

State of Connecticut General Obligation Bonds (2018 Series C) & General Obligation Refunding Bonds (2018 Series D)

Analytical Contacts:

Kate Hackett, Managing Director
khackett@kbra.com, (646) 731-2304

Justin Schneider, Analyst
jschneider@kbra.com, (646) 731-2453

Table of Contents

Executive Summary 3

 Security 3

 Use of Proceeds 3

 Rating Summary 4

 Outlook: Negative 5

Financial Performance and Liquidity Update 5

 FY 2017 Financial Results 5

 FY 2018 and FY 2019 Biennium Adopted Budget 6

 FY 2018 Financial Operations 7

 Recent Litigation 8

 Midterm Budget Revisions for FY 2019 8

 Fiscal Reforms Recently Passed by Connecticut General Assembly 9

 Consensus Revenue Estimates 9

 General Fund Outyear Forecast 10

 Liquidity Position 10

State Resource Base Update 11

 Bankruptcy Assessment 14

Conclusion 14

Executive Summary

Kroll Bond Rating Agency (KBRA) has taken the following actions relating to the State of Connecticut (the "State") and Connecticut Innovations, Incorporated.

Ratings				
Issuer: State of Connecticut (the "State")				
Series/Bond	Rating	Outlook	Action	Amount ('000) ²
General Obligation Bonds (2018 Series C)	AA-	Negative	Assigned	\$400,000
General Obligation Refunding Bonds (2018 Series D)	AA-	Negative	Assigned	\$100,000
General Obligation Bond Anticipation Notes (2017 Series A)	K1+		Affirmed	\$400,000
General Obligation Bonds	AA-	Negative	Affirmed	\$15,055,169

Issuer: Connecticut Innovations, Incorporated ¹				
Series/Bond	Rating	Outlook	Action	Amount ('000) ²
State of Connecticut General Fund Obligation Bonds 2014 Series A	AA-	Negative	Affirmed	\$16,325

KBRA's long-term ratings do not apply to bonds backed by a letter of credit or liquidity facility, unless otherwise noted.

¹ KBRA views the obligation of the State to pay debt service on the 2014 Series A Bonds as tantamount to the general obligation security of the State.

² Amounts are as of May 2018

KBRA's long-term rating assessment is based on its review of the four KBRA rating determinants included in KBRA's [U.S. State General Obligation Rating Methodology](#). A full discussion of the credit was published on [December 5, 2017](#). KBRA's most recent State of Connecticut report was published on [March 15, 2018](#). This report provides updates on the State's financial Performance and Liquidity as well as an update on the State's Resource Base. KBRA has assigned the following Rating Determinant ratings:

- Management Structure, Budgeting Practices and Policies: AA+
- Debt and Additional Continuing Obligations: A+
- Financial Performance and Liquidity Position: A+
- State Resource Base: AA-

Security

The General Obligation Bonds (2018 Series C) and General Obligation Refunding Bonds (2018 Series D) are general obligations of the State and are secured by Connecticut's full faith and credit pledge. All general obligation bond debt service of the State is deemed appropriated without further action by the State Legislature.

Use of Proceeds

Proceeds of the 2018 Series C Bonds will be used to finance various capital projects of the State and 2018 Series D Bonds will be used to refund a portion of the State's general obligation bonds on a current refunding basis.

Key Rating Strengths

- Historically, State leadership has demonstrated an ability and willingness to make adjustments during the fiscal year to maintain budget balance.
- A strong financial management framework exists for tracking revenues and monitoring budget performance as well as an established mechanism for adjusting budgeted expenditures during the fiscal year.
- The State's Budget Reserve Fund is projected to increase to \$769.3 million, or approximately 4.1% of FY 2018 General Fund expenditures, by the end of FY 2018.
- Connecticut has the highest personal per capita income in the country at \$69,311 for calendar year 2016.
- Available cash balances provide good liquidity for operations, without utilization of external borrowing.

Key Rating Concerns

- Continuing structural imbalance in FY 2018 and FY 2019 in the State's General Fund after the midterm budget revisions (SB 543) were passed by the General Assembly on May 9, 2018.
- State's recent difficulty in accurately projecting personal income tax levels impacted by the performance of volatile financial markets, specifically capital gains taxes, and continued lack of significant growth in wage levels across the State.
- State's increasing budgetary burden related to fixed costs, specifically debt service, pension contributions, and Medicaid expenditures.
- Both the State debt burden and the State's level of pension liabilities are high, compared to other states, on a per capita basis and as a percentage of personal income and GSP.

Rating Summary

KBRA's assignment of the AA- rating and Negative Outlook on the State of Connecticut General Obligation Bonds reflects the State's ongoing difficulty in accurately projecting State revenues and the continuing structural imbalance in the FY 2018-FY 2019 biennium budget for the State's General Fund. The rating also reflects KBRA's view that, though the General Assembly used a portion of unanticipated income tax collections to balance the FY 2018 and FY 2019 budget, the balance in the Budget Reserve Fund (BRF) at the end of FY 2018 is projected to grow to \$769.3 million, or approximately 4.1% of FY 2018 General Fund expenditures, which KBRA considers to be a moderately strong level of reserves. In KBRA's view, this level of reserves significantly strengthens the financial condition of the State.

Unlike the last several fiscal years where the State experienced ongoing shortfalls in personal income tax (PIT) collections, the State income tax collections in FY 2018 was \$1.34 billion higher than budgeted. This windfall was primarily final and estimated collections and was due to one-time income tax revenues related to repatriation of hedge fund profits and approximately \$600 million of annual personal income tax collections received over budget. Under the State's new Volatility Cap included in the enacted FY 2018-FY 2019 biennium budget, any final and estimated income tax collections over \$3.15 billion is required to be deposited in the BRF, starting in FY 2018. In FY 2018, based on the Volatility Cap, most of the amount of income tax collections received above budget was projected to be deposited in the BRF. Under the midterm budget revision legislation (SB 543), the General Assembly used a portion of this amount to balance the FY 2018 and FY 2019 budget rather than take action to reduce State spending or raise revenues. In addition to not resolving the continued structural imbalance in the General Fund, the General Assembly did not address the outyear budget gaps starting in FY 2020, which are due in part to a number of revenue enhancements (approximately \$1.2 billion) that are included in the FY 2019 budget but scheduled to expire in FY 2020.

KBRA recognizes the efforts made by the Malloy administration and the General Assembly over the last several years to restructure General Fund revenues in response to changes in the State's wage and

employment base however, in KBRA's view, further commitment to structurally balanced operations is necessary.

KBRA views the establishment of the Volatility Cap as significantly reducing the budget volatility historically experienced by the State in projecting final and estimated income tax revenues (largely capital gains taxes). The Volatility Cap should also provide a funding source for the BRF from final and estimated taxes above a certain level in a given year, however, the consistency of this funding source depends on decisions by the General Assembly on the use of these funds going forward. Over the last four years, the State has continued to closely monitor revenue performance and budget to actual operating performance on a monthly basis and both the Governor and the Legislature have taken action to balance financial operations as needed. KBRA will continue to monitor the State's budgetary performance in FY 2018 and FY 2019.

The State's liquidity position remains strong. As of June 30, 2017, the State's total available cash was \$ 2.7 billion, and the common cash pool was \$ 1.1 billion. As of May 19, 2018, the State's total available cash was \$3.5 billion.

Outlook: Negative

KBRA's Negative Outlook reflects the State's ongoing difficulty in accurately projecting State revenues, the continuing structural imbalance in the FY 2018-FY 2019 biennium budget after the midterm budget revisions (SB 543) and the continued weakness in the State's economy. KBRA's assessment of the financial condition of the State going forward will be largely based on the ability and willingness of the General Assembly to take significant steps towards resolving the structural imbalance in the State's General Fund budget. KBRA will continue to monitor both the personal income tax collection trends and the State's progress in managing the FY 2018/FY 2019 budget.

In KBRA's view, the following factors may contribute to a rating upgrade:

- Trend of accurate revenue projections leading to budget stability in the General Fund.
- Trend of structurally balanced budgets and actual financial results showing General Fund operating surpluses.
- Sustained increase in funding level of State's Budget Reserve Fund.
- Significant increase in the funded ratios for the State's pension systems.

In KBRA's view, the following factors may contribute to a rating downgrade:

- Ongoing structural imbalance in the State's General Fund operating budget.
- Failure to maintain budget discipline and balanced financial operations
- Continued pressure on personal income tax collections resulting from difficulty in projecting final and estimated tax collections, further shifts in the State's employment base or decline in economic activity.
- Significant reliance on non-recurring revenues to balance the budget.

Financial Performance and Liquidity Update

FY 2017 Financial Results

Based on the Comptroller's audited budgetary based financial report for FY 2017, the fiscal year ended with an operating deficit of \$22.7 million in the General Fund, which was eliminated by a transfer from the BRF. As a result of this transfer, the balance in the BRF was reduced from \$235.6 million to \$212.9 million, or 1.1% of FY 2017 expenditures, which KBRA considers to be low, especially given the volatility of the State's income tax collections. In FY 2017, the State experienced a significant shortfall in personal income tax collections totaling \$530 million (6% below budget) and a shortfall in sales tax revenue of \$136.5 million (3.2% below budget).

These FY 2017 shortfalls were due to lower than anticipated revenues for both withholding taxes and final and estimated taxes, which include capital gains tax, as well as sales tax revenues. April 2017 collections of personal income taxes were significantly lower than expected and led to a projection of a significant operating deficit in the General Fund at the end of FY 2017. FY 2017 ended with a rather modest operating deficit of \$22.7 million, as noted above, and minimal drawdown of the BRF. The modest drawdown on the BRF was due to revenue transfers and expenditure reductions under the deficit mitigation plan submitted by the Governor to the Legislature on May 10, 2017. It is notable that significant expenditure action was able to be implemented so close to the end of the fiscal year.

Statement of Revenues, Expenditures, and Net Surplus for General Fund						
General Fund (budgetary modified cash basis) FY 2012-2017 (ending June 30)						
<i>(in \$ millions)</i>	2017	2016	2015	2014	2013	2012
Operating Revenues	17,703.0	17,780.8	17,282.0	17,009.1 ^{1,2}	19,405.0	18,561.6
Operating Expenditures	17,763.0	17,921.3	17,419.7	16,980.0	19,025.7	18,781.6
Other Resources	37.4	-30.0	24.5	28.7	18.7	76.5
Net Operating Surplus (Deficit)	(22.7)	(170.4)	(113.2)	57.7	398.0	(143.6)
Transfer (to) from Budget Reserve Fund	22.7	170.4	113.2	(248.5)	(177.2)	143.6
Reserved for Subsequent Years Expenditure	0	0	0	0.0	220.8	0.0
Reserved from Prior Year Resources	0	0	0	190.8	0.0	0.0
Net Surplus (Deficit) June 30th	\$0	\$0	\$0	\$0	\$0	\$0
Budget Reserve Fund	\$212.9	\$235.6	\$406.0	\$519.2	\$270.7	\$93.5
% of Operating Expenditures	1.2%	1.3%	2.3%	3.1%	1.4%	0.5%

Source: Annual Report of the State Comptroller 2017-2012

¹ FY 2014 General Fund revenues and expenditures reflect the reduction of approximately \$2.8 billion in both revenues and expenditures related to the shift to the "net budgetary" approach in Medicaid funds.

² FY 2014 revenues do not include \$599 million of GAAP Conversion Bonds

FY 2018 and FY 2019 Biennium Adopted Budget

The General Assembly failed to pass a budget for the FY 2018-FY 2019 biennium before the start of the 2018 fiscal year on July 1, 2017. Under State Statute, the Governor has the ability to run the State under Executive Order to maintain essential services in the absence of a budget. The FY 2018-FY 2019 biennium budget was finally adopted on October 30, 2017 after a long budget negotiation in the General Assembly and signed into law by the Governor on October 31, 2017. OPM stated that the adopted FY 2018-FY 2019 biennium budget was tightly balanced with limited room for budget overruns on the expenditure side. In KBRA's view, the adopted biennium budget was not structurally balanced, based on use of a substantial level of non-recurring revenues sources, which include transfers from State operating funds as well as a number of revenue enhancements and tax cuts that are scheduled to expire in FY 2020. Though the adopted biennium budget does include a reduction in local education funding, it does not include a structural shift of cost sharing to local government

On the revenue side, the adopted FY 2018-FY 2019 budget included a reduction to property tax credits, decrease in the earned income tax credit (EITC), increase in cigarette taxes and the suspension of the transfer of sales tax revenues into the MSRA. Hospital provider taxes are significantly increased for FY 2018 and FY 2019, however a portion of the hospital tax payments will be returned to the hospitals as supplemental state payments, thereby increasing federal Medicaid reimbursement and creating a financial benefit for both the State and the hospital industry.

Non-recurring revenues in the form of transfers from a number of State operating funds total \$173 million in FY 2018 and \$213 million in FY 2019. The major transfers include a delay in payment of the GAAP deficit amortization and use of certain operating funds from the State's Energy Efficiency Funds for this biennium. In addition to transfers from State operating funds, the adopted budget includes revenue enhancements and tax cuts that are scheduled to expire in FY 2020. The impact of these combined transfers and various revenue enhancements and tax cuts totals \$1.2 billion in FY 2020. Reflected in the list of items that are projected to be modified in 2020, leaving a structural hole of over \$1 billion, is the restoration of the sales tax transfers to the Municipal Revenue Sharing Account (MRSA), the reduction of the Hospital Tax by half and restoration of the full property tax credit against state income taxes as well as other items.

On the expenditure side, the adopted FY 2018-FY 2019 budget includes the savings from the SEBAC collective bargaining agreement approved by the General Assembly in July 2017, reduction in state aid for education (ECS) and school health centers, reduction in funding for higher education, cuts to child care subsidies and cuts to the State's Medicaid program. The major driver of spending reductions in the FY 2018-FY 2019 adopted budget is the collective bargaining savings, estimated at \$700 million in FY 2018 and \$868 million in FY 2019, included in the five-year extension of the labor contract with the State employees' union (SEBAC). The agreement would freeze all State employee wages over the next three years, increase employee pension and healthcare contributions and make other changes to reduce costs in both the State retirement and healthcare plans. COLA payments and scheduled wage increases resume in FY 2020. The State has also agreed not to lay off any unionized State employees over the next four fiscal years which, in KBRA's view, will limit the State's options for managing its budget in the current biennium and beyond. OPM also notes that the tight budget limits the flexibility of the State to meet unforeseen expenses.

FY 2018 Financial Operations

Based on its letter dated January 19, 2018, OPM projected an end of year FY 2018 General Fund operating deficit of \$240.2 million, based on revised revenue projections resulting from the January 2018 consensus revenue estimates shown above. The State's collection of final and estimated payments of personal income taxes, as of January 15, exceeded State's targets by over \$1 billion, however the increased final and estimated tax payments did not improve FY 2018 operations for the following reasons. The increased January collection is due to two factors. First, taxpayers accelerated their 2017 tax year income tax payments to maximize their federal tax deduction prior to expiration of uncapped state and local tax deduction included in the new federal tax law. These accelerated tax payments were estimated to total approximately \$500 million and April 2018 income tax collection projections were reduced by this amount. The other factor in the increased collections was a one-time unbudgeted payment of income taxes (\$675 million) on the repatriation of overseas profits of hedge fund managers that the IRS required to be brought back into the US by the end of 2017 (Section 457A of the IRS Code, enacted in 2008). This is a onetime payment of income taxes on 2008 hedge fund profits; these profits have been included in the State's income tax base since 2008. Under the Volatility Cap, these one-time revenues are required to be deposited in the BRF and are not available for FY 2018 operations.

Based on its letter dated April 20, 2018, OPM projected an end of year FY 2018 General Fund operating deficit of \$363.5 million, which represents an increase of \$170.8 million from March 2018. This increase in the projected deficit reflects OPM's assumption of a delay in the federal government's decision on the reimbursement from Medicaid for hospital supplemental payments, which is discussed above as included in the FY 2018/FY 2019 biennial budget. Statutory provisions require states to process certain hospital rate and supplemental hospital payments in advance of full federal approval. This OPM projection for end of year results also reflects further upward revision on projections for personal income tax collections.

In the April 20 letter, OPM revised its projection for personal income taxes (PIT) upwards by \$485.1 million, as both the withholding and estimated and final components of the PIT out performed prior projections for the year by \$100 million and \$385.1 million, respectively. In a letter dated April 30, 2018, OPM further increased its projections for PIT receipts, based on April 2018 consensus revenue estimates, with an upward

revision in the estimated and finals component of PIT revenues of \$240 million, as April collections significantly exceeded expectations. As of the April 30, 2018 OPM letter, PIT revenues projected to be received in FY 2018 exceed budgeted level by \$1.34 billion. Based on discussions with OPM, this number includes a total of approximately \$760 million of income taxes on repatriated overseas hedge fund profits and approximately \$580 million of PIT collections in excess of budgeted levels. Based on discussions with OPM, it was assumed by OPM and OFA in January of 2018 that taxpayers would attempt to accelerate as near to 100% as possible of their 2017 tax liability into December 2017 and January 2018 to maximize the SALT deduction and so \$500 million was removed from April 2018 projections. Instead, April collections of estimated and final taxes significantly exceeded the reduced April target. Based on discussions with OPM, reasons for this unforeseen increase in both withholding and final and estimated collections include calendar year 2017 capital market performance and short term positive impact from the federal tax cuts.

Recent Litigation

On May 15, 2018, a federal lawsuit was filed to stop the General Assembly from transferring funds from the State's Clean Energy Fund and the State's Energy Conservation and Load Management Fund to the General Fund in FY 2018 and FY 2019. The total amount of funds scheduled for transfer is currently is \$145 million.

Midterm Budget Revisions for FY 2019

On May 9, 2018, the General Assembly passed Senate Bill (SB) 543, which included appropriations to balance FY 2018 operations and midterm budget revisions for FY 2019. The legislation was signed by the Governor on May 15, 2018. Based on the OPM letter dated May 21, 2018, the FY2018 General Fund deficit is projected to be \$717.5 million. This deficit for FY 2018 will be funded by use of funds which would have been transferred to the BRF under the Volatility Cap under original enacted FY 2018-FY 2019 budget legislation. This deficit includes the previously projected FY 2018 deficit. In addition, SB 543 directed that a portion of the supplemental hospital payments scheduled to be made in FY 2019, as well as several other costs, would be charged to FY 2018 operations and added to the projected FY 2018 deficit. The total additional amount of these costs charged back to FY 2018 is \$341.7, which along with the FY 2018 projected deficit, brings the total amount of the deficit to \$717.5 million. This amount will be funded prior to the transfer of required funds under the Volatility Cap to the BRF. The BRF balance is projected to be \$769.3 million, or approximately 4.1% of FY 2018 General Fund expenditures, at the end of FY 2018.

In KBRA's view, the State's FY 2019 General Fund budget under Senate Bill 543 continues to be structurally imbalanced, based on a substantial level of non-recurring revenues sources, including transfers from State operating funds and, as discussed above, the charge back to FY 2018 of certain costs of supplemental hospital payments included in the FY 2019 budget. FY 2019 also includes a number of revenue enhancements which are scheduled to expire, and tax cuts scheduled to take effect which contribute to a FY 2020 gap of \$1.2 billion. KBRA will continue to monitor the State's budgetary performance in FY 2018 and FY 2019.

Based on the midterm budget revisions, FY 2019 is projected to end the fiscal year with a \$8.2 million surplus in the General Fund. Based on April 2018 consensus revenue estimates, PIT revenues are projected to increase by \$395 million in FY 2019, while sales taxes and corporation taxes are projected to decline. Federal grants, which includes federal reimbursements for the supplemental hospital payments, are projected to increase by approximately \$400 million. For FY 2019, revenues on a net basis are projected to increase \$148.4 million. The General Assembly increased appropriations by \$207.6 million, which included restoration of funding for the Medicare Savings program and funding for Municipal Aid, as well as other cuts included in the original budget.

Based on the April 2018 consensus revenue estimate, the transfer to the BRF under the Volatility Cap (indexed to personal income growth per Senate Bill 543), is projected to be \$371.3 million, bringing the BRF balance to \$1.14 billion for FY 2019 or approximately 6% of FY 2018 expenditures.

Fiscal Reforms Recently Passed by Connecticut General Assembly

Statutes passed by the General Assembly as part of the FY 2018-FY 2019 budget process established a Municipal Accountability Review Board (MARB) to provide oversight and assistance to municipalities experiencing fiscal distress. The enacted FY 2018-FY 2019 budget also includes other fiscal reforms including requirements for certain stress tests on the State’s pension funds, a new Revenue Cap that limits the ability to budget more than a certain percentage of estimated revenues in a budget year, a Volatility Cap and limits on annual issuance of GO bonds. The new revenue cap requires the General Assembly to reduce budgeted appropriations to 99.5% of estimated revenues in FY 2020, down to 98% of revenue projections by FY 2026.

Available General Fund surpluses will be deposited into the Budget Reserve Fund until the Fund reaches an amount equal to a maximum 15% of net General Fund appropriations, up from 10%. Based on the enacted budget, the Volatility Cap required that estimated and final payments of the personal income tax in excess of \$3.15 billion be deposited into the Budget Reserve Fund beginning in FY 2018. Based on the midterm budget revisions under SB 543, the \$3.15 billion will be indexed annually to the 5-year compound annual growth in State personal income beginning in FY 2019. Funds in the BRF may be transferred to fund a deficit in the immediately preceding fiscal year or transferred by the General Assembly if revenues consensus estimates show declines of more than 1% and for certain other purposes once the BRF equals 5% of appropriations.

In KBRA’s view, the establishment of the Volatility Cap was a positive credit factor which should significantly reduce the budget volatility associated with budgeting final and estimated revenues going forward. KBRA also recognizes that the Volatility Cap, as originally established, significantly limits the State’s ability to utilize any growth in the final and estimated tax collection growth and views the annual indexing discussed above as appropriately easing these restrictions. The Volatility Cap should provide a funding source for the BRF from final and estimated taxes above a certain level in a given year, however, the consistency of this funding source depends on decisions by the General Assembly on how to use the BRF, as shown in the last legislative session.

The General Assembly also passed legislation that requires the Treasurer to include many of the statutory provisions discussed above as a pledge in any new general obligation or credit revenue bond (refers to new State PIT revenue bonds) issued after May 15, 2018. The pledge will be included as part of the bond covenant. Specifically, the pledge includes the provisions on the Volatility Cap, the Revenue Cap and the statutory spending cap and certain provisions limiting annual issuance of general obligation bonds would be limited to \$1.9 billion (excluding certain purposes), adjusted annually by CPI.

State of Connecticut Consensus Revenue Estimates Growth Projections								
	May-2017		November-2017		January-2018		May-2018	
	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019	FY 2018	FY 2019
General Fund	0.90%	0.60%	-0.60%	0.40%	-0.80%	0.50%	N/A	N/A
Personal Income Tax								
Withholding	2.10%	2.10%	-1.50%	0.70%	2.10%	2.20%	4.30%	1.40%
Final and Estimated	0.00%	1.00%	2.10%	2.20%	-1.50%	0.70%	39.60%	-19.90%
Sales Tax	2.90%	2.40%	1.20%	2.50%	1.30%	1.60%	1.30%	1.60%

Source: State of Connecticut Office of Policy and Management and Office of Fiscal Analysis Consensus Revenue Estimates

Consensus Revenue Estimates

In the FY 2018-FY 2019 biennium budget adopted by the General Assembly on October 30, 2017, budgeted revenues levels were based on the May 1, 2017 consensus revenue estimates. As seen in the chart above, subsequent consensus revenue estimates in November 2017 and January 2018 reduced projections for the final and estimated portion of the personal income taxes and for sales taxes. These continued shortfalls

through January 2018 reflect the State’s ongoing difficulty in projecting the level of final and estimated taxes as well as generally slower growth in the State economy.

In KBRA’s view, the State’s current revenue projections for FY 2018 and FY 2019, based on the April 2018 consensus revenue estimates, are still fairly conservative. As discussed above, actual PIT collections of estimated and finals in FY 2018 far exceeded budgeted levels. Based on April 2018 consensus revenue estimates for FY 2018, withholding taxes are projected to increase 4.3% and final and estimated taxes are projected to increase 39.6%. This reflects the PIT performance over budget as well as the one-time income tax collections on the repatriation of hedge fund income at the end of calendar year 2017. For FY 2019, withholding taxes are projected to increase 1.4% and final and estimated taxes are projected to decline 19.9%, which again reflects the one-time nature of a portion of the FY 2018 increase. When the one-time repatriation revenues are netted out of FY 2018 numbers, final and estimated taxes are projected to decline by 3.2% in FY 2019. For FY 2020, OPM is projecting that the estimated and final taxes will decline by 5.5%. In FY2018 and FY 2019, sales taxes are projected to increase 1.3% and 1.6% respectively. KBRA will continue to monitor the performance of the State’s revenues and the impact on the State’s financial operations.

General Fund Out Year Budget Projections as of 5/9/2018				
(in millions)				
	FY 2020	FY 2021	FY 2022	FY 2023
Revenue	17,490.7	17,602.8	17,387.1	17,674.0
Appropriations	19,506.2	20,179.7	20,613.5	21,351.3
Projected Deficit	(2,015.5)	(2,576.9)	(3,226.4)	(3,677.3)
Deficit as a Percent of Revenue	-11.5%	-14.6%	-18.6%	-20.8%

Source: Office of Fiscal Analysis fiscal note to SB 543

General Fund Outyear Forecast

The Office of Fiscal Analysis (OFA) generally develops a projection of the impact of an adopted biennium budget beyond the biennium. On May 9, 2018, the OFA published its current forecast for FY 2020, FY 2021, FY 2022 and FY 2023 based on the impact of the recently passed midterm budget revisions. As part of the midterm budget revision process, the Governor had proposed eliminating future tax cuts and continuing some of the revenue enhancements. These items include permanent elimination of the property tax credit, elimination of the transfer of sales tax revenue to the MRSA and extension of the increased Hospital Tax. In the legislative session addressing the midterm budget revisions, the General Assembly did not address the outyear General Fund forecast.

Teacher Retirement System Restructuring

As part of the midterm budget revisions for FY 2019, the Governor has also proposed a restructuring of the Teacher’s Retirement System (TRS) to allow changes to assumptions and methodologies used in the actuarial valuations. The intent of this restructuring would be to moderate the significant increases in the TRS annual pension contributions through 2032 and so increase State budget stability, similar to the restructuring by the State of the State Employee’s Retirement System in 2016. The State Treasurer has publicly raised objections about the State’s legal ability to make changes to the TRS funding structure, based on bond covenants included on the State’s 2008 pension obligation bonds. The Teacher’s Retirement System Viability Commission released their report on the TRS at the end of March and the General Assembly will continue to consider a number of different options for changes to TRS. KBRA will continue to monitor these developments and will review the State’s plan to restructure TRS as this plan becomes available.

Liquidity Position

The State’s liquidity position remains strong. As of June 30, 2017, the State’s total available cash was \$ 2.7 billion, and the common cash pool was \$ 1.1 billion. As of May 19, 2018, the State’s total available cash was \$3.5 billion.

The common cash pool represents the State’s operating cash. Available cash includes bond funds and other balances which can be made available to the common cash pool through temporary transfers under long established State practice. The State’s level of cash in the common cash pool at a given point in the fiscal year reflects the seasonality of cash flow. The level of total available cash is impacted both by the rate of bond issuance and the rate of spending from those bond funds. The State has no plans to issue cash flow notes.

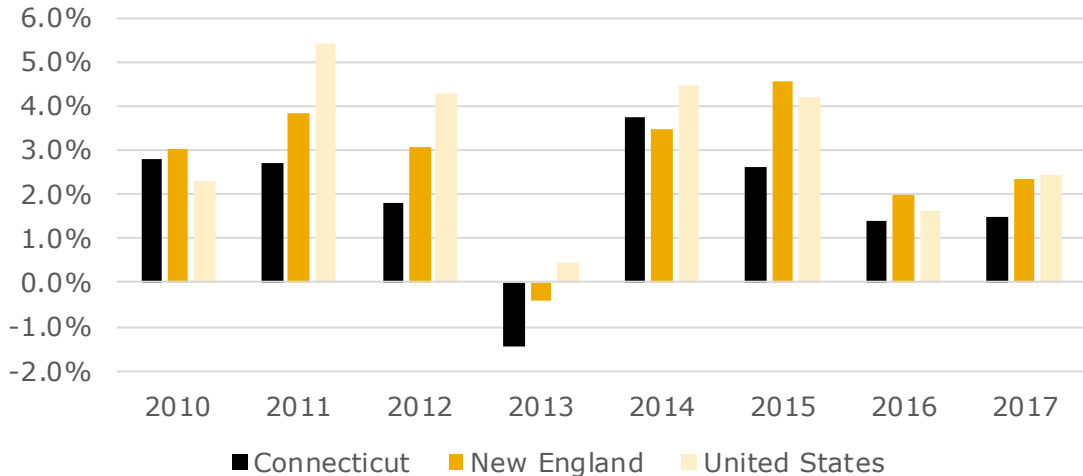
Available Cash Balance as of June 30 (In Millions)					
	2014	2015	2016	2017	May 19, 2018
Common Cash Pool	\$941.1	\$1,091.5	\$821.0	\$1,100.6	\$1,988.3
Total Available Cash	\$1,780.8	\$2,218.3	\$1,764.8	\$2,657.0	\$3,497.9

Source: State of Connecticut Treasurer’s Office Cash & Debt Monthly Reports

State Resource Base Update

In KBRA’s view, the State economy continues to grow but at a slower pace than regional and national growth trends. From 2010 to 2016 the State’s population has been flat, while the New England region and nation has grown by 1.9% and 4.5% respectively. Going forward, KBRA expects that Connecticut’s population growth will continue to be slower than that for New England and the U.S.

**% Change in Per Capita Personal Income
2010-2016**



Source: Bureau of Economic Analysis

Income levels, as measured by per capita personal income, have historically been the highest in the nation. Per capita personal income in 2017 is still the highest in the nation at \$70,121, which was 112% and 139.2% of New England and U.S. levels, respectively. Even though the State still has the highest per capita personal income its growth rate has slowed. From 2010 to 2017 the State’s per capita personal income has grown by 12.9% which is the lowest growth rate for any state in the nation over the same time. This is reflective of losses of many financial sector jobs in the State; financial sector jobs have decreased by 5.3% since 2010. Historically, declines in personal income growth have generally been steeper in Connecticut than the region and the U.S. during periods of economic decline.

Over the last twenty years, the State’s high per capita personal income figure has historically been driven, in part, by the relatively large proportion of residents who work in high paying jobs in the finance, insurance, real estate, and certain manufacturing (such as defense) sectors.

	2016 Population	Chg. from 2010	2016 Age Dependency Ratio ^{1,2}	Chg. from 2010	2016 Population w/ B.A. Degree or Higher ^{2,4}	Chg. from 2010	2016 Poverty Level ²	Chg. from 2010
Connecticut	3,576,452	0.0%	59.1%	0.4%	38.6%	3.1%	9.8%	-0.3%
New England	14,735,525	1.9%	57.8%	1.7%	39.1%	3.5%	10.4%	-0.8%
United States	323,127,515	4.5%	61.3%	2.5%	31.3%	3.1%	14.0%	-1.3%
Connecticut as % of New England	N/A		102.3%		98.8%		94.2%	
Connecticut as % of U.S.	N/A		96.4%		123.3%		70.0%	
	2017 Personal Income (\$ Billions)	Chg. from 2010	2017 Per Capita Personal Income	Chg. from 2010	2017 Real Gross State Product (\$Billions)	Chg. from 2010	2017 Real GSP Per Capita	Chg. from 2010
Connecticut	\$251.6	13.1%	\$70,121	12.9%	\$224.7	-3.3%	\$62,633	-3.5%
New England	\$927.6	23.1%	\$62,632	20.3%	\$883.2	7.5%	\$59,637	5.0%
United States	\$16,413.6	31.7%	\$50,392	25.1%	\$16,721.5	14.3%	\$51,337	8.6%
Connecticut as % of New England	N/A		112.0%		N/A		105.0%	
Connecticut as % of U.S.	N/A		139.2%		N/A		122.0%	

Source: US Census Bureau and Bureau of Economic Analysis

¹Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs.

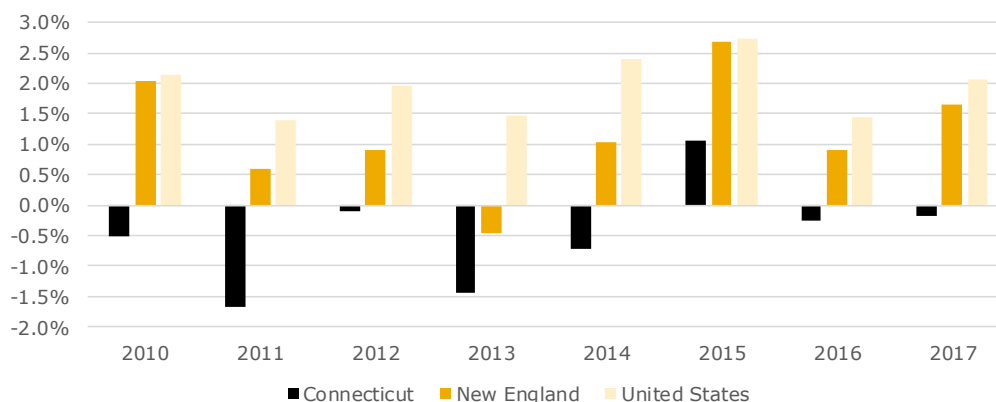
²Year over year change shown as nominal change in percentage points.

³New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

⁴Percent of the population aged 25 and over.

Overall, Connecticut's real GSP has decreased by 3.3% since 2010 while the GSP of the region and nations grew during the same period. However, since 2000 the state has seen a 7.4% growth compared to the region at 21.8% and nation at 32.5%.

% Change in Real GSP
(Chained 2009 Dollar)



Source: Bureau of Economic Analysis

The State continues to have a diverse economic base. In 2017, eighteen "Fortune 500" companies were headquartered in Connecticut, including United Technologies Corporation ("UTC"), Cigna, Praxair, Priceline Group and Hartford Financial Service Group. KBRA notes that the defense industry, which comprises about one-quarter of the State's manufacturing employees, is an important component of the State's economy and has demonstrated renewed strength since 2002 we expect this trend to continue. Major defense companies include United Technologies Corporation and its Pratt and Whitney Aircraft Division, Sikorsky Aircraft (a division of Lockheed Martin), and General Dynamics Corporation's Electric Boat Division.

In the summer of 2017, Aetna announced that it was moving its headquarters and 250 jobs from the state to New York City. However, at the end of 2017, CVS acquired Aetna and announced that that they will not relocate the headquarters out of Hartford.

Since 2010, the State has also generally lagged the New England region and the United States in growth in total employment and reduction of the unemployment rate. Between 2010 and March 2018, total State employment grew 3.87%, as compared to 7.8% for the region and 11.58% for the US. Connecticut's lag in employment gains reflect the continued slow growth of the State's economy.

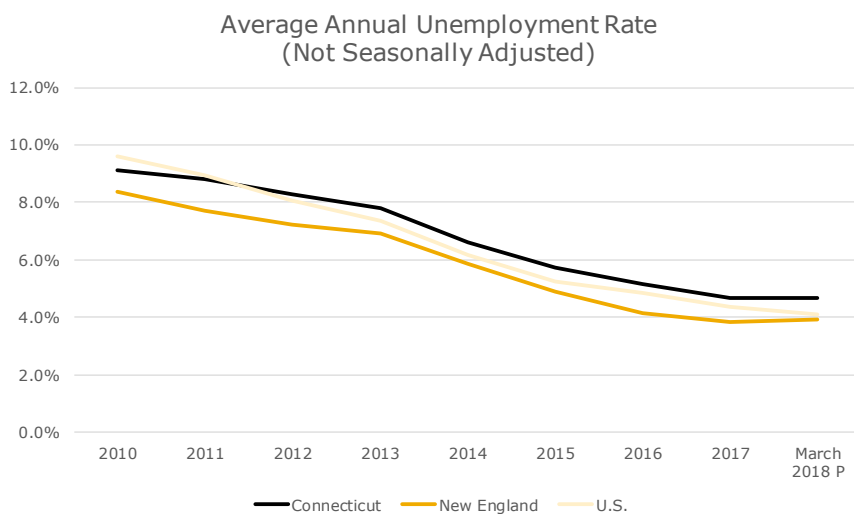
Total Employment (Not Seasonally Adjusted)						
<i>in thousands</i>	Connecticut Employment	% Chg.	New England Employment	% Chg.	U.S. Employment	% Chg.
2009	1,741		7,109		139,894	
2010	1,737	-0.20%	7,103	-0.09%	139,077	-0.58%
2011	1,746	0.49%	7,141	0.54%	139,885	0.58%
2012	1,730	-0.92%	7,171	0.41%	142,475	1.85%
2013	1,718	-0.70%	7,197	0.37%	143,941	1.03%
2014	1,767	2.88%	7,342	2.01%	146,317	1.65%
2015	1,787	1.14%	7,427	1.16%	148,845	1.73%
2016	1,807	1.07%	7,527	1.35%	151,440	1.74%
2017	1,829	1.23%	7,618	1.21%	153,337	1.25%
March 2018 ^P	1,805	-1.32%	7,659	0.53%	155,178	1.20%

Source: U.S. Bureau of Labor Statistics

New England: Maine, Massachusetts, New Hampshire, Vermont, Rhode Island, and Connecticut

P=Preliminary

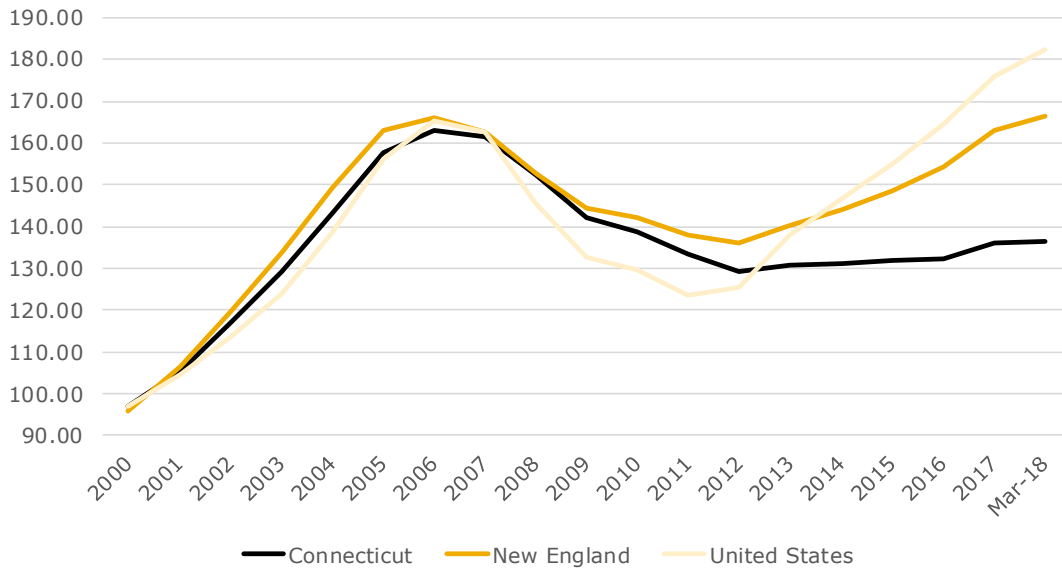
Despite the continued decline of the State's average unemployment rate from a peak of 9.1% in 2010 to 4.7% in March 2018, the unemployment rate in Connecticut is still above that of the region and U.S., which averaged 3.9% and 4.1%, respectively.



Source: Bureau of Labor Statistic
P=Preliminary

The State's housing market began to recover in 2013, according to the Freddie Mac Home Price Index as of March 2018, represents 83.8% of its pre-recession peak.

**Freddie Mac Home Price Index
2000-2017
(not seasonally adjusted)**



Source: Freddie Mac Home Price Index

Bankruptcy Assessment

Under Chapter 9 of the U.S. Bankruptcy Code, State governments are not permitted to petition courts for protection from creditors, including holders of their general obligation debt.

Conclusion

KBRA has assigned a long-term rating of AA- with a Negative outlook to the State of Connecticut’s General Obligation Bonds (2018 Series C) and General Obligation Refunding Bonds (2018 Series D). Additionally, KBRA has affirmed the long-term rating of AA- with a Negative outlook on the State of Connecticut’s outstanding General Obligation Bonds and K1+ of on the State of Connecticut’s General Obligation Bond Anticipation Notes (2017 Series A). KBRA has also affirmed the long-term rating of AA- with a Negative outlook on the State of Connecticut General Fund Obligation Bonds 2014 Series A issued by Connecticut Innovations, Inc.

© Copyright 2018, Kroll Bond Rating Agency, Inc., and/or its licensors and affiliates (together, "KBRA"). All rights reserved. All information contained herein is proprietary to KBRA and is protected by copyright and other intellectual property law, and none of such information may be copied or otherwise reproduced, further transmitted, redistributed, repackaged or resold, in whole or in part, by any person, without KBRA's prior express written consent. Information, including any ratings, is licensed by KBRA under these conditions. Misappropriation or misuse of KBRA information may cause serious damage to KBRA for which money damages may not constitute a sufficient remedy; KBRA shall have the right to obtain an injunction or other equitable relief in addition to any other remedies. The statements contained herein are based solely upon the opinions of KBRA and the data and information available to the authors at the time of publication. All information contained herein is obtained by KBRA from sources believed by it to be accurate and reliable; however, all information, including any ratings, is provided "AS IS". No warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, or fitness for any particular purpose of any rating or other opinion or information is given or made by KBRA. Under no circumstances shall KBRA have any liability resulting from the use of any such information, including without limitation, for any indirect, special, consequential, incidental or compensatory damages whatsoever (including without limitation, loss of profits, revenue or goodwill), even if KBRA is advised of the possibility of such damages. The credit ratings, if any, and analysis constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. KBRA receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. Please read KBRA's full disclaimers and terms of use at www.kbra.com.