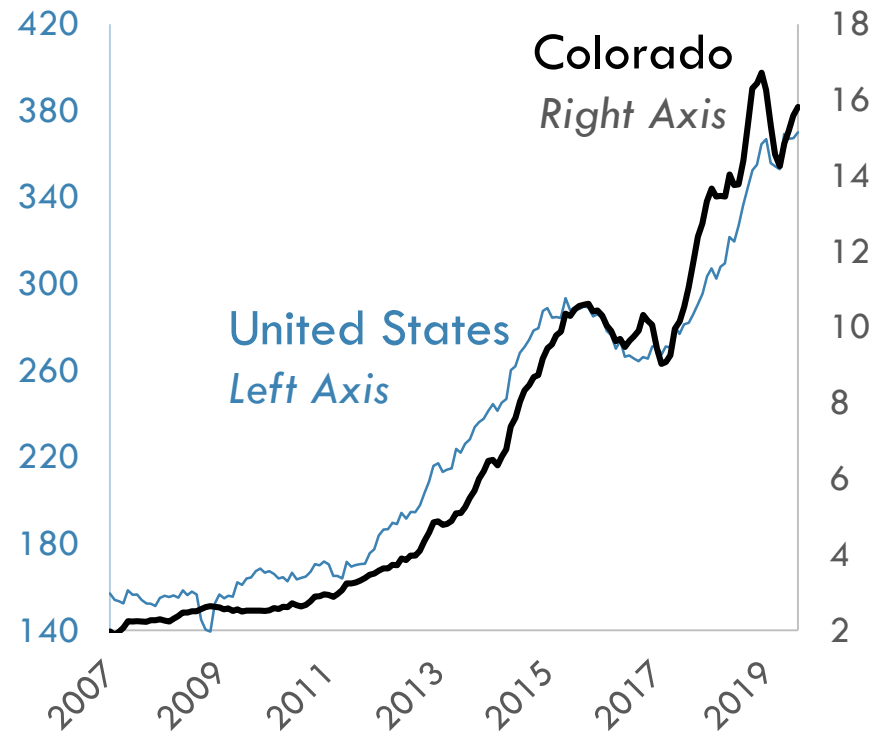
Crude oil prices remain subdued by strong supply, weaker demand

West Texas Intermediate
Crude Oil Price
Dollars per Barrel



Source: Energy Information Administration.
Average weekly prices through December 13, 2019.

Crude Oil Production
Millions of Barrels per Month



Source: Energy Information Administration. Three-month moving averages. Data are through August 2019.

Economic Outlook

U.S. and Colorado economic growth will continue, but at slower rates

- Labor markets will tighten further, constricting business growth and profits with higher wages
- Inflationary pressures will remain subdued on slower global economic demand for goods and slowing housing costs
- Energy, manufacturing, and export industry activity expected to remain soft into 2020

Recessionary risk for 2020 has eased, but risk remains elevated for the forecast period.

General Fund Budget Outlook



Ongoing shifts in taxpayer behavior and slowing economic growth are expected to drive General Fund revenue growth

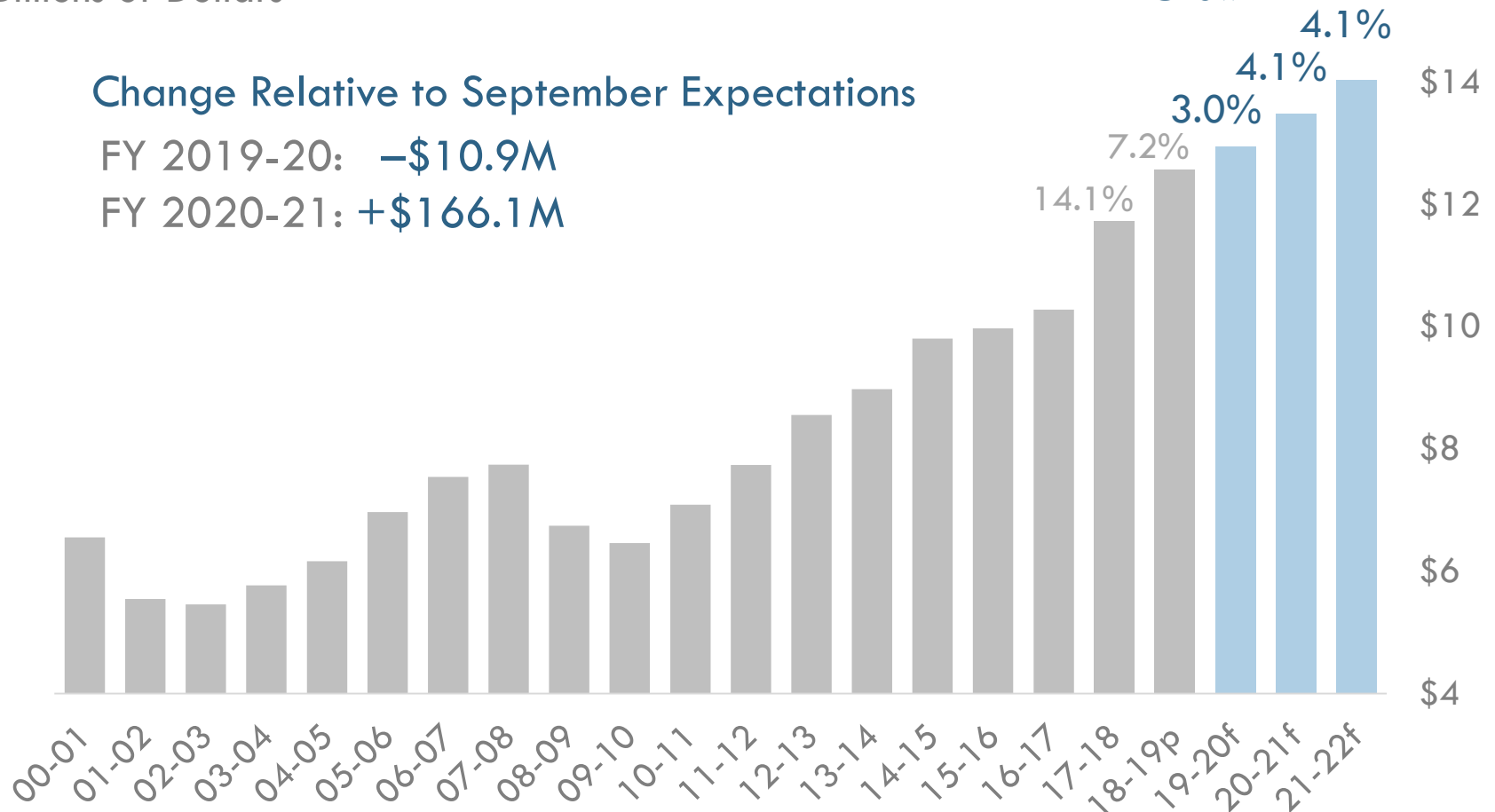
Gross General Fund Revenue
Billions of Dollars

Year-over-Year
Growth

Change Relative to September Expectations

FY 2019-20: $-\$10.9M$

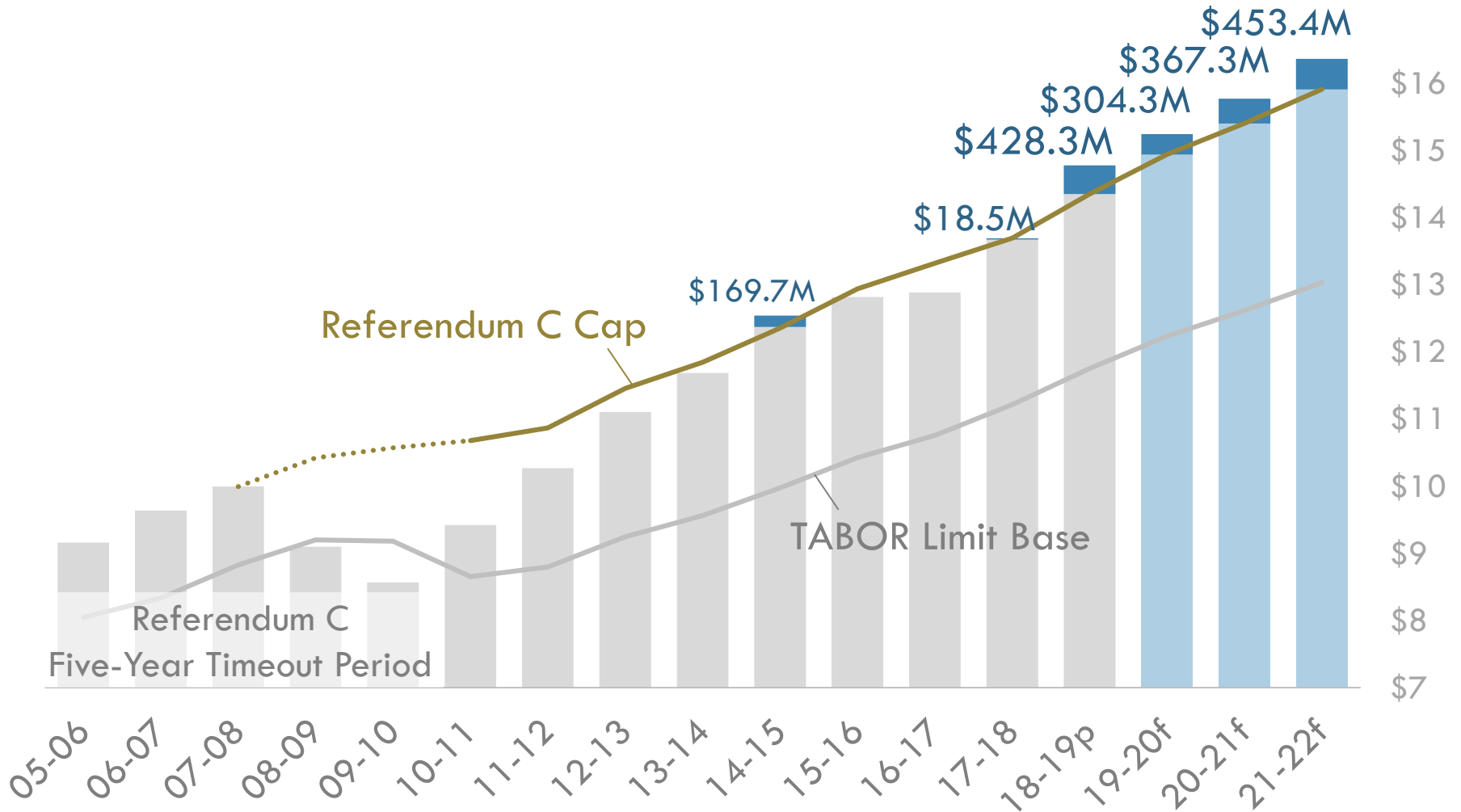
FY 2020-21: $+\$166.1M$



TABOR Outlook

Revenue Subject to TABOR

Dollars in Billions

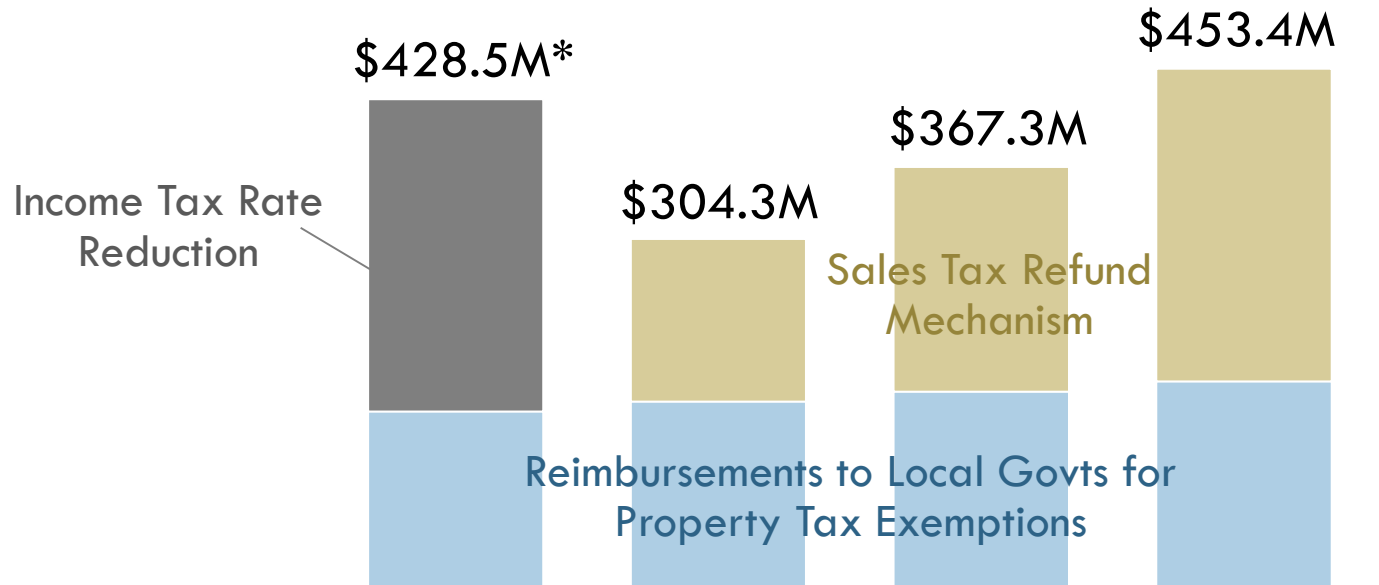


Source: Colorado Office of the State Controller and Legislative Council Staff December 2019 forecast.

TABOR surplus revenue is set aside in the year in which a surplus occurs to pay refunds in the following budget year

Expected TABOR Refunds & General Fund Budget Impacts

Dollars in Millions



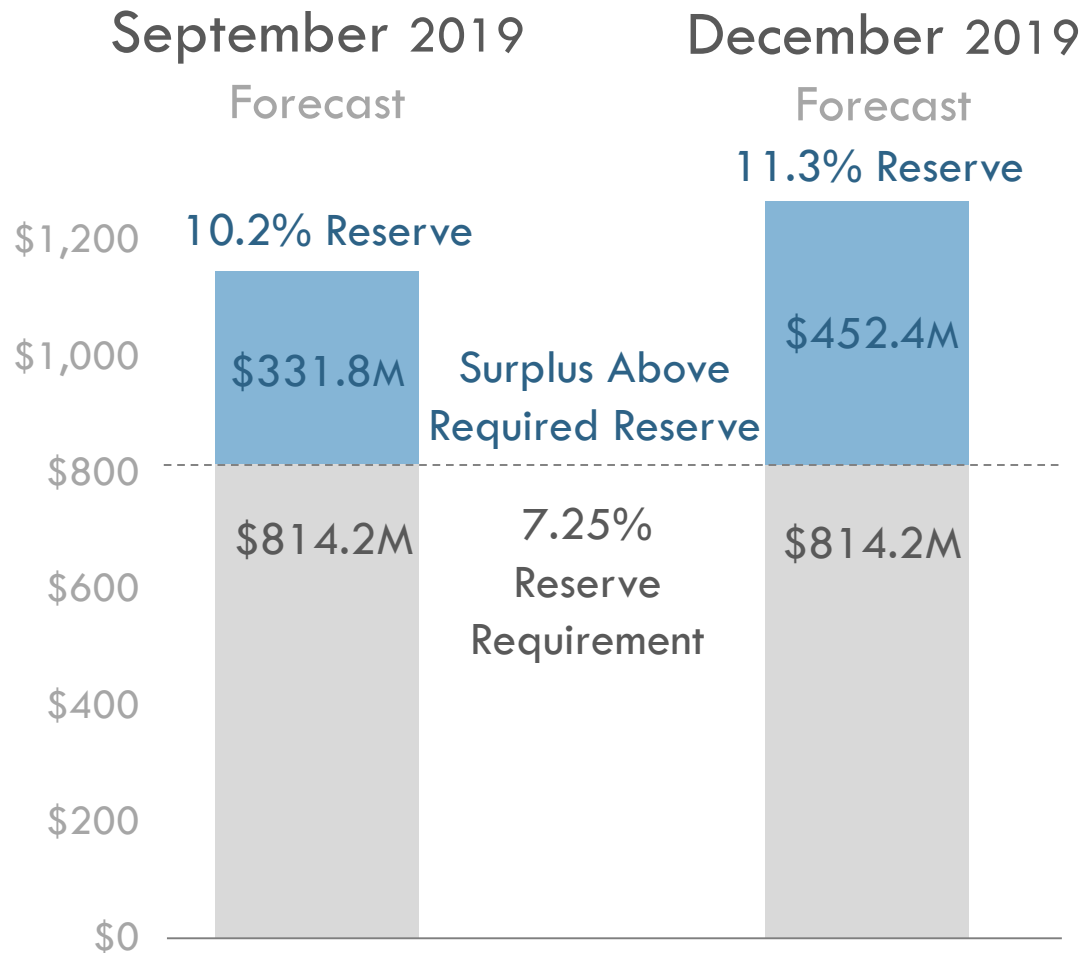
TABOR Surplus & Set Aside:	2018-19	2019-20	2020-21	2021-22
Refunded in Fiscal Year:	2019-20	2020-21	2021-22	2022-23

Source: Colorado Office of the State Controller and Legislative Council Staff December 2019 forecast.

*This amount includes \$0.1 million in underrefunds from the FY 2014-15 surplus.

Last Year | FY 2018-19 General Fund Reserve

Dollars in Millions

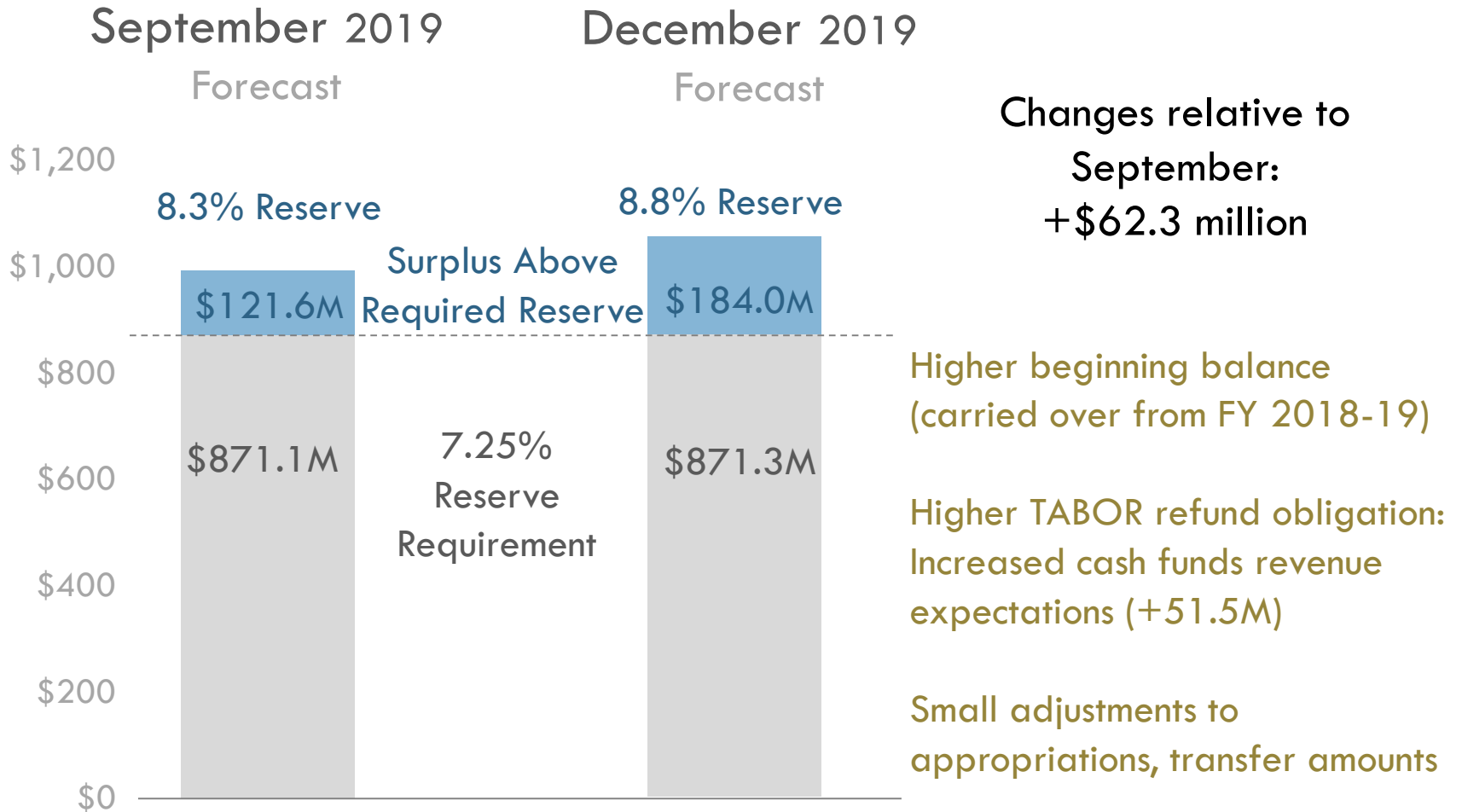


Changes relative to September:
+\$120.5 million

The change is attributable to a new assumption for the FY 2018-19 year-end balance based on the Basic Financial Statements. This amount will be updated with the release of the CAFR.

Current Year | FY 2019-20 General Fund Reserve

Dollars in Millions



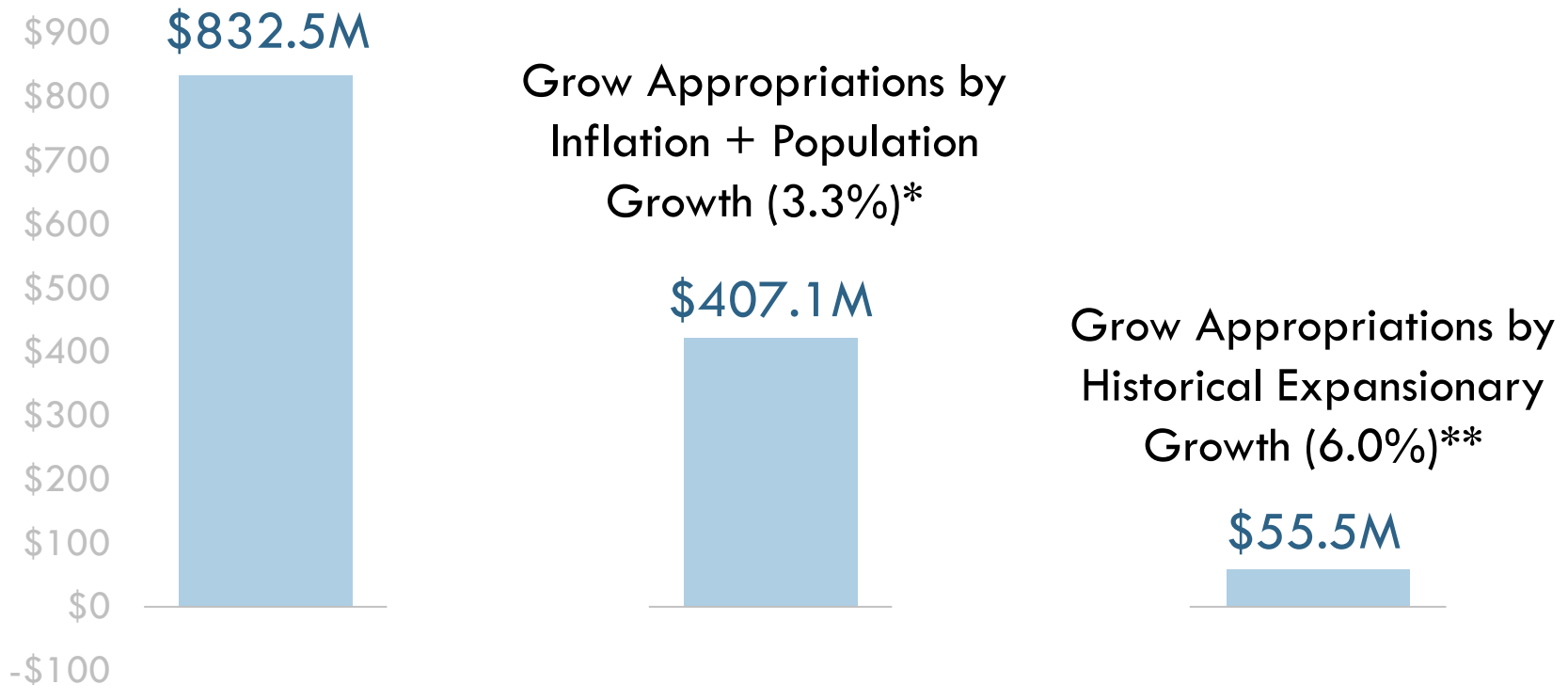
Next Year | FY 2020-21 Budget Outlook Scenarios

Amounts **above** or **below** the required 7.25% reserve.

Incorporates the revenue forecast, current law transfers, rebates and expenditures, TABOR refund obligations, and the reserve requirement.

Hold FY 2019-20

Appropriations Constant



Source: Legislative Council Staff December 2019 forecast.

*2020 population and inflation projections. **Appropriations growth over the past two economic expansions.

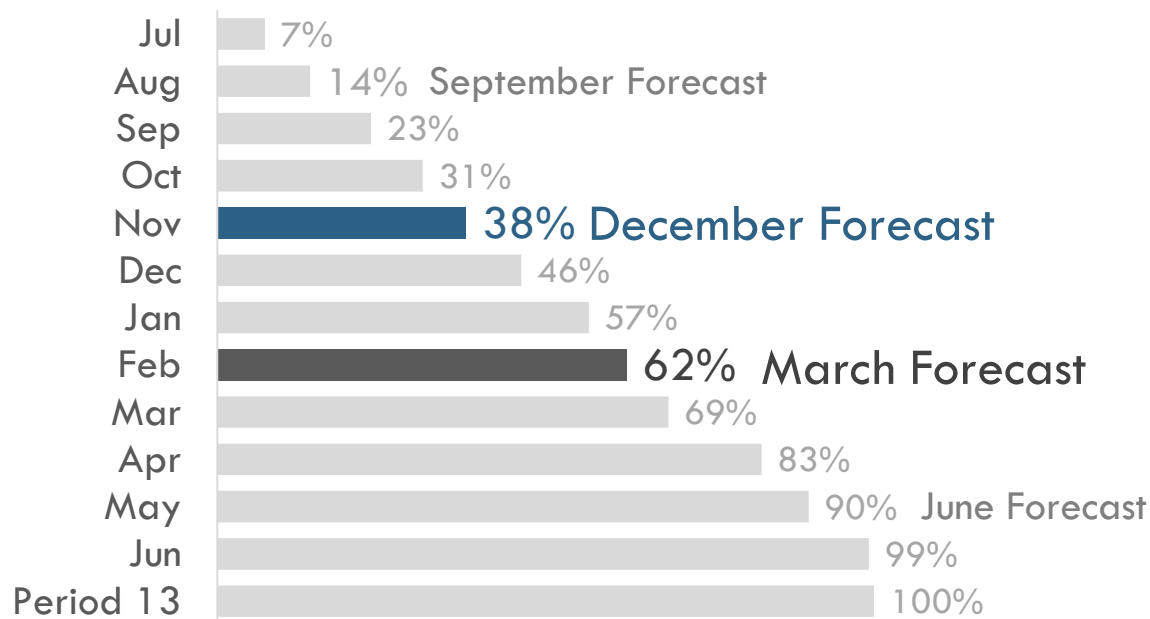
Risks to the Forecast

Upside Risks for FY 2019-20

- Ongoing shifts in taxpayer behavior with federal tax law changes
- Taxation of out-of-state (including online) sales tax collections

How Much Do We Know About FY 2019-20?

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



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

Risks to the Forecast

Elevated downside risk for FY 2020-21 and FY 2021-22

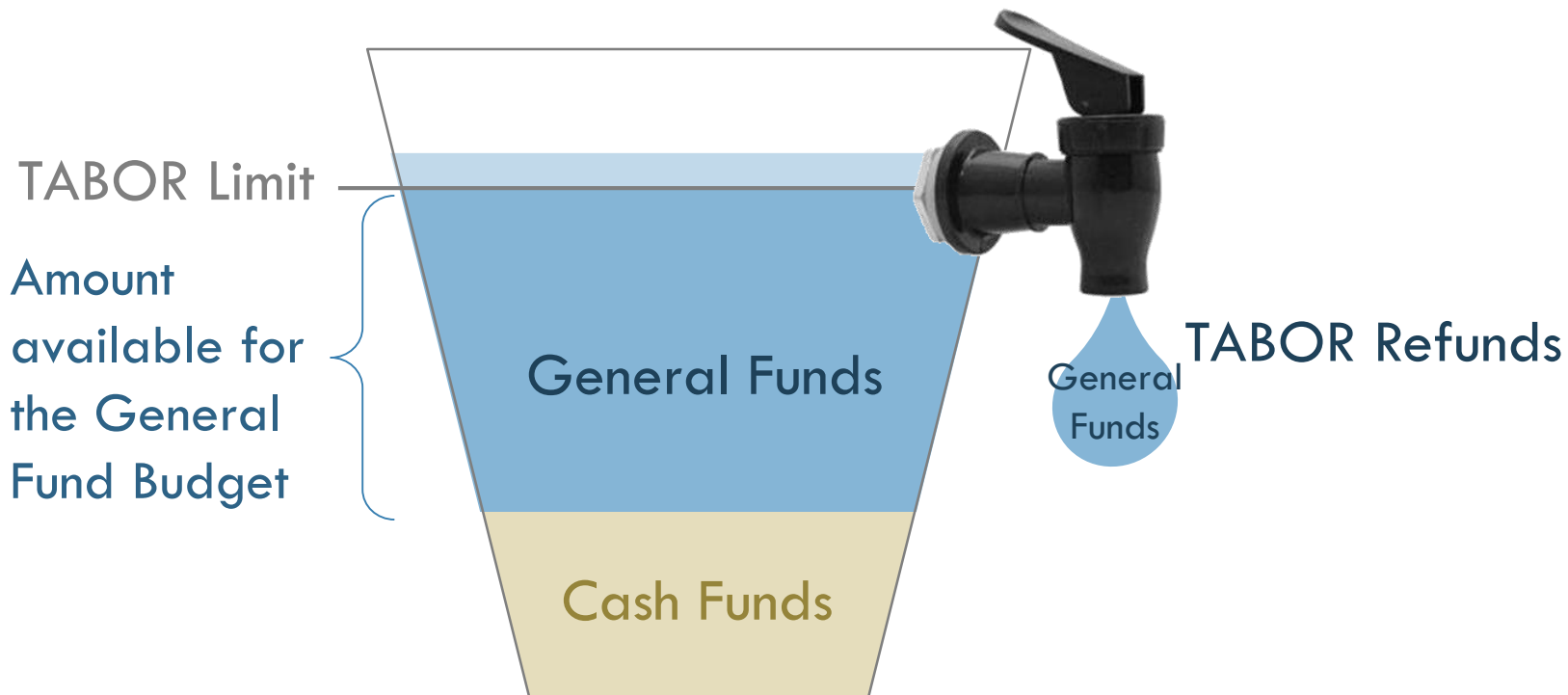
- Slower growth as the economic expansion matures
- Leading indicators improved some, but still flashing warning signs

In the current TABOR refund situation...

- The TABOR limit will constrain revenue growth
- Upside surprises mean larger TABOR refunds
- Higher than expected *cash fund* revenue will increase General Fund budgetary pressures

TABOR Refunds are refunded from General Funds

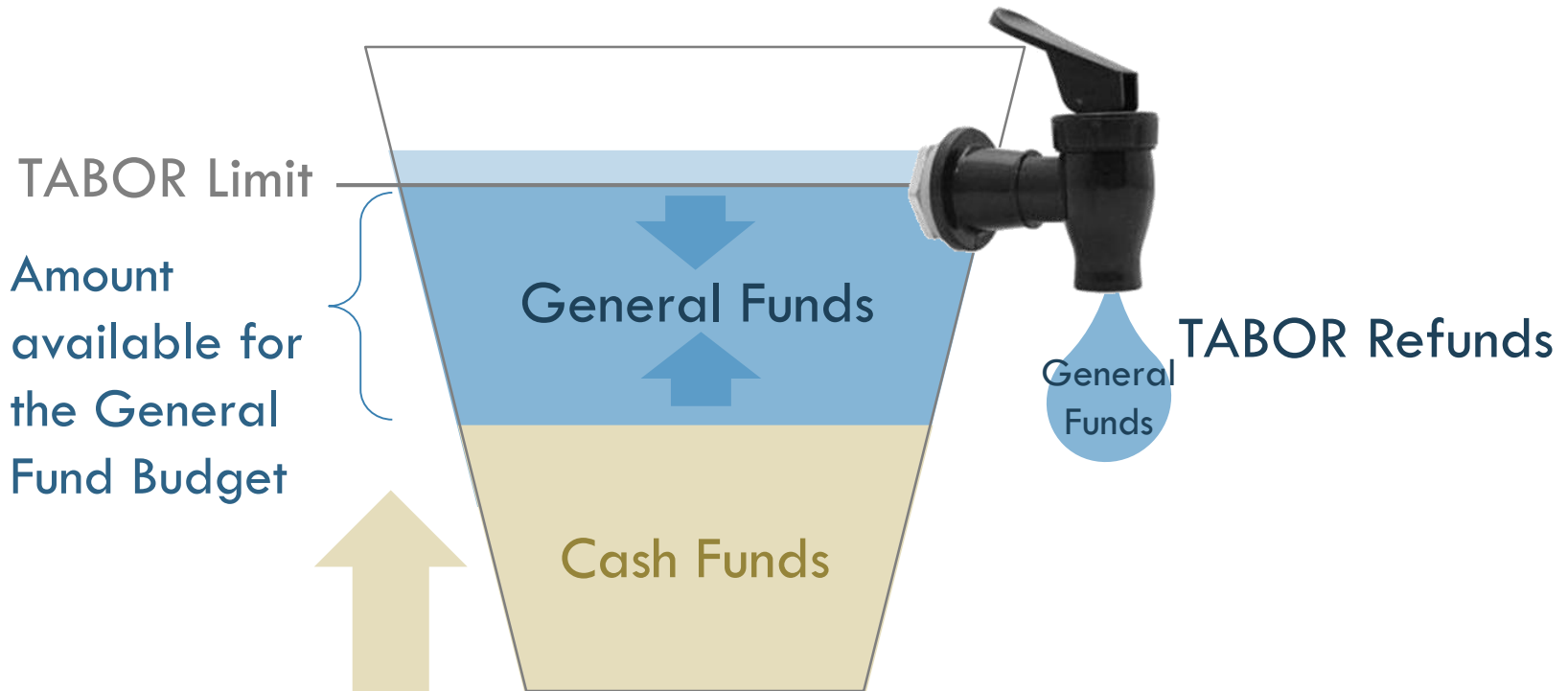
In a TABOR surplus situation...



General Fund dollars in = General Fund dollars out

TABOR Refunds are refunded from General Funds

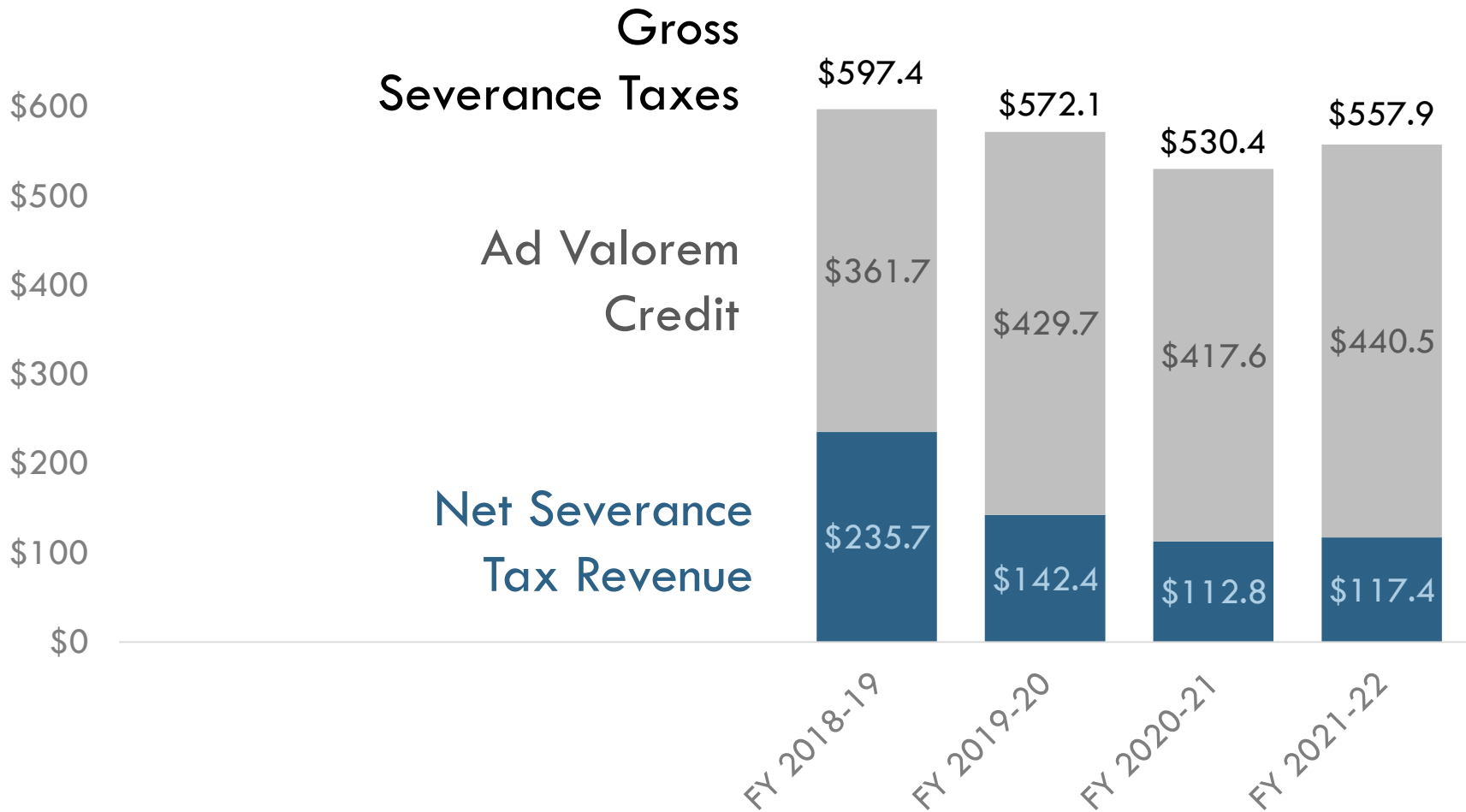
In a TABOR surplus situation...



Cash Fund dollars in = General Fund dollars out

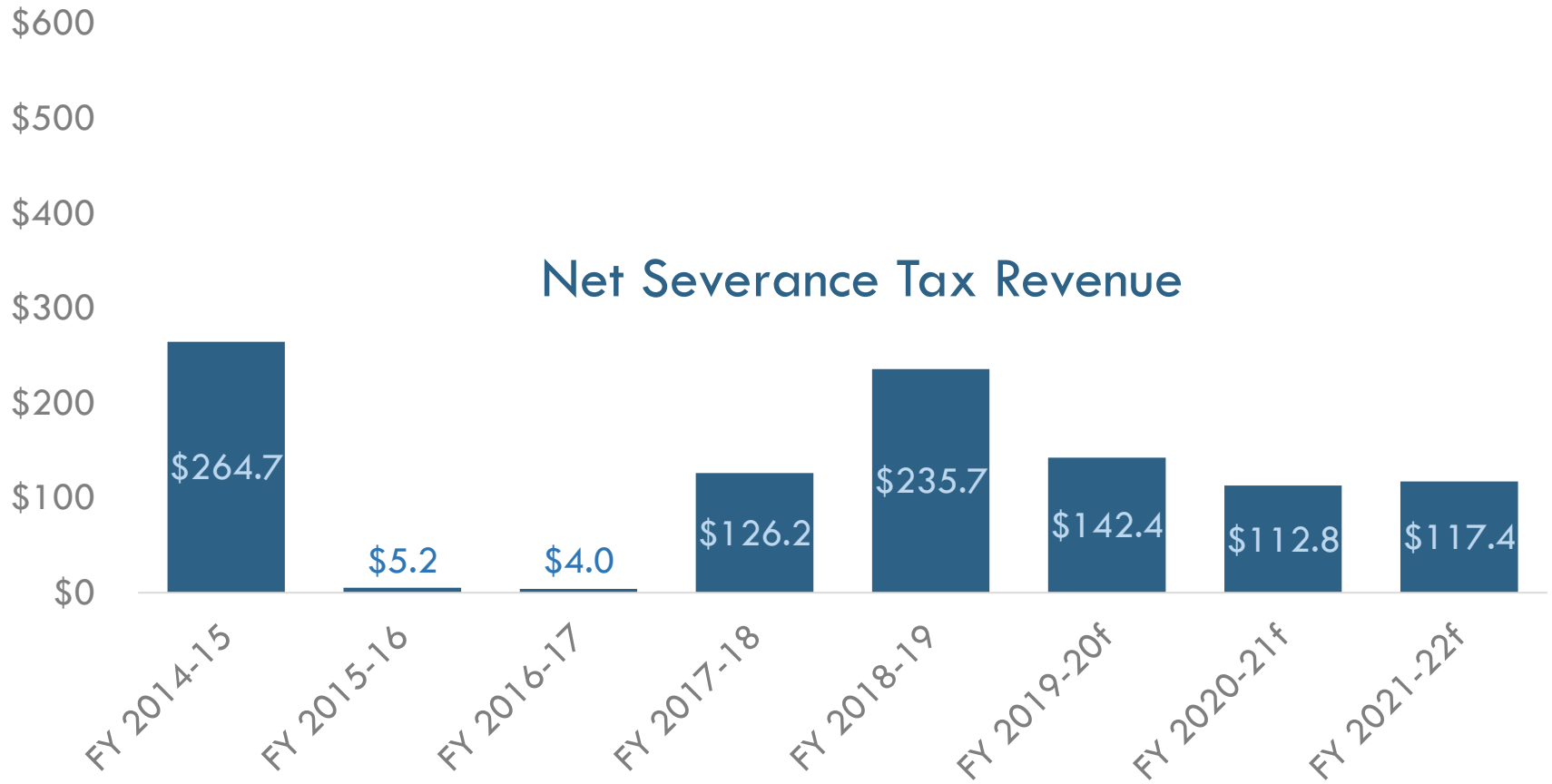
Severance Taxes Are Noisy

Dollars in Millions



Severance Taxes Are Noisy

Dollars in Millions



K-12 Enrollment Forecast



K-12 Public School Enrollment

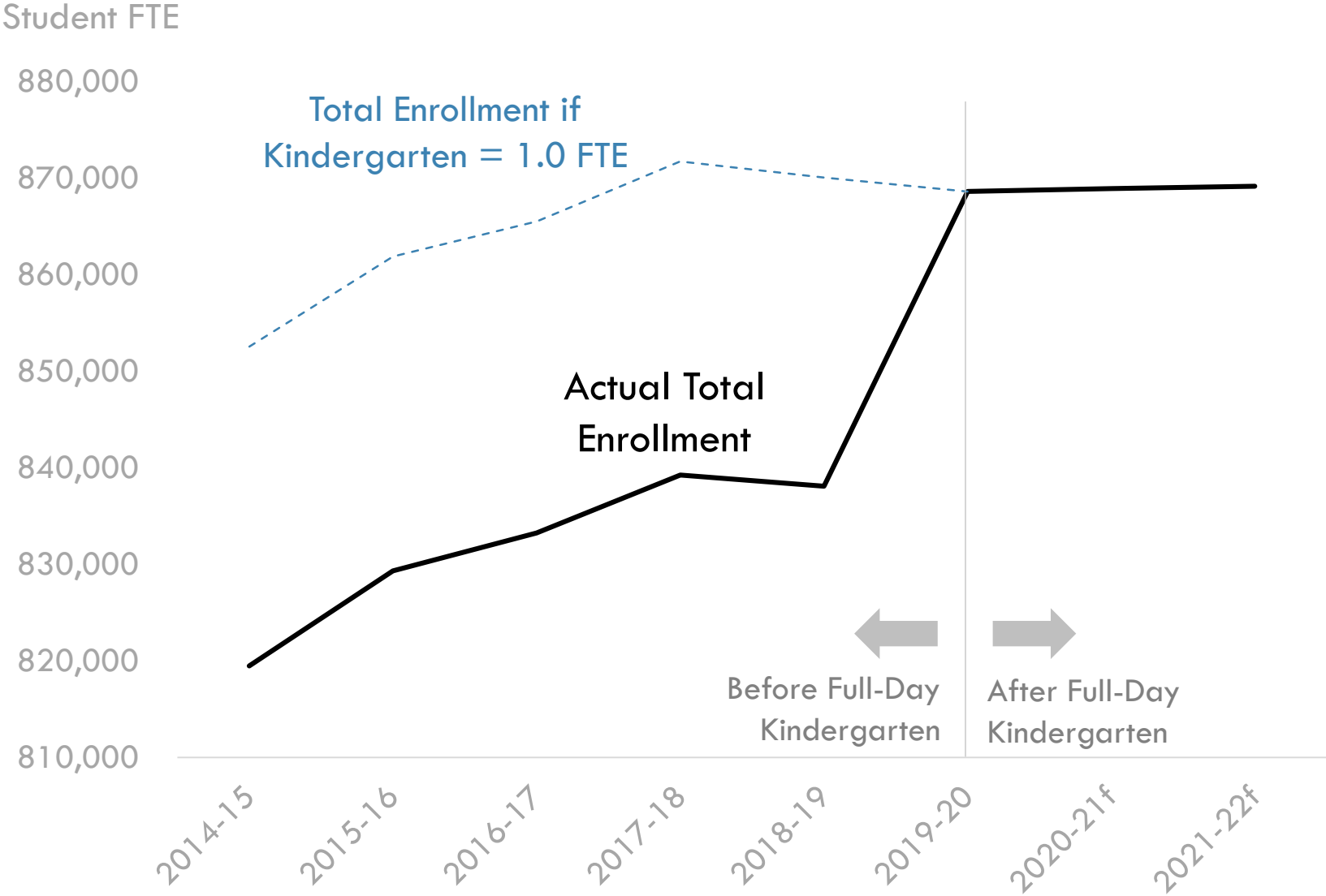
Full-Time Equivalent (FTE) Students

Region	Actual 2019-20	Percent Change*
Metro Denver	494,190	3.2%
Northern	91,722	4.8%
Colorado Springs	124,019	4.7%
Pueblo	33,370	4.0%
Eastern Plains	26,898	4.4%
San Luis Valley	7,414	2.8%
Mountain	25,489	2.6%
Southwest	13,589	4.1%
Mountain		
Western	51,909	3.3%
Statewide Total	868,597	3.6%

Source: Colorado Department of Education and Legislative Council Staff December 2019 forecast.

*Percent change from 2018-19, when kindergarten students were counted as 0.5 FTE.

Total K-12 Enrollment



Source: Colorado Department of Education and Legislative Council Staff December 2019 forecast (f).

*Prior to 2019-20, kindergarten students were counted as 0.5 FTE.

K-12 Public School Enrollment

Full-Time Equivalent (FTE) Students

Region	Actual 2019-20	Percent Change*	Estimated 2020-21	Percent Change	Estimated 2021-22	Percent Change	Average Growth**
Metro Denver	494,190	3.2%	491,985	-0.4%	490,832	-0.2%	-0.3%
Northern Colorado Springs	91,722	4.8%	93,069	1.5%	93,690	0.7%	1.1%
Pueblo	124,019	4.7%	125,051	0.8%	125,791	0.6%	0.7%
Eastern Plains	33,370	4.0%	33,139	-0.7%	32,809	-1.0%	-0.8%
San Luis Valley	26,898	4.4%	27,188	1.1%	27,456	1.0%	1.0%
Mountain Southwest Mountain	7,414	2.8%	7,489	1.0%	7,545	0.7%	0.9%
Western	25,489	2.6%	25,368	-0.5%	25,272	-0.4%	-0.4%
Statewide Total	13,589	4.1%	13,615	0.2%	13,680	0.5%	0.3%
	51,909	3.3%	52,002	0.2%	52,064	0.1%	0.1%
	868,597	3.6%	868,907	0.0%	869,138	0.0%	0.0%

Source: Colorado Department of Education and Legislative Council Staff December 2019 forecast.

*Percent change from 2018-19, when kindergarten students were counted as 0.5 FTE.

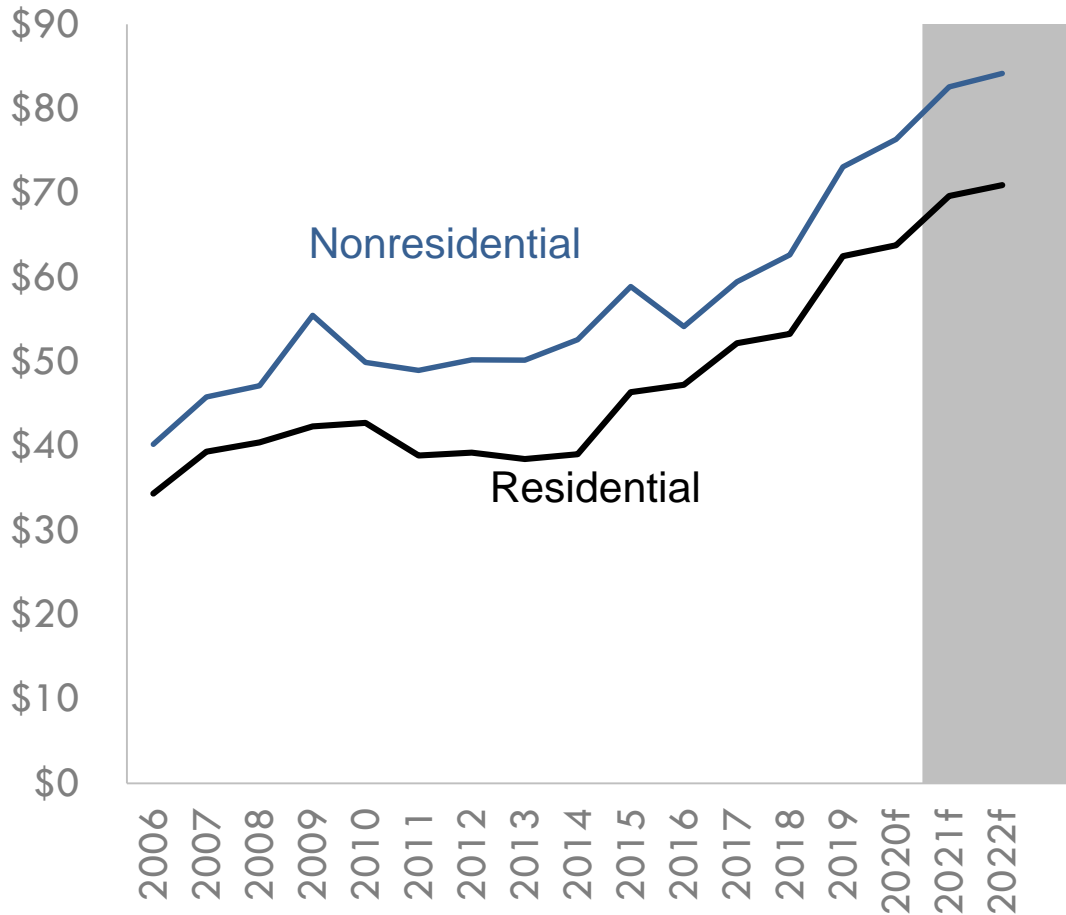
**Compound average annual growth rate between 2019-20 and 2021-22.

Assessed Valuation Forecast



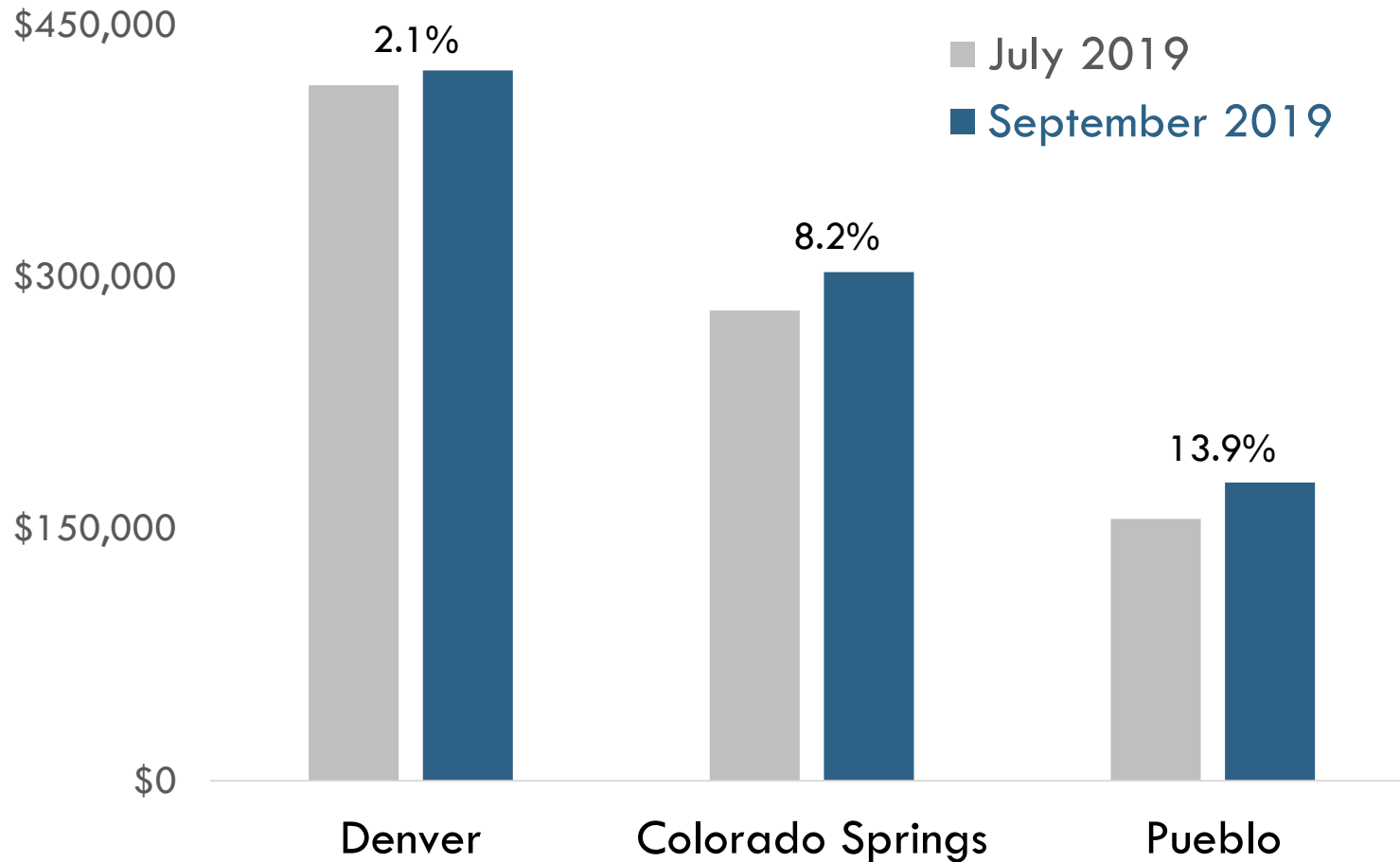
Assessed Values in Colorado

Dollars in Billions

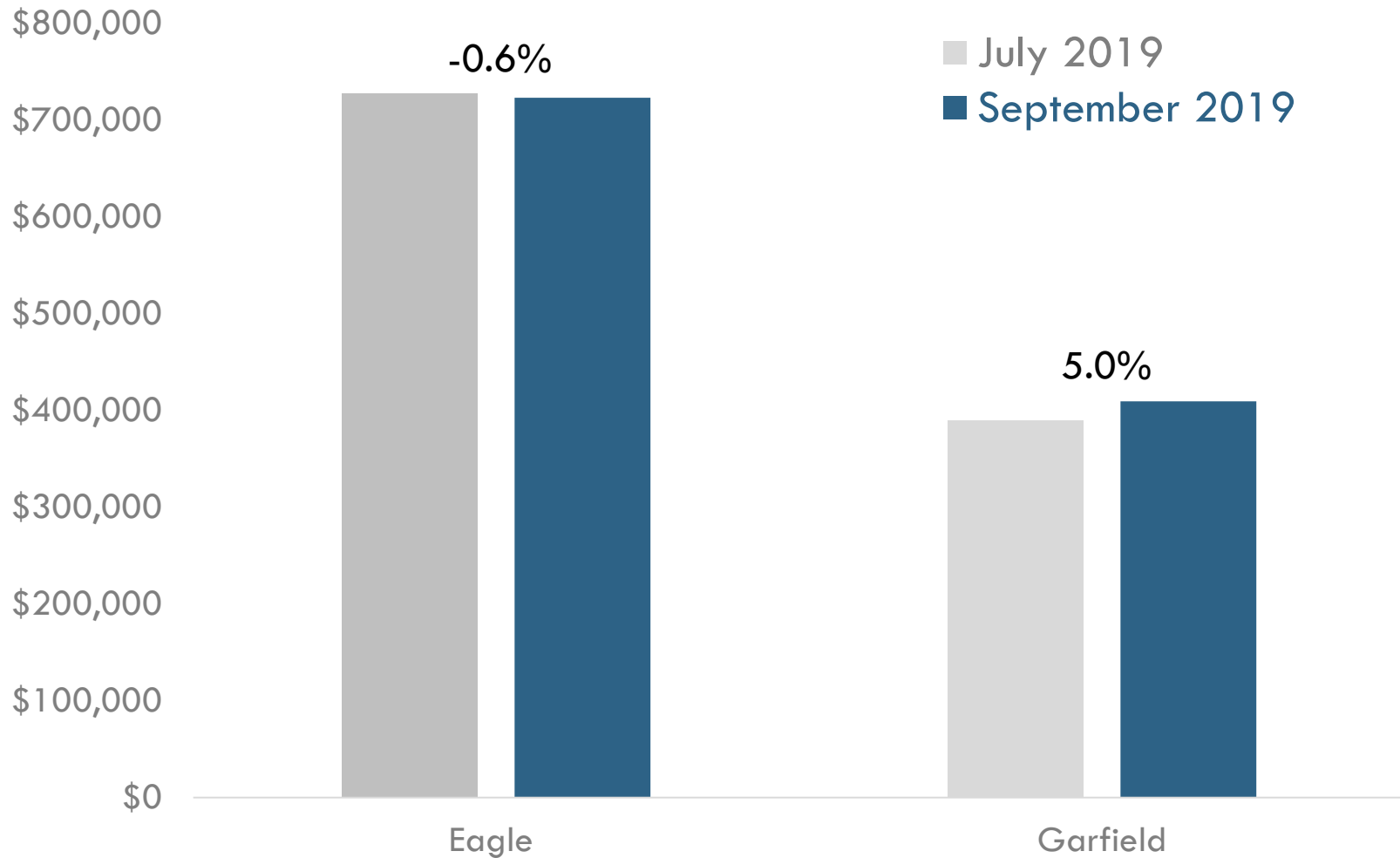


Year	Total Assessed Value	Percent Change
2014	\$91.6	3.3%
2015	\$105.3	15.0%
2016	\$101.4	-3.7%
2017	\$111.6	10.1%
2018	\$115.9	3.8%
2019	\$135.6	17.0%
2020f	\$140.1	3.4%
2021f	\$152.2	8.6%
2022f	\$155.1	1.9%

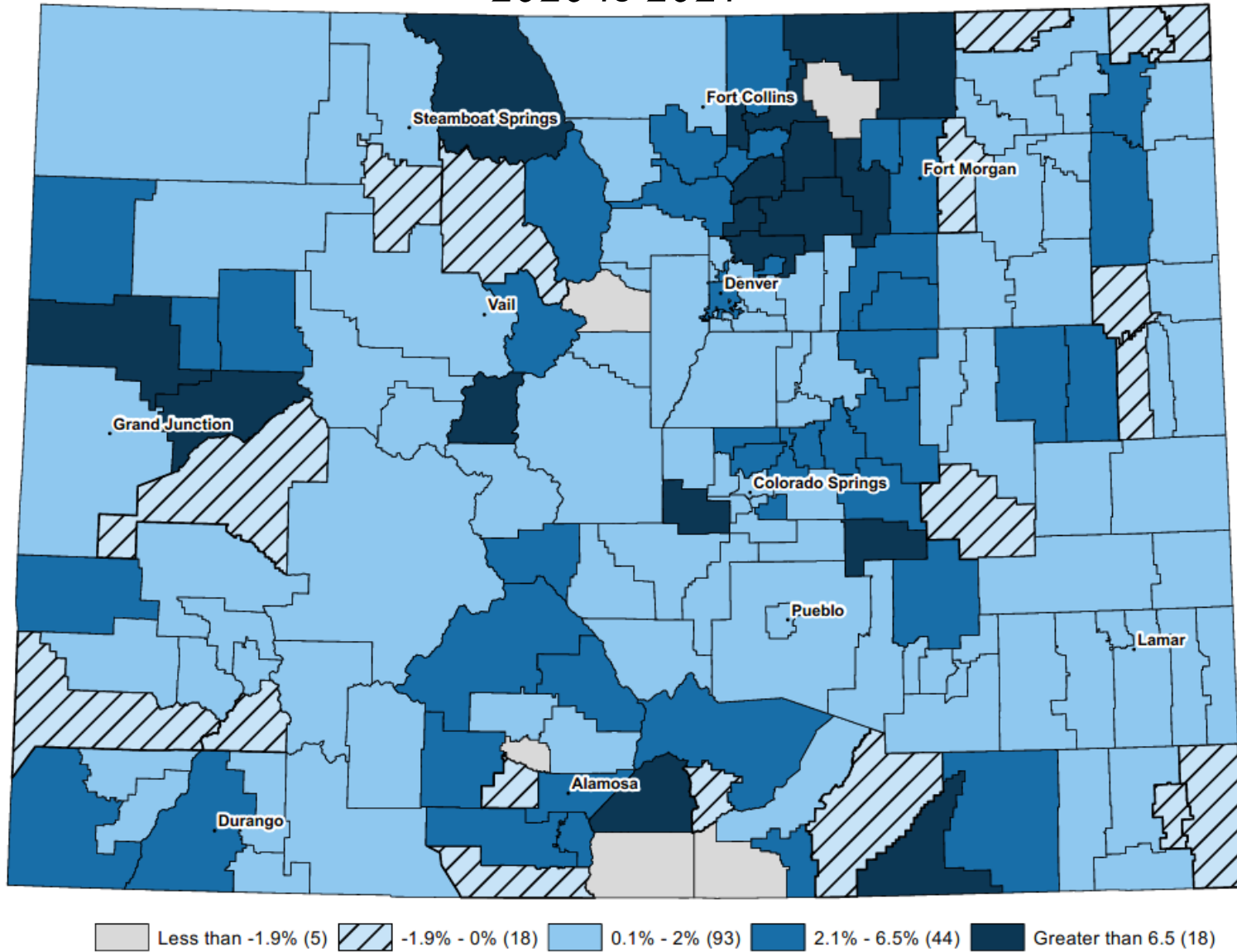
Comparison of Median Home Values

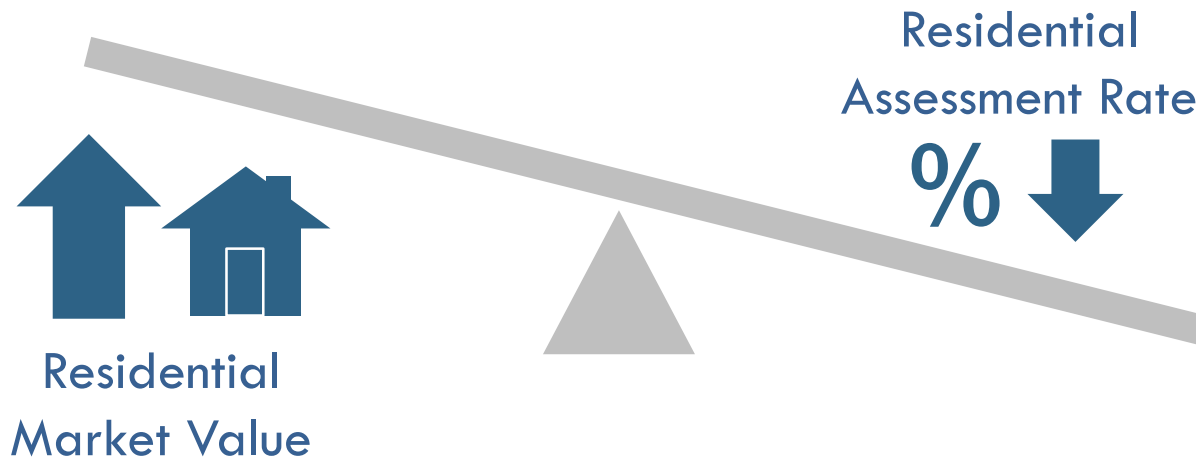


Comparison of Median Home Values



Change in Total Assessed Values by School District 2020 to 2021





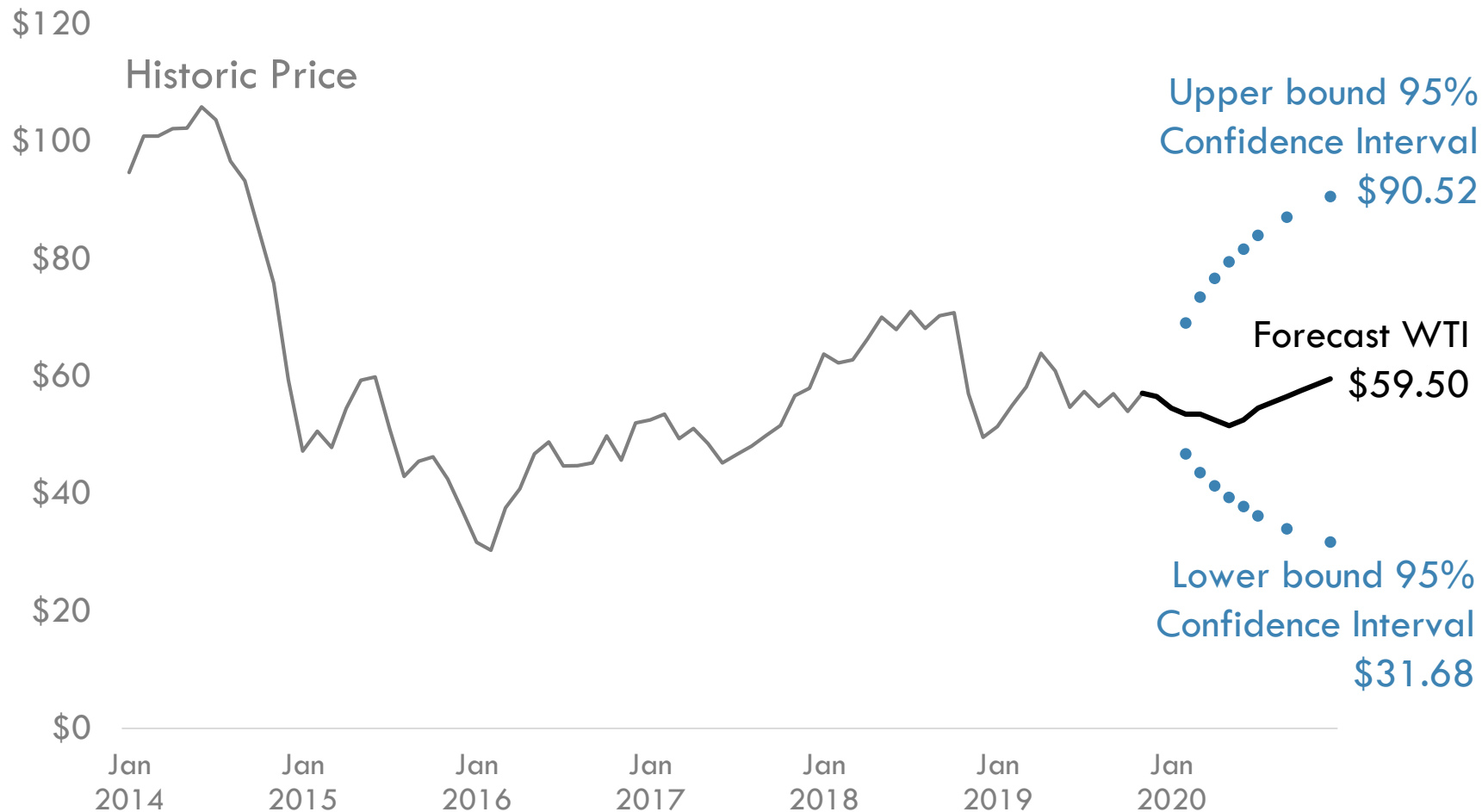
Residential Assessment
Rate
2021 & 2022

=

7.15%
7.13%

But the forecast is not without risks

West Texas Intermediate (WTI) Crude Oil Price



What does the price of oil mean for the RAR?

	Baseline*	Scenario 1	Scenario 2
Implied Price of Oil, Dec 2020	\$59.50	\$50.50	\$68.50
RAR	7.13%	7.00%	7.15%
Change in 2021 AV from baseline	\$0	-\$2.7 billion -1.7%	\$1.6 billion 1.0%

*Legislative Council Staff December 2019 forecast.
RAR = Residential assessment rate.

School Finance Outlook



Changes Under House Bill 19-1262

FY 2019-20 Cost of Full-Day Kindergarten Implementation

Dollars in Millions

	Utilization	Funded Pupil Count	Total Program	State Aid
Estimated	100%	25,896	\$220.6	\$213.2
	95%	24,702	\$210.3	\$202.9
	90%	23,508	\$200.0	\$192.7
	85%	22,367	\$190.2	\$182.9
Actual		23,803	\$204.2	\$198.3

Change in Expectations for FY 2019-20 School Finance Funding

Dollars in Millions

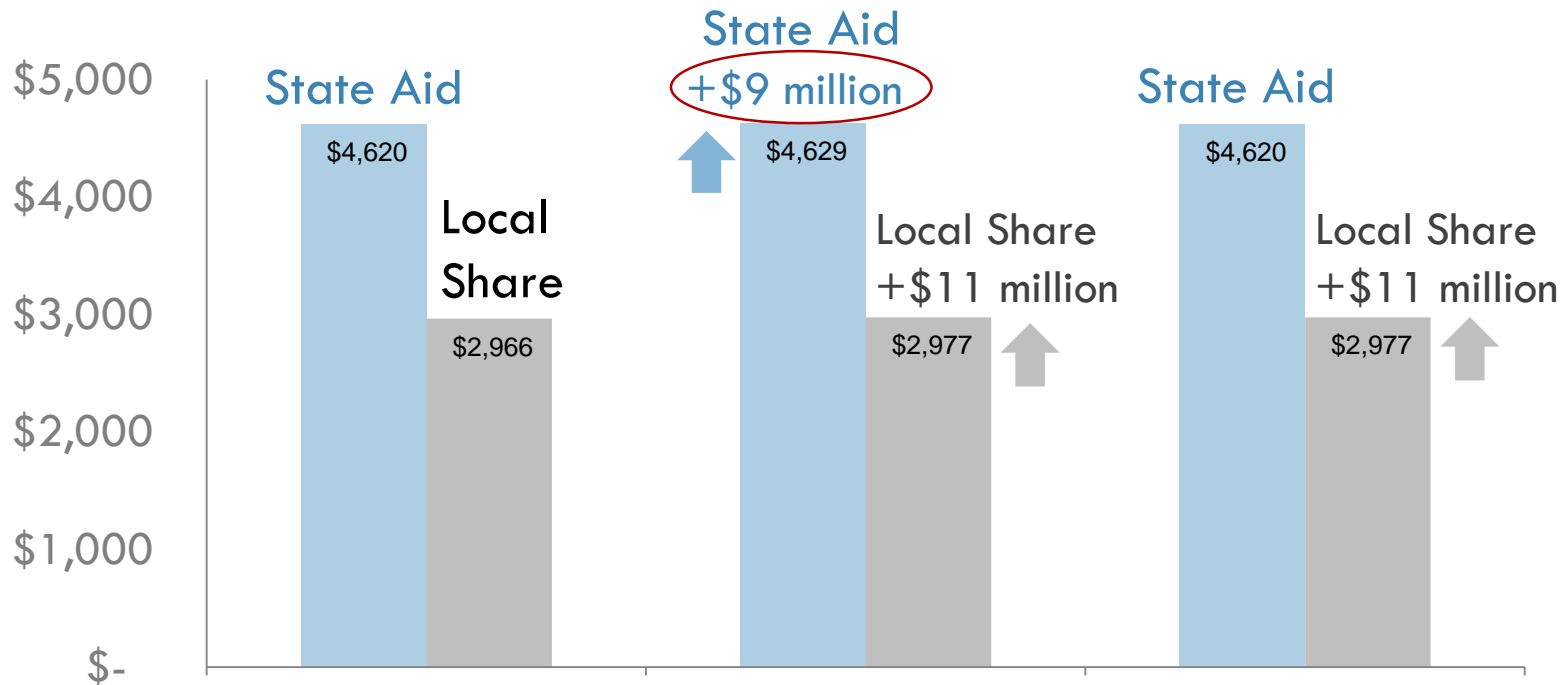
Current Law
Appropriation

December 2019 Expectations
The General Assembly's Choices Range From:

BS Factor: \$572 million

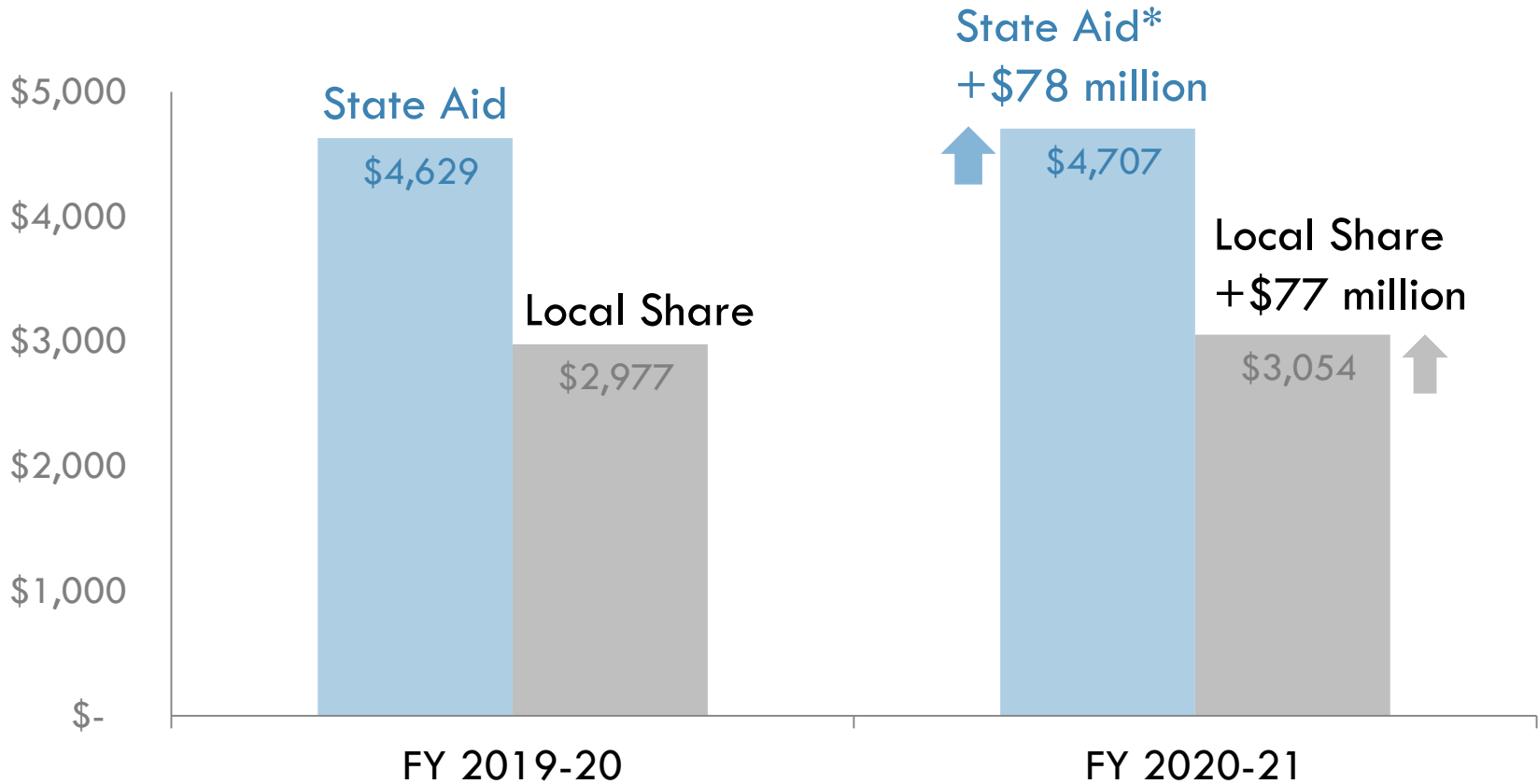
Hold at \$572 million

Increase to \$581 million



Year-over-Year Change in School Finance Funding FY 2019-20 to FY 2020-21

Dollars in Millions



Source: Legislative Council Staff December 2019 forecast.

*Assumes a constant Budget Stabilization Factor.

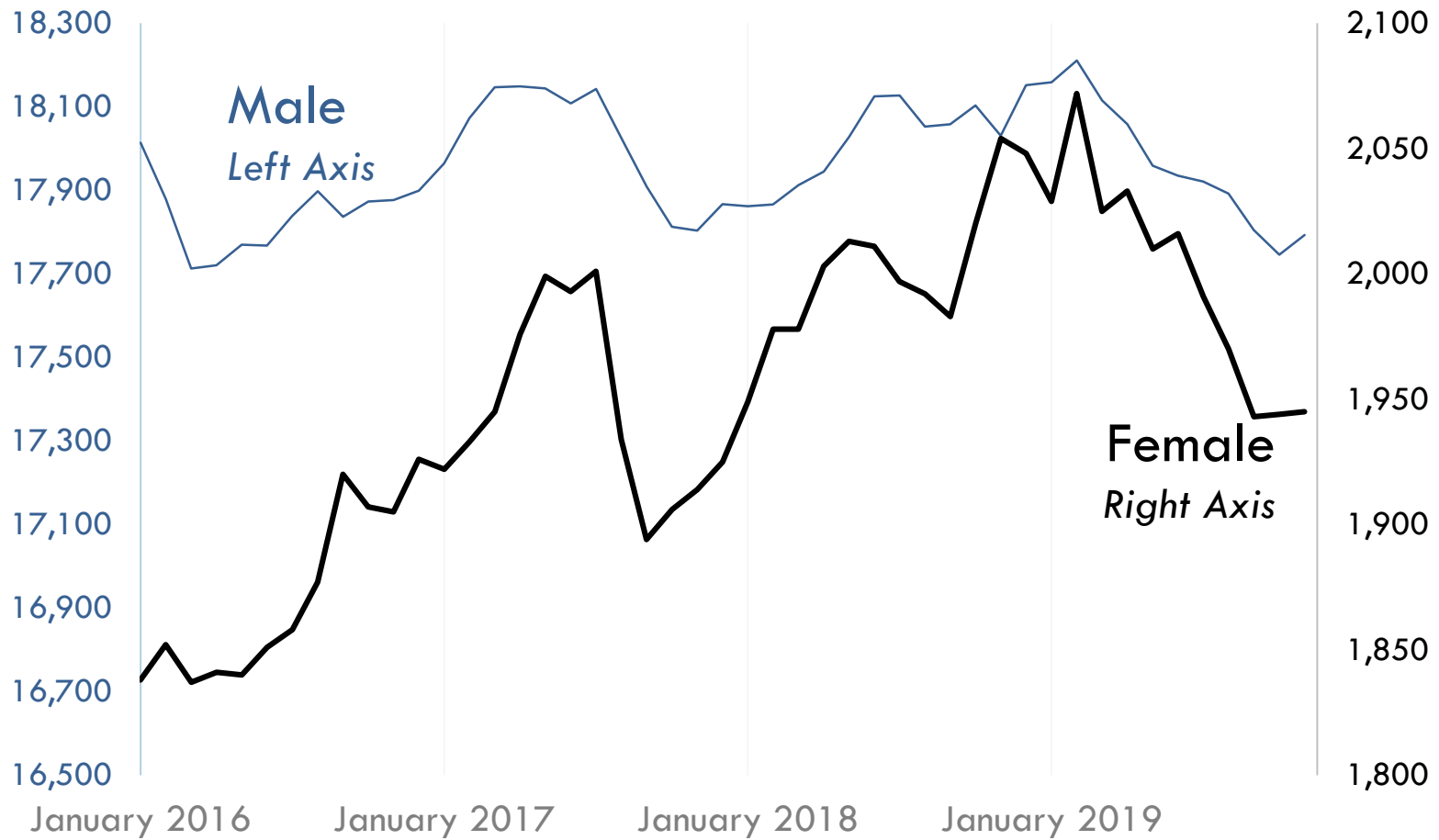
Implications for Balancing General Fund (GF) and State Education Fund (SEF) Contributions in 2020-21

- \$9M required increase in 2019-20; \$78M increase in state aid requirement in 2020-21 year-over-year reduces flexibility.
- Increasing 2019-20 SEF spending by \$9M implies \$15 million (0.4%) **GF increase** in 20-21.
- Increasing BS Factor by \$9M implies \$3 million (0.1%) **GF decrease** in 2020-21.

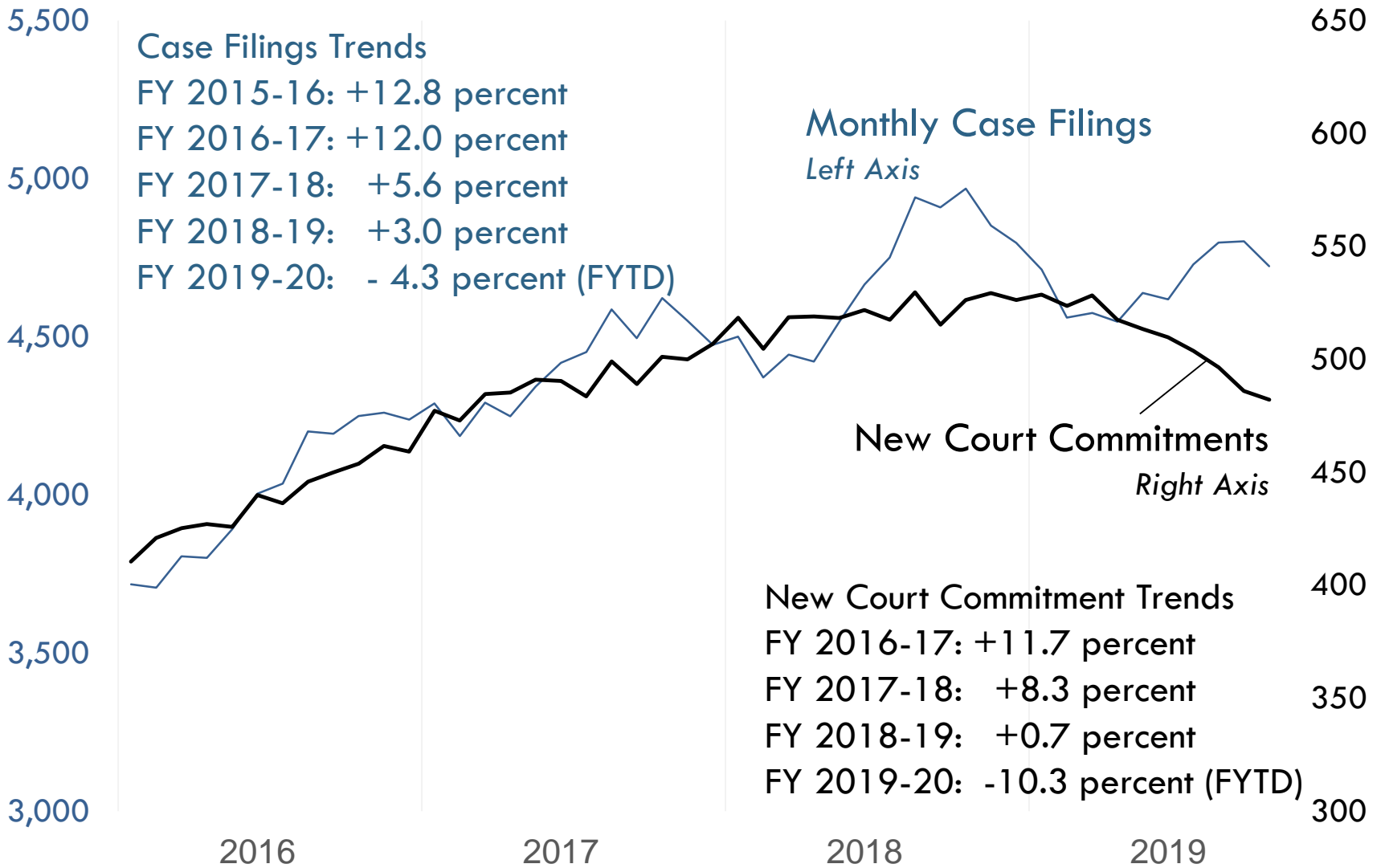
Adult Corrections Population Forecast



The prison population is down 2.7 percent since February



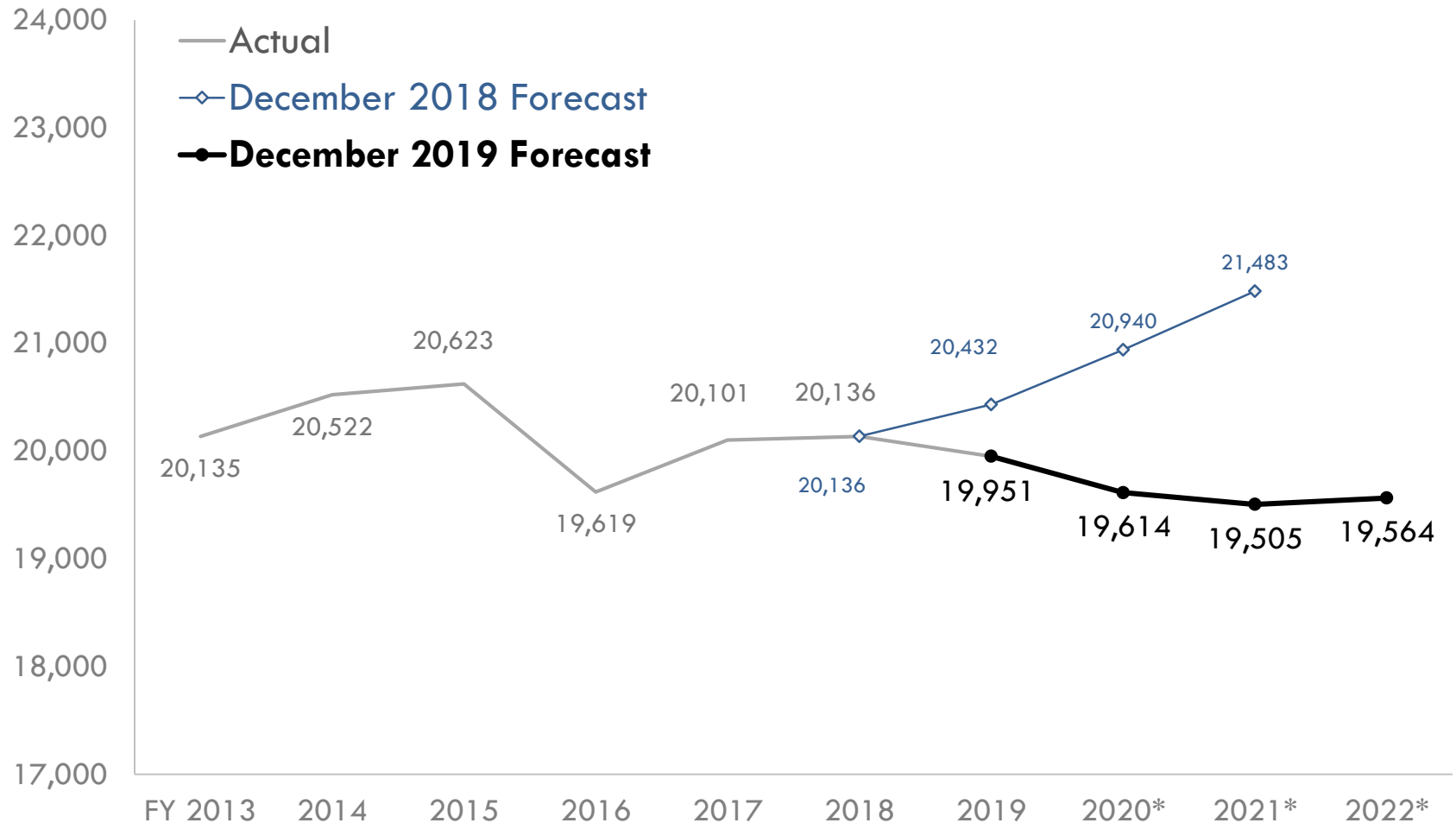
Case filings are down, and so are admissions



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.

Trend in commitments has reduced inmate expectations

Adult Inmate Population Forecasts as of June 30

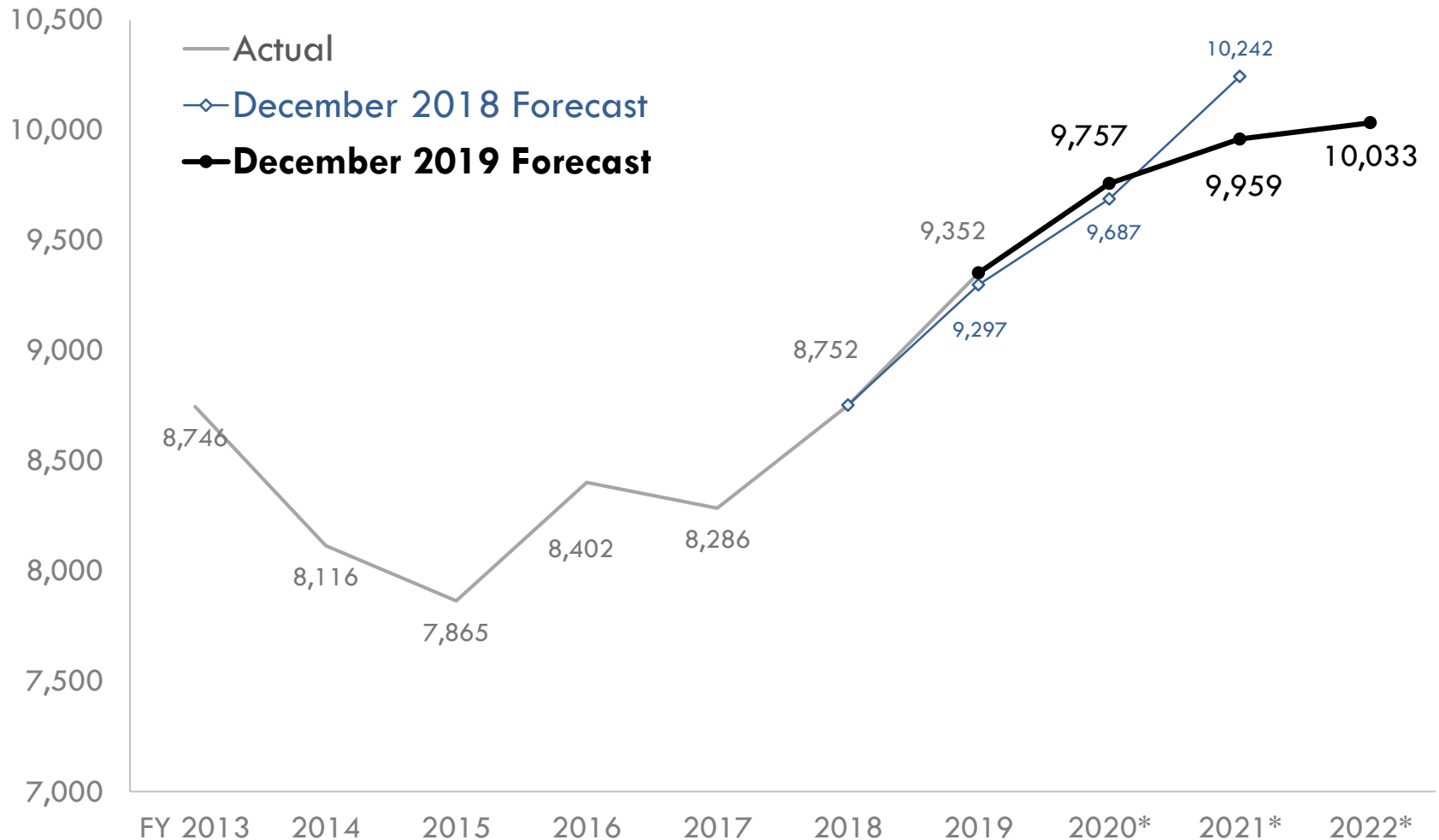


Forecast uncertainty remains elevated

- This forecast always contains (bidirectional) error
 - 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 new court commitments is most important determinant of forecast accuracy
- Other risks include:
 - Implementation of SB 19-143
 - More parole board members and judges
 - Supreme Court decision in *Allman v. People*
 - Termination of Denver Community Corrections contracts

Parole caseload growth will continue

Adult Parole Caseload Forecasts as of June 30

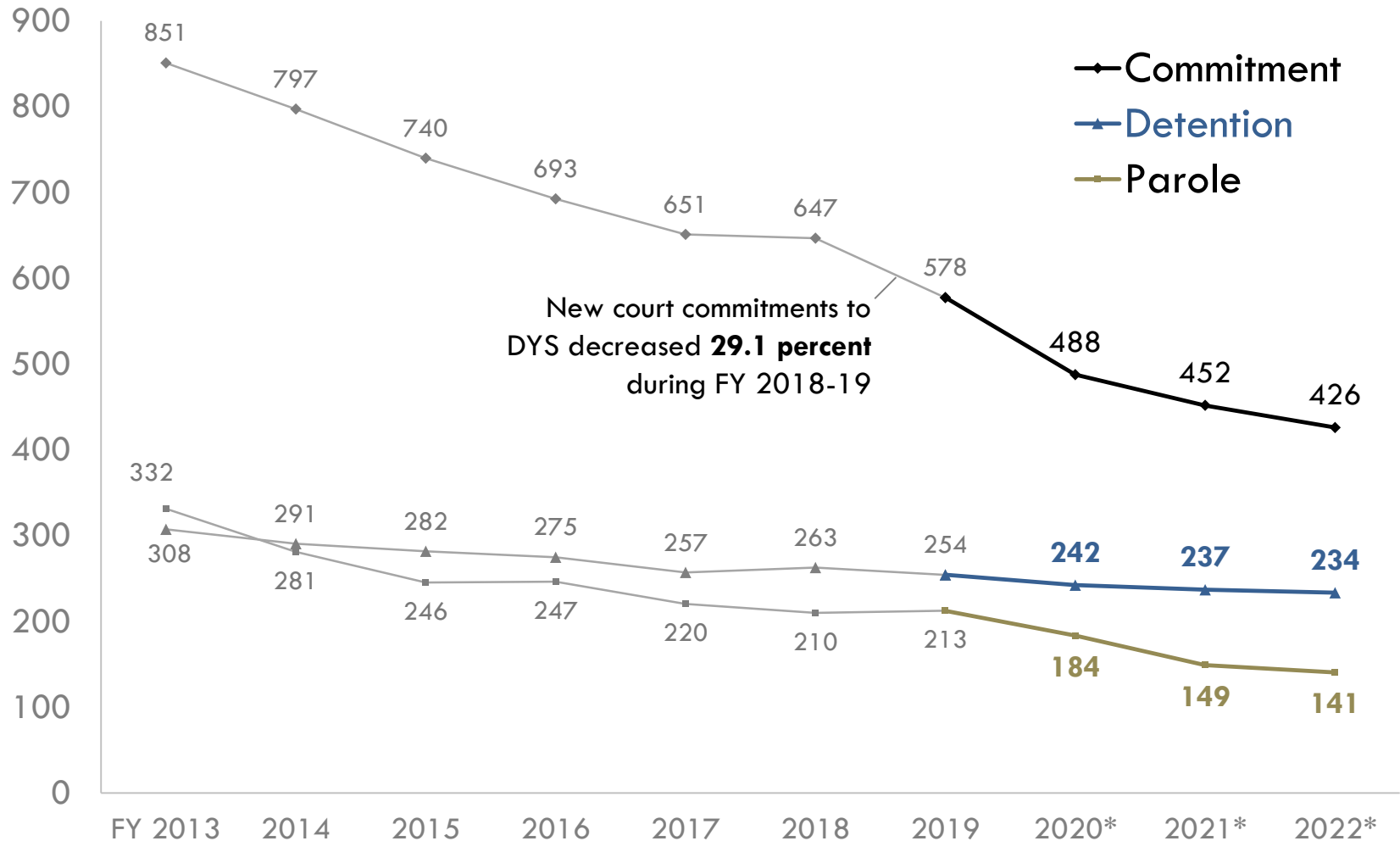


Juvenile Corrections Population Forecast



All DYS Populations are Falling

Average Daily Populations through FY 2021-22



Questions?

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