

Connecticut's Fiscal Guardrails: A Data-Driven Analysis An Overview of the Caps

ZACHARY LISCOW *Yale Law School*

LUKE BRONIN *Yale Law School / The Connecticut Project*

NATHANAEL MCLAUGHLIN *Tobin Center for Economic Policy at Yale University*

PATRICK J. MURPHY *University of San Francisco*

MOHIT AGRAWAL *Yale Department of Economics*

ELIZA MCKENNEY *Tobin Center for Economic Policy at Yale University*

DECEMBER 2024

A joint research effort between [The Tobin Center for Economic Policy](#)
and [The Connecticut Project](#)

Copyright © Yale University. All rights reserved.

CONTRIBUTORS

ZACHARY LISCOW *Yale Law School*

Zachary Liscow is professor of law at Yale Law School, served as chief economist at the Office of Management and Budget at the White House from 2022–2023, and was a staff economist at the White House Council of Economic Advisers from 2009–2010. Liscow earned his PhD in economics from the University of California, Berkeley, and his JD from Yale Law School, as well as a degree in economics and in environmental science and public policy from Harvard College.

LUKE BRONIN *Visiting Lecturer in Law, Yale Law School / The Connecticut Project*

Luke Bronin is a visiting lecturer in law, senior research scholar in law, and Tsai leadership senior distinguished fellow in residence at Yale Law School and most recently served two terms as Mayor of Hartford, Connecticut. Bronin was general counsel to then-governor of Connecticut Dannel P. Malloy from 2013–2015 and prior to that served in the Obama administration at the US Department of the Treasury. Bronin was an officer in the US Navy Reserve. Bronin received a BA from Yale College, an MSc from the University of Oxford, and a JD from Yale Law School.

NATHANAEL MCLAUGHLIN *Policy Fellow, Tobin Center for Economic Policy at Yale*

Nat McLaughlin is a policy fellow at the Tobin Center for Economic Policy, previously held the role of policy advisor to Connecticut's Chief Budget Officer, and also served as a naval officer. McLaughlin holds an MA in global affairs and an MBA from Yale University, a Master's in national defense and security studies from the US Naval War College, and a BS in industrial engineering from Northwestern University.

PATRICK J. MURPHY *Professor, University of San Francisco*

Patrick J. Murphy is a professor and faculty director for the Urban and Public Affairs program at the University of San Francisco. He currently serves as the director of resource equity and public finance for The Opportunity Institute. Previously, Murphy worked at the US Office of Management and Budget, as a consultant for state and local government, and at Arnold Ventures. Murphy received a BA from the University of Notre Dame, an MPA from the University of Texas-Austin, and a PhD and MA from the University of Wisconsin-Madison.

MOHIT AGRAWAL *PhD Candidate, Yale Department of Economics*

Mohit Agrawal is an applied microeconomist and a fourth-year PhD candidate in economics, a graduate policy fellow at Yale's Institute for Social and Policy Studies, and a visiting scholar at University of Chicago's Becker Friedman Institute. Agrawal served as deputy policy director and advisor to Governor Ned Lamont of Connecticut from 2019–2021. He received his BA in mathematics from Princeton University, and an MSc in applied statistics, as well as an MBA, from the University of Oxford.

ELIZA MCKENNEY *Research & Policy Program Manager, Tobin Center for Economic Policy at Yale*

Eliza McKenney is a research and policy program manager at the Tobin Center for Economic Policy. Prior to joining the Tobin Center, McKenney worked in economic consulting at Cornerstone Research where she collaborated with leading economic and financial academics. McKenney holds a BBA in finance and a BA in psychology from the College of William & Mary.

Connecticut has had statutory constraints on borrowing or spending for decades, with a debt limit first adopted in 1957 and a spending cap adopted in 1991, alongside the passage of the first state income tax.¹ However, the 2017 revisions to the spending and borrowing caps, combined with the new revenue and volatility caps, represent a far more comprehensive set of restrictions on the General Assembly and the governor's budgetary and borrowing authority. This paper summarizes those "fiscal guardrails." The spending cap and volatility cap are discussed in greater detail in separate papers in this series.

DEBT LIMITS AND BOND CAPS Limits on state borrowing have the longest history in the state, with the first debt limit established in 1957.² There have been a number of adjustments and additions to the structure of these caps over the years, but the basic goal has remained the same: to ensure that the state borrows within its means and provides confidence to purchasers of state bonds that they will be repaid. The current statutory restrictions on borrowing include the following four caps:

- **Debt Limit.** The debt limit restricts the aggregate amount of indebtedness, including both outstanding debt and debt authorized by the General Assembly but not yet issued, to 1.6 times the expected revenue receipts during a given fiscal year.³
- **Bond Issuance Cap.** The issuance cap restricts the amount of general obligation bonds and credit revenue bonds that the Treasurer may issue in a given fiscal year to \$2.4 billion, with adjustments for inflation beginning in FY25. It does, however, provide a number of exemptions from the total calculation. These include bonds issued by the Connecticut State University system, UConn 2000 construction bonds, refunding bonds, revenue anticipation notes or other instruments designed to meet cash flow needs, and borrowing in response to an emergency such as a natural disaster.⁴
- **Bond Allotment Cap.** The allotment cap restricts the amount of general obligation and credit revenue bonds that the governor may requisition in a given fiscal year to \$2.4 billion, with the same adjustment and exemptions as the issuance cap.⁵
- **Bond Allocation Cap.** The bond allocation cap limits the amount of general obligation bonds and credit revenue bonds that the Bond Commission can approve in a given year to \$2.4 billion, adjusted for inflation beginning in FY25.⁶

¹ "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," Connecticut State Treasurer's Office, 2023, <https://portal.ct.gov/-/media/opm/bud-other-projects/reports/other-reports/inaugural-ct-investor-conference--opm--fiscal-guardrails--may-23-2023.pdf>, 4.

² "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 4.

³ "Sec. 3-21. Bond Limitation. Debt Certification. Bond Issuance Limitation. Allotment Limitation," Chapter 32, Treasurer, General Statutes of Connecticut, https://cga.ct.gov/current/pub/chap_032.htm#sec_3-21.

⁴ "Sec. 3-21."

⁵ "Sec. 3-21."

⁶ "Sec. 3-20. State General Obligation Bond Procedure Act. State Bond Commission. Bond pledge and undertaking," Chapter 32, Treasurer, General Statutes of Connecticut, https://www.cga.ct.gov/2024/sup/chap_032.htm#sec_3-20.

SPENDING CAP Connecticut's spending cap has both constitutional and statutory elements. A statutory spending cap was first enacted alongside the income tax in 1991. A constitutional amendment was ratified the following year, prohibiting the General Assembly from increasing general budget expenditures above the prior year's expenditures by more than the increase in personal income or the percentage increase in inflation, whichever is greater.⁷ Practically, this means that the General Assembly appropriation of funds is limited by prior year appropriations.

The constitution leaves it to the General Assembly to define the terms "increase in personal income," "increase in inflation," and "general budget expenditures." The definition of those terms may be amended by a three-fifths majority of the members of each house of the legislature.⁸

Determining the base ("general budget expenditures") upon which a given year's spending cap is calculated is complicated in practice (see Figure II.A). Since its initial adoption, the base has been adjusted multiple times. Certain categories of spending have been consistently excluded, while other types of spending have been included or excluded from the cap over time.

As required by the state constitution, the cap calculation excludes debt service payments. Other categories of expenditure have been excluded or included under the cap at different times. Aid to distressed municipalities was long excluded from the spending cap but has been moved under the cap over time, with the bulk of municipal aid moving on budget in FY24. Similarly, appropriations to fund the actuarially determined contribution to the pension funds were initially excluded but are now under the cap.

The spending cap base in FY25 includes approximately 74 percent of all general budget appropriations in FY25 or \$19.3 billion of a \$26.0 billion appropriated budget. Excluded from the spending cap today are debt service of \$3.5 billion in FY25, unfunded Teacher Retirement System liabilities of \$1.3 billion, and the appropriation of federal funds of \$1.9 billion.⁹

To calculate the allowable growth in spending from one year to the next, the base is adjusted by the compound annual increase in personal income over the prior five years, using Bureau of Economic Analysis statistics or the annual increase in the consumer price index (CPI) measured in December from the Bureau of Labor Statistics, whichever is greater.¹⁰ According to the Connecticut State Treasurer's Office, the growth in personal income test has been applied twenty-seven times while the CPI was applied as the deflator only five times over the period of 1993 to 2024.¹¹

7 "Article III, Section 18(b)," Constitution of the State of Connecticut, 2023, https://www.cga.ct.gov/asp/Content/constitutions/Constitution_State_CT.pdf, 210.

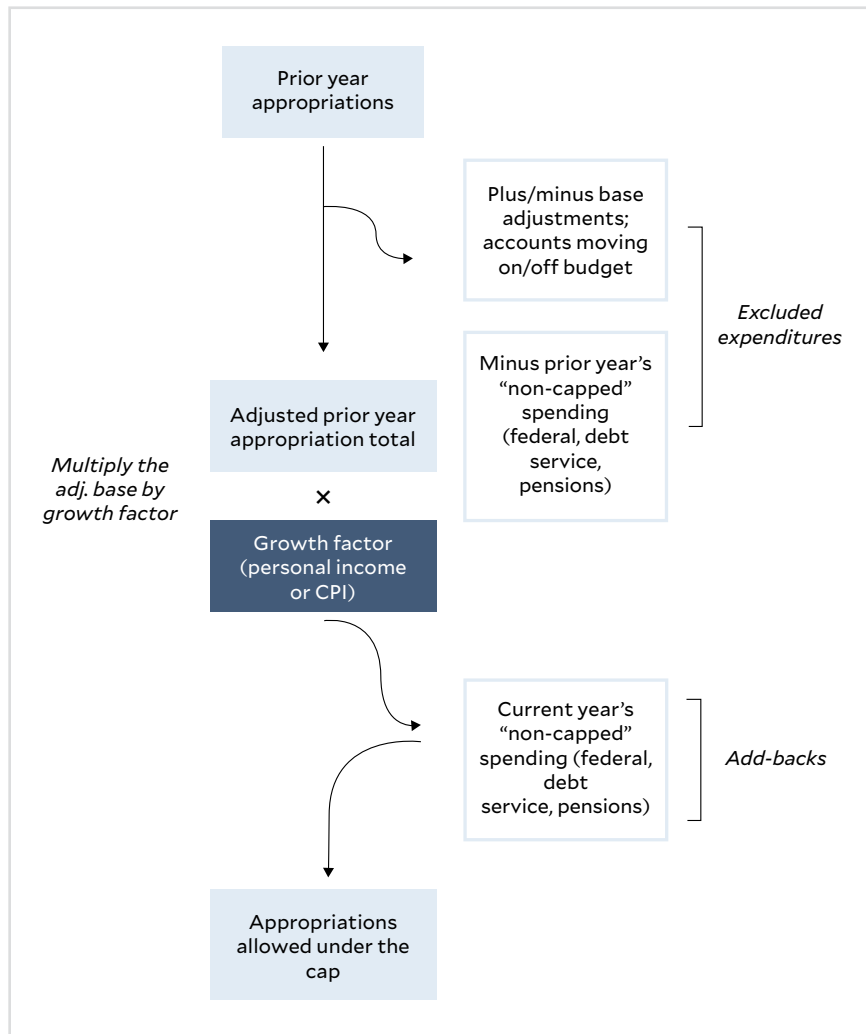
8 "Article III, Section 18(b)," 210.

9 "Connecticut State Budget FY 24–FY 25," Office of Fiscal Analysis, https://www.cga.ct.gov/ofa/Documents/year/BB/2023BB-20231005_FY%2024%20and%20FY%2025%20Connecticut%20Budget.pdf, 393.

10 "Sec. 2-33a. Limitation on expenditures authorized by General Assembly. Base year adjustment for certain expenditures," Chapter 16, General Assembly, General Statutes of Connecticut, https://www.cga.ct.gov/current/pub/chap_016.htm#sec_2-33a.

11 "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 5.

Figure II.A: Connecticut's spending cap calculation



After adjusting for growth, the items that had previously been excluded from the calculation are added back, producing the limit for appropriations for the current year.

VOLATILITY CAP The newest and most innovative of the fiscal constraints included in the 2017 budget deal was the volatility cap. The volatility cap was designed to insulate the budget from the significant swings in revenue that had become a feature of Connecticut's budget landscape in the years following the Great Recession. It is based on the principle that unpredictable revenue sources should not be relied upon to fund predictable, recurring expenditures.¹²

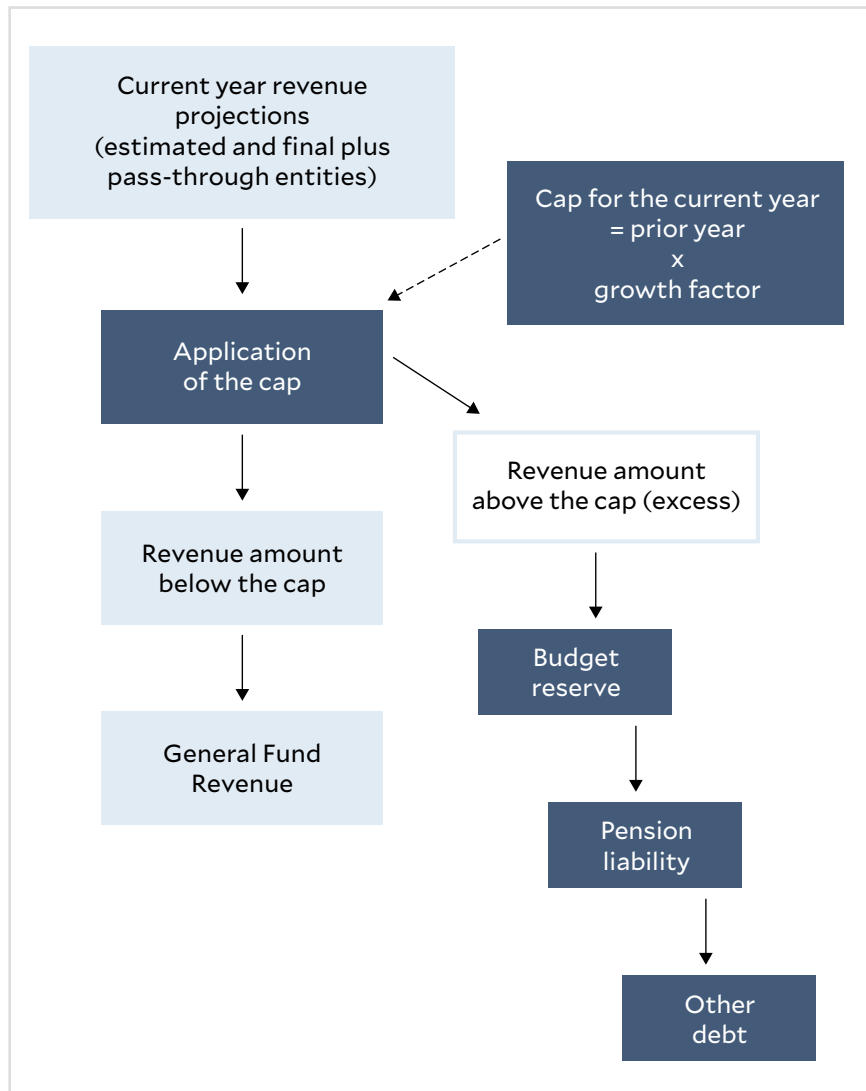
The volatility cap limits the amount that the General Assembly can budget from Connecticut's most significant, volatile revenue sources: taxes on pass-through entities and the estimated and final payments of the personal income tax.¹³ As with the spending cap, the volatility cap statute

¹² "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 19.

¹³ "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 7. Smaller revenue sources such as the inheritance tax are more volatile but tend to make up less than a percent of state revenues. See, "Connecticut State Budget FY 24–FY 25," 401.

establishes a base amount that is then adjusted annually. When tax receipts are estimated for the coming year, they are compared to the cap. Any revenues above the threshold are deemed excess and are unavailable for appropriation by the General Assembly and instead are transferred to the Budget Reserve Fund (BRF).¹⁴

Figure II.B: Connecticut's volatility cap calculation



Conceptually, the volatility cap is designed to ensure that in “good years” – years when tax collections are unusually high – the windfall is used to bolster savings and pay down long-term liabilities, rather than growing the state budget and leaving the state vulnerable to revenue shortfalls in less favorable years.¹⁵

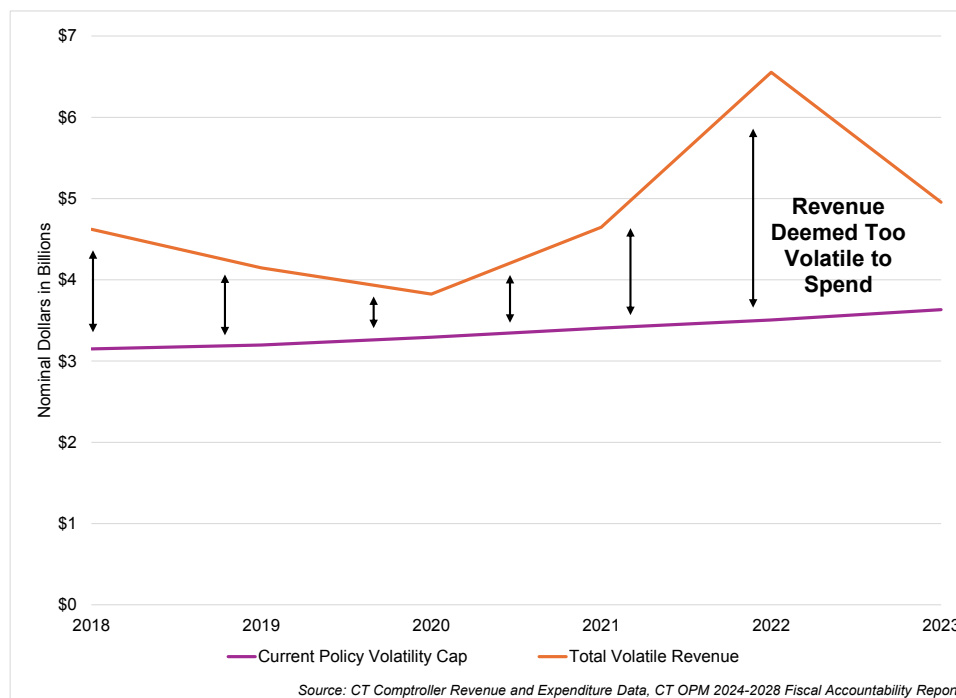
¹⁴ “Sec. 4-30a. Transfer of surplus to Budget Reserve Fund, State Employees Retirement Fund and Teachers’ Retirement Fund. Reduction of outstanding state indebtedness. Transfer of funds from Budget Reserve Fund,” Chapter 47, State Property and Funds, General Statutes of Connecticut, https://www.cga.ct.gov/current/pub/chap_047.htm#sec_4-30a.

¹⁵ “Connecticut’s Fiscal Guardrails Treasurer’s Office Inaugural Investor Conference,” 19.

In Connecticut, the volatility cap was set at \$3.15 billion in 2018 and allowed to increase each year based upon the state's compound annual rate in personal income growth over the prior five calendar years using data reported by the federal Bureau of Economic Analysis.¹⁶ Funds in excess of this amount are deposited into the BRF. Once the BRF reaches a set level (recently increased from 15 percent to 18 percent of the state's operating budget), any additional funds are to be used to pay down pension liabilities and debt (see Figure II.B).¹⁷

It is worth noting that since the establishment of the volatility cap, revenues from the two most volatile sources of revenue noted above have exceeded the threshold in every year since 2018. In other words, rather than merely ensuring that unusual or inconsistent windfalls are set aside, the cap has served to create a significant recurring surplus. From 2018 to 2023, the amount of revenue that exceeded the volatility cap in a given year ranged from \$530 million to over \$3 billion, with an average of \$1.4 billion per year (Figure II.C).

Figure II.C: Connecticut's volatility cap in practice, 2018–2023



Under the statute establishing the volatility cap, the cap threshold can be adjusted by a vote of three-fifths of both chambers of the General Assembly “due to changes in state or federal tax law or policy or significant adjustments to economic growth or tax collections.”¹⁸

¹⁶ “Sec. 4-30a.”

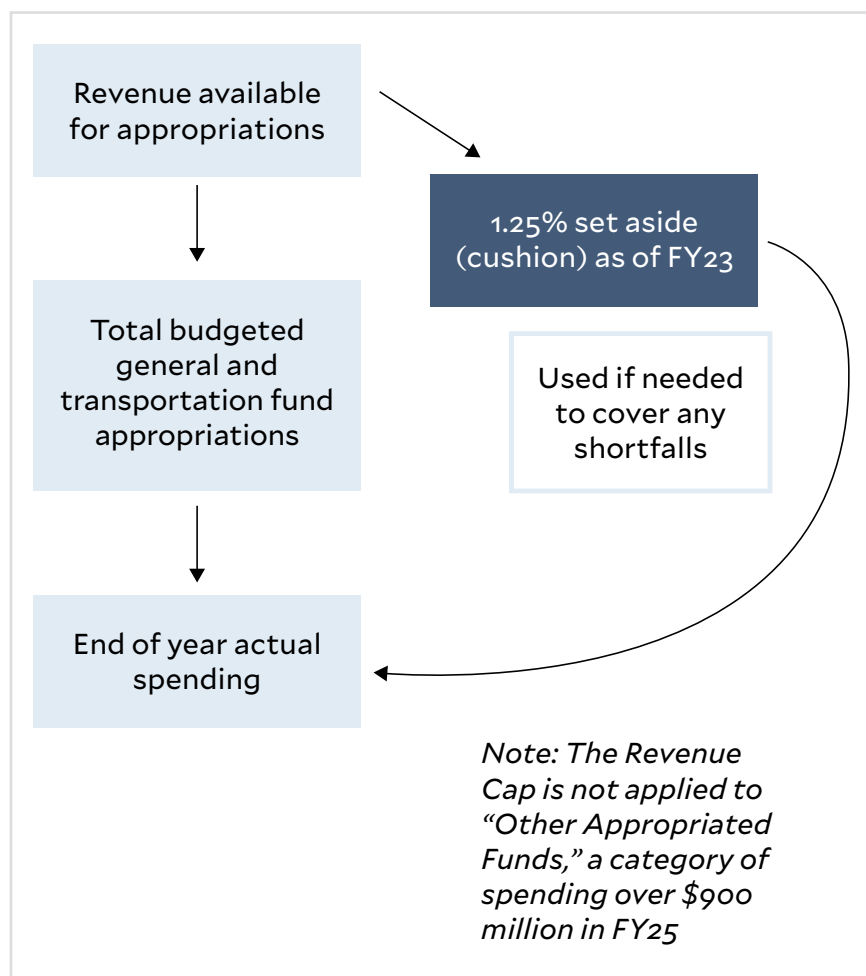
¹⁷ The Budget Reserve Fund is funded up to a statutorily defined percentage of net General Fund appropriations for the current fiscal year. Once the BRF is funded at that defined percentage, excess funds are paid toward reducing unfunded pension liabilities. That statutory percentage was initially set at 15% and was updated to 18% for FY25 (starting July 1, 2024). See, “Sec 4-30a” and “Connecticut’s Fiscal Guardrails Treasurer’s Office Inaugural Investor Conference,” 8.

¹⁸ “Sec. 4-30a.”

REVENUE CAP The revenue cap, also established in 2017, was designed to force appropriators to budget conservatively. It does this by limiting the amount of General Fund and Special Transportation Fund appropriations to less than the total amount of projected revenue.¹⁹ The concept behind the cap is that both revenue and spending projections are just that: projections. If spending exceeds expectations or revenues fall short, or both, the budget for that year is in deficit.

The revenue cap creates a cushion to mitigate that risk. By setting aside a relatively small share of total projected revenue (1-2 percent), the state should have the ability to cover its spending for the coming year. The revenue cap creates this financial cushion and is applied to those revenues available for appropriations (after application of the volatility cap).²⁰

Figure II.D: Connecticut's revenue cap calculation



19 "Sec. 2-33c. Limitation on General Fund and Special Transportation Fund appropriations," Chapter 16, General Assembly, General Statutes of Connecticut, https://cga.ct.gov/2023/pub/chap_016.htm#sec_2-33c.

20 "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 6.

The revenue cap has been phased in gradually, stepping down from 99.75 percent in FY19 to 98.75 percent in FY23.²¹ While the initial revenue cap statute would have dropped the threshold to 98 percent in FY26, in 2023 the General Assembly froze the revenue cap at its current level of 98.75 percent. In other words, of the total revenue available for appropriations, 1.25 percent gets set aside until the books are closed at the end of the fiscal year. If funds are needed to close an operating deficit at year's end, they can be drawn from this 1.25 percent reserve. If any funds remain in this reserve, they are deposited into the BRF. As with the spending cap, the revenue cap could be lifted in a given year should the governor declare a state of emergency and three-fifths of each house concur.

Notably, the revenue cap is not applied to a category of revenues termed "Other Appropriated Funds," which includes funds for very specific uses such as municipal aid, workers' compensation, and regulating banking. This category has grown from an estimated \$230.4 million in FY23 to an estimated \$902.2 million in FY25 largely due to efforts to bring municipal aid on budget and the creation of new accounts associated with regulating the recreational cannabis market.²²

How do the caps work and work relative to one another?

While each of the different guardrails is a separate provision in statute or the state's constitution, they have an interactive relationship when it comes to making budget decisions. Understanding how the different guardrails work in Connecticut requires something of a complicated "flow chart" (see Figure II.E).

As illustrated in the diagram, economic activity in the state drives the system. Applying the state's tax structure to that economic activity produces revenue for the state: a sales tax is applied to retail sales, personal income tax rates determine how much an individual will pay, and so on. If the level of economic activity increases, state revenue will generally increase as well. Similarly, if the economy enters a downturn, tax receipts will fall relative to the prior year.

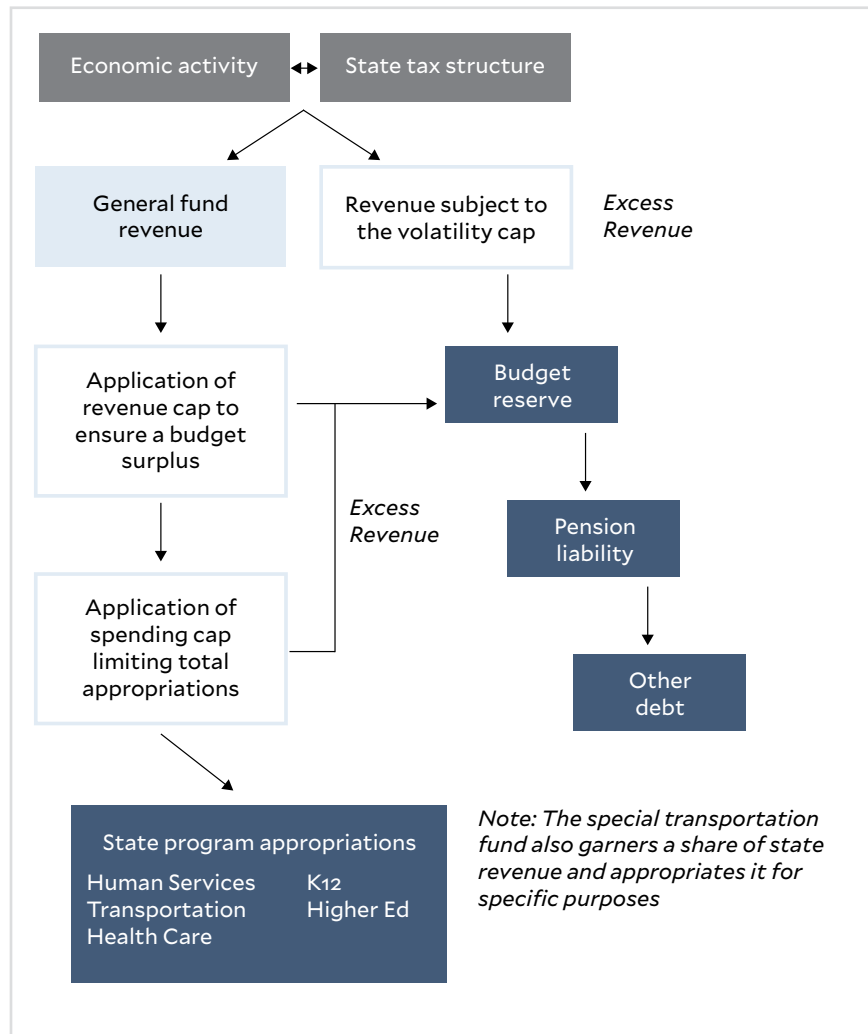
The caps come into play early in the process. The first critical point is the calculation of the volatility cap threshold, which is annually adjusted from the statutory amount set in FY18 using the five-year compound growth in personal income. Revenues subject to the volatility cap are set aside and subject to that volatility cap threshold; in current policy, those revenues include receipts from the pass-through entity (PTE) tax and estimated and final payments (EFP) for the personal income tax. Any amount collected above the volatility cap is siphoned off to be placed in the BRF. The remainder below the volatility cap is added back with the other revenues in the General Fund.²³

21 "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 6.

22 "Connecticut State Budget FY 24–FY 25," 395–396.

23 "Connecticut's Fiscal Guardrails Treasurer's Office Inaugural Investor Conference," 9; "OLR Backgrounder: Connecticut's Volatility Cap and Budget Reserve Fund," Rute Pinho, Office of Legislative Research, 2024, <https://www.cga.ct.gov/2024/rpt/pdf/2024-R-0019.pdf>.

Figure II.E: Connecticut’s fiscal guardrails calculation



This new pool of revenues is then subject to another calculation, the revenue cap. As of FY23, the General Assembly may only appropriate 98.75 percent of projected available revenue. In FY23, a year with about \$22.4 billion in post-volatility cap revenue collected, the revenue cap created a de facto surplus of nearly \$300 million.²⁴ Connecticut has thus taken something of a “belt and suspenders,” abundance-of-caution approach: first, the volatility cap makes deposits into the BRF in years with strong economic performance; then, the revenue cap sets aside additional savings into the BRF for the given year.

²⁴ “Connecticut State Budget FY 23 Revisions,” Office of Fiscal Analysis, https://www.cga.ct.gov/ofa/Documents/year/BB/2022BB-20220809_FY%2023%20Connecticut%20Budget%20Revisions.pdf, 9.

The third critical point comes with the application of the spending cap. Spending in a given year cannot exceed the prior year's amount spent, plus an adjustment for growth. In other words, even after revenue deemed too volatile to spend is set aside, and even after the remainder is reduced by 1.25 percent as required by the revenue cap, the remaining revenue may still exceed the spending cap.²⁵

The “Bond Lock”

As noted in the introduction to the series, the statutes passed in 2017 also included a so-called bond lock provision, requiring the treasurer to include covenants in new bond issuances pledging to maintain the fiscal guardrails for a certain period of time. This pledge is currently binding through FY33, unless the General Assembly adopts a resolution not to continue the pledge beyond FY28.

The bond lock provision permits adjustment to the guardrails if the governor declares an emergency or the existence of extraordinary circumstances and an adjustment is approved by at least three-fifths of both chambers of the General Assembly. However, such an adjustment would apply only to the fiscal year in which it was made.²⁶

²⁵ “Sec. 2-33a.”

²⁶ “State Fiscal Controls,” Rute Pinho, Office of Legislative Research, 2023, <https://www.cga.ct.gov/2023/rpt/pdf/2023-R-0299.pdf>.