Inflation, Public Services, *& TABOR*

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Inflation is most often thought of in relation to its impact on individuals and families. However, this phenomenon also touches government budgets, impacting what, and how, public services are funded. In Colorado, inflation's impact on state government is heightened because of the Taxpayer Bill of Rights (TABOR), which limits allowable revenue to a function of inflation plus growth. These and other issues related to inflation and the funding of public services in Colorado are discussed in greater depth within the following brief.

Public Services in Inflationary Times

The supply of public services and programs is not immune to increasing prices, while demand from the public typically responds to inflationary pressures and economic downturns in a countercyclical manner (meaning an increased demand for public services and programs, like housing assistance, health insurance, and unemployment insurance). A prominent example of increasing public support and costs of a government program comes from the federal Social Security program, where around 70 million people will experience an increase in payments of 8.7%, or more than $140 per month, beginning in 2023. The program's payments are indexed to inflation via the CPI-W (CPI for Urban Wage Earners and Clerical Workers).[1] As the Social Security example illustrates, the role of government, including attempts to deal with inflation via monetary and fiscal policy, becomes arguably more important and challenging during inflationary periods.

As in all states, the current inflationary period has implications for Colorado's governments – including influencing revenues, expenditures, and the services provided to the public. In Colorado, state and local governments operate under the rules established by the voter-approved TABOR. The following section explores the interaction among inflation, TABOR, and public services.

Inflation and Colorado's Taxpayer Bill of Rights (TABOR)

The topics of inflation and Colorado's TABOR have recently been at the forefront of residents' minds and wallets. Cost increases are stressing household budgets, with overall inflation in the Denver-Aurora-Lakewood area of 7.7 percent from September 2021 to September 2022. Beginning in August 2022, the State of Colorado sent taxpayers refunds required by TABOR in flat amounts of $750 for single filers and $1,500 for joint filers. The timing of the refunds was accelerated, in part, to soften the impact of high inflation on Colorado households, but inflation has always been a key determinant of how much revenue Colorado's state and local governments can retain annually in the absence of voter approval.

What is TABOR?

Colorado's TABOR is a constitutional amendment passed by voters in 1992 (Article X, Section 20 of the Colorado Constitution). The amendment places a limit, the TABOR limit, on the revenue that governments can retain. When revenue collections exceed the TABOR limit, those revenues are required to be returned (or refunded) to taxpayers unless voters explicitly determine otherwise. In addition to limiting the use of certain taxes, TABOR also requires voter approval for governments to institute new taxes, increase tax rates, or borrow using long-term debt.[2] Voters approved Referendum C in 2005, which provided a timeout from the TABOR limit, during which the State of Colorado could retain excess revenue, and then reset the baseline limit going forward beginning in Fiscal Year 2010-11.[3]

How is the TABOR Revenue Limit Tied to Inflation?

Two factors tied to the demands for and costs of government services combine to determine the TABOR limit on government revenue. The first factor is the percent change in population over the previous year for Colorado's state and local governments. The second factor is inflation – based on the previous year's percent change in the Denver-Aurora-Lakewood consumer price index (CPI-U).[4] For example, in 2006 the TABOR revenue limit increased 1.30% from the previous year due to a 1.20% increase in Colorado's population and a 0.10% inflation rate (1.20% + 0.10% = 1.30%). Fiscal Year 2021 experienced the same population change as 2006 (1.20%), but with higher inflation (1.90%) resulting in the TABOR revenue limit increasing by 3.10% (1.20% + 1.90% = 3.10%). These combined percentages reflect the additional amounts of nonexempted revenue (revenue sources that count toward TABOR limits) that can be retained and spent or saved by the State (for details over the past two decades, see table 1). Nearly a dozen revenue sources are exempted from consideration under TABOR, notably including federal funds, transfers or expenditures from reserves, and enterprise fund revenue.[5]

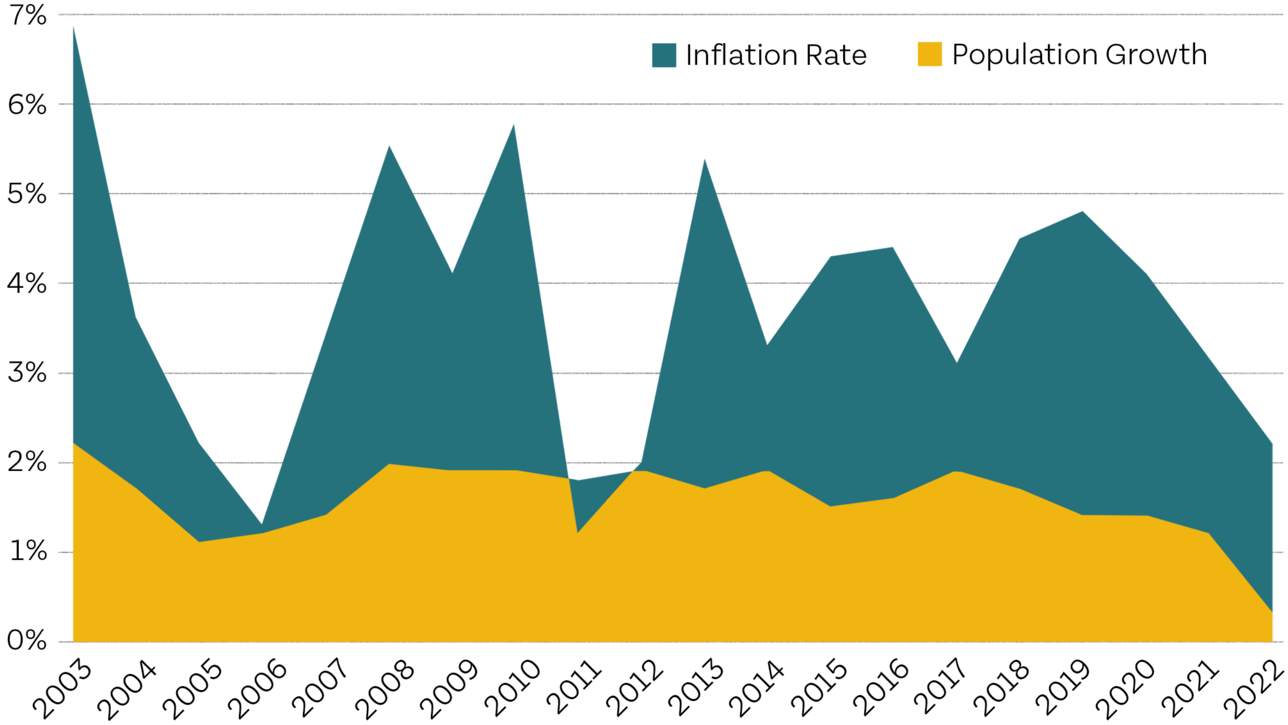
Table 1: **Allowable TABOR Growth Rate for Nonexempt Revenues**
(population growth, inflation rate, and total)

Fiscal Year	Population Growth	Inflation Rate	Allowable TABOR Growth Rate for Nonexempt Revenues
2022	0.30%	1.90%	2.20%
2021	1.20%	1.80%	3.10%
2020	1.40%	2.70%	4.10%
2019	1.40%	3.40%	4.80%
2018	1.70%	2.80%	4.50%
2017	1.90%	1.20%	3.10%
2016	1.60%	2.80%	4.40%
2015	1.50%	2.80%	4.30%
2014	1.90%	1.40%	3.30%
2013	1.70%	3.70%	5.40%
2012	1.90%	0.10%	2.00%
2011	1.80%	-0.60%	1.20%
2010	1.90%	3.90%	5.80%
2009	1.90%	2.20%	4.10%
2008	1.98%	3.56%	5.54%
2007	1.40%	2.10%	3.50%
2006	1.20%	0.10%	1.30%
2005	1.10%	1.10%	2.20%
2004	1.70%	1.90%	3.60%
2003	2.20%	4.70%	6.90%
Averages	**1.58%**	**2.18%**	**3.77%**

Sources: Certifications and Schedules of Nonexempt TABOR Revenue (Unaudited) (https://osc.colorado.gov/financial-operations/financial-reports/tabor); Schedule of Computations Required under article X, Section 20 of the State Constitution (TABOR) (Audited) (https://osc.colorado.gov/financial-operations/financial-reports/tabor/schedule-of-computations)

While Colorado ranks fifth among states for population growth from 1990 to 2020, 58% of the increase in the TABOR revenue limit over the past two decades comes from the inflation component of the formula compared to 42% due to population change. Since 2003, the average annual inflation rate used to determine the TABOR revenue limit is 2.18%, with a single year of deflation in Fiscal Year 2011 (where the inflation component contributed a negative 0.6% to the growth) and a maximum of 4.7% in Fiscal Year 2003. The following figure, figure 1, presents the allowable TABOR growth rate for nonexempt revenues based on the population and inflation components. Compared to population changes since 2003 (standard deviation of 0.42%), much more volatility rests with the inflation component of the growth rate formula (1.37%). The National Conference of State Legislatures (NCSL) noted that the decision to use the CPI as a basis for tax and expenditure limits, like TABOR, reflects the generally low levels of inflation experienced in the United States since the 1980s and the desire to constrain government revenue and spending, but that history "is by no means a guarantee of future levels."[6]

Figure 1: **Allowable TABOR Growth Rate for Nonexempt Revenues**
(population growth and inflation rate components)



Sources: Certifications and Schedules of Nonexempt TABOR Revenue (Unaudited) (https://osc.colorado.gov/financial-operations/financial-reports/tabor); Schedule of Computations Required under article X, Section 20 of the State Constitution (TABOR) (Audited) (https://osc.colorado.gov/financial-operations/financial-reports/tabor/schedule-of-computations)

Challenges to Using Inflation to Determine the TABOR Revenue Limit

Just like the many people in the United States experiencing their first period of high inflation, this is the first time Colorado's state and local governments are facing the challenges of providing public services in a high-inflation environment of greater than 5% since the passage of TABOR in 1992. Criticisms of TABOR's revenue limit formula are not new, but concerns over the adequacy of using a single index, like the Denver-Aurora-Lakewood CPI-U, to represent price changes, the lagged relationship between inflation measures and the TABOR revenue limit calculations, and the appropriateness of the inflation concept in this context have resurfaced under the pressure of high inflation.

Use of a Single Inflation Index

On its surface, using a well-established and geographically-focused price index to represent changes in government costs seems appealing. A primary criticism, though, of using the CPI-U to represent the changing costs of government is the fact that the "C" in CPI refers to the focus of the index on "Consumer" prices. Inflation experienced by consumers may differ dramatically from changes in the costs of providing public services.[7] For example, the CPI-U captures the changes in the price of housing, transportation, and food for consumers, but this may not parallel the changes in the price of healthcare, construction, and education for governments.[8] And even if the items reflected in the CPI-U matter for governments, the composition of the CPI-U is based on the share of consumer spending on each category of goods and services, but the spending composition of governments clearly differs from consumers.

In theory, an index that reflects the actual spending of a specific government is ideal to capture price changes, but such an index is generally unavailable. In practice, a range of price indices exist that may better reflect the costs of government than the CPI-U. The Government Finance Officers Association (GFOA) details different price index options for governments to incorporate inflation into budgeting activity. The GFOA highlights alternative indices relevant to government spending like the Producer's Price Index (PPI), Gross Domestic Product (GDP) deflator, Construction Price Index, Employment Cost Index (ECI), and Personal Consumption Expenditure (PCE), as well as a composite Municipal Cost Index (MCI) using the CPI, PPI, and Construction Price Index.[9]

A related concern about the appropriateness of using the Denver-Aurora-Lakewood CPI-U as the benchmark for inflation is that the "U" refers to "Urban," so the geographic focus may misrepresent the inflation experience in other parts of the state, especially in rural communities.[10] The geographic and urban focus of the CPI-U may result in flawed changes in revenue availability to government if the Denver-Aurora-Lakewood CPI-U fails to accurately reflect price changes experienced across the state.

Timing and Appropriateness of Inflation Data

Other issues with using a consumer inflation index to dictate government revenue retention relate to timing and appropriateness. State legislators recently raised the timing issue, as construction costs for approved capital projects escalate beyond the inflation measurement used to determine the current budget year's revenue limit. Specifically, the inflation component of the growth allowed by the TABOR revenue limit is based on the last calendar year's inflation.[11] The calendar year ends in December, while the State of Colorado's fiscal year begins in July, so there is a six-month lag for data that already reflect the previous year's inflation. While generally not a major issue in periods of low or stable inflation, the use of stale inflation data in times of high or erratic inflation becomes problematic for satisfying increasing spending demands.

While the TABOR revenue limit ultimately catches up with the more recent inflation changes in subsequent fiscal years, the inability to retain inflated revenue amounts for current spending needs creates a mismatch. Approaches likely exist to lessen the impact of the timing issue (like using the latest available inflation data in the budget process), but it is unclear whether such a change is allowed under the constitutional provisions.[12] Shifting to the use of inflation estimates for the current budget year period in an effort to align revenue retention with ongoing cost inflation is appealing (rather than applying historic data to the current period).[13] Unfortunately, forecasting inflation is notoriously challenging, so such an approach would require a process to true-up the inflation estimates with actual inflation after the data become available. Such a process might be a source of additional unwanted uncertainty in determining the availability of revenue over time.

The State of Colorado depends heavily on the income tax, and the relationship between wages and inflation is important to understanding the ability of a CPI-U based formula to allow revenue to keep pace with a growing economy. Wage increases must exceed inflation for compensation to increase in real terms over time. To illustrate, an individual receiving a 3% raise in a year experiencing 3% inflation actually ends up with no raise in real, or inflation-adjusted, terms. Another individual receiving a 5% raise in the same year experiences a 2% raise in real terms (5% minus 3% = 2%). Tying the TABOR revenue limit's growth to inflation guarantees that the increase in allowed revenue retention trails actual personal income growth during periods of economic growth (where employees receive real pay raises). For this reason, the use of measures like the change in personal income are typically preferred as a more economically-sensitive basis for government tax and expenditure limits.[14]

Inflation Drives Public Spending, Especially K-12 Education in Colorado

Like all sectors, public sector costs are implicitly and sometimes explicitly tied to inflation. The costs of providing public services are not insulated from increasing prices for goods and services. The large share of spending directed to personnel in government means that wage pressures to keep pace with inflation are especially salient. And as in most states, primary and secondary (K-12) education represents a major spending category for the State of Colorado. A difference for Colorado is that the resources directed to education are, in part, determined formulaically by the inflation rate, based on voters passing Amendment 23 in the year 2000. Amendment 23 requires the State of Colorado grow the annual base per-pupil school funding at a rate equal to or greater than inflation. Given the prominence of K-12 education funding in the state's budget, the resource demands to satisfy Amendment 23 in the face of high inflation will be substantial in the absence of supplanting existing non-base education funding.

Inflation and Government Revenue Sources

Governments typically raise revenue through taxes and fees. Taxes, in general, respond rapidly to inflation. Alternatively, fee revenue not explicitly tied to inflation will likely lag increasing costs of providing those fee-supported services. In Colorado, most government revenue increases driven by inflation will be restricted by TABOR revenue limits except in the relatively common case where voters allow local governments to retain some amount of excess revenues.

Sales and Use Taxes

As the costs of goods rise, so too do the sales and use taxes applied as a fixed percentage of the increasing prices. This is especially important from a revenue perspective for large ticket items like new cars and appliances. When new vehicle costs in Colorado surged nearly 8% between May 2020 and May 2021, the sales and use tax collected for a new vehicle would similarly climb. Of course, the net effects of such increases in price depend on the price elasticity of demand (changes in consumer behavior as prices climb) and often result in a decline in purchases that offset at least a portion of any inflation-driven windfall in tax revenue.

Income Taxes

Wages keeping pace or exceeding inflation increase the base on which income taxes are applied. An inflationary period coupled with low unemployment, like the situation in Colorado to date, results in higher income tax collections. Of course, any uptick in unemployment offsets such revenue gains tied to increasing wages and also results in higher demand for public services, like unemployment insurance payments. Colorado workers experienced a 7.8% increase in "average weekly wages between December 2020 and December 2021, which directly translates to higher income tax collections but not necessarily retention due to the state's TABOR revenue limits.[15]

Property Taxes

While not a state government revenue source in Colorado, inflation experienced as rapidly rising home prices and property values in Colorado expands the property tax base for local governments and affects the state's share of responsibility for funding K-12 schools and other local government assistance. Of course, the ability for local governments to increase revenue from growing property values depends on local TABOR revenue limits.

Fees

It is unclear the extent to which fees imposed by Colorado's governments include inflation-adjustment provisions, but some notable state and local fees do require such adjustments. Examples include the Retail Delivery Fee passed in 2021 as a piece of Senate Bill 21-260 (annual inflation adjustment), the maximum rate that can be charged to fulfill Colorado Open Records Act (CORA) requests (inflation adjustment in five-year intervals),[16] and the City and County of Denver's affordable housing linkage fee.[17] The use by governments of such automatic fee adjustments for inflation may become more common and important following the current inflationary environment.

Implications of High Inflation for TABOR's Impact on Colorado Governments

The current inflationary environment will permanently grow the TABOR revenue limits for governments by substantial amounts. As of September 2022, Colorado's Legislative Council and Office of State Planning and Budgeting staff estimate increases in the FY 2023-24 allowable TABOR revenue limit of 9.3% and 9.0%, respectively.[18] The following table presents preliminary and estimated TABOR revenue limit growth from FY 2021-22 to FY 2024-25.

Estimated Allowable TABOR Growth Rate				
	FY 2021-22	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
Colorado Legislative Council Staff	**2.2%**	**4.2%**	**9.3%**	**5.9%**
Population Growth	0.3%	0.7%	1.1%	1.2%
Inflation	2.0%	3.5%	8.2%	4.7%
Office of State Planning and Budgeting (OSPB)	**2.2%**	**4.2%**	**9.0%**	**5.4%**
Population Growth	0.3%	0.7%	0.7%	0.9%
Inflation	2.0%	3.5%	8.3%	4.5%

Notes: Preliminary figures for FY 2021-22, estimates for remaining years based on September 2022 quarterly forecasts.

Such large inflation-based increases in the TABOR revenue limit, specifically for Fiscal Years 2023-24 and 2024-25, are unprecedented over the past two decades. The ultimate impact on the state budget of this increase in allowed revenue retention will be offset by the inflation-driven increases in K-12 education (to comply with Amendment 23),[19] the magnitude of the difference between the CPI-U-measured inflation and actual change in government costs, the persistence of elevated inflation, the strength of the job market in determining government wage increases, and the implications of inflation and inflation-fighting measures on the state's economic activity.

Inflation has always played a critical role in determining the revenues that can be retained by governments in Colorado under the TABOR constitutional amendment. The recent period of high inflation increasingly focuses attention of policymakers and the public on the interaction between TABOR, inflation, and public sector revenue and spending.

Endnotes

1 Jeff Nesbit. "Social Security Benefits Increase in 2023." Social Security Administration (SSA), October 13, 2022. Accessed at: https://blog.ssa.gov/social-security-benefits-increase-in-2023

2 For details, see: Greg Sobetski. Memorandum: The TABOR Revenue Limit. Legislative Council, November 29, 2018.

3 Colorado General Assembly. "TABOR." Accessed at: https://leg.colorado.gov/agencies/legislative-council-staff/tabor

4 Previously, the Denver-Boulder Consolidated Metropolitan Statistical Area For All Urban Consumers, All Goods was used to measure inflation.

5 Greg Sobetski. Memorandum: The TABOR Revenue Limit. Legislative Council, November 29, 2018.

6 Bert Waisanen. (2010). State Tax and Expenditure Limits—2010. National Conference of State Legislatures (NCSL). Accessed at: https://www.ncsl.org/research/fiscal-policy/state-tax-and-expenditure-limits-2010.aspx

7 Christine R. Martell and Paul Teske. "Fiscal management implications of the TABOR bind." Public Administration Review 67.4 (2007): 673-687.

8 Center on Budget and Policy Priorities. Policy Basics: Taxpayer Bill of Rights (TABOR), November 5, 2019.

9 Government Finance Officers Association. Best Practices: Inflationary Indices in Budgeting. March 31, 2010. Accessed at: https://www.gfoa.org/materials/inflationary-indices-in-budgeting

10 Jesse Paul. "Rising inflation is on a collision course with Colorado's TABOR cap. And the state budget is in the middle." The Colorado Sun, July 28, 2022.

11 Ibid

12 Ibid

13 As an example of the uncertainty in forecasting inflation, the Legislative Council forecasted Denver-Aurora-Lakewood core based statistical area inflation of 2.2% for 2021 in the December 2020 forecast. Subsequent quarterly forecasts refined the 2021 inflation estimate to 2.7% (March 2021), 3.1% (June 2021), 3.7% (September 2021), and 3.7% (December 2021). The annual 2021 inflation ended up at 3.5%. Similarly, the inflation forecast for 2022 made in December 2021 was 3.4%, which was revised steeply upward in the subsequent March 2022 (to 7.0%), June 2022 (to 7.9%), and September (to 8.2%) forecasts. For details, see: Legislative Council Staff. "Forecasts by Calendar Year." Accessed at: https://leg.colorado.gov/EconomicForecasts

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18 Colorado Legislative Council Staff. September 2022 Economic & Revenue Forecast, September 22, 2022. Accessed at: https://leg.colorado.gov/sites/default/files/sept2022forecast.pdf. Governor's Office of State Planning & Budgeting. Colorado Economic & Fiscal Outlook, September 22, 2022. Accessed at: https://drive.google.com/file/d/1f5rOqwPr5sEBcgumNkDc5guOr-zrTjFw/view

19 Legislative Council's September 2022 quarterly forecast expects at least $197 million in additional state aid for school finance funding in FY 2023-24 compared to the previous year (p. 17).