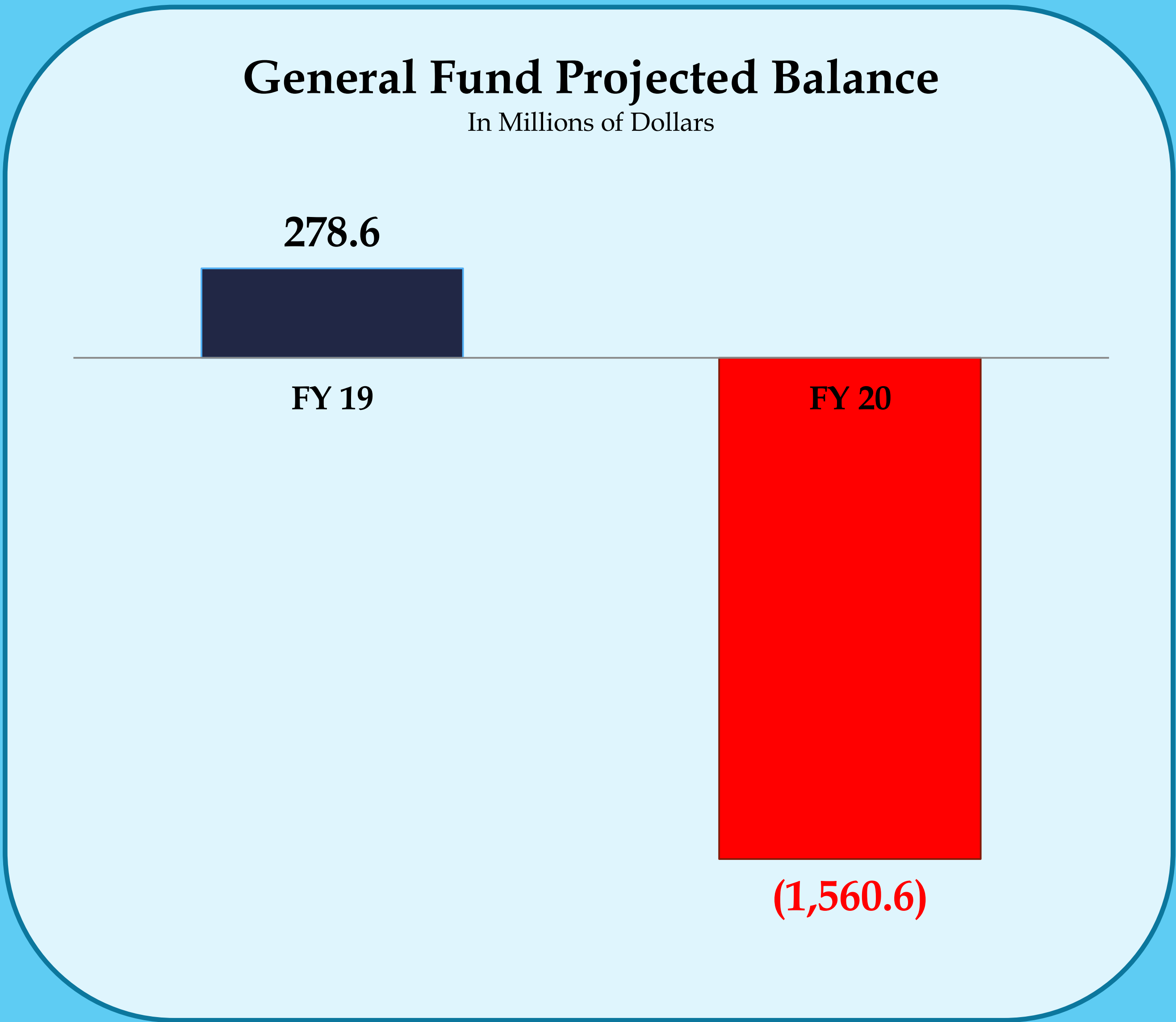
CONNECTICUT GENERAL ASSEMBLY
OFFICE OF FISCAL ANALYSIS

OFA

FISCAL ACCOUNTABILITY REPORT

FY 19 – FY 22



November 15, 2018

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NOTE TO READERS
Totals in tables and charts within the report may appear to not add up due to rounding.

Table of Contents

Section I. Executive Summary

The Office of Fiscal Analysis (OFA) is statutorily required every November to produce the Fiscal Accountability Report (FAR). The FAR must explain: (1) the level of spending changes from current year spending allowed by consensus revenue estimates, (2) any changes to current year spending necessary because of "fixed cost drivers," and (3) the total change to current year spending required to accommodate fixed cost drivers without exceeding current revenue estimates. For this report, fixed cost drivers include debt service, pension contributions, retiree health care, entitlement programs, and federal mandates.

A Swing in Revenues: From FY 19 Surplus to FY 20 Deficiency
OFA is projecting a General Fund (GF) surplus of $278.6 million in FY 19. The FY 19 GF surplus is mainly due to an increase in net revenue of $260.7 million per November Consensus. In addition, a Volatility Adjustment transfer of $648 million is anticipated to be deposited into the Budget Reserve Fund (BRF) in FY 19.

OFA is projecting a General Fund deficit of $1.6 billion in FY 20. The decline is largely a result of the planned reduction to the Hospital Tax and recognition of various non-recurring revenue items (including fund sweeps and a technical adjustment related to federal funds). These adjustments account for approximately $1.1 billion of the estimated $1.4 billion revenue decrease from FY 19.

The Out Years (FY 20 – FY 22)
Utilizing the methodology required by CGS Section 2-36b, reductions in non-fixed costs of $1.6 billion are necessary in FY 20 to balance General Fund expenditures with consensus revenue projections. Non-fixed costs total $9.4 billion in FY 20 and will need to be reduced by 17%. Fixed costs are 49% of total expenditures in FY 19 and grow each year; by FY 22 fixed costs represent 54% of total expenditures.

The FY 20 expenditure reduction of $1.6 billion is assumed in the FY 21 and FY 22 projections. However, even with that significant expenditure reduction, non-fixed cost reductions of $449.2 million in FY 21 and $724.6 million in FY 22 are required to balance General Fund expenditures with consensus revenue projections.

Out year projections may be further affected by shifts in demographics and key industries, as well as future recessions that may occur and are overdue by historical measure.

Budget Reserve Fund Balance
The current balance in the BRF is $1.2 billion. At the end of FY 22, the balance is projected to be $2.9 billion. This happens primarily as a result of Volatility Cap adjustment transfers of $1.7 billion over four fiscal years. In FY 22, the BRF balance will be 14.2% of appropriations, the highest in BRF history, slightly less than the statutory maximum level of 15%.

Special Transportation Fund (STF)
OFA is projecting an STF operating surplus of $66.6 million in FY 19, and a cumulative fund balance of $681 million in FY 22, primarily because of improvements to revenue estimates and the acceleration of the scheduled transfer of motor vehicle sales tax revenues into the STF.

Table 1.1: Financial Summary by Fund[1,2]
In Millions of Dollars

Fund	FY 19	FY 20	FY 21	FY 22
General Fund (GF)				
November Consensus Revenue	19,269.4	17,823.2	18,038.0	17,910.1
Expenditures				
Previous Year Expenditure		18,990.8	17,823.2	18,038.0
Fixed Cost Growth		654.6	536.8	578.1
Other Expenditure Adjustments		(261.7)	127.2	18.6
Expenditure Reduction (CGS Sec. 2-36b)		(1,560.6)	(449.2)	(724.6)
Subtotal	**18,990.8**	**17,823.2**	**18,038.0**	**17,910.1**
GF Balance	**278.6**	-	-	-
Special Transportation Fund (STF)				
November Consensus Revenue	1,684.6	1,803.5	1,904.8	1,994.6
Expenditures				
Previous Year Expenditure		1,618.0	1,686.6	1,783.0
Fixed Cost Growth		58.4	82.6	79.9
Other Expenditure Adjustments		10.2	13.8	1.1
Subtotal	**1,618.0**	**1,686.6**	**1,783.0**	**1,864.0**
STF Balance	66.6	116.9	121.8	130.6
Other Appropriated Funds				
Revenue[1]	246.3	251.0	251.4	254.4
Expenditure Reduction (CGS Sec. 2-36b)[2]	-	(2.7)	(0.3)	-
Expenditures	241.8	240.4	242.4	242.7
Other Appropriated Funds Balance	**4.5**	**10.6**	**8.9**	**11.6**
All Appropriated Funds				
Revenue	21,200.3	19,877.7	20,194.2	20,159.1
Expenditures	20,850.6	19,750.2	20,063.4	20,016.8
ALL APPROP. FUNDS BALANCE	**349.7**	**127.5**	**130.8**	**142.3**

[1]The Other Appropriated Funds FY 19 revenue projection includes the use of $5.5 million in prior year fund balances that are needed to accommodate projected FY 19 expenditures.

[2]Other Appropriated Funds reductions are built into the expenditure projections in the following row.

Section II. Methodology and Assumptions

METHODOLOGY

CGS Section 2-36b requires OFA to estimate any changes to current year expenditures due to fixed cost drivers.

This methodology compares the statutorily required annual consensus revenue estimates with the previous year's expenditures, plus the annual growth in fixed costs. For years in which expenditures are greater than revenue an adjustment is calculated. It represents how much non-fixed spending will have to be decreased in order to achieve a zero ending balance. For years in which revenue is growing faster than fixed costs, the positive ending balance reflects the amount that non-fixed spending may increase.

Flat Funding of Non-Fixed Accounts

The expenditure projections contained in the report adjust only the accounts categorized as fixed costs to reflect changes over the previous year expenditures. Most other accounts are flat funded at FY 19 levels.

FIXED COSTS

For this report, OFA examined all expenditure accounts to identify the array of fixed costs. **Table 2.1** shows the categories of expenditures that comprise fixed costs, as well as major categories that, while not identified as fixed costs, make up a significant portion of the budget. Please refer to **Appendix D** at the end of this report for account level details on expenditure items identified in the fixed costs categories below.

Table 2.1 Fixed and Non-Fixed Costs

Fixed Costs	Non-Fixed Costs
Entitlements	Education (Lower & Higher)
Debt Service	Municipal Aid
Pension Payments	Wages and Active Employee Fringe Benefits[1]
Retiree Healthcare Costs	Criminal Justice
Adjudicated Claims	Environment & Economic Development
	Public Safety

[1]Excluding retirement benefits.

OTHER ADJUSTMENTS TO EXPENDITURES

In addition to fixed cost increases, OFA includes adjustments relating to contractual SEBAC increases, changes to hospital supplemental payments to conform to consensus revenue and current law, and changes to account for the loss of carryforward funds made available in FY 19.

Please refer to **Appendix C** at the end of the report for a list of key assumptions used to develop cost projections for FY 20 - FY 22.

Section III. General Fund - Current Fiscal Year

As seen in **Table 3.1**, OFA is projecting a $278.6 million General Fund (GF) surplus in FY 19. In addition, a Volatility Adjustment transfer of $648 million is anticipated to be deposited into the Budget Reserve Fund (BRF) in FY 19.

REVENUE

GF revenues are estimated at $260.7 million over budget, after $648 million in additional Estimates and Finals (E&F) Income Tax revenue has been set aside by a volatility adjustment transfer to the BRF.[1] Total estimated tax revenues are 3.6% greater than budgeted as E&F, Withholding Income Tax, Sales and Use and Corporation Tax are all anticipated to exceed budgeted expectations.

Table 3.1 November Update to FY 19 GF Estimates
In Millions of Dollars

Summary	FY 19
Budgeted Balance	10.5
Revenue	
Budgeted	19,008.7
Consensus Adjustments	
Withholding	255.4
Sales and Use	58.0
Corporations	49.0
Refunds of Taxes	(72.2)
Other Revenue	(29.5)
Subtotal	**19,269.4**
Expenditures	
Budgeted	18,998.2
Agency Lapses	(73.9)
Agency Deficiencies	66.6
Subtotal	**18,990.8**
SURPLUS/(DEFICIT)	**278.6**

Income Tax Increases
The total Personal Income Tax projection for FY 19 is $540.3 million above budget, but $284.9 million of this is set aside by a Volatility Adjustment transfer. Therefore, the remaining $255.4 million in Withholding Income Tax becomes the single largest portion of the $260.7 million increase in projected revenue, as compared to budget (see **Table 3.2** below). At the close of FY 18, Personal Income Tax collections exceeded revenue estimates by $244.3 million. Since then, collections have continued to exceed expectations.

Sales and Use Tax Increases
The Sales and Use Tax projection for FY 19 is $58 million above budget. This is primarily due to ending FY 18 with $51 million more in collections than was anticipated in April 2018 Consensus Revenue. This positive increase in the base is assumed in FY 19 - FY 22 revenue estimates.

Table 3.2 Summary of FY 19 General Fund Revenue Estimates
In Millions of Dollars

Revenue Category	Budget	November Estimate	Difference
Estimates and Finals	2,959.9	3,244.8	284.9
Withholding	6,147.7	6,403.1	255.4
Sales and Use	4,153.6	4,211.6	58.0
Corporations	920.2	969.2	49.0
All Other (Net)	5,190.4	5,088.7	(101.7)
Volatility Adjustment Transfer	(363.1)	(648.0)	(284.9)
TOTAL	**19,008.7**	**19,269.4**	**260.7**

[1]In accordance with CGS Sec. 2-35(b)(1)(B), consensus revenue estimates must set aside any E&F revenues in excess of the statutory Volatility Cap, as adjusted per Section 20 of PA 18-81.

Corporation Tax Increases

The FY 19 Corporation Tax projection is $49 million above budget. This is primarily due to ending FY 18 with $52.5 million more in collection revenue than was anticipated in the April 2018 Consensus Revenue. This positive increase in the base is assumed in the FY 19 - FY 22 revenue projections.

Significant Negative Variances in Other Revenue Sources

The November Consensus Revenue estimate includes negative adjustments in other various revenue sources including:

1. $48.1 million in tax refunds, net of a $24.1 positive technical update to the Earned Income Tax Credit;
2. $30 million resulting from the expectation that a licensing fee to establish a new off-reservation commercial casino will not be paid;
3. $15 million in miscellaneous revenues to reflect current trends;
4. $14.6 million in federal grants to reflect adjustments to various expenditures that receive Medicaid reimbursement including:
    a. Reduced estimates for anticipated final rate adjustments across various programs in the Department of Developmental Services, and
    b. A reduction in claims associated with licensure changes for the Department of Veterans Affairs; and
5. $13 million in Public Service Companies to reflect current trends, including the use of tax credits.

The sum total of the significant negative variances listed above and other miscellaneous positive and negative adjustments is -$101.7 million.

EXPENDITURES

Deficiencies

OFA is projecting GF deficiencies in six state agencies totaling $66.6 million in FY 19, as reflected in **Table 3.3** below. Additional detail describing state agency FY 19 funding requirements are provided on the following pages.

Table 3.3 FY 19 Estimated Deficiency Needs
In Millions of Dollars

Agency	FY 19
Department of Correction	31.9
State Comptroller – Adjudicated Claims	20.0
Dept. of Mental Health and Addiction Services	6.6
Dept. of Children and Families	5.8
Dept. of Emergency Services and Public Protection	2.0
Office of the Chief Medical Examiner	0.4
TOTAL	**66.6**

Department of Correction - $31.9 million
The Department of Correction (DOC) is projected to have a year-end deficiency of $31.9 million resulting from shortfalls of $15.9 million in the Personal Services account (PS), $1.2 million in the Other Expenses account (OE) and $14.7 million in the Inmate Medical Services account. DOC's FY 19 available PS resources are 1% less than its FY 18 expenditures. DOC was required to take on additional unanticipated staff from the Department of Children and Families due to the closure of the Connecticut Juvenile Training School (CJTS). CJTS was officially closed on 4/12/18. New staff account for approximately $5 million of PS expenditures, with approximately $4 million going towards positions that most likely would not have been filled during FY 19 otherwise.

OE is projected to have a $1.2 million deficiency as it is unable to meet its appropriation reduction. Compared to FY 18, the appropriation for this account decreased 5.4%, while anticipated expenditures have decreased 1%. Furthermore, DOC has witnessed higher electricity rates and air conditioning utilization due to hot weather.

The Inmate Medical Services account is projected to have a $14.7 million deficiency as it is unable to meet its appropriation reduction and has incurred increased overtime costs. The primary factors contributing to increased overtime are inadequate staffing levels and difficulties filling open positions. The transfer of Inmate Medical Services from UConn Healthcare to DOC resulted in numerous vacancies. Transition costs and carry-forward expenses from UConn Healthcare also contributed to the deficiency.

Office of State Comptroller – Adjudicated Claims – $20.0 million
The projected shortfall in the Adjudicated Claims account is $20 million. The FY 19 Revised Budget did not include an appropriation for the account. Approximately $8.6 million has been expended to date. Approximately $6.3 million of the projected shortfall (31.3%) is for payment of a settlement reached at the end of FY 18 and $6.5 million (32.5%) is related to the SEBAC v. Rowland settlement. The balance is for projected payment of other claims and related expenditures.

Department of Mental Health and Addiction Services – $6.6 million
The agency's projected FY 19 budget shortfall is comprised of: $7 million in the Personal Services account, $1.5 million in the Other Expenses account, $1.1 million in the Professional Services account, and $1.2 million in the Workers' Compensation Claims account. This shortfall is partially offset by $4.3 million lapsing funds from the following accounts: $250,000 in the TBI Community Services account, and $4 million in the Home and Community Based Services account.

The $7 million projected shortfall in the Personal Services account (3.8% of the total FY 19 available appropriation) is primarily due to: (1) higher than budgeted overtime costs of approximately $1.8 million, primarily at Connecticut Valley Hospital (CVH), and (2) increased staffing and associated costs at CVH ($2.8 million), Whiting Forensic Hospital ($850,000), and the regional centers ($1.6 million).

The Other Expenses account shortfall of $1.5 million (6.5% of the total FY 19 available appropriation) is due to increased expenditures to support security and safety upgrades at CVH. In addition, the available appropriation is approximately $1.7 million below FY 18 total expenditures of $24.9 million.

The $1.1 million shortfall in Professional Services is primarily associated with contracted medical services. This represents 9.8% of the total FY 19 available appropriation. The available appropriation is approximately $2 million below FY 18 total expenditures of $13.2 million.

The $1.2 million shortfall in Workers' Compensation Claims represents 10.5% of the total FY 19 available appropriation. The available appropriation is approximately $2.4 million below FY 18 total expenditures of $13.8 million.

Lower than budgeted expenditures are leading to an estimated lapse of approximately $250,000 in the TBI Community Services account and $4 million in the Home and Community Based Services account. This represents 2.9% and 16.8% of the total FY 19 available appropriations, respectively.

Department of Children and Families - $5,808,610
A net deficiency of $5.8 million (less than one percent of the agency's available FY 19 appropriation) is projected across a variety of Department of Children and Families accounts. This is primarily due to two factors: (1) support for clinical interventions and other services, totaling approximately $4.1 million, for non-delinquent youth at risk for involvement in the juvenile justice system; and (2) the 2017 Revised Juan F. Exit Plan, which requires adequate social worker staffing to oversee abused and neglected children, as well as community-based programming to address service needs to achieve Exit Plan outcome measures.

Department of Emergency Services & Public Protection - $2,000,000
The Department of Emergency Services and Public Protection (DESPP) is projected to have a shortfall of $2 million in the Personal Services account. In the first quarter of this fiscal year, DESPP spent $2.2 million (27%) more on overtime expenses than in the same period last fiscal year. A contributing factor to the increase in overtime expenses is the spike in retirements that the agency experienced in FY 18. Last year, there were approximately 100 retirements within the agency, almost double what is anticipated annually. In total, there are currently 955 sworn officers out of a previous 1,200, a shortfall that leads to shifts paid in overtime instead of normal pay.

Office of the Chief Medical Examiner - $392,663
A $392,663 deficiency is anticipated in the Personal Services account (PS). PS expenditures are impacted by overtime and unbudgeted salary increases that were approved by the Commission on Medicolegal Investigations (CGS Sec. 19a-401) for the Chief Medical Examiner and the Deputy Chief Medical Examiner (an approximate 20% increase, or a total of $112,000 for both positions, from FY 18 to FY 19). Overtime is required to cover essential shifts as CME's caseload continues to grow. Between 2012 and 2017, cremations increased by 26%, autopsies increased by 70%, and drug deaths increased by 290%.

Other Appropriated Funds
The Department of Banking (DOB), the Insurance Department (DOI), the Department of Housing (DOH), and the Workers' Compensation Commission (WCC) have projected deficiencies in their industry funds as a result of technical adjustments. These adjustments are related to the fringe benefit recovery rate for fringe benefits, and indirect overhead appropriations that were not made as part of the FY 19 Revised Budget. The resulting net deficiency projected for each agency/fund is as follows: (1) DOB /Banking Fund: $415,423, (2) DOI/Insurance Fund: $178,911, (3) DOH/Insurance Fund: $18,860, and (4) WCC/Workers' Compensation Fund: $949,287.

Estimated Lapses

OFA is projecting state agency lapses totaling $73.9 million. The largest lapses are occurring across the Office of the State Comptroller - Fringe Benefit accounts and within the Department of Social Services (predominately Medicaid). The combined lapses in these two agencies account for 82% of total projected FY 19 lapses, and are less than 1% of total available funding for both agencies. See **Table 3.4** below for further detail.

Table 3.4 FY 19 Estimated Lapses
In Millions of Dollars

Agency / Account	FY 19 $
State Comptroller - Fringe Benefit Accounts	26.8
DSS - Medicaid	25.0
DSS - Connecticut Home Care Program	5.0
DDS - Personal Services	4.5
DRS - Personal Services	4.4
OTT - UConn 2000 - Debt Service	3.6
DSS - Temporary Family Assistance - TANF	3.5
Other Various Lapses	1.0
TOTAL	**73.9**

Section IV. FY 20 to FY 22 Projections

FY 20 Imbalance

The projected FY 19 surplus of $278.6 million, combined with $1,839.1 million in net negative changes to the FY 20 balance, results in an anticipated FY 20 deficit of $1,560.6 million. As detailed in **Figure 4.1**, FY 20 changes include $276.8 million in revenue growth, which is offset by $814.9 million in hospital related changes, $581.3 million in revenue policies and technical adjustments, and $719.8 million in expenditure growth.

Figure 4.1
FY 20 Changes

	$276.8 million	Revenue Growth
Hospital Related: -$814.9 million	**$104.8 million**	Net Impact of Hospital Supplemental Payment Reduction
	-$516.0 million	Hospital Tax Decrease as Required by CGS 12-263q
	-$403.7 million	Federal Grants Revenue Adjustment due to Delayed FY 18 Supplemental Payments
Revenue Policy & Technical: -$581.3 million	**-$209.1 million**	Budgeted Fund Sweeps
	-$98.4 million	Increase Motor Vehicle Sales Tax Transfer to STF
	-$273.8 million	**Other Revenue Policy & Technical Adjustments** Policy ($116.6 million) Technical Adjustments ($157.2 million)
Expenditure Growth: -$719.8 million	**-$654.6 million**	**Fixed Cost Increases** Medicaid & Other Entitlements ($253.9 million) State Employee Pension & Retiree Health ($188.3 million) Teachers' Retirement & Retiree Health ($113.0 million) Debt Service ($110.9 million) Adjudicated Claims (-$11.5 million)
	-$65.1 million	SEBAC

TOTAL:
-$1,839.1 million

HOSPITALS

In total, hospital policies result in a net negative impact of $814.9 million in FY 20. **Table 4.1** below provides details of the revenue and expenditure adjustments impacting FY 20.

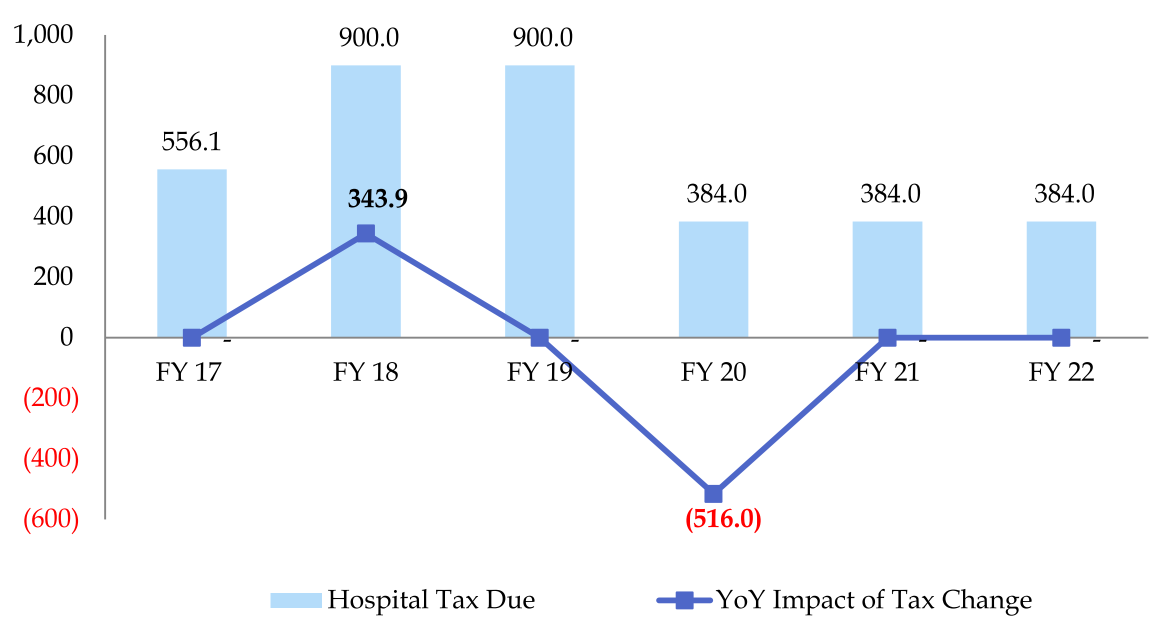
Table 4.1 Hospital Policies' Impact on FY 20
In Millions of Dollars

Description	Revenue	Expenditures	Impact on Balance
Hospital Tax Reduction	(516.0)	-	(516.0)
Hospital Medicaid Supplemental Payment Reduction[1]	(222.0)	(326.8)	104.8
Federal Grants Revenue Adjustment Due to Delayed FY 18 Supplemental Payments	(403.7)	-	(403.7)
TOTAL	**(1,141.7)**	**(326.8)**	**(814.9)**

[1]This reflects a $104.8 million net impact to the GF, based on FY 19 projected Hospital Supplemental expenditures, which are approximately $3 million less than the FY 19 Revised Budget due to Charlotte Hungerford no longer being eligible for the small hospital pool.

Hospital Tax Reduction
CGS Sec. 12-263q increases the hospital tax from $556 million to $900 million temporarily in both FY 18 and FY 19. This provides a revenue increase of $343.9 million in those fiscal years over the previous hospital tax structure. In the out years, the law decreases the hospital tax from $900 million to $384 million beginning FY 20 which is responsible for $516 million (28%) of the total anticipated FY 20 net changes.

Figure 4.2 Hospital Tax by Fiscal Year
In Millions of Dollars



Hospital Medicaid Supplemental Payments
The FY 19 Revised Budget reduces the hospital Medicaid supplemental payments starting in FY 20, from $496.3 million in FY 19 to $166.5 million (a reduction of $329.8 million) with a corresponding reduction in federal grant revenue of approximately $222.2 million. The reduction in the hospital Medicaid supplemental payments and the related revenue change result in a positive net impact to the General Fund (GF) of $107.6 million beginning in FY 20 and mitigating the $516 million reduction in the Hospital Provider tax enacted in the FY 18 – FY 19 Biennial Budget.

Federal Grants Revenue Adjustment due to Delayed FY 18 Supplemental Payments
Federal grant projections for FY 19 were revised upward by $403.7 million in FY 19 to reflect the receipt of federal funds associated with two quarters of FY 18 hospital supplemental Medicaid payments anticipated to be paid out in FY 19.

REVENUE POLICY AND TECHNICAL ADJUSTMENTS

The net FY 20 impact of GF revenue policy and technical adjustments decreases the balance by $581.3 million. **Table 4.2** highlights the major components of that adjustment with descriptions of specific items following afterwards.

Table 4.2 Revenue Adjustments to FY 20
In Millions of Dollars

Description	FY 20 Adjustments
Budgeted Fund Sweeps	(209.1)
Increase Motor Vehicle Sales Tax Transfer to STF	(98.4)
Other Revenue Policies	
Restoration of Property Tax Credit	(55.3)
Income Tax Reductions	(29.8)
Inheritance & Estate Tax Reductions	(23.9)
Corporation Tax Reductions	(16.5)
Other Policy	8.9
Other Revenue Policy - Subtotal	**(116.6)**
Technical Adjustments	
Federal Grants: Technical Adjustments and Reconciliations	(134.8)
Other Technical Adjustments	(22.4)
Technical Adjustments - Subtotal	**(157.2)**
TOTAL	**(581.3)**

Restoration of Property Tax Credit
The largest single adjustment is restoration of the (maximum) $200 property tax credit to AGI-level eligible regardless of whether or not they are elderly or have dependents. (The FY 18 – FY 19 Biennial Budget temporarily restricted the credit based on age and numbers of dependents.)

Income Tax Reductions
Table 4.2 reflects the impact of various policies listed below that reduce income tax collections in FY 20.

- Phase-in of the Pension and Annuity Exemption ($16.4 million).
- Increase in the Social Security Exemption Threshold ($8.4 million).
- Increase to the Teachers' Pension Exemption in Income Year 2019 ($8 million).

These reductions are partially offset by the sunset of the Angel Investor Tax Credit ($3 million).

Inheritance & Estate Tax Reductions
Reductions to this tax type include: (1) the phase-in of exemption level of the federal Estate Tax, and (2) the lowering of the lifetime liability cap from $20 million to $15 million.

Corporation Tax Reductions
The reduction to this tax type reflects the sunset of the 20% surcharge in Income Year 2019 and the annualization of various tax credit limitation increases.

EXPENDITURES

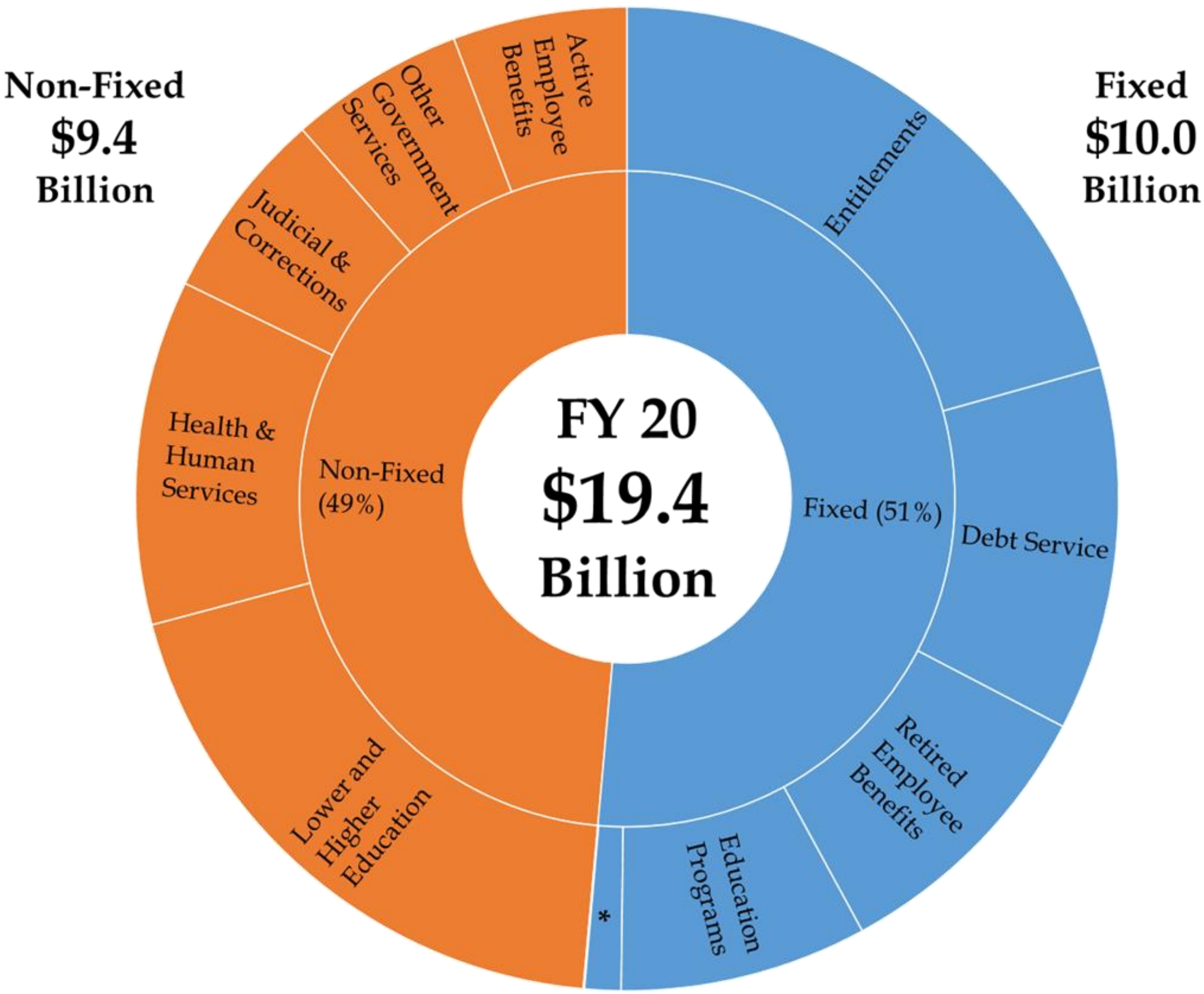
In FY 20, **fixed costs are anticipated to increase by a total of $654.6 million** and include predominately Medicaid, entitlements, State Employee Pension & Retiree Health, Teachers' Retirement, and Debt Service.

A **non-fixed cost expenditure reduction of $1,560.6 million** is statutorily required (CGS Sec. 2-36b) in FY 20 in order to balance the GF. Additional expenditure reductions of $449.2 million in FY 21 and $724.6 million in FY 22 are needed to balance the GF with consensus revenue estimates. See **Table 4.3** below for detail.

Table 4.3 GF Fixed Costs Changes and Non-Fixed Cost Reductions
In Millions of Dollars

Category	FY 19	FY 20	FY 21	FY 22
+ November Consensus Revenue	19,269.4	17,823.2	18,038.0	17,910.1
- Previous Year Expenditure		18,990.8	17,823.2	18,038.0
- Fixed Costs				
Medicaid & Other Entitlements		253.9	184.9	188.4
State Employee Pension & Retiree Health		188.3	146.9	152.2
Teacher's Retirement & Retiree Health		113.0	49.9	51.3
Debt Service		110.9	155.0	185.9
Adjudicated Claims		(11.5)	0.2	0.2
Total - Fixed Costs		**654.6**	**536.8**	**578.1**
- SEBAC		65.1	127.2	18.6
- Hospital Medicaid Supplemental Payment Reduction		(326.8)		
- Non-Fixed Cost Expenditure Reduction (CGS Sec. 2-36b)		(1,560.6)	(449.2)	(724.6)
Total - Expenditures	**18,990.8**	**17,823.2**	**18,038.0**	**17,910.1**
BALANCE	**278.6**	-	-	-

Figure 4.3 FY 20 Non-Fixed and Fixed Cost GF Expenditures



*Active Employee Benefits – Fixed Costs

Entitlements

Entitlements are the largest category of fixed costs, representing 41% of projected fixed costs in FY 22. However, the rate of growth has been the smallest of all other fixed costs categories at 5.1% per year. Medicaid and community residential services for Department of Developmental Services (DDS) consumers collectively account for 82% of entitlements. Absent future specific state or federal policy changes impacting these programs, expenditures are anticipated to increase consistent with current historical trends.

> **Medicaid** is the largest entitlement program, and is projected to cost the GF $3.1 billion in FY 22 (or 67% of entitlements). The cost of the Medicaid program is projected to increase approximately 5.8% per year from FY 19 - FY 22. The increase is primarily due

to (1) caseload growth and (2) changes in federal reimbursement associated with the HUSKY D population. Between FY 19 and FY 20, approximately 30% of the $171 million increase is associated with caseload and 18% is due to increasing the state share for HUSKY D from 7% to 10%.

Despite projected growth in this area, per member per month (PMPM) costs have been decreasing over time. When comparing FY 12 to FY 17 (the most recent comparable data available), PMPM has decreased by 3.4% from $655 in FY 12 to $633 in FY 17, which mitigates the growth in program expenditures related to caseload and reimbursement changes.

Community Residential Services for DDS consumers is the second largest entitlement program, and is projected to cost approximately $653 million in FY 22 (or 14% of entitlements). This program is anticipated to grow by $35 million in FY 20, $19.2 million in FY 21, and $16.2 million in FY 22, which reflects a total increase in FY 22 of 12%, or $70 million, over the FY 19 funding level of approximately $582.4 million. The increase is due to: (1) prior year annualization of FY 19 private provider wage increases ($15 million) for certain employees, and (2) caseload changes including group home privatizations and caseload growth for community placements. Caseload growth is limited to age-outs, long-term care residents (Money Follows the Person) and Southbury Training School residents.

State Employee Retirement and Retiree Health Care

The increase in state retirement costs for FY 20 - FY 22 is predominately due to projected increases in the state's actuarially determined employer contribution (ADEC) for the State Employees' Retirement System (SERS), resulting from increases in the SERS unfunded accrued liability (UAL) payment discussed below. [2]

Projected SERS ADEC Will Increase to $2 Billion in FY 22

The state funds the SERS annual ADEC (comprised of the amortized UAL payment and the normal cost) out of the resources of the GF, Special Transportation Fund (STF) and recoveries from other funds (including,

2017 Collectively Bargained Changes to SERS

1. Reduced Discount Rate from 8% to 6.9%.
2. Changed actuarial cost method to Entry Age Normal.
3. Phased in level dollar amortization methodology over 5 years.
4. Extended the amortization period for the portion of the UAL accrued after 12/31/83 from 2032 to 2046.
5. Increased contributions by 2 percent for current SERS employees.
6. Implemented new Tier IV, a hybrid defined benefit-defined contribution plan, for new employees.
7. Modified COLA for retirees on and after 7/1/22, including a 30 month (2.5 year) COLA moratorium.

[2] The state funds three retirement systems for retired state employees: SERS, the Judges' and Compensation Commissioners' Retirement System and the Higher Education Alternate Retirement Program (a defined contribution plan). GF support for SERS comprises 98% of projected FY 19 expenditures for the three systems.

but not limited to, other appropriated funds, grant funds and federal funds). Currently, the GF funds approximately 74% of the ADEC, the STF 8% and the balance is paid by recoveries from other funds.

The state's projected GF portion of the SERS ADEC increases by $140 million in FY 20, $92.2 million in FY 21 and $93.7 million in FY 22, for a total increase of 28%, or $329 million, over the FY 19 level of approximately $1.2 billion to $1.5 billion.

Total SERS UAL Payment Will Increase to $1.8 Billion in FY 22 and Level Off at $1.9 Billion in FYs 23 – 32

For FY 20 - FY 22, the UAL portion of the ADEC represents 87% to 90% of the total SERS ADEC. The UAL portion is $1.5 billion in FY 20, $1.7 billion in FY 21 and $1.8 billion in FY 22.

The projected payment trend in **Figure 4.4** on the following page reflects UAL payments leveling off at approximately $1.9 billion in FY 23 and remaining level until FY 32, after which the UAL payment declines by 25% ($484 million) to approximately $1.5 billion in FY 33, reflecting the payoff of the statutory UAL base in the prior fiscal year.[3] The UAL payment is projected to remain at $1.5 billion until FY 47, when the transitional base is paid off. Prior to the recent contractual changes to SERS, the annual UAL payment was projected to reach approximately $2 billion in FY 27 and continue increasing to a peak of $3 billion in FY 32 (the end of the prior single amortization period).

Total SERS Normal Costs Projected to Decrease to $209 million in FY 22

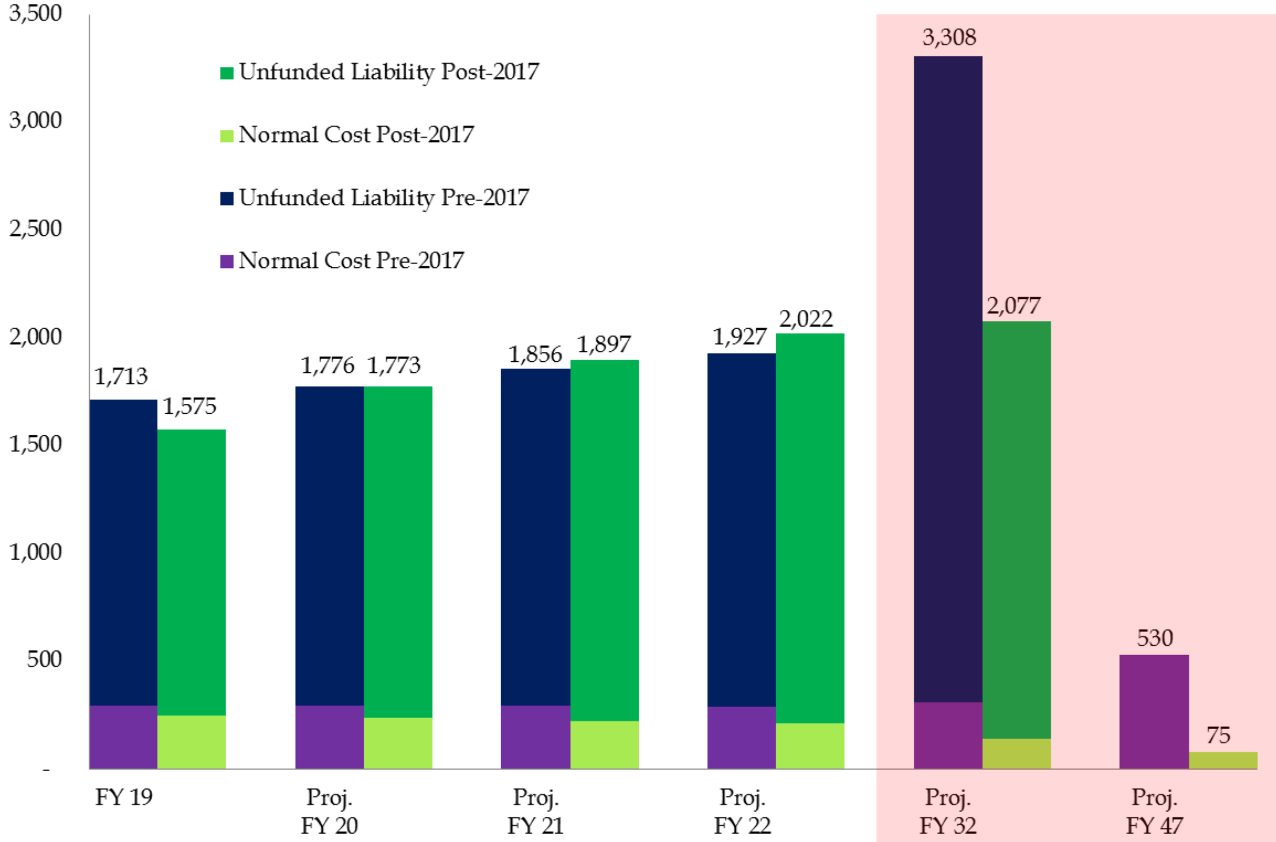
For FY 20 - FY 22, the normal cost portion of the ADEC represents 13% to 10% of the total SERS ADEC: $235 million in FY 20, $218 million in FY 21 and $209 million in FY 22.

Figure 4.4 on the following page reflects the total SERS ADEC trend for all funds for FY 19 - FY 47, pre and post 2017 changes, assuming all actuarial assumptions are achieved. The figure is provided to illustrate the ADEC trend over time. The post 2017 payments reflect recently modified actuarial assumptions and plan design changes made pursuant to two agreements reached between the state and the State Employees' Bargaining Agent Coalition (SEBAC) in February 2017 and subsequently in July 2017. [4]

[3]The SERS unfunded accrued liability (UAL) was split by agreement in 2016 between what is known as the "statutory base" (the UAL as of 1984) and the UAL as of 2016, which is known as the "transitional base." In addition, as of 2016 any gains or losses experienced by the system have separate 25 year amortization periods. The statutory base has 13 years left in its amortization period and the transitional base has 28 years left in its amortization period.

[4]The graph reflects an actuarial projection of system costs on a closed basis. Actual payments are certified in annual actuarial valuations of the system. The normal cost reflected in the post 2017 projection does not include the state's 1% contribution to Tier IV employees' defined contribution plan (estimated to be $65.5 million in FY 47) adopted in SEBAC 2017. In addition, SERS adopted a layered amortization methodology in 2016 for any gains or losses incurred after 2016, which are not reflected in the graph.

Figure 4.4 Trends in the State Employees Retirement System (SERS) for All Funds
In Millions of Dollars



Retiree State Employee Health Costs Projected to Increase to $840 Million in FY 22
The projected increases in retiree health care are $25.9 million in FY 20, $54 million in FY 21 and $57 million in FY 22, totaling in FY 22 an increase of approximately 19%, or $137 million, over the FY 19 level of $703 million.[5] Growth in retiree health is predominately due to increases in the costs of medical and prescription services for Medicare and non-Medicare eligible dependents. Aggregate program expenditures are projected to increase approximately 7% per year from FY 20 - FY 22. Retiree health care represents approximately 8% of GF fixed costs in FY 22.

Pursuant to the SEBAC 2017 agreement, the state moved Medicare eligible retirees and dependents into a Medicare Advantage Plan for medical and pharmacy coverage, resulting in projected annualized savings of approximately $130 million. This reflects the difference between projected claims experience under the pre-2017 self-funded model and the premium for the Medicare Advantage Plan, which is a fully-insured plan. Projected non-Medicare related expenditures account for approximately 60% of total program expenditures, while non-Medicare eligible retirees account for 31% of the population.

[5]FY 19 expenditures reflect $21.5 million in FY 18 carryforward.

Teachers' Retirement Pension and Retiree Health Costs

The Teachers' Retirement System (TRS), which provides pension and healthcare benefits for retired public school teachers, is funded by three accounts in the Teachers' Retirement Board (TRB) budget. The TRB accounts and the debt service costs associated with the Pension Obligation Bond (POB) are fixed costs which are also presented in **Appendix E - Municipal Aid**. These state expenditures represent fiscal support to municipalities for expenses related to their retired public school teachers.

Annual Pension-Related Payments Will Increase to Approximately $1.7 Billion in FY 22
The FY 22 pension-related payments reflect an increase of 20% or $277 million over the FY 19 payments of $1.4 billion. The state's TRS pension costs, shown in **Table 4.4,** consist of the state's retirement contribution (payments towards the unfunded accrued liability (UAL) and normal cost) and the state's debt service payments. The state's retirement contribution for the TRS is referred to as the Annual Required Contribution (ARC).

Table 4.4 Teachers' Retirement System Pension Costs to the State
In Millions of Dollars

Category	FY 19	FY 22	Change
UAL	1,134	1,274	140
Normal Cost	158	210	52
Debt Service	118	203	85
TOTAL	**1,410**	**1,687**	**277**

State UAL Payments Will Increase to Nearly $1.3 Billion in FY 22
The FY 22 TRS UAL payment reflects an increase of 12% or $140 million over the FY 19 UAL payment of $1.1 billion.

The following factors will continue to result in rising state payments toward TRS' unfunded liability: (1) the level percentage of payroll methodology, (2) the fixed amortization period, and (3) the discount rate of 8%. The state has limited ability to lower the UAL payment by adjusting these factors. The bond covenant for the 2008 POB constrains the state's ability to change the first two factors, and in the absence of other changes, lowering the discount rate immediately increases the UAL.

2008 Pension Obligation Bond (POB)

1. Requires the state to make the full Annual Required Contribution (ARC) through 2032.
2. Allows for limited flexibility to reduce the ARC under specific conditions, including reaching a funded ratio of 70%.
3. May not be paid off early before 2025.

The TRS 2018 valuation resulted in an increase in the funded ratio, which shows the percentage of assets available to cover the liability, from 56% to 58%.[6] This is due primarily to lower than expected cost-of-living adjustments and salary increases. The TRS 2018 valuation reflected an $11.1 million increase (for a total of $13.2 billion) in the total UAL of the system. The TRS funded ratio was 70% in 2008 immediately after the addition of $2 billion from the POB issuance into the Teachers' Retirement Fund (TRF).

Figure 4.5 on the following page shows the trajectory of the TRS'ARC and debt service payments for selected years from FY 18 - FY 33. Years shown past FY 22 are: (1) FY 25, when the state could use the ARC funds toward early settlement of the POB; (2) FY 32, the final year of the POB and when the UAL payment is at its maximum; and (3) FY 33, the year when 98% of the UAL is paid and only a small UAL remains. The trajectory of projected payments[7] beyond FY 22 assumes current actuarial assumptions and 7% actual returns are realized. The figure is provided to generally illustrate the payment trend over time; actual plan experience is accounted for in the actuarial valuation of the system (provided every two years).

Total Normal Cost Rate Will Remain Steady with the State Share Increasing

The FY 22 TRS normal cost reflects an increase of 33% or $52 million over the FY 19 normal cost payment of $158 million. The normal cost rate is the average percent of active members' pay required to fully fund benefits earned in the current year. The normal cost portion of the TRS pension costs is funded by active TRS members and the state.

The 2016 valuation established a total normal cost rate of 10.6%. Beginning January 2018 under PA 17-2 JSS, contributions from active employees increased from 6% of pay to 7%.[8] This increase dropped the state's share of the normal cost to 3.6%, which resulted in state savings of $40.1 million in FY 19.

However, the same public act requires the state, beginning in FY 20, to annually pay an ARC based upon a 6% member contribution rather than the 7% members will actually contribute. Consequently, the state savings which resulted from the increased member contribution is eliminated in FY 20 onward. The additional revenue to the TRS from this provision is anticipated to exceed $40 million annually. The 2018 valuation establishes a normal cost rate of 10.5% of which member contributions are permitted to offset 6% of the normal cost rate, leaving 4.5% of pay for the state's share of FY 20 and FY 21 normal cost.

TRS Debt Service Will Increase to $203.3 Million in FY 22

TRS debt service costs for the pension obiligation bonds issued on behalf of the TRS in 2008 have been part of the TRS related expense since FY 10. The FY 22 TRS debt services costs reflect an increase of 72% or $85 million from the FY 19 debt service cost of $118 million. Debt service costs will continue for the life of the bond (2032) and are funded in the Office of the State Treasurer - Debt Service account.

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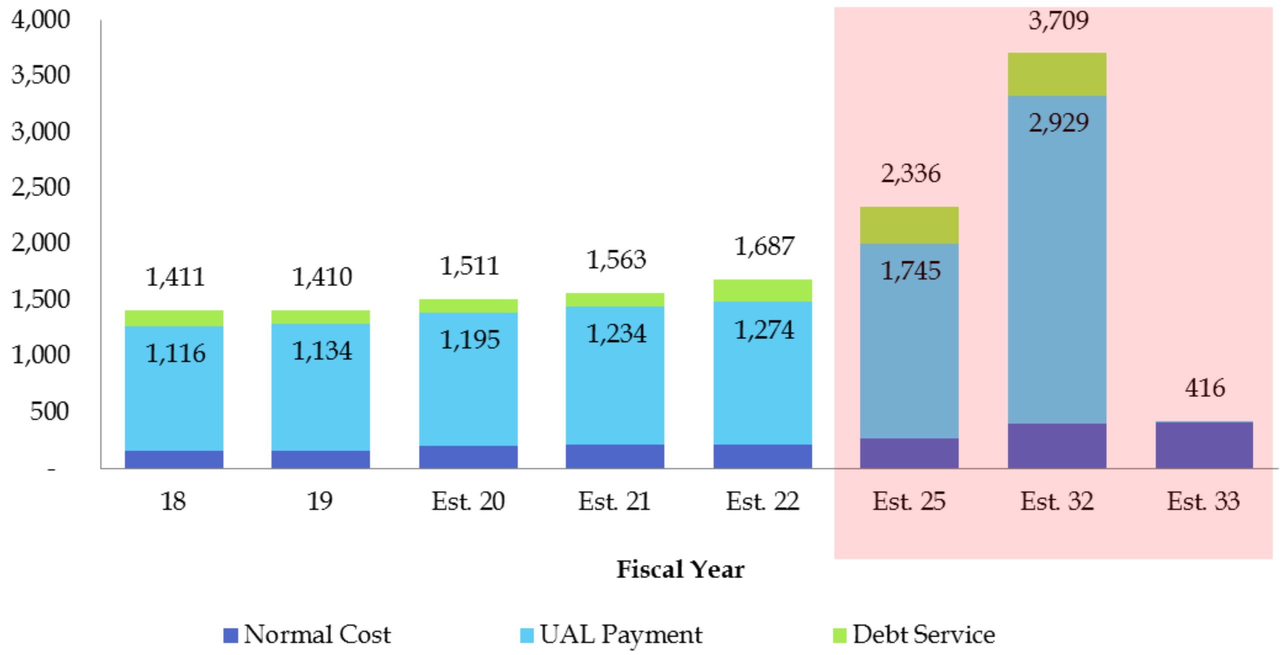
[6]While a funded ratio of 80% is widely viewed as a healthy bench mark, the movement or trend of the funded ratio is as important as the absolute value. American Academy of Actuaries, Issue Brief (July 2012)

[7]*Source:* TRS Actuarial Consultant 30-year Projections based on 2016 Valuation using 8% Discount Rate, Earning 7% Actual Returns. Estimate provided to the Pension Sustainability Commission.

[8]By way of comparison, the average member contribution in the 11 similar teachers' retirement systems nationwide is 8% of pay. *Source:* Report of the Connecticut Teachers' Retirement System Viability Commission (2018)

Figure 4.5 Teachers' Retirement System Pension Costs to the State
In Millions of Dollars



State Costs for TRS Healthcare Benefits Will Increase to $41.6 Million in FY 22
State funding for the two retiree health options provided by the TRB represents 2% of the state's TRS expenditure in FY 22. Expenditure growth in TRB retiree health from FY 19 to FY 20 is primarily due to: (1) the use of a one-time transfer of $16.1 million from the FY 18 surplus to the TRB health fund to fully support the state's share of costs in FY 19, and (2) projected health plan membership growth. Continued membership growth as well as medical cost inflation will lead to rising state costs through FY 22.

The TRB changed the health plan provided to Medicare eligible retirees and dependents (i.e., "the base plan") from a self-insured Medigap Supplement plan to a Medicare Advantage Plan for medical coverage starting in FY 19. Medical and prescription drug premiums for the base plan subsequently declined 28% from FY 18, which is projected to reduce total FY 19 plan costs by approximately $38 million.[9]

[9]This plan savings reflects the difference between projected claims experience under the prior self-insured model and the current fully-insured medical premium for the Medicare Advantage Plan and prescription drug plan changes.

Debt Service (Inclusive of TRB)

Annual GF debt service is expected to grow by approximately $452 million from FY 19 to FY 22, from $2.2 billion to $2.7 billion. This represents an annual growth rate of approximately 6%.

Figure 4.6 GF Debt Service
In Millions of Dollars

The table on the following page shows the change and growth in the 3 largest debt service line items, which represent over 97% of overall GF debt service payments.

Table 4.5 General Obligation (GO) Debt Service – Significant Line Items
In Millions of Dollars

Line Items	FY 19	FY 22	Change	Growth
GO Debt Service	1,859	2,155	296	5.0%
UConn 2000 - Debt Service	207	244	36	5.5%
Pension Obligation Bonds - TRB	118	203	85	19.7%

The primary debt service line item is expected to grow at an annual rate of 5% from FY 19 to FY 22. While this is a substantially lower growth rate than the 11.2% rate from FY 15 - FY 18, the anticipated growth rate still results in a sizeable expected increase in debt service, from $1.86 billion in FY 19 to $2.15 billion in FY 22, because the underlying amount is relatively high.

The slower growth in GO debt service can be somewhat attributed to the combination of various debt and bonding caps instituted in the FY 18 – FY 19 Biennial Budget and to a one-time slowdown in capital spending during ongoing budget negotiations in FY 18; no bond commission meetings were held between May and November 2017. Greater detail on bonding-related projections is provided in **Section VII**.

The highest debt service-related growth rate is due to escalating payments that are fixed by contract. Debt service on Pension Obligation Bonds increases from $118.4 million in FY 19 to $203.3 million in FY 22, as mentioned in the TRB discussion. (These payments will surpass $300 million in FY 23.) Similarly, payments for municipal restructuring, which is used for paying debt service on bonds issued by Hartford, are expected to peak at $56.3 million in FY 21, before decreasing steadily until the debt is repaid in 2036.

FY 20 & FY 21 SEBAC Wage Increases

The 2017 State Employees Bargaining Agent Coalition (SEBAC) agreement included general wage increases in FY 20 and FY 21 of 3.5% plus an annual increment (or a lump sum payment for certain bargaining unit employees who have reached their maximum step) for unionized employees covered by the agreement. The projected GF estimated cost for these wage increases is $110.8 million in FY 20 and $127.2 million in FY 21. The 2017 SEBAC agreement did not provide for a wage increase in FY 22.

The 2017 SEBAC agreement included job security provisions that apply to employees within unions that agreed to their collective bargaining contracts, in accordance with the agreement. Covered unionized employees hired before July 1, 2017 cannot be laid off from July 1, 2017 through June 30, 2021. These covered bargaining unit members represent approximately 75% of state employees.

REVENUE OUT YEARS

In the out years, revenue is projected to return to moderate growth levels relative to the increases anticipated in FY 19. Enacted policies also negatively impact GF revenues, in particular through the Sales and Use Tax.

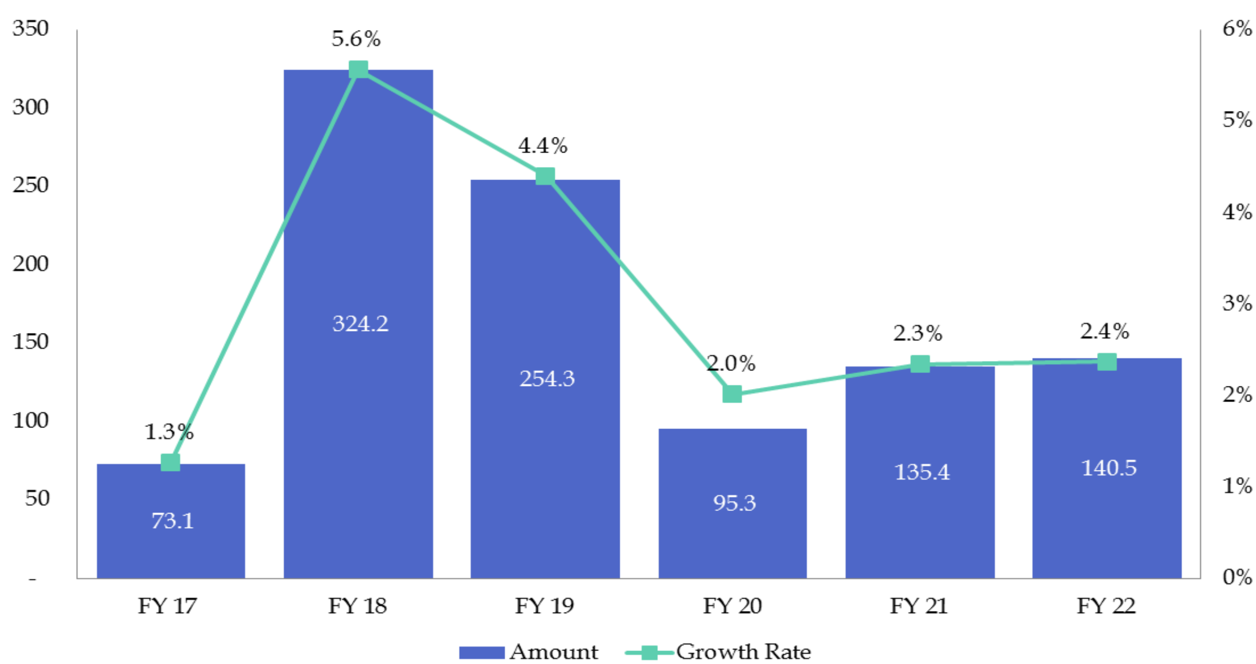
Income Tax Growth Expected to Moderate

Following revenue surges in the Estimated and Final (E&F) Payments portion of the Income Tax through FY 19, growth is expected to moderate in the out years. In particular, negative growth projected for E&F for FY 20 results in a reduction of approximately $267 million in that year alone, with only $79 million and $81 million in positive growth expected in each of the next succeeding years, respectively.

Similarly, strong growth of approximately 4.4% in the Withholding portion of the Income Tax in FY 19 is expected to drop to within the 2.0% - 2.4% range in the out years. While this does contribute roughly $100 million to $140 million annually to overall growth expectations, this is far lower than the $250 million in growth experienced in this revenue category in FY 19.

The primary driver behind these projections is the expectation that revenue growth will revert to more modest historical averages in the long term. In particular, federal tax policy and economic stimulus have led to significant revenue growth that is not expected to continue through the out years. **Figure 4.7** below illustrates the expected trajectory in Withholding collections.

Figure 4.7 Trends in Withholding Growth
In Millions of Dollars



Sales Tax Transfers Impact to the GF

Recent policies transfer a portion of Sales and Use collections to various funds and continue to do so at an accelerated pace over the next two biennia. Although the transfers support those other funds, the direct impact to the GF is a loss of revenue estimated to be $375.2 million in FY 19, ramping up to over $1 billion by FY 22.

Figure 4.8 Estimated Sales and Use Tax Revenue for Non-GF
In Millions of Dollars

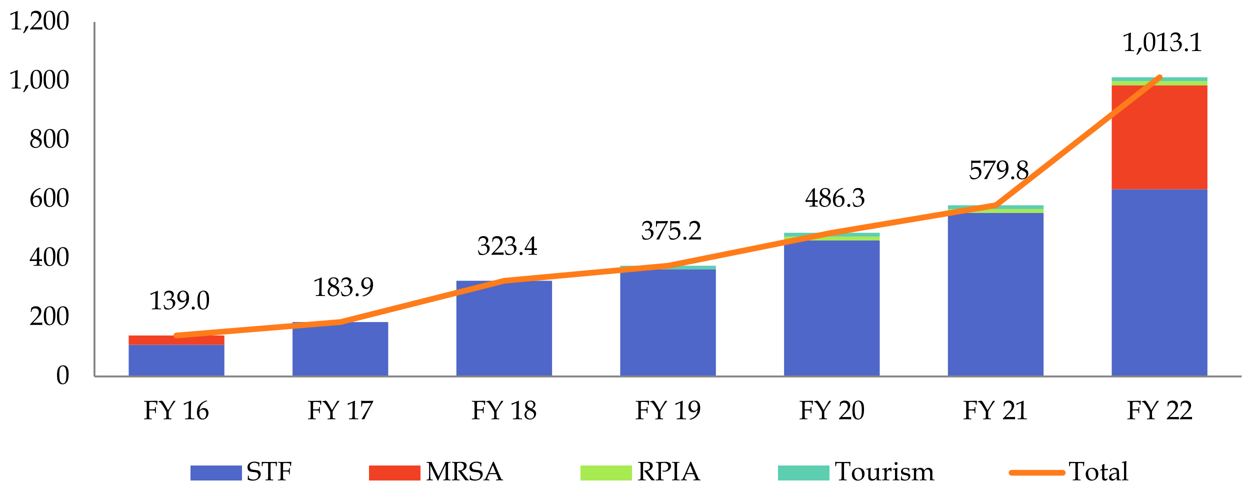
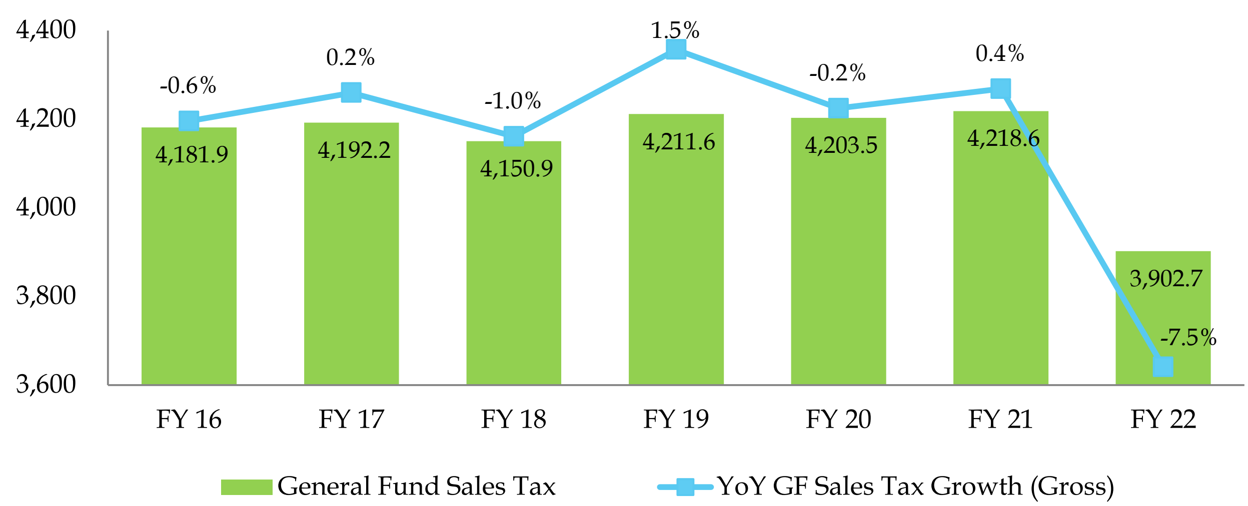


Figure 4.9 Estimated Sales and Use Tax Revenue for the GF
In Millions of Dollars



Sales Tax Transfers

Sales and Use Tax revenue supports the following funds and accounts:

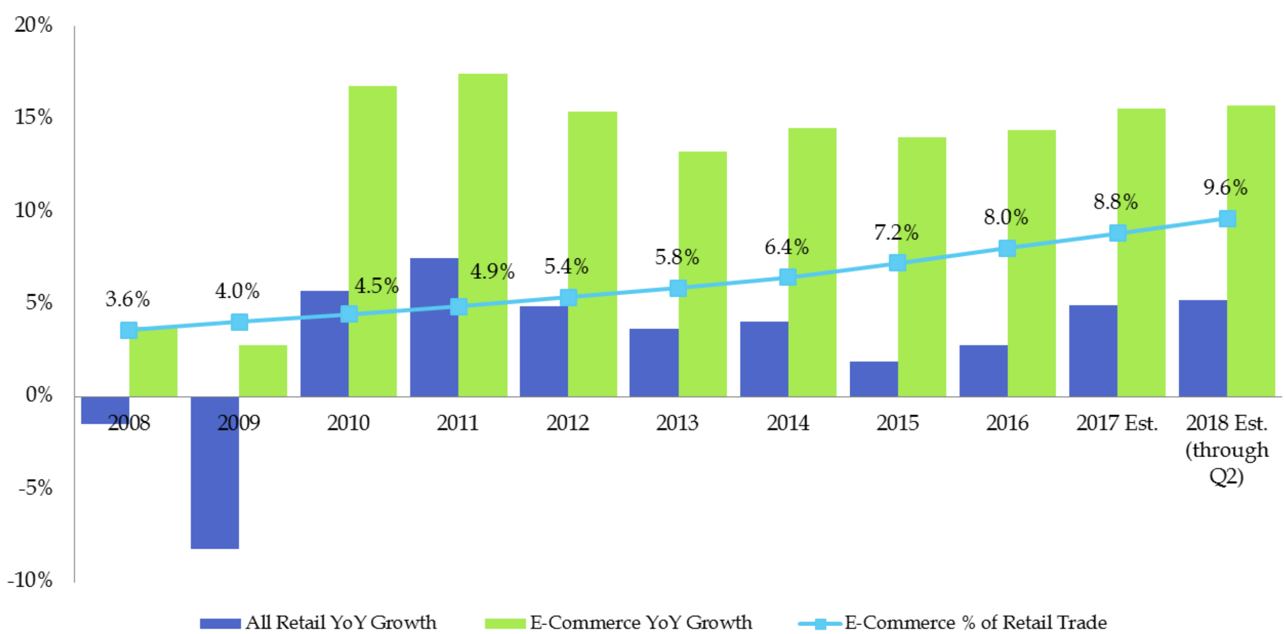
Fund	Source
General Fund (GF)	All Sales
Special Transportation Fund (STF)	General Sales, Car Sales
Municipal Revenue Sharing Fund (MRSF)	General Sales
Regional Planning Incentive Account (RPIA)	Room Occupancy, Rental Car
Tourism Fund	Room Occupancy

Sales Tax Impact from *South Dakota v. Wayfair*

E-Commerce is an increasingly larger segment of retail sales, going from 3.6% of annual U.S. retail trade sales in 2008 to 9.6% as of the second quarter of 2018. With the *Wayfair* ruling in June 2018, it is easier for states to collect taxes that otherwise would go uncollected.

For Connecticut, the *Wayfair* decision is anticipated to result in approximately $40 million in additional revenue annually that may be collected by the Department of Revenue Services (DRS). The enforcement of Sales Tax collections by DRS on retailers currently not in compliance will determine when the state may see an increase in tax collections.

Figure 4.10 Annual U.S. Retail Trade Sales Compared to E-Commerce Retail Sales



Source: U.S. Census

Section V. Trends and Concerns

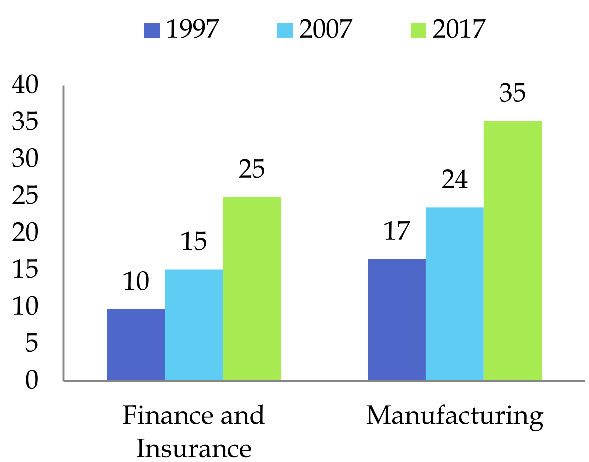
The income tax and sales tax account for 75%, or $14.5 billion, of General Fund (GF) FY 19 revenue. These two revenue sources are highly dependent on an economy facing considerable uncertainty over the next five to ten years due to:

1. **An Economy in Transition** regarding demographics and key industries, and
2. A **Recession** would create significant fiscal challenges.

ECONOMIC TRANSITION

Aging of Major Industries

Figure 5.1 Share of Workforce Over Age 54



Over the past ten years key industries, including Finance, Insurance and Manufacturing, have experienced substantial increases in the share of workers over age 54. As the baby boomer generation driving these increases retires over the next decade, employment and income impacts in Connecticut are unknown. The **economic section** below details how demographics and changing industry prospects are anticipated to impact tax revenue in Connecticut.

RECESSION

Escaping the FY 20 - FY 21 Biennium Without Recession Would Break Records

LONGEST TIME BETWEEN RECESSIONS
10 Years
1991-2001

TIME SINCE LAST RECESSION
9 Years and Counting
Since June 2009

IF RECESSION STARTS:
June 2019 Start of Biennium = MATCHES RECORD
June 2021 End of Biennium = EXCEEDS RECORD BY 2 YRS.

Due to the length of the current economic cycle it is useful to consider how well positioned the state is to weather the stress of a recession. This section explores the state's historical responses to recessions and the measures already taken to prepare for the next recession, namely the development of the Volatility Cap and the buildup of the Budget Reserve Fund (BRF). It also describes constraints that may pose challenges to the state when it needs to respond to the next recession.

Economic Transition

The Connecticut economy is in a period of transition in terms of both demographics, as the baby boomer generation ages into retirement, and the types of industries that are present and prospering. This section will take a closer look at how these two major factors will continue to intertwine to impact tax revenue and income growth going forward.

Unfavorable Demographics Have Negative Revenue Implications

As the baby boomer generation transitions from prime earning years into retirement, Connecticut will see the age 45 to 64 cohort shrink 9% between 2020 and 2030.[10] As people in the age 45 to 64 group typically pay the most in state and local taxes, this demographic shift is likely to result in lower revenues for the state. The over 75 age group will see the most growth, but pays the lowest average taxes.

Figure 5.2 State and Local Income Taxes by Age in the US (2017)
In Dollars

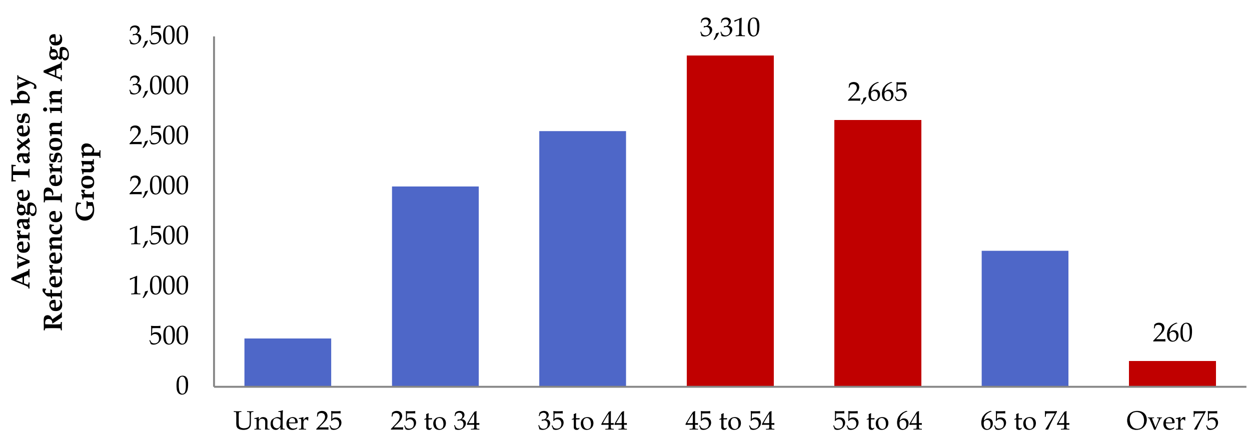
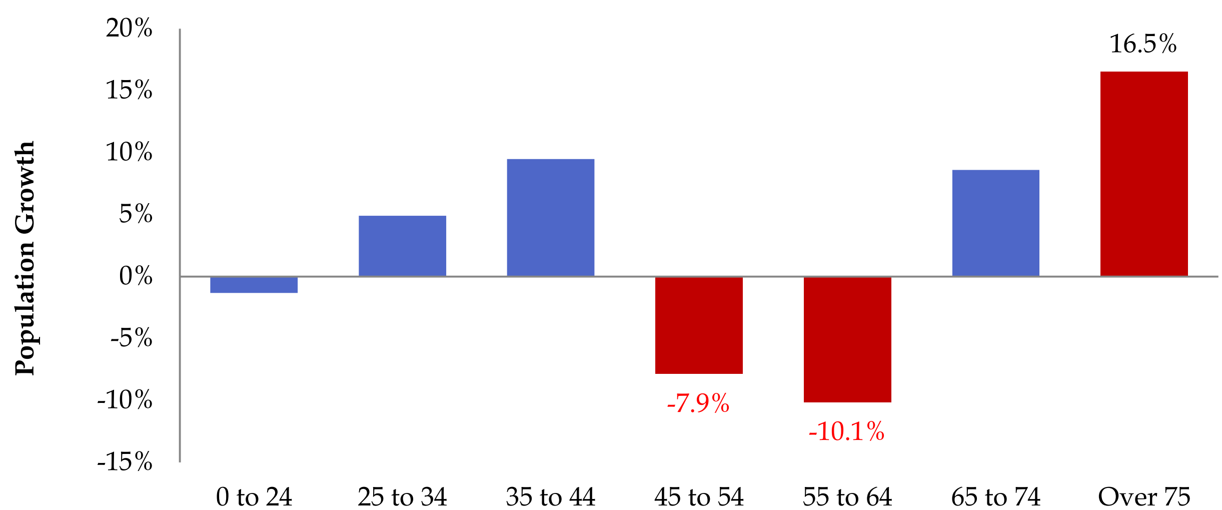


Figure 5.3 Connecticut Projected Population Growth by Age (2020 to 2030)



[10]*Source:* Connecticut State Data Center, 2015 to 2040 Population Projections for Connecticut (July 2017)

Income Volatility from High Income Earners
From 2010 to 2016, 68% of all income growth has come from high income earners (income of $200,000 or more). As illustrated in **Figure 5.3** below, growth in this income group has been erratic since 2010 and has accounted for both large increases and large decreases in income, impacting tax revenues. As shown in **Table 5.1** below, volatility is concentrated in the group with incomes above $2 million. In years with growth (2010, 2012, and 2014), those making over $2 million accounted for 50% or more of the increase in income. In years of decline (2013, 2015, and 2016), the $2 million group accounted for over 100% of the drop in income. The high growth, but varied incomes, of this group reflect the highly volatile industries they work in.

FY 18 Income Tax Growth Exceeds

$1.78 Billion

The trend of volatile income growth continued into tax year 2017 with a sizeable increase in income tax collections primarily attributed to high income earners. This includes one-time payments of approximately $764 million and approximately $1 billion in growth.

Figure 5.4 Growth in Connecticut Adjusted Gross Income (AGI)
In Billions of Dollars

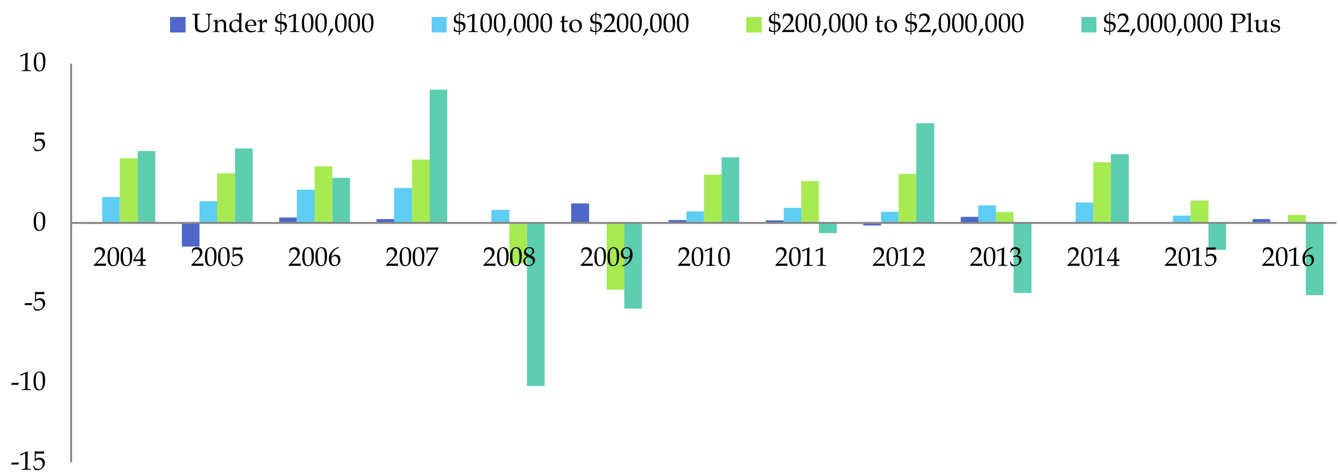


Table 5.1 Annual Growth in Billions in Connecticut AGI ($200,000 and over)

Income Range	2010	2011	2012	2013	2014	2015	2016
$200,000 to $2,000,000	3.0	2.6	3.1	0.7	3.8	1.4	0.5
$2,000,000 Plus	4.1	-0.6	6.3	-4.4	4.3	-1.7	-4.5
$200,000 Plus Total	**7.1**	**2.0**	**9.3**	**-3.7**	**8.1**	**-0.3**	**-4.0**
Percentage Change in AGI from Previous Year							
$200,000 to $2,000,000	9%	7%	8%	2%	9%	3%	1%
$2,000,000 Plus	25%	-3%	31%	-17%	20%	-6%	-18%

Source: Department of Revenue Services

High Income Industries: Primary Source of Growth and Volatility
Given the importance of high income earners, this section examines some of the larger high income industries. **Table 5.2** presents a summary of these industries which account for 33% of all wage income in Connecticut.[11] The table provides the current size of each industry in wages and employment, as well as a recent history in growth over the past five years, and employment projections going forward.

Table 5.2 High Income Industries Status

Industry	Total Wages 2017 In Billions $	Employment 2017	Average Annual Wage 2017	Past 5 Years Average Annual Growth		Annualized Growth Rate[1]
				Employment	Average Wages	
Professional and Technical Services	9.98	96,351	103,549	0.9%	2.4%	1.3%
Insurance	7.80	58,375	133,641	-0.7%	2.8%	0.7%
Financial Investments	7.43	23,485	316,481	-1.3%	-0.3%	0.6%
Management of Companies	4.99	32,346	154,375	0.9%	-0.2%	0.7%
Transportation Equipment	4.49	43,992	101,983	1.0%	1.8%	2.2%
Banking (Credit intermediation)	2.71	24,336	111,197	-1.8%	3.2%	-0.1%

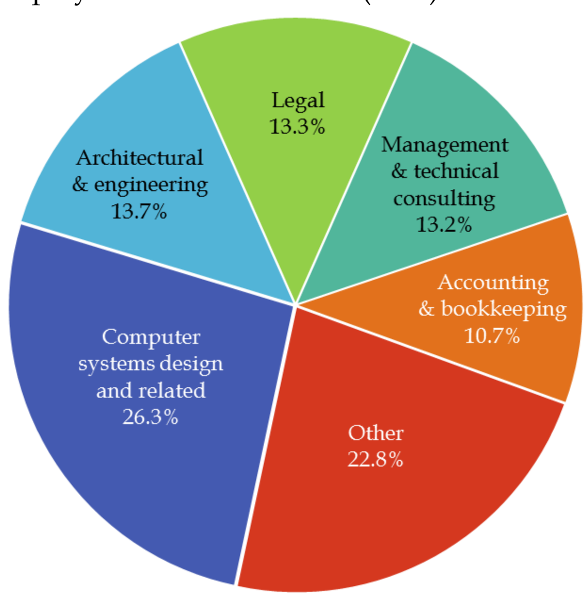
[1]Reflects annualized growth between 2016 and 2026 based on Connecticut Industry Projections from the CT DOL
Sources: CT DOL; US Bureau of Labor Statistics; 5 year averages include growth between 2012 and 2017.

Professional and Technical Services is the largest of these industries in terms of total wages and employment. **Figure 5.5** illustrates the range of professions included. It has been a growth sector in recent years for both employment and wages. While continued growth is anticipated, this industry is sensitive to recessions.

Insurance industry employment has decreased as average wages have risen, leading to relatively flat growth for the industry as a whole. Looking forward, the industry is in a period of transition as the number of employees reaching retirement age increases over the next decade.

Financial Investments is a very high wage sector which experiences significant volatility due to its connection to inherently erratic financial markets.

Figure 5.5 Professional and Technical Services Employment in Connecticut (2017)



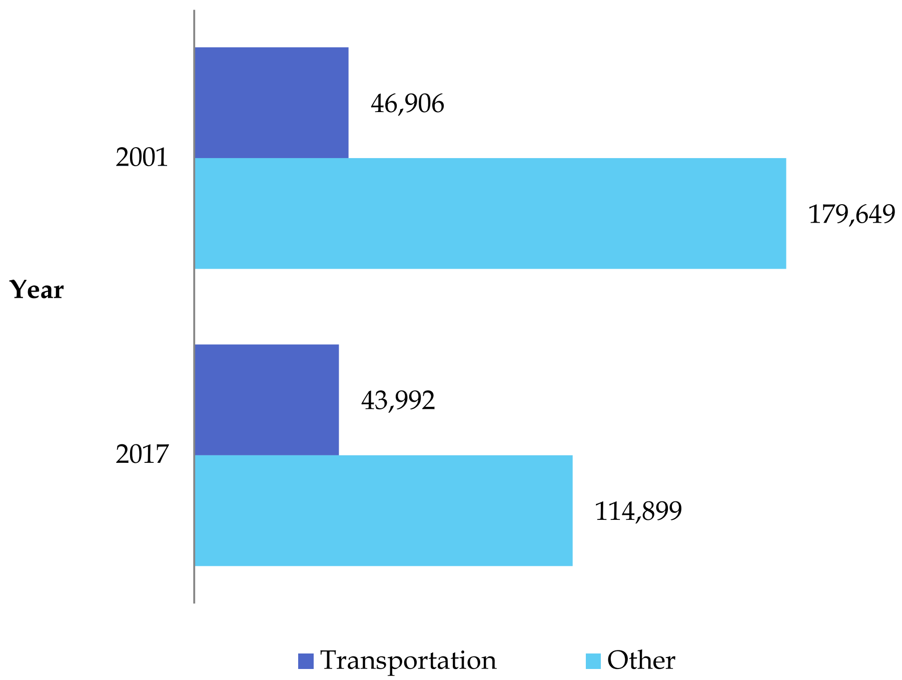
[11]Department of Labor total annual wages for FY 18.

There is also substantial nonwage income in this industry that is highly volatile.

Management of Companies is an industry group that contains both private equity companies, which have high wages, and smaller management companies, which have relatively high employment but lower wages. Similar to the financial investments industry, there is significant volatility in wages and non-wage income.

Transportation Equipment Manufacturing has seen recent increases in both employment and wages largely attributed to changes in 2017. This industry, which includes aerospace and ship building, has been relatively stable compared to other forms of manufacturing within the state, as shown in **Figure 5.6.** National trends towards automation are still a concern for all forms of manufacturing.

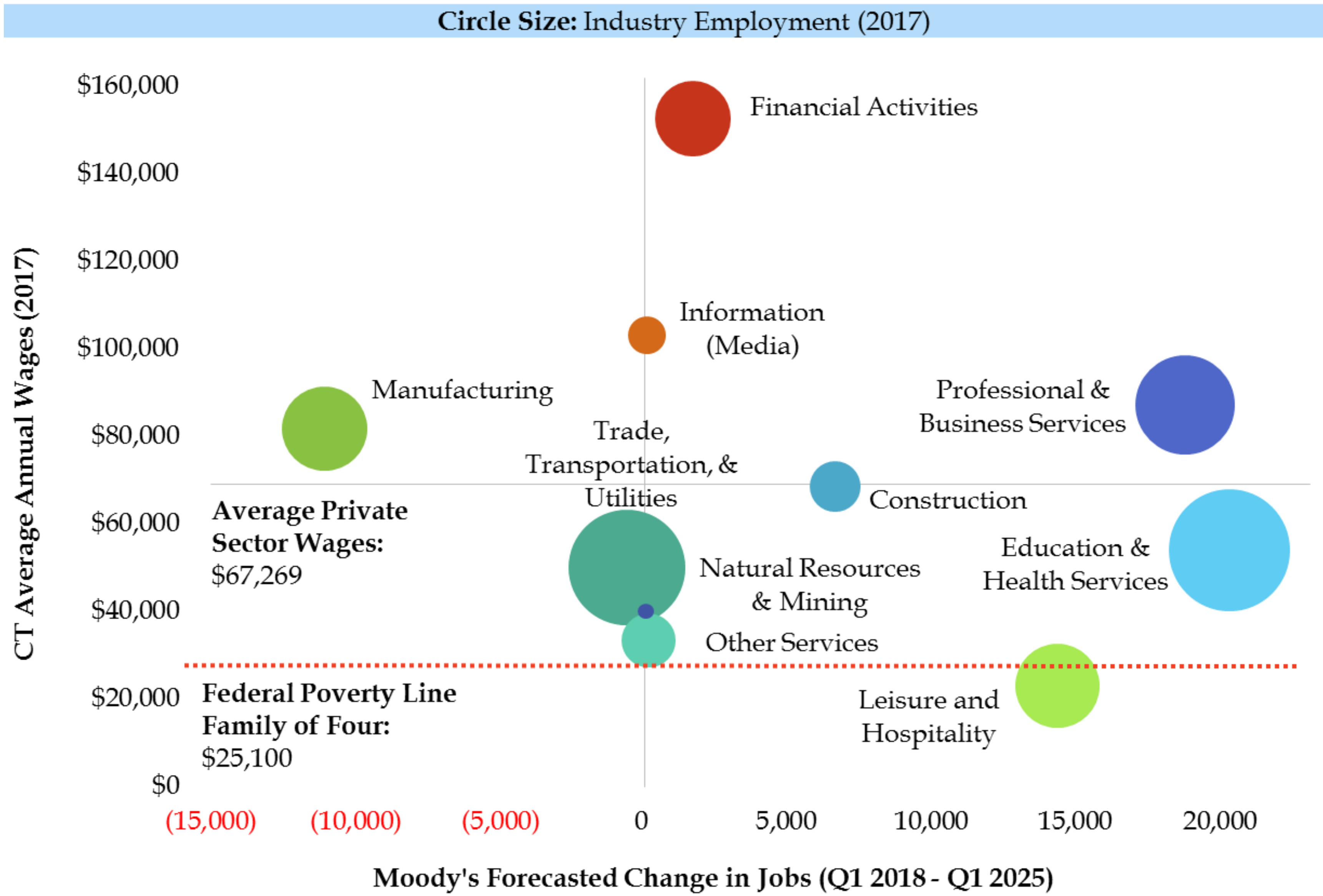
Figure 5.6 Manufacturing Employment (2001 and 2017)



Banking (credit intermediation) has seen what appears to be a permanent decline in employment within the state since the Great Recession.

Transitioning Employment Landscape
Employment in Connecticut is anticipated to change largely based on growth in three industries: (1) Professional and Business Services, (2) Education and Health Services, and (3) Leisure and Hospitality. As **Figure 5.7** illustrates on the following page, a significant portion of the anticipated increases in employment are from industries with an average wage below the state average, or in the case of Leisure and Hospitality, below the Federal Poverty Level.

Figure 5.7 Connecticut Sector Employment Growth Projections vs. Average Wages



Sources: Employment Growth Projections from Moody's (2017), Employment & Wages from Bureau of Labor Statistics

Table 5.3 Two Year Impact of Hypothetical Recession
In Billions of Dollars

Revenue Loss	2.9
Forgone Growth	0.8
Volatility Cap Impact	(0.5)
Net Budgetary Impact of Revenue Loss	**3.2**

Is Connecticut Prepared for the Next Recession?
In recent US history the time between recessions has been getting longer—but has never been more than ten years. Since the last recession will have ended about ten years prior to the start of FY 20, it is prudent to consider the state's position in the event of a recession.

Revenue Shock & Budgetary Implications
Typically, a recession results in a very sharp decline in revenue in the first year; followed by a second year of either mild decline or mild growth. In order to illustrate Connecticut's ability to respond to such a prolonged decline in anticipated revenue, both the direct impact of the revenue loss and other budgetary implications were studied over a two year period. The budgetary implications include the (1) forgone revenue gains built into estimates and typically relied upon to balance a budget, and (2) the impact of the volatility cap which effectively reduces the exposure the budget has to reductions in revenue.

Volatility Cap and the BRF
The volatility cap improves Connecticut's ability to respond to a potential recession in two ways (1) reducing revenue available for budgeting, and (2) increasing transfers to the Budget Reserve Fund. By reducing revenue available for budgeting, as seen in **Table 5.3**, the estimated impact of the revenue loss is reduced considerably.

The BRF could be used in the event of a recession and is estimated to have a balance of $2.1 billion at the end of FY 19, and is estimated to grow to $2.9 billion in FY 22, assuming all currently projected deposits occur. If the BRF reaches these estimated levels, it will be enough to help offset the direct impact of the revenue shock; however, the impact of projected increases in fixed cost expenditures would need to be addressed in other ways.

Other Options
In addition to using budget reserve funds to help balance a budget through a recession, the state has relied upon: (1) increased federal revenue, (2) tax and other revenue increases, (3) borrowing, and (4) spending cuts. The capacity to rely on borrowing and spending cuts to balance the budget in the event of a recession is constrained; it is unclear what role, if any, the federal government will play in future recessions.

Bond Covenant Constrains Use of BRF and Economic Recovery Notes
The bond covenant per CGS Sec. 3-20 is effective through FY 23, and sets a higher bar for deployment of some tools used in response to previous recessions, such as the use of the BRF or issuance of bonds for operating deficits (i.e., economic recovery notes (ERNs). While the covenant restricts certain uses of the BRF and bonding, it also allows for modification of items when three circumstances are satisfied: (1) a fiscal is emergency declared by the Governor, (2) a 3/5 vote of the legislature on the relevant modification, and (3) any modification may be for the fiscal year in progress only.

Fixed Costs Constraints
Fixed costs represent more than half (54% or $11 billion) of GF projected expenditures in FY 22. The state's ability to restructure fixed costs to mitigate growth and reduce expenditures as needed is constrained by various factors as discussed below.

State Employee Retirement and Retiree Health Benefits Governed by Collective Bargaining Agreement in Place until 2027
State employee retirement benefits and retiree health care comprise 22% ($2.4 billion) of fixed costs in FY 22. Governed by a collective bargaining contract which is in place until 2027, they cannot be modified without reopening the current agreement. The collective bargaining agreement governing health and pension has been reopened three times since the recession of 2008/09 (2009, 2011 and 2017). In addition, the current agreement precludes the state from laying off covered unionized employees hired before July 1, 2017 until July 1, 2022.

Debt Service Payments are Required by Contract when Bonds are Issued
Approximately three-quarters of the FY 22 debt service payment was established by bonds sold prior to FY 19. Some outstanding bonds have contractual repayment requirements through FY 38.

Teachers' Retirement System and Debt Service on Pension Obligation Bond (POB) Restricted by Bond Covenant
The bond covenant requires the state to make the full Annual Required Contribution (ARC) through 2032 and provides limited flexibiltiy to reduce the ARC in the near term. In addition, the POB cannot be paid off before 2025.

Municipal Restructuring Agreement between the State of Connecticut and the City of Hartford
The state entered into a contractual agreement with the City of Hartford to assume payment of debt service on bonds issued by Hartford which is not anticipated to be repaid until 2036.

Medicaid Program Needs to Operate within Federal Rules and the Majority of State Expenditures are for HUSKY C and HUSKY A
Medicaid comprises 67.5% of entitlements and is required to operate within federal rules in order for the state to receive federal funds to help defray the cost of the program. The federal program guidelines govern mandatory covered groups and minimum criteria for required benefits and eligibility for these groups. While the state has the ability the make limited modifications to benefits and eligibility, this requires federal approval and notification, which limits the state's ability to make immediate changes to entitlement programs. The majority of state Medicaid expenditures (87%) support HUSKY C beneficiaries (aged, blind and disabled beneficiaries) and HUSKY A (parents/caretakers, pregnant women and children). HUSKY D (individuals without children) represents 13% of state Medicaid expenditures because approximately 90% of program expenditures are covered by the federal government.

Section VI. Special Transportation Fund

The Special Transportation Fund (STF) has a projected FY 19 operating surplus of $66.6 million, which would increase the cumulative balance of the STF to $312.3 million at year end. The anticipated increase in surplus is primarily based on revenue increases of $64.1 million.

Table 6.1 FY 19 STF November Estimates
In Millions of Dollars

Summary	FY 19 Budget	Nov. Update	Diff.
Revenues	1,620.5	1,684.6	64.1
Expenditures	1,617.3	1,618.0	0.7
SURPLUS	**3.2**	**66.6**	**63.4**

Policies adopted in the FY 19 Revised Budget improved the STF outlook by: (1) accelerating the scheduled transfer of motor vehicle sales tax revenues from the General Fund (GF); and (2) reducing debt service costs by limiting new Special Tax Obligation (STO) bond issuances to $750 million per year in FY 19 and FY 20.

Annual operating surpluses and a growing, cumulative fund balance are projected through FY 22. These positive trends allow for increased future STO bond issuances while maintaining a healthy revenue-to-debt ratio in the fund.

Table 6.2 Special Transportation Fund Balance
In Millions of Dollars

Summary	FY 19	FY 20	FY 21	FY 22
+ Net Revenues	1,684.6	1,803.5	1,904.8	1,994.6
- Expenditures	1,618.0	1,686.6	1,783.0	1,864.0
Debt Service Expenditures on the Bonds	645.7	688.2	760.9	830.7
Other STF Expenditures	972.3	998.4	1,022.1	1,033.3
= Surplus	66.6	116.9	121.8	130.6
CUMULATIVE BALANCE (245.7 at FY 19 start)	**312.3**	**429.2**	**551.0**	**681.6**

REVENUE HIGHLIGHTS

STF revenues are projected to increase by $64.1 million over budget in FY 19. Most of the increase ($50.2 million) is from improvement in the Oil Companies Tax due to a rise in oil prices. Additionally, projections for Interest Income have increased by $10 million over budget as a result of better than expected returns on investment.

Motor Vehicle Sales Tax Transfer

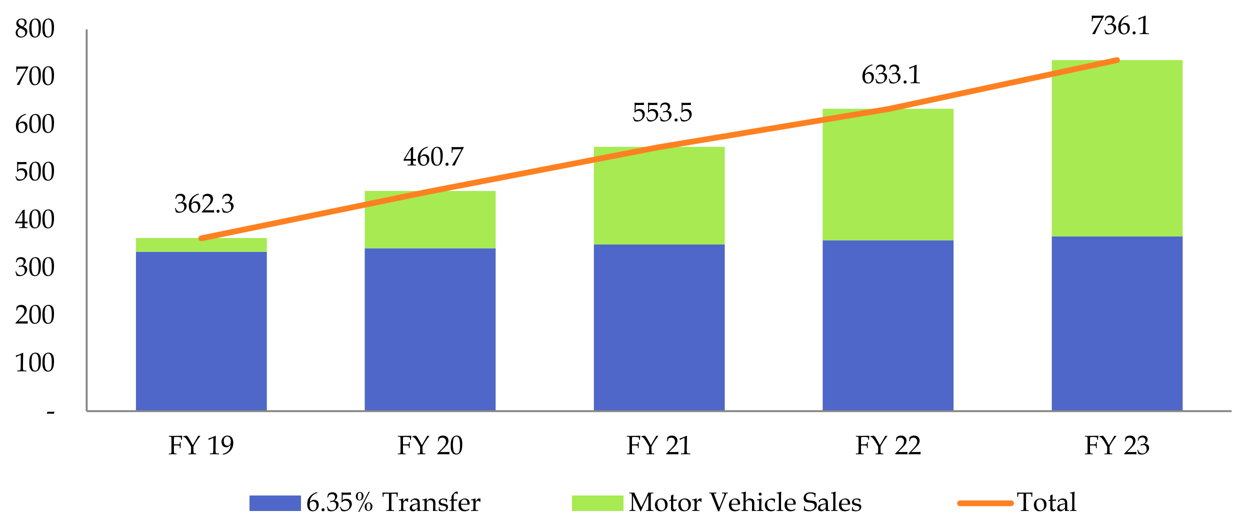
Under PA 18-81, this transfer begins in FY 19 at a partial rate and fully phases in to 100% of motor vehicle sales by FY 23.

By FY 23, this transfer will provide approximately $370 million annually in additional revenue to the STF.

Sales Tax Transfers Increase
Sales Tax revenues are projected upwards due to better than anticipated monthly collections in 2018, which positively impacted the final FY 18 collections and continues through the FY 19 - FY 22 estimates.

The STF received two sales tax transfers from the GF, resulting in increased projections of $3.9 million in FY 19. The first transfer was of 0.5 percentage points of the 6.35% sales tax rate. The second transfer was a partial transfer of motor vehicle sales tax collections.

Figure 6.1 Projected Sales Tax Transfers to STF
In Millions of Dollars



EXPENDITURE HIGHLIGHTS

STF FY 19 expenditures are currently projected to be $689,000 over budget. However, spending in certain line items is trending less than budgeted, with major changes detailed below. These trends largely offset the budgeted $12 million bottom-line lapse target for the STF and projected budget shortfalls in the State Employees' Health Service Cost and Unemployment Compensation fringe benefit line items within the Office of the State Comptroller (OSC).

Debt Service: $5.5 million
The FY 19 STO bond issuance, finalized in October 2018, resulted in a $5.5 million decrease in debt service within the STF for FY 19. The reduction from budgeted estimates reflects lower costs of borrowing and specific timing of the issuance, along with savings associated with the refunding of over $100 million of previously issued bonds.

Personal Services in DOT: $5 million
The Department of Transportation (DOT) projects spending approximately $5 million less than the FY 19 revised appropriation assuming that only "critical" vacant positions are filled by December 2018.

Pay-As-You-Go in DOT: $2 million
Thus far, FY 19 spending is approximately $1.5 million less than comparable periods in prior years and on track to reach $11.6 million in total, which is $2 million less than the $13.6 million revised appropriation.

State Employee Health Service Cost (State Comptroller – Fringe Benefits): $1.1 million
The projected deficiency is approximately $1.1 million (2.2% of projected expenditures). The FY 19 appropriation reflects a 1.1% increase over the FY 18 original appropriation and effectively no increase over FY 18 actual expenditures. The deficiency reflects expenditure trends being 2.3% higher than anticipated in the budget.

FY 19 - FY 22: Fringe Benefits

- STF fringe benefits are projected to grow by a total of 28% ($35.9 million) from FY 19 - FY 22 on a fixed cost basis, due to increases in the state's contribution to the State Employee Retirement System (SERS).
- The STF portion of the SERS actuarially determined employer contribution (ADEC) is projected to increase by $15.9 million in FY 20, $9.9 million in FY 21, and $10.1 million in FY 22.
    - Approximately 90% of the projected FY 22 SERS STF contribution is for the unfunded accrued liability and 10% for the normal cost.

DOT Weather-related Spending Volatility
While no change is projected at this time, there is known volatility in some DOT expenditures regarding winter weather response (e.g., overtime expenditures in Personal Services and salt in Other Expenses).

STO BONDING AND DEBT SERVICE

Table 6.3 Estimates of STO Bond Fund Use
In Millions of Dollars

FY	Authorizations	Allocations (CY)	Issuances	Debt Service
19	1,574	1,464	750	646
20	1,600	1,300	750	688
21	900	1,100	1,000	761
22	900	850	1,200	831
23	900	850	1,200	924

STO Bonding Expected to Decrease After Let's Go, CT! Funds Are Exhausted
Beginning in FY 16, the overall use of STO bond funds has increased as part of the Let's Go, CT! ramp up. Annually from FY 16 - FY 20, between $275 and $750 million of Let's Go bond funds have supplemented the basic transportation infrastructure program. Absent extension of the program or another policy to increase STO bond authorizations beyond FY 20, new STO bond use is expected to return to a non-Let's Go base level.

Despite the expected reduction in new STO bond authorizations, STO bond issuance is expected to increase through FY 22. The contrary trends are caused by the lag between bond approval and actual project spending. Transportation projects are typically long term in nature, with project spending happening incrementally over several years. STO bonds are issued in response to and anticipation of spending rates, which lag allocations.

Issuances of STO bonds are capped at $750 million for each of FY 19 and FY 20. After the expiration of the cap, issuances are expected to grow to $1.2 billion in FY 22. Out-year issuances can be modified in response to both actual spending rates and the amount of resulting debt service that can be maintained given revenue levels.

Debt Service on STO Bonds Increasing
Debt service paid from the STF is expected to increase from $646 million in FY 19 to $924 million in FY 23, representing annual growth of 9.4%. The increase in debt service is due to anticipated higher interest rates (from 5% in the FY 19 issuance to 5.75% in the FY 22 and FY 23 issuances), increased amount of new issuances, and the particular timing of debt service on previously issued bonds. Over 75% of the debt service estimates for FY 20 - FY 23 is from bonds issued in FY 19 or earlier.

Coverage Ratio at Good Level, but Declining
The STF does not have a debt limit akin to the GF debt limit. Instead, projected revenues are compared against anticipated debt service in order to generate the debt service coverage ratio. Based on revised consensus revenue numbers for the STF

STF Debt Service Coverage Ratio

STO bond covenants require that STF revenues are at least twice anticipated debt service expenditures. Ratios greater than the 2.0 minimum coverage ratio are needed to borrow at competitive rates.

and updated debt service estimates, the ratio of revenue to debt service is expected to average 2.5 from FY 19 through FY 22. This ratio declines from 2.6 in FY 19 to 2.4 in FY 22 (above the 2.0 minimum), as issuances rise more quickly than revenues. From FY 09 - FY 18, the average ratio was 2.7, with annual values between 2.4 and 3.0.

Future Revenue Growth and Debt Service Growth Imbalance

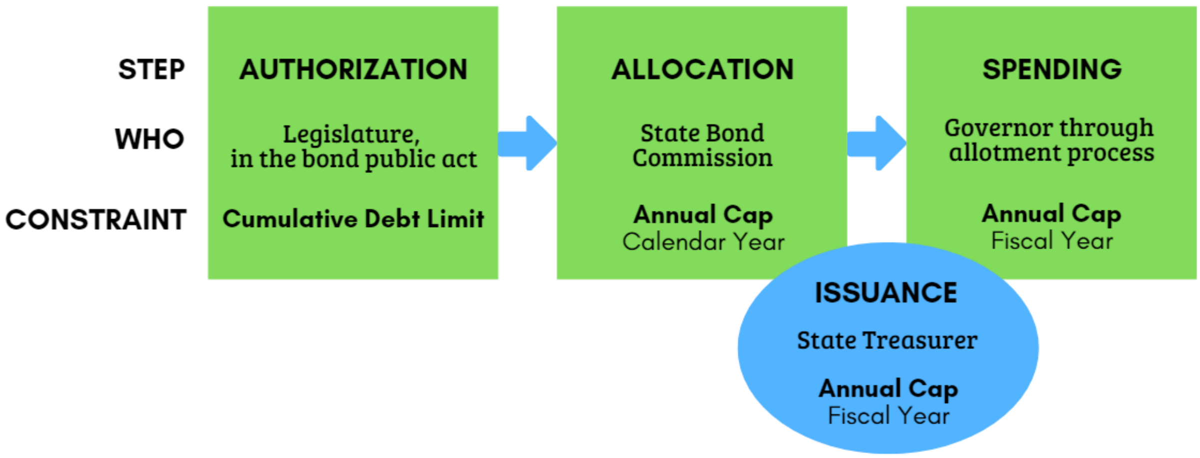
Despite annual surpluses and a growing cumulative balance in the STF, there is a projected growth imbalance between STF revenues (5.8% growth from FY 19 - FY 22) and debt service (8.8% growth). This growth imbalance is responsible for the above-mentioned decline in the coverage ratio. Since the ratio is starting from a relatively strong position (2.6 revenue to debt service ratio), a temporary imbalance and/or short-term decline in the ratio is not expected to negatively impact the bond program. However, such an imbalance cannot be maintained indefinitely.

Additionally, a portion of revenues going to the STF is based on the phase-in of the sales tax transfer. These phase-in revenues cause overall revenue growth to be overstated during the phase-in period and mask a larger ongoing growth imbalance. Absent improvement in underlying revenue growth, a decline in debt service growth, or some combination of both, the growth imbalance could worsen after FY 23.

Section VII. Bonding

Bonding is a process in which long-term borrowing is used to finance capital projects, or other programs, not directly funded by appropriations.[12] There are four major steps in the state bonding process. For General Obligation (GO) bonds, supported by and repaid from the General Fund (GF), each step in the process has a cap or limit as of FY 19.[13]

Figure 7.1 Process of Bonding State Dollars



Statute requires the Office of Fiscal Analysis to project bond authorizations, allocations and issuances, along with their impact on the debt service for future years.[14] The projections for GO bonds are provided in the table below, with a discussion of each aspect to follow.

Table 7.1 Estimates of GO Bond Fund Use
In Millions of Dollars

FY	Debt Service	Authorizations	Allocations (Calendar Year)	Issuances
19	2,237	1,394	2,083	2,042
20	2,321	1,874	2,135	2,362
21	2,476	1,549	2,188	2,179
22	2,662	1,396	2,243	2,144
23	2,795	2,013	2,299	2,192

Borrowing Costs Anticipated to Rise

Costs of borrowing are anticipated to increase as key federal bond market factors continue to slowly return to pre-2008 norms. Current interest rates for the most commonly used GO bonds, tax-exempt fixed-rate bonds, are anticipated to increase from 5% to 5.75% by FY 23. These changes are in addition to any Connecticut-specific market adjustments that may occur.

[12]Debt service on bonds is appropriated in the state budget through Office of the State Treasurer – Debt Service
[13]Special Tax Obligation (STO) bonds, which are supported by the Special Transportation Fund, are discussed in Section VI.
[14]CGS Sec. 2-36b(b)(5)

DEBT LIMIT AND BOND CAPS WILL CONSTRAIN BOND USE

AUTHORIZATIONS

Bond authorizations are restricted by the state's statutory debt limit. The debt limit is determined by the ratio of GF-supported debt to net tax revenues. In the calculation, GF-supported debt includes bonds that have been legislatively authorized, but not yet allocated by, the State Bond Commission.

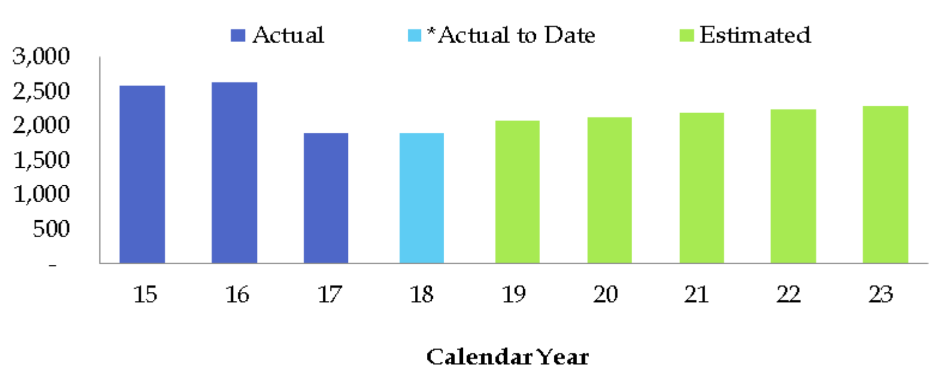
Given consensus revenues and scheduled debt service payments, there is expected to be approximately $1,874 million of space under the relevant 90% threshold available for net new bonding in FY 20. Absent statutory change, the available space would first be used towards the $492.3 million of previously authorized bonds set to become effective in FY 20.

An average of $1.7 billion of space for new authorizations is expected to be available annually from FY 20 - FY 23, given the debt limit. There is some year-to-year variation due to particular timing of projected revenue changes and debt payoffs. Because the debt limit is cumulative, authorizations below the maximum allowed in one year could be used in future years. For example, the available space for FY 20 includes $180 million of space not used in FY 19.

Once the debt limit has been reached, room for additional authorizations can be created by either increases in net tax revenues, through growth or policy changes, or reductions in outstanding balances through paying off debt. Additionally, a portion of the almost $2.3 billion in outstanding bond authorizations that have not yet been allocated can be canceled or reduced, creating additional room under the debt limit.

ALLOCATIONS

Figure 7.2 GO Bond Allocations
In Millions of Dollars



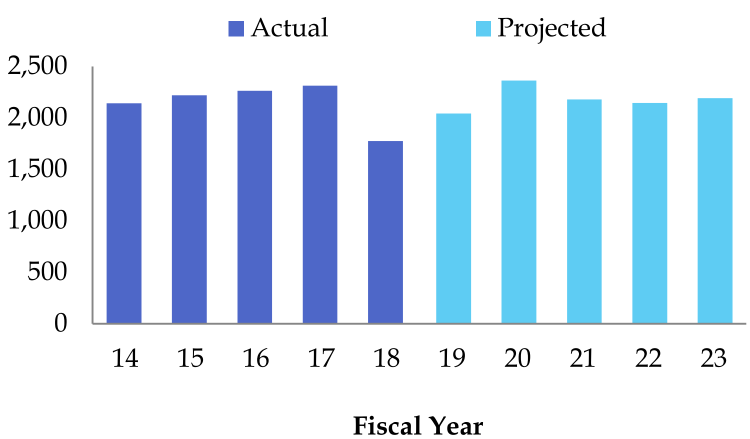
Allocations are made through the State Bond Commission and have traditionally been measured by Calendar Year (CY). GO bond allocations rose sharply in recent years, peaking in CY 16 at $2.7 billion. Beginning in CY 17, pursuant to CGS Sec. 3-20, allocations were limited to $2 billion per calendar year.

In CY 17, the first year the allocation cap was in place, $1.94 billion was allocated. To date in CY 18, $1.92 billion has been allocated, approximately $118 million below the annual limit. Some portion of the remaining funds may be allocated before the end of CY 18.

ISSUANCES

In the GF, new debt issuances are limited by the GO bond issuance cap beginning in FY 19. Issuance and new debt estimates are based on issuing the maximum allowable debt under the issuance cap, plus specified exemptions, where applicable.

Figure 7.3 GO Bond Issuances
In Millions of Dollars



Bonds are issued by the Treasurer based on expected need and past programmatic spending rates, not immediately when allocated. FY 18 issuances were well below previous years, which is largely attributable to suspended and/or reduced debt spending for the early part of the fiscal year when no budget had been agreed upon.

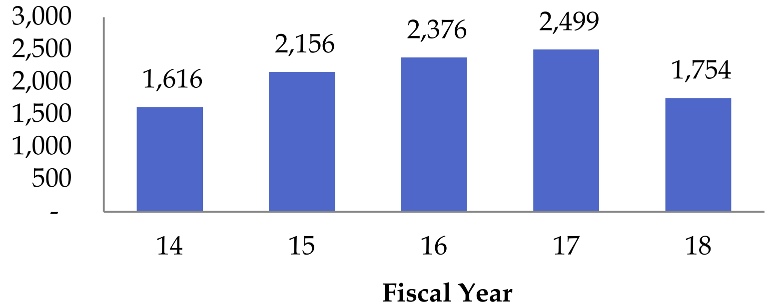
FY 19 GO issuances are expected to be limited by the issuance cap, though total GO issuances will exceed the $1.9 billion cap due to exemptions for UConn 2000 bonds and CSCU 2020 bonds. However, the bond covenant that locked in the issuance cap through FY 23 appears to count refunding bonds against the issuance cap.[15] To date, $239 million of refunding bonds have been issued in FY 19, effectively limiting issuances for new bonds to $1.7 billion plus exemptions.

The amount of the GO issuance cap is adjusted at the start of the fiscal year based on inflation in the previous calendar year.[16] While the level of the cap is expected to increase by $194 million from FY 19 to FY 23, the amount of authorized exemptions issued beyond the cap is expected to drop sharply, from over $400 million in FY 20 to near $100 million in FY 23.[17]

[15]Refunding bonds are issued by the state to reduce future debt service costs. Unlike new bond issuances whose proceeds are used for authorized projects, refunding bonds are used to pay off existing bonds.
[16]The issuance cap is adjusted based on annual change in BLS's CPI less food and energy from the previous calendar year (i.e., FY 20's issuance cap is adjusted by CY 18's rate).
[17]Exemption calculations assume that the full amount authorized for exempted programs for each year is issued the same year. For example, CSCU has $126 million of previously authorized bonds scheduled to become effective in FY 20. It is assumed that the full amount will be issued that year. It is possible some amount of these bonds see their issuance delayed into future years.

BOND SPENDING

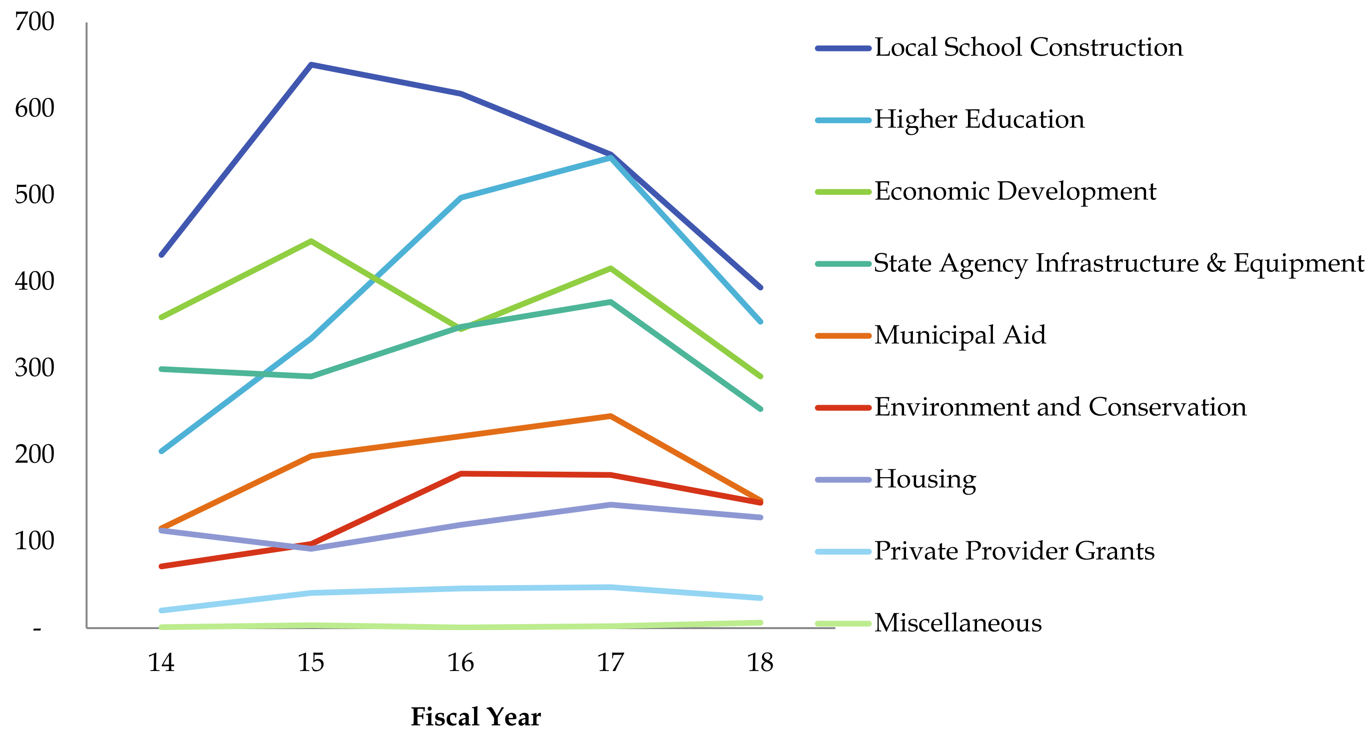
Figure 7.4 GO Bond Spending
In Millions of Dollars



Bond fund expenditure levels show when allocated bonds are spent in support of projects. While some bonds funds are spent shortly after allocation, the long-term nature of capital projects often means that allocated funds are not completely spent until years later. The trend in bond spending approximates the trend in allocations; however, the spending trend slightly lags allocations. For example, CY 16 saw a peak of $2.7 billion in GO bond allocations, some of which were then carried forward so that FY 17 saw the peak in bond fund spending.

A categorical look at bond fund spending illustrates a few overall themes. Reimbursements to districts for school construction expenses remains the single largest bond program, though it has been trending downward for some time (the relatively low 2014 number seems to be an aberration as spending exceeded $600 million in both FY 13 and FY 15).

Figure 7.5 GO Bond Spending By Category
In Millions of Dollars



Higher education bond spending increased in the years leading up to FY 18. However, spending in this category may decline in the coming years. The CSCU 2020 program is scheduled to exhaust new authorizations in FY 20. Likewise, UConn 2000 bond funding is slated to taper to less than $100 million annually in new authorizations after the biennium and through the end of the program in FY 27.

Besides higher education, categories such as municipal aid, housing, and state infrastructure were trending upward through FY 17, before declining in FY 18 (mirroring the decline across all categories).

Section VIII. Budget Reserve Fund (BRF)

"Volatility Adjustment" Transfers

When anticipated revenues are projected to exceed a statutory cap, the excess must be set aside as a transfer to the BRF. This transfer is called a "Volatility Adjustment," and it is required under a law that took effect in FY 18. This statutory cap, along with several other caps, is incorporated into a June 2018 bond covenant that restricts policy changes for 5 years.

The current balance in the Budget Reserve Fund (BRF) is $1.2 billion. The Volatility Adjustment transfers reflected in the November 2018 consensus revenue estimates, plus the projected FY 19 General Fund (GF) surplus of $278.6 million, increase the BRF balance by a total of approximately $1.7 billion over the next four fiscal years, to $2.9 billion in FY 22, provided that no withdrawals or diversions are made.

The Volatility Adjustment transfers equal the difference between: (1) projected total revenues in the Estimated & Final Payments portion of the Income Tax, plus the new Pass-Through Entity Tax, and (2) a threshold (the "Volatility Cap") established in FY 18 that increases each fiscal year based on personal income growth.[18]

The projected BRF balances for FY 19 – FY 22 are large relative to historical results, in terms of both amounts and share of the GF (see **Appendix F** for a comparison). However, the projected BRF balance each fiscal year is anticipated to remain below 15% of GF appropriations, the limit established in statute.

Table 8.1 Projected Balances of the BRF (FY 19 – FY 22)[1,2,3]
In Millions of Dollars

Fiscal Year (FY)	Balance at FY Start	Change	Balance at End of FY	Appropriations	Balance at FY Start as a % of Approp.
18	212.9	972.4	1,185.3	18,610.8	1.1%
19	1,185.3	926.6	2,111.9	18,990.8	6.2%
20 (proj.)	2,111.9	278.1	2,390.0	19,319.5	10.9%
21 (proj.)	2,390.0	263.3	2,653.3	18,518.8	12.9%
22 (proj.)	2,653.3	244.3	2,897.6	18,644.7	14.2%
TOTAL		**1,712.3**			

[1]The FY 19 "Change" estimate includes a Volatility Adjustment transfer of $648 million and a net operating surplus (after the Volatility Adjustment transfer) of $278.6 million.

[2]Assumes one of the following takes place: (a) withdrawals from the BRF, (b) diversion of projected Volatility Adjustment transfers, or (c) diversion of the estimated FY 19 net operating surplus.

[3]Assumes FY 20 - FY 22 appropriations add back expenditure reductions that are assumed in this report to balance future budgets.

[18]The Volatility Cap grows at the compound annual rate of growth in personal income over the previous five calendar years.

Section IX. Tax Expenditure Estimates

State law permits various tax expenditures in the form of tax credits, exemptions, and deductions which amount to an estimated $6.5 billion in FY 19. This amount is approximately 30.9% of the total projected FY 19 General Fund and Special Transportation Fund revenue. The majority of tax expenditures occur in the Sales and Use Tax and Motor Fuels Tax (approximately 61.7% and 19.7%, respectively). The table below reflects OFA's estimated total tax credits, exemptions and deductions for FY 19 through FY 22.[19]

Table 9.1 Summary of Major Identifiable State Tax Expenditure Estimates[1]
In Millions of Dollars

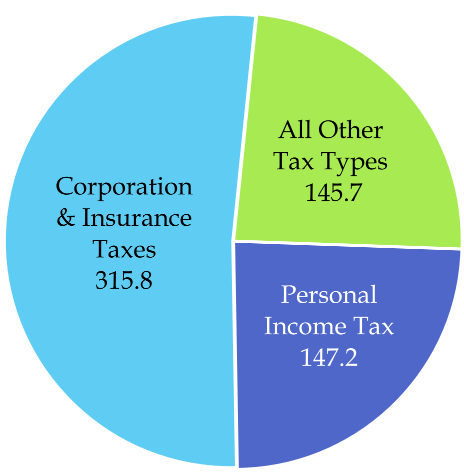
Tax Category	FY 19	FY 20	FY 21	FY 22
Personal Income	367.3	482.3	518.3	554.8
Sales and Use	3,999.5	4,081.9	4,175.9	4,277.4
Corporate and Insurance	420.7	428.9	427.2	438.0
Petroleum Companies Gross Earnings	215.4	226.1	231.1	237.4
Motor Fuels and Motor Carrier Road	1,275.5	1,279.5	1,280.5	1,281.5
All Other Taxes	201.7	209.5	211.1	212.8
TOTAL	**6,480.1**	**6,708.2**	**6,844.1**	**7,001.9**

[1]Includes estimated identifiable revenue reductions of $100,000 or more.

TAX CREDITS

Tax credits are estimated to be $608.7 million in FY 19, or 9.4% of all projected FY 19 tax expenditures. The remaining $5.9 billion in FY 19 in total tax expenditures includes all exemptions and deductions. A breakout of credits by tax type is provided in **Figure 9.1** below.

Figure 9.1 FY 19 Tax Credit Estimates by Revenue Type
In Millions of Dollars



Types of Tax Expenditures

A **credit** directly reduces a taxpayer's tax liability. An **exemption** excludes specified transactions from tax (e.g. sales tax on food products). A **deduction** lowers the taxable amount of a specific transaction (e.g. contributions to CHET to taxable income).

[19]For more information, please see the Connecticut Tax Expenditure Report, Office of Fiscal Analysis (February 2018). Please note that this report includes updated estimates on certain expenditures where necessary. https://www.cga.ct.gov/ofa/Documents/year/TER/2018TER20180201_Tax%20Expenditure%20Report%20FY%2018.pdf

SALES AND USE TAX

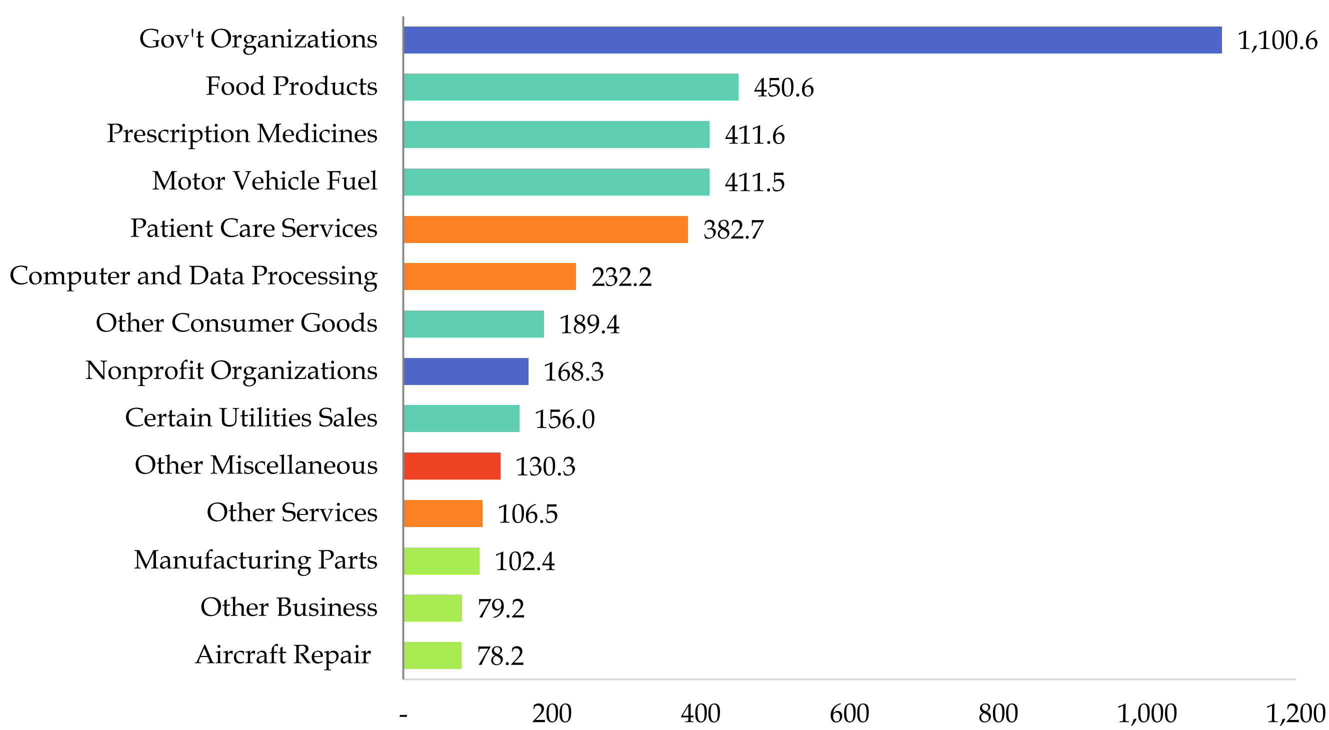
Sales and Use Tax expenditures represent approximately **61.7%** of all identifiable tax expenditures and are estimated to be **$4 billion** in FY 19.

Consumer goods consist of approximately 40.5% of all total sales and use tax exemptions. Government Organizations make up the single largest type of exemption at over $1.1 billion estimated for FY 19. **Table 9.2** below shows the categories of Sales and Use Tax expenditures available as well as the value of each category. Expenditures are detailed in **Figure 9.2**.

Table 9.2 Sales and Use Tax Category Comparison
In Millions of Dollars

	Category	FY 19	% of Total
	Consumer Goods	1,619.1	40.5%
	Business Exemptions	259.8	6.5%
	Service Exemptions	721.4	18.0%
	Government and Nonprofit Organizations	1,268.9	31.7%
	Miscellaneous	130.3	3.3%
Total Sales and Use Tax Exemptions		**3,999.5**	100.0%

Figure 9.2 FY 19 Major Sales and Use Tax Expenditures
In Millions of Dollars



Appendix A. Consensus Revenues

Revenue Estimates for FY 19 and the Out-Years
In Millions of Dollars

Fund/Revenue	FY 19	FY 20	FY 21	FY 22
General Fund				
Taxes				
Personal Income	9,647.9	9,471.1	9,685.6	9,907.4
Withholding	6,403.1	6,498.4	6,633.8	6,774.3
Estimates & Finals	3,244.8	2,972.7	3,051.8	3,133.1
Sales & Use	4,211.6	4,203.5	4,218.6	3,902.7
Corporation	969.2	928.6	992.7	971.7
Pass-through Entity	600.0	600.0	600.0	600.0
Public Service	230.8	237.7	244.7	251.9
Inheritance & Estate	176.2	155.8	134.2	126.0
Insurance Companies	234.3	237.4	239.6	241.8
Cigarettes	375.5	356.4	338.8	322.0
Real Estate Conveyance	209.4	217.5	224.4	232.7
Alcoholic Beverages	63.0	63.4	63.8	64.1
Admissions & Dues	41.8	42.1	42.4	42.7
Health Provider	1,049.2	534.0	535.5	536.9
Miscellaneous	20.2	20.7	21.2	21.6
Total Taxes	**17,829.1**	**17,068.2**	**17,341.5**	**17,221.5**
Refund of Taxes	(1,287.3)	(1,391.6)	(1,460.3)	(1,530.8)
Earned Income Tax Credit	(94.2)	(97.3)	(100.6)	(104.0)
R&D Credit Exchange	(6.4)	(6.7)	(6.8)	(7.7)
Taxes Less Refunds	**16,441.2**	**15,572.6**	**15,773.8**	**15,579.0**
Other Revenue				
Transfers-Special Revenue	352.7	360.2	368.2	373.8
Indian Gaming Payments	223.6	201.2	200.3	199.3
Licenses, Permits, Fees	292.6	322.7	300.6	331.4
Sales of Commodities	29.1	30.2	31.0	31.8
Rents, Fines, Escheats	151.1	153.4	155.7	158.1
Investment Income	29.8	30.9	31.4	31.9
Miscellaneous	174.1	178.1	181.7	185.4
Refund of Payments	(63.1)	(64.3)	(65.7)	(67.0)
Total Other Revenue	**1,189.9**	**1,212.4**	**1,203.2**	**1,244.7**
Other Sources				
Federal Grants	2,097.8	1,337.1	1,346.5	1,353.9
Transfer From Tobacco Fund	110.2	110.0	108.6	107.6
Transfers From/ (To) Other Funds	78.3	(130.8)	(130.8)	(130.8)
Transfer to BRF- Volatility Adj.	(648.0)	(278.1)	(263.3)	(244.3)
Total Other Sources	**1,638.3**	**1,038.2**	**1,061.0**	**1,086.4**
TOTAL – GENERAL FUND	**19,269.4**	**17,823.2**	**18,038.0**	**17,910.1**

Fund/Revenue	FY 19	FY 20	FY 21	FY 22
Special Transportation Fund (STF)				
Motor Fuels Tax	501.1	501.6	499.1	496.7
Oil Companies Tax	330.0	346.5	354.3	364.0
Sales & Use Tax	362.3	460.7	553.5	633.1
Sales Tax - DMV	86.8	87.6	88.5	89.4
Refunds of Taxes	(13.6)	(14.3)	(15.0)	(15.8)
Total-Taxes Less Refunds	**1,266.6**	**1,382.1**	**1,480.4**	**1,567.4**
Other Sources				
Motor Vehicle Receipts	252.5	254.4	256.4	258.4
Licenses, Permits, Fees	141.4	142.1	142.7	143.2
Interest Income	22.4	23.3	24.2	25.1
Federal Grants	12.1	12.1	11.8	11.0
Transfers From/ (To) Other Funds	(5.5)	(5.5)	(5.5)	(5.5)
Refunds of Payments	(4.9)	(5.0)	(5.2)	(5.0)
Total Other Revenues	**418.0**	**421.4**	**424.4**	**427.2**
TOTAL - STF	**1,684.6**	**1,803.5**	**1,904.8**	**1,994.6**

Appendix B. Other Appropriated Funds

Other Appropriated Funds	Actual FY 18 $	Projected FY 19 $	Projected FY 20 $	Projected FY 21 $	Projected FY 22 $
Mashantucket Pequot and Mohegan Fund					
Beginning Balance	23,390	23,390	23,390	23,390	23,390
Revenue	57,649,850	49,942,796	49,942,796	49,942,796	49,942,796
Expenditures	(57,649,850)	(49,942,796)	(49,942,796)	(49,942,796)	(49,942,796)
Transfers	-	-	-	-	-
Ending Balance	**23,390**	**23,390**	**23,390**	**23,390**	**23,390**
Regional Market Operating Fund					
Beginning Balance	36,360	(108,932)	(94,846)	(86,991)	(100,666)
Revenue	858,634	1,100,000	1,100,000	1,100,000	1,100,000
Expenditures	(1,003,926)	(1,085,914)	(1,092,145)	(1,113,675)	(1,114,213)
Transfers	-	-	-	-	-
Ending Balance	**(108,932)**	**(94,846)**	**(86,991)**	**(100,666)**	**(114,879)**
Banking Fund					
Beginning Balance	2,035,948	1,772,548	277,569	7,578,014	14,297,149
Revenue	36,439,093	35,000,000	35,000,000	35,000,000	35,000,000
Expenditures	(25,502,493)	(27,294,979)	(27,699,555)	(28,280,865)	(28,388,515)
Transfers	(11,200,000)	(9,200,000)	-	-	-
Ending Balance	**1,772,548**	**277,569**	**7,578,014**	**14,297,149**	**20,908,634**
Insurance Fund					
Beginning Balance	8,179,066	1,007,544	(3,214,857)	(5,909,836)	(8,845,605)
Revenue	78,165,501	91,539,391	93,525,309	94,038,069	94,172,632
Expenditures	(85,410,805)	(95,761,792)	(96,220,288)	(96,973,838)	(97,108,401)
Transfers	73,781	-	-	-	-
Ending Balance	**1,007,544**	**(3,214,857)**	**(5,909,836)**	**(8,845,605)**	**(11,781,374)**
Consumer Counsel and Public Utility Control Fund					
Beginning Balance	8,274,274	4,597,555	4,539,363	4,953,984	6,422,397
Revenue	21,898,917	25,700,000	26,471,000	28,036,130	30,419,214
Expenditures	(23,075,636)	(25,758,192)	(26,056,379)	(26,567,717)	(26,578,482)
Transfers	(2,500,000)	-	-	-	-
Ending Balance	**4,597,555**	**4,539,363**	**4,953,984**	**6,422,397**	**10,263,129**
Workers' Compensation Fund					
Beginning Balance	17,517,229	13,932,793	9,421,869	11,947,331	12,033,081
Revenue	18,529,791	21,584,140	28,792,026	26,756,002	26,925,921
Expenditures	(22,114,227)	(26,095,064)	(26,266,564)	(26,670,252)	(26,724,077)
Transfers	-	-	-	-	-
Ending Balance	**13,932,793**	**9,421,869**	**11,947,331**	**12,033,081**	**12,234,925**
Criminal Injuries Compensation Fund					
Beginning Balance	3,586,831	3,964,507	4,030,419	4,096,331	4,162,243
Revenue	2,924,530	3,000,000	3,000,000	3,000,000	3,000,000

Other Appropriated Funds	Actual FY 18 $	Projected FY 19 $	Projected FY 20 $	Projected FY 21 $	Projected FY 22 $
Expenditures	(2,546,855)	(2,934,088)	(2,934,088)	(2,934,088)	(2,934,088)
Transfers	-	-	-	-	-
Ending Balance	**3,964,507**	**4,030,419**	**4,096,331**	**4,162,243**	**4,228,155**
Municipal Revenue Sharing Fund					
Beginning Balance	47,111	47,111	47,111	47,111	47,111
Revenue	-	-	-	-	-
Expenditures	-	-	-	-	-
Transfers	-	-	-	-	-
Ending Balance	**47,111**	**47,111**	**47,111**	**47,111**	**47,111**
Tourism Fund					
Beginning Balance	-	-	5,012	310,024	915,036
Revenue	-	12,900,000	13,200,000	13,500,000	13,800,000
Expenditures	-	(12,894,988)	(12,894,988)	(12,894,988)	(12,894,988)
Transfers	-	-	-	-	-
Ending Balance	-	**5,012**	**310,024**	**915,036**	**1,820,048**
Totals					
Beginning Balance	39,700,210	25,236,515	15,035,029	22,959,357	28,954,135
Revenue	216,466,316	240,766,327	251,031,131	251,372,997	254,360,563
Expenditures	(217,303,793)	(241,767,813)	(243,106,803)	(245,378,219)	(245,685,560)
Transfers	(13,626,219)	(9,200,000)	-	-	-
ENDING BALANCE	**25,236,515**	**15,035,029**	**22,959,357**	**28,954,135**	**37,629,138**

Assumptions: Expenditures in the other appropriated funds are non-fixed costs, and as such are flat funded in FY 20 – FY 22. The exception is wages, which are assumed to grow based on the 2017 SEBAC agreement. Revenue assumptions for each fund are as follows:

Banking Fund: FY 20 – FY 22 revenue from statutory banking licenses and fees, as well as assessments, is anticipated to remain constant at approximately $35 million annually.

Consumer Counsel/Department of Public Utility Control Fund: FY 20 - FY 22 revenue assumes a 3% increase to reflect inflationary increases.

Criminal Injuries Compensation Fund: Annual revenue from criminal fines, which are set by statute, is anticipated to remain flat at approximately $3.0 million.

Insurance Fund: The Department of Insurance annually assesses insurers by the amount necessary to meet appropriated budgeted levels, taking into account previous year actual expenditures and the fund balance. PA 17-4 moved the Children's Health Initiatives account, appropriated at $2,935,769, into the Insurance Fund beginning in FY 18 without providing statutory authority for the Insurance Department to assess domestic health insurers and health care centers to fund it. The projected negative ending balances reflect this underfunding.

Mashantucket Pequot/Mohegan Fund: FY 20 - FY 22 projections assume a General Fund transfer to the Pequot Fund equal to the FY 19 appropriation of $49.9 million. Pursuant to PA 14-217, General Fund transfers to the Pequot Fund are equal to the amount appropriated for Pequot Fund grants in a given fiscal year.

Municipal Revenue Sharing Fund: There is no projected revenue into or expenditures from this fund in the out years.

Regional Market Operation Fund: Revenue is based on incoming rent from the current 15 tenant leases and two long-term land leases. In addition, approximately 20% of revenue is generated from outdoor billboard advertising, farmers' market stalls, rail cars, and office rents. Revenue for FY 20 – FY 22 is projected based on the anticipated terms of the leases.

Tourism Fund: Revenue from 10% of room occupancy tax collections supports this fund. Estimates for FY 19 to FY 22 assume a growth rate of approximately 3% for room occupancy tax collections.

Workers' Compensation Fund: The State Treasurer assesses private insurance companies and employers to cover the Commission's annual costs. Revenue is based on the statutorily-defined assessment formula. In fiscal years following a fund sweep the amount of the revenue (assessment) reflects the impact of the fund sweep. In fiscal years where the impact of a fund sweep is not reflected in the revenue, the fund balance at the end of the fiscal year should reflect a sum equal to approximately six months' worth of expenditures, which has historically been approximately $10 to $14 million.

Appendix C. Key Assumptions, Sources, and Methodologies

KEY ASSUMPTIONS

The following assumptions were used to develop the fixed cost projections for FY 20 through FY 22.

Department of Mental Health and Addiction Services

- *General Assistance Managed Care* - Assumes average growth of 2.4% to accommodate cost and caseload needs.
- *Medicaid Adult Rehabilitation Option* - Assumes average growth of 5.6% to support Medicaid claiming needs.

Department of Social Services

- *Medicaid* – Reflects average growth of 5.8% per year.
- *Medicaid* - Assumes a decline in federal reimbursement for the HUSKY D population pursuant to the provisions of the federal Affordable Care Act. The federal share will decline from 93% in FY 19 to 90% in FY 20.
- *HUSKY B* – Reflects average growth of 3% per year. The estimate also reflects enhanced federal reimbursement ending September 30, 2019, of 88% up from 65%.
- *Community Residential Services* – Reflects prior year annualization of caseload changes including group home privatizations and community placements and caseload growth for community placements for age-outs, long-term care residents (Money Follows the Person) and Southbury Training School residents.
- *Other Entitlements* – Assumes 2.2% annual growth for State Administered General Assistance, 4% annual growth for Old Age Assistance, and 3.3% annual growth for Aid to the Disabled based on historical aggregate impact of cost and caseload increases. TANF and Aid to the Blind are flat funded based on caseload trends in recent years.

Office of Early Childhood

- *Birth to Three* - Reflects 2% growth per year based service expenditures.
- *Care4Kids TANF/CCDF* - Reflects a 3% increase per year on subsidy expenditures.

Teachers' Retirement Board

- *Retirement Contributions* – Reflects actuarial funding requirements for FY 20 and FY 21 presented in June 30, 2018, draft actuarial valuation of the Teachers' Retirement System. Projections assume: (1) level percentage of payroll amortization methodology, (2) 8% discount rate, and (3) 16.6 year amortization period (equivalent single period). The FY 22 requirement also reflects the draft 2018 actuarial valuation and projected payroll growth.

- *Retiree Health Service Cost* – Reflects the state share of one-third of the basic plan premium costs as provided by statute, adjusted by projected premium costs and membership trends.
- *Municipal Retiree Health Insurance Costs* - Reflects the state share of one-third of the flat statutory subsidy and membership trends.

Department of Children and Families

- *No Nexus Special Education* - Funding is projected at FY 19 levels as placements in residential treatment centers are anticipated to stabilize at current levels.
- *Board and Care for Children – Adoption* - Reflects a growth rate of approximately 2% per year. In addition, an extra per diem of approximately $201,725 is included in FY 20 due to the leap year.
- *Board and Care for Children – Foster* - Funding is projected at FY 19 levels as the caseload for the account is anticipated to stabilize at current levels. In addition, an extra per diem of approximately $270,929 in FY 20 is included due costs related to the leap year.
- *Board and Care for Children – Short-term and Residential* - It is anticipated that the caseload for the account will stabilize in the current fiscal year and that expenditures will remain relatively flat going forward. An extra per diem of approximately $181,413 in FY 20 is included due to costs related to the leap year. It is anticipated that rate increases under the Single Cost Account System (CGS Sec. 17a-17) will be suspended, as they have been in every fiscal year since FY 04.
- *Individualized Family Supports* - Account is projected to remain at FY 19 levels in the out years.

State Treasurer

- *Debt service* - Estimates were made using outstanding debt payments plus modeled projections that used the Treasurer's assumed interest rates for FYs 19-23 (5, 5.25, 5.5, 5.5, 5.75).
- *Debt limit* – Reflects consensus net tax revenues.
- *Allocation and Issuance Caps* - Reflect statutorily required adjustments as per the Bureau of Labor Statistics Consumer Price Index Less Food and Energy. Adjustments to those bond caps reflect estimated annual growth in CPI of 2.3, 2.5, 2.5, 2.5, and 2.5 for CYs 18-22 respectively.
- *Allocations and Issuance Levels* - Assumes reaching their respective limits, plus all allowable exemptions. Bonds for the UConn 2000 and CSCU 2020 programs are exempted from the issuance cap, as are bonds backed by non-GF revenue sources (e.g., Clean Water Fund revenue bonds and Special Tax Obligation Transportation bonds). Based on preliminary review of the bond covenant required by CGS 3-20(aa), exemption was not provided for GO bonds used for transportation or for refunding bonds.

State Comptroller – Fringe Benefits

- *State Employee Retirement* – Reflects the unfunded accrued liability payment and normal cost based on actuarial projections and assumptions in the draft valuation as of June 30,

2018. Projections assume: (1) level percentage of payroll amortization and closed five-year phase in to level dollar, (2) 6.9% discount rate, and (3) layered amortization periods.

- *Higher Education Alternative Retirement* System – Reflects growth based on wage increase assumptions for FY 20 and FY 21 and assumes no wage increase for FY 22 based on the SEBAC 2017 Agreement. Increase in employer contribution due to wages in FY 20 is offset by the ¼% reduction in the employer contribution pursuant to the SEBAC 2017 Agreement.
- *Pensions & Retirements - Other Statutory* – Assumes approximately 5% growth per year based on average historical changes in the account, including COLAs.
- *Judges and Compensation Commissioners' Retirement System* – Reflects the unfunded accrued liability payment and normal cost based on actuarial projections and assumptions in the most recent valuation, June 30, 2016. Projections assume: (1) level percentage of payroll amortization, (2) 6.9% discount rate, and (3) 15 year closed amortization period.
- *Retired State Employees Health Service Cost* – Reflects average annual growth of 7% per year. Growth is based on projected changes in medical, dental, and pharmacy trends for non-Medicare covered retirees and dependents and projections for the Medicare Advantage Plan for Medicare covered retirees and dependents.

SEBAC 2017 Agreement

- *Wages* – Assumes growth of 5.1% in FY 20 and 5.5% in FY 21 based on the 2017 SEBAC agreement. Except for the annualization of FY 21 increments, no other wage increases are projected in FY 22.

TAX EXPENDITURE SOURCES, METHODOLOGIES, AND ASSUMPTIONS

The Department of Revenue Services (DRS) is the primary source for data on tax expenditures. However, in the event that DRS does not have information available, other sources are utilized when viable. Such sources include federal agencies (such as the Census Bureau and the Energy Information Administration), other Connecticut state agencies outside of DRS, and state agencies from other U.S. states.

In order to provide estimates for the current fiscal year and out years, the data collected are analyzed and grown on an individual basis, holding constant all other tax provisions. Certain tax expenditures have no growth in the out years or follow a historical trending pattern. In other cases, a variety of sources are utilized when applicable. These include, but are not limited to:

- Growth rates, as calculated by Consensus;
- Economic indicator projections provided by Moody's Analytics;
- CPI growth rates reported by the Bureau of Labor Statistics; and
- Federal Open Market Committee statements.

Appendix D. Fixed Cost Details

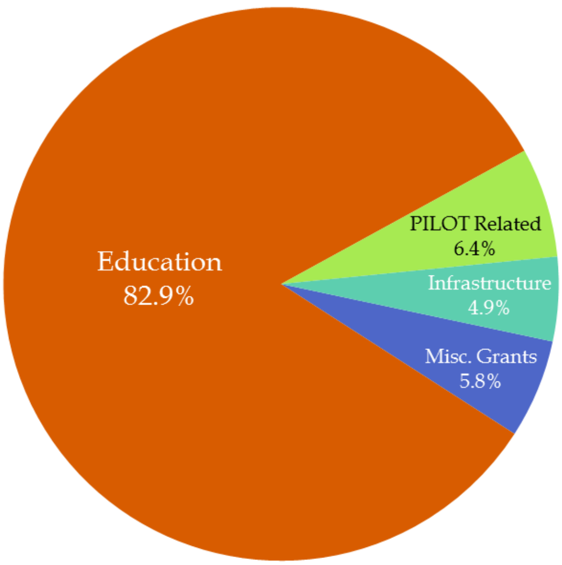
Fixed Cost Account	FY 19 $	FY 20 $	FY 21 $	FY 22 $
General Fund				
Debt Service - State Treasurer				
Debt Service	1,858,767,569	1,935,098,529	2,060,494,489	2,154,911,249
UConn 2000 - Debt Service	207,340,360	216,225,089	235,140,539	243,620,570
CHEFA Day Care Security	5,500,000	5,500,000	5,500,000	5,500,000
Pension Obligation Bonds - TRB	118,400,521	118,400,521	118,400,521	203,080,521
Municipal Restructuring	20,000,000	45,666,624	56,314,628	54,677,708
Debt Service - State Treasurer Total	**2,210,008,450**	**2,320,890,763**	**2,475,850,177**	**2,661,790,048**
State Comptroller - Miscellaneous				
Adjudicated Claims	20,000,000	8,521,780	8,752,064	8,980,003
State Comptroller - Miscellaneous Total	**20,000,000**	**8,521,780**	**8,752,064**	**8,980,003**
State Comptroller - Fringe Benefits				
State Employees Retirement Contributions	1,166,880,636	1,307,016,940	1,399,202,432	1,492,914,198
Higher Education Alternative Retirement System	(12,770,439)	(13,418,258)	(14,160,918)	(14,160,918)
Pensions and Retirements - Other Statutory	1,880,196	1,975,575	2,084,917	2,185,420
Judges and Compensation Commissioners Retirement	27,427,480	28,675,468	29,965,864	31,314,328
Retired State Employees Health Service Cost	681,936,283	729,371,175	783,412,923	840,418,375
State Comptroller - Fringe Benefits Total	**1,865,354,156**	**2,053,620,900**	**2,200,505,218**	**2,352,671,403**
Department of Mental Health and Addiction Services				
General Assistance Managed Care	41,407,403	42,416,003	43,394,003	44,402,203
Medicaid Adult Rehabilitation Option	4,184,260	4,422,660	4,670,760	4,928,860
Department of Mental Health and Addiction Services Total	**45,591,663**	**46,838,663**	**48,064,763**	**49,331,063**
Department of Social Services				
HUSKY B Program	5,320,000	9,920,000	16,020,000	17,220,000
Medicaid	2,583,368,000	2,754,732,501	2,900,518,302	3,060,018,302
Old Age Assistance	40,118,970	42,026,966	43,780,266	45,530,266
Aid To The Blind	584,005	582,905	582,405	582,405
Aid To The Disabled	61,337,500	63,437,500	65,368,500	67,528,500
Temporary Family Assistance - TANF	71,631,712	73,212,712	74,812,712	74,812,712
Connecticut Home Care Program	39,350,000	44,517,000	46,117,000	46,117,000
Community Residential Services	582,421,640	617,458,572	636,676,852	652,885,320
State Administered General Assistance	19,334,722	19,919,122	20,504,122	20,954,122
Department of Social Services Total	**3,403,466,549**	**3,625,807,278**	**3,804,380,159**	**3,985,648,627**

Fixed Cost Account	FY 19 $	FY 20 $	FY 21 $	FY 22 $
Office of Early Childhood				
Birth to Three	21,446,804	21,446,804	21,446,804	21,446,804
Care4Kids TANF/CCDF	103,053,951	130,753,951	134,453,951	138,253,951
Office of Early Childhood Total	**124,500,755**	**152,200,755**	**155,900,755**	**159,700,755**
Teachers' Retirement Board				
Retirement Contributions	1,292,314,000	1,392,183,000	1,437,429,000	1,484,145,000
Retirees Health Service Cost	14,575,250	26,892,000	31,510,400	36,135,000
Municipal Retiree Health Insurance Costs	4,644,673	5,500,000	5,500,000	5,500,000
Teachers' Retirement Board Total	**1,311,533,923**	**1,424,575,000**	**1,474,439,400**	**1,525,780,000**
Department of Children and Families				
No Nexus Special Education	2,151,861	2,151,861	2,151,861	2,151,861
Board and Care for Children - Adoption	98,885,001	101,064,426	102,883,990	104,941,670
Board and Care for Children - Foster	135,464,455	135,735,384	135,464,455	135,464,455
Board and Care for Children - Short-term and Residential	90,706,633	90,888,046	90,706,633	90,706,633
Individualized Family Supports	5,997,627	5,997,627	5,997,627	5,997,627
Department of Children and Families Total	**333,205,577**	**335,837,344**	**337,204,566**	**339,262,246**
General Fund Total	**9,313,661,073**	**9,968,292,483**	**10,505,097,102**	**11,083,164,145**
Special Transportation Fund				
Debt Service - State Treasurer				
Debt Service	645,723,716	688,177,696	760,880,760	830,685,864
Debt Service - State Treasurer Total	**645,723,716**	**688,177,696**	**760,880,760**	**830,685,864**
State Comptroller - Fringe Benefits				
State Employees Retirement Contributions	126,280,942	142,227,565	152,119,605	162,174,271
State Comptroller - Fringe Benefits Total	**126,280,942**	**142,227,565**	**152,119,605**	**162,174,271**
Special Transportation Fund Total	**772,004,658**	**830,405,261**	**913,000,365**	**992,860,135**

Appendix E. Municipal Aid

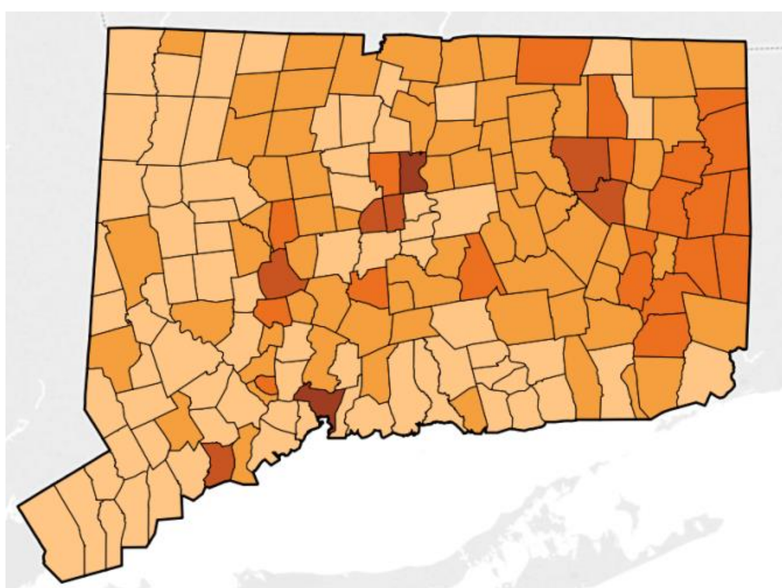
Municipal Aid a Large Share (31%) of Non-Fixed Costs
In FY 19, municipal aid totaled $4.5 billion, or 21% of all appropriations. The non-fixed share of municipal aid totaled $3 billion, or 31% of all FY 19 non-fixed costs. These non-fixed costs provide municipalities funding for education, property tax relief, and various other programs. Non-fixed municipal aid is anticipated to increase by at least $38.7 million per year through FY 28, due to a new phase-in schedule for the Education Cost Sharing (ECS) formula. **Table E.1** on the following page lists FY 19 municipal aid grants.

Figure E.1 FY 19 Non-Fixed Municipal Aid by Category



Distressed Municipalities Most Reliant on State Aid
The state's most populous and financially distressed communities continue to receive the largest share of state aid. In FY 19, $900 million (36%) of all non-fixed aid will go to the five cities with a population over 100,000. In contrast, when ranked by a standard indicator of wealth, the 40 wealthiest municipalities received a combined $86 million (4%). On a per capita basis, municipal aid is concentrated in the cities, surrounding suburbs, and towns in the eastern part of the state, as shown in the map below.

In FY 18, the legislature established the Municipality Accountability Review Board (MARB), a committee of state appointees that provides financial assistance and oversight to the state's most financially distressed communities. Municipalities may receive assistance from MARB if they agree to state fiscal oversight and control.



MARB has entered into an agreement with the City of Hartford to make debt payments on the city's behalf totaling approximately $550 million over a 20-year period. MARB is also currently working with the city of West Haven on its fiscal issues, though no agreement for long-term financial assistance has been finalized.

As the state's cities continue to face budgetary constraints due to uncertainty surrounding state aid, economic trends, and historical factors, it is possible that additional qualifying communities will seek state assistance under the MARB framework.

Education Cost Sharing (ECS) Formula Results in Annual Increases
In 2017, the legislature enacted a new ECS formula and a phase-in schedule that is estimated to require a funding increase of approximately $38.7 million each fiscal year, beginning in FY 20.[20] Under the statutory schedule, ECS appropriations in the next biennium are anticipated to total approximately $2.053 billion in FY 20 and $2.091 billion in FY 21, compared to nearly $2.017 billion in FY 19.[21] The schedule reaches full formula funding for all towns in FY 28 (i.e., no town will be over-funded or under-funded). Full funding is estimated to require $2.362 billion, an increase of $345.4 million (17.1%) over FY 19.

Figure E.2 Estimated ECS Funding
In Billions of Dollars

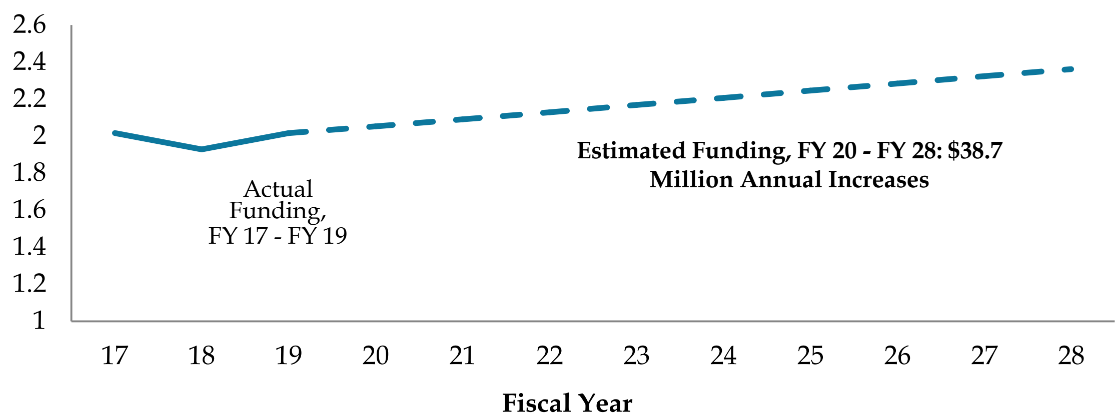


Table E.1 Grants Included in Analysis of Municipal Aid
In Dollars

Grant	FY 18 Actual	FY 19 Estimated	FY 20 Estimated	FY 21 Estimated	FY 22 Estimated
Property Tax Relief and Infrastructure					
State Property PILOT	50,306,432	56,045,788	56,045,788	56,045,788	56,045,788
College & Hospital PILOT	98,377,556	105,889,432	105,889,432	105,889,432	105,889,432
Disability Exemption	364,713	364,713	364,713	364,713	364,713
Elderly Freeze Program	50,026	65,000	65,000	65,000	65,000
Property Tax Relief for Veterans	2,700,686	2,708,107	2,708,107	2,708,107	2,708,107
Municipal Revenue Sharing	35,221,814	36,819,135	36,819,135	36,819,135	36,819,135
Municipal Transition	36,000,000	30,700,000	30,700,000	30,700,000	30,700,000
Municipal Stabilization Grant	55,480,953	37,753,335	37,753,335	37,753,335	37,753,335

[20]Precise formula funding is subject to changes in student populations and town wealth levels as the ECS formula data is updated annually.
[21]FY 19 ECS funding consists of $2.0138 billion in ECS formula funding as well as approximately $2.9 million in ECS "bonus" funding issued to school districts that hosted hurricane-displaced students in FY 18.

Grant	FY 18 Actual	FY 19 Estimated	FY 20 Estimated	FY 21 Estimated	FY 22 Estimated
Municipal Restructuring	20,000,000	27,300,000	27,300,000	27,300,000	27,300,000
Municipal Restructuring (Debt Service)	16,811,744	48,566,231	45,666,625	56,314,629	54,677,710
Local Capital Improvement Projects (LOCIP)	54,999,918	34,999,926	34,999,926	34,999,926	34,999,926
Town Aid Road	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000
Grants for Municipal Projects	59,837,294	60,000,000	60,000,000	60,000,000	60,000,000
Pequot Grant	57,649,850	49,942,796	49,942,796	49,942,796	49,942,796
Subtotal	**520,807,818**	**551,154,463**	**548,254,857**	**558,902,861**	**557,265,942**
ECS and Other Education Aid					
Youth Service Bureau	2,482,854	583,973	2,612,772	2,612,772	2,612,772
Vocational Agriculture	9,972,874	13,759,589	14,952,000	15,124,200	15,577,926
Adult Education	18,883,142	20,383,960	22,359,585	22,546,145	23,223,994
Health and Welfare Services Pupils Private Schools	3,438,415	3,438,415	6,921,000	7,065,000	7,209,000
Education Equalization Grants	1,927,170,841	2,016,728,682	2,052,556,112	2,091,283,543	2,130,010,973
Bilingual Education	1,902,302	3,177,112	3,177,112	3,177,112	3,177,112
Priority School Districts	37,097,535	37,150,868	37,150,868	37,150,868	37,150,868
Interdistrict Cooperation	1,537,499	1,537,500	1,583,625	1,631,134	1,680,068
School Breakfast Program	2,156,006	2,158,900	2,158,900	2,158,900	2,158,900
Excess Cost - Student Based	138,979,288	140,619,782	202,909,998	209,199,998	215,489,998
Open Choice Program	36,108,943	39,138,373	40,700,000	42,200,000	43,700,000
Magnet Schools	310,226,448	326,508,158	345,000,000	347,000,000	348,500,000
After School Programs	4,418,571	4,720,695	4,720,695	4,720,695	4,720,695
Subtotal	**2,494,374,718**	**2,609,906,007**	**2,736,802,667**	**2,785,870,367**	**2,835,212,306**
Teacher's Retirement System (TRS)					
Debt Service	140,219,021	118,400,521	118,638,796	118,638,796	203,318,796
Retirement Contributions	1,271,033,000	1,292,314,000	1,392,183,000	1,437,429,000	1,484,145,000
Retirees Health Service Cost	14,554,500	14,575,250	26,892,000	31,510,400	36,135,000
Municipal Retiree Health Insurance Costs	4,644,673	4,644,673	5,500,000	5,500,000	5,500,000
Subtotal	**1,430,451,194**	**1,429,934,444**	**1,543,213,796**	**1,593,078,196**	**1,729,098,796**
Various Other Grants					
Housing/Homeless Services-Municipality	575,226	575,226	575,226	575,226	575,226
Local and District Departments of Health	4,144,588	4,144,588	4,144,588	4,144,588	4,144,588
School Based Health Clinics	10,618,232	10,743,232	10,743,232	10,743,232	10,743,232
Teen Pregnancy Prevention - Municipality	98,281	98,281	98,281	98,281	98,281
Connecticard Payments	703,638	703,638	703,638	703,638	703,638
Subtotal	**16,139,965**	**16,264,965**	**16,264,965**	**16,264,965**	**16,264,965**
GRAND TOTAL	**4,461,773,695**	**4,607,259,879**	**4,844,536,285**	**4,954,116,389**	**5,137,842,009**

Appendix F. Budget Reserve Fund

Figure F.1 Budget Reserve Fund Activity and Balance
In Millions of Dollars

FY	Start Balance	Change	End Balance	Start Balance as a % of General Fund Appropriations*
04	-	302.2	302.2	0.0%
05	302.2	363.8	666.0	2.6%
06	666.0	446.5	1,112.5	5.2%
07	1,112.5	269.2	1,381.7	8.1%
08	1,381.7	-	1,381.7	9.3%
09	1,381.7	-	1,381.7	9.0%
10	1,381.7	(1,278.5)	103.2	9.0%
11	103.2	(103.2)	-	0.7%
12	-	93.5	93.5	0.0%
13	93.5	177.2	270.3	0.6%
14	270.3	248.5	519.2	1.6%
15	519.2	(113.2)	406.0	3.0%
16	406.0	(170.4)	235.5	2.3%
17	235.6	(22.7)	212.9	1.3%
18	212.9	972.4	1,185.3	1.1%
19 (proj.)	1,185.3	926.6	2,111.9	6.2%
20 (proj.)	2,111.9	278.1	2,390.0	10.9%
21 (proj.)	2,390.0	263.3	2,653.3	12.9%
22 (proj.)	2,653.3	244.3	2,897.6	14.2%

Appendix G. Other Revenue Policy and Technical Adjustments Details

In Millions of Dollars

Description	FY 20 Adjustments
Other Revenue Policy	
Personal Income Tax	
Year 2 phase-in of Pension/Annuity Exemption	(16.4)
Increase Social Security exemption threshold	(8.4)
Adjust for Teachers' Pension Increase from 25% to 50% in Income Year 2019	(8.0)
Sunset of Angel Investor Tax Credit	3.0
Sales and Use	
Reduce Sales and Use Tax Rate on Vessel-Related sales	(2.3)
Corporation Tax	
Reflect Income Year 2019 sunset of the 20% Corporation surcharge	(15.0)
Annualize phase-in of R&D/R&E/URA credit thresholds	(1.5)
Inheritance and Estate	
Adopt Federal Exemption Level	(19.4)
Lower lifetime cap from $20 million to $15 million	(4.5)
Health Provider	
Exempt Medicaid/Medicare from Ambulatory Surgical Center Tax (PA 18-170)	(0.5)
Refunds of Taxes	
Restoration of Property Tax Credit	(55.3)
Year 1 phase-in of STEM graduate tax credit	(3.9)
Transfer Special Revenue	
Sunset administrative savings requirement on the CT Lottery Corp.	(1.0)
Implement Daily Fantasy Sports tax	0.7
Licenses, Permits and Fees	
Authorize Daily Fantasy Sports Contests	(0.5)
Miscellaneous Revenue	
Expiration of Civil Gideon fees diversion	0.4
Transfer from Tobacco Settlement	
Eliminate Transfer to the Early Childhood Ed. Program	10.0
Eliminate Transfer to Tobacco & Health Trust Fund	6.0
Other Revenue Policy - Total	**(116.6)**
Technical Adjustments	
Federal Grants: Technical Adjustments and Reconciliations	**(134.8)**
Other Technical	**(22.4)**
Technical Adjustments - Total	**(157.2)**
TOTAL	**(273.8)**