

State of Connecticut General Obligation Bonds (2018 Series A) & General Obligation Refunding Bonds (2018 Series B)

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Table of Contents

Executive Summary3
Security3
Use of Proceeds3
Rating Summary4
Outlook: Negative5
Update on Financial Performance and Liquidity6
 FY 2017 Financial Results6
 FY 2018 and FY 2019 Biennium Adopted Budget7
 FY 2018 Financial Operations8
 Midterm Budget Revisions for FY 20199
 Liquidity Position10
 GAAP Financial Statements10
 Fiscal Reforms Recently Passed by Connecticut General Assembly10
State Resource Base Update11
Conclusion14

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)
General Obligation Bonds (2018 Series A)	AA-	Negative	Assigned	\$250,000
General Obligation Refunding Bonds (2018 Series B)	AA-	Negative	Assigned	\$367,000
General Obligation Bond Anticipation Notes (2017 Series A)	K1+		Affirmed	\$400,000
General Obligation Bonds	AA-	Negative	Affirmed	\$14,438,169

Issuer: Connecticut Innovations, Incorporated ¹				
Series/Bond	Rating	Outlook	Action	Amount ('000)
State of Connecticut General Fund Obligation Bonds 2014 Series A	AA-	Negative	Affirmed	\$16,985

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 February 15, 2018

KBRA's long-term rating assessment is based on its review of the four KBRA rating determinants included in KBRA's 's [U.S. State General Obligation Rating Methodology](#) 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 A) and General Obligation Refunding Bonds (2018 Series B) 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 A Bonds will be used to finance various capital projects of the State and 2018 Series B Bonds will be used to refund a portion of the State's general obligation bonds on a current 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 \$878 million, or approximately 4.6% of current 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

- Structural imbalance in the State's General Fund operating budget for FY 2018 and FY 2019.
- 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 Taxable General Obligation reflects the structural imbalance in the State's General Fund operating budget for FY 2018 and FY 2019, the State's difficulty over the last several years in accurately projecting final and estimated income tax revenue levels and continued slow growth in other income tax and sales tax revenues.

KBRA's view of the financial condition of the State going forward is largely based on the ability and willingness of the State's General Assembly to take significant steps towards resolving the structural imbalance in the State's General Fund budget. KBRA recognizes that continued State revenue shortfalls and the need to adjust ongoing revenue expectations impacted budget negotiations for the FY 2018-FY 2019 biennium budget process and that the General Assembly will have to make difficult decisions to further balance FY 2018 and FY 2019 operations during an election year for state level office. Over the last three 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.

KBRA views the projected increase in the State's Budget Reserve Fund (BRF) to \$878 million, or approximately 4.6% of current FY 2018 General Fund expenditures, from certain unbudgeted income tax collections, as positive and views this level of reserves as providing increased protection against volatility in the State's revenue base. Also, in KBRA's view, the establishment of the Revenue Volatility Cap in the 2017 Budget Law will significantly reduce the budget volatility associated with budgeting final and estimated revenues going forward.

The State's adopted FY 2018-FY 2019 General Fund biennium budget is not structurally balanced based on use of a substantial level of non-recurring revenues and certain tax cuts that are scheduled to expire in FY 2020. In addition, KBRA views the adopted biennium budget as having limited room for budget adjustments on the expenditure side. Since the adoption of the budget at the end of October 2017, four months after the beginning of the FY 2018 fiscal year, General Fund revenue projections have been reduced based on

November 2017 and the January 2018 consensus revenue estimates, resulting in a projected General Fund deficit for FY 2018 of \$195 million (February 2018 OPM Letter) and impacting projections for FY 2019. On December 13, 2017, the Governor submitted a deficit mitigation plan to the General Assembly for FY 2018, which included options for both revenue and expenditure actions totaling over \$300 million. To date, the General Assembly has not taken action on this deficit mitigation plan. On February 5, 2018, the Governor presented his proposed mid-term budget revisions for FY 2019 to the General Assembly, which included \$235 million in revenue enhancements and a net \$65 million in expenditure increases. The Governor's midterm budget revisions for FY 2019 assume that action will be taken by the General Assembly on the Governor's deficit mitigation plan presented in December 2017.

In addition to the proposed midterm budget revisions, the Governor also presented a General Fund outyear budget projection report for FY 2020, 2021 and 2022. The budget gaps for the next three years projected by the Office of Fiscal Analysis (OFA) at the time of the adoption of the FY 2018-FY 2019 budget have been significantly reduced by the Governor's proposal to make permanent many of the tax cuts and revenue enhancements that were included in the adopted FY 2018-FY 2019 budget.

OPM has indicated that deliberations on the FY 2018 deficit mitigation plan, as well as the Governor's midterm budget revisions for FY 2019 are expected to continue throughout the legislative session with a scheduled adjournment date of May 9, 2018. It should be noted that, historically, the State's ability to make budget adjustments has been limited towards the end of the fiscal year.

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. Based on conversations with OPM, the intent of these changes 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. OPM states that the State is considering a number of different options for changes to TRS at this point. The Teacher's Retirement System Viability Commission is scheduled to release their report on the TRS by March 30, 2018. KBRA will continue to monitor these developments and will review the State's plan to restructure TRS as this plan becomes available.

Outlook: Negative

KBRA's Negative outlook reflects the State's ongoing difficulty in accurately projecting State revenues, the structural imbalance in the adopted FY 2018-FY 2019 biennium budget and the continued weakness in the State's economy. KBRA's view of the financial condition of the State going forward is largely based on the ability and willingness of the State's 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 trends in personal income tax collections 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 take actions necessary 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.

Update on Financial Performance and Liquidity

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

On February 8, 2017, the Governor presented his proposed FY 2018/FY 2019 biennium budget to the General Assembly. In KBRA's view, the Governor's proposed budget reflected a positive effort to partially restructure the State's finances by increasing allocation of costs to local governments based on contraction in the State's revenue base.

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. The adopted FY 2018-FY 2019 biennium budget as tightly balanced with limited room for budget overruns on the expenditure side. In KBRA's view, the adopted biennium budget is 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 for Teacher Retirement System pensions to local government

On the revenue side, the adopted FY 2018-FY 2019 budget reflected many of the same items in the Governor's proposed budget, including 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 hospital as supplemental state payments, thereby increasing federal Medicaid reimbursement and creating a financial benefit for both the State and the hospital industry. The budget also includes an increase in the State teachers' contribution to pension costs from 6% to 7% of annual salary.

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.

Based on KBRA's discussions with OPM, the risk areas on the expenditure side of the FY 2018-FY 2019 biennium budget include the challenge of achieving budgeted saving levels in the area of personnel expenditures, given the limits on layoffs included in the SEBAC agreement. Another risk is the ability of the

State to maintain compliance in staffing and provision of services related to certain legal consent decrees in the social service provision, given cuts in spending. OPM also noted that the tight budget limits the flexibility of the State to meet any unforeseen expenses

The Office of Fiscal Analysis (OFA) and OPM generally develops a projection of the impact of an adopted biennium budget beyond the biennium (Three Year Out report). Based on OFA assessment of the FY 2018-FY 2019 budget impact, the budget gap for FY 2020 is projected at \$1.9 billion and FY 2021 and FY 2022 is projected at \$2.7 billion and \$3.2 billion, respectively.

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 below, 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. The impact of these shortfalls will be discussed further in this report. These continued shortfalls 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.

State of Connecticut Consensus Revenue Estimates Growth Projections						
	May-2017		November-2017		January-2018	
	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%
Personal Income Tax						
Withholding	2.10%	2.10%	2.10%	2.20%	2.10%	2.20%
Final and Estimated	0.00%	1.00%	-1.50%	0.70%	-1.50%	0.70%
Sales Tax	2.90%	2.40%	1.20%	2.50%	1.30%	1.60%

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

FY 2018 Financial Operations

Based on its letter dated November 20, 2017, OPM is projecting a \$202.8 million deficit in the General Fund, slightly more than one percent of net General Fund appropriations for the fiscal year that began on July 1, 2017. The November 20 OPM letter reflects the adopted FY 2018-FY 2019 budget provisions and the November consensus revenue estimates, as shown above. The November 2017 revenue estimates result in General Fund revenues being revised downward by \$227 million compared to the adopted FY 2018-FY 2019 budget. The largest decline was in federal grants based on the final reconciliation process for payments for medical services for the second half of 2017. Net income tax revenues have been revised downward by 34.1 million and sales tax revenue has been revised downwards by \$70 million.

On December 13, 2017, the Governor submitted a deficit mitigation plan to the General Assembly for FY 2018, which included options for both revenue and expenditure actions totaling over \$300 million. Major revenue enhancements included an increase in the sales and use tax rate from 6.5% to 6.9% and increase in the real estate conveyance tax. The plan included a significant reduction in municipal aid, as well as cuts in a number of social programs. To date, the General Assembly has not taken action on this deficit mitigation plan.

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 16th consensus revenue estimates shown above, which includes modest shortfalls in federal grants due to reconciliation activities.

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 15 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 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 one-time payment of income taxes on 2008 hedge fund profits; these profits have been included in the State's income tax base since 2008.

Pursuant to the revenue volatility cap enacted as part of the 2017 Budget Law (FY 2018-FY 2019 biennium budget), final and estimated personal income tax collections in excess of \$3.15 billion are required to be transferred to the BRF. Based on OPM projections for FY 2018 for final and estimated payments, including these unbudgeted collections, it is required that \$665 million will be transferred to the BRF. This transfer will bring the balance in the BRF to \$878 million, or approximately 4.6% of current FY 2018 General Fund expenditures, which KBRA considers to be very positive.

OPM, based on its letter dated February 20, 2018, further projected a General Fund deficit from operations, of \$194.8 million, which reflects an improvement from January 2018. In KBRA's view, the State's current revenue projections, based on the January 2018 consensus revenue estimates, are fairly conservative, though there exists the possibility of further revisions as the fiscal year progresses. KBRA will continue to monitor the State's revenue performance and the impact on the State's financial operations.

Midterm Budget Revisions for FY 2019

On February 5, 2018, the Governor presented a status report on the biennium budget, as required by State statute, including detailed projections of revenues and expenditures and proposed mid term budget revisions for FY 2019. These midterm budget revisions reflect the impact of the January 2018 consensus revenue estimates on the FY 2019 budget and the need for increased spending for certain programs. The Governor's midterm budget revisions include \$235 million in revenue enhancements and a net \$65 million in expenditure increases. Revenue enhancements include elimination of the property tax credit under income tax statutes, increase of cigarette and cigar taxes and, repeal of sales tax exemption on non-prescription drugs. On the expenditure side, there are further reductions in municipal aid and increases representing adjustments from the 2017 labor agreement and funding for social service compliance costs. The Governor's midterm budget revisions for FY 2019 assume that action will be taken by the General Assembly on the Governor's deficit mitigation plan presented in December 2017.

The Governor proposed revenue enhancements for the Special Transportation Fund (STF) to increase funding for the Let's Go CT transportation initiative. These include increasing the gasoline tax by 7 cents over 4 years, imposing a new tire fee of \$3 beginning in FY 2019, accelerating transfer of the sales tax on new cars from the General Fund to the STF by two years and instituting statewide electronic tolling in FY 2023.

In addition to the proposed midterm budget revisions, the Governor also presented a General Fund outyear budget projection report for FY 2020, 2021 and 2022. As shown in the chart below, based on the Governor's outyear report, the budget gaps projected by OFA at the time of the adoption of the FY 2018-FY 2019 budget for the next three years have been reduced significantly. The future budget gaps are reduced based on the Governor's proposal to make permanent many of the tax cuts and revenue enhancements that were included in the adopted FY2018-FY 2019 budget as temporary fixes for the current biennium. 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.

General Fund Out Year Budget Projections (in millions)			
Enacted FY 2019 Budget	FY 2020	FY 2021	FY 2022
Revenue	17,510.1	17,612.9	17,753.5
Appropriations	19,708.5	20,548.0	21,187.9
Projected Deficit	(2,198.4)	(2,935.1)	(3,434.4)
Recommended Revisions	FY 2020	FY 2021	FY 2022
Revenue	18,708.6	18,870.3	19,045.4
Appropriations	19,552.7	20,375.2	20,988.7
Projected Deficit	(844.1)	(1,504.9)	(1,943.3)
Out Year Balance Improvement	1,354.3	1,430.2	1,491.1

Source: State of Connecticut Office of Policy and Management Rating Agency Presentation

OPM has indicated that deliberations on the FY 2018 deficit mitigation plan, as well as the Governor's Midterm Budget Revisions for FY 2019 are expected to continue throughout the legislative session with a scheduled adjournment date of May 9, 2018.

Liquidity Position

The State's liquidity position remains strong. As of December 30, 2017, the State's available cash was \$ 2.6 billion, and the common cash pool was \$ 1.4 billion. Since January 2018, the State's available cash has exceeded monthly projections due to the increased collections of final and estimated personal income taxes in that month, as discussed above. As of March 10, 2018, the State's available cash was \$3.7 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	December 30, 2017
Common Cash Pool	\$941.1	\$1,091.5	\$821.0	\$1,100.6	\$1,398.9
Total Available Cash	\$1,780.8	\$2,218.3	\$1,764.8	\$2,657.0	\$2,592.6

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

GAAP Financial Statements

The Office of the State Comptroller released the FY 2017 audited financial statement (CAFR) in December 2017. For FY 2017, the General Fund ended the year with a negative unassigned fund balance (accumulated GAAP deficit) of \$821.1 million, which reflects a decrease from the FY 2016 negative unassigned fund balance of \$998.9 million.

Fiscal Reforms Recently Passed by Connecticut General Assembly

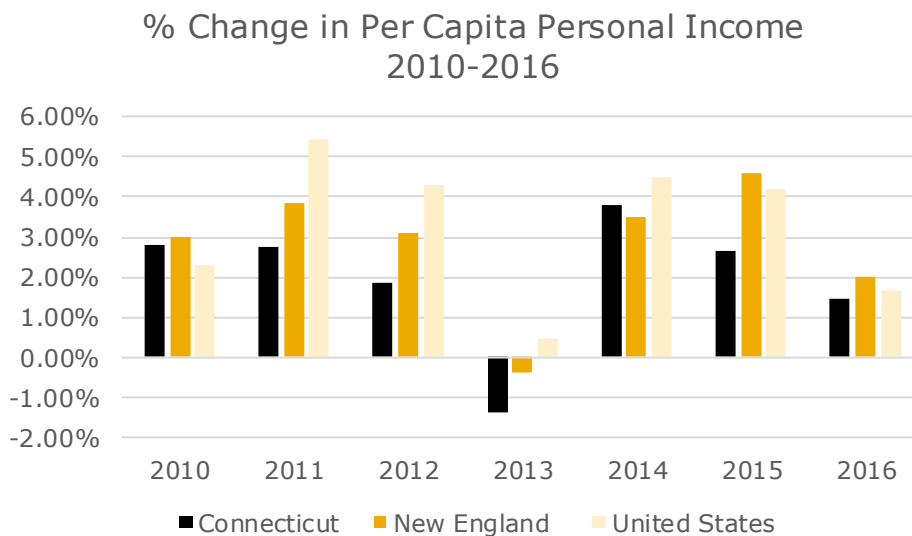
Statutes passed by the General Assembly as part of the FY 2018-FY 2019 budget process established a Municipal Accountability Review Board (MARB) to provide oversight and assistance to municipalities experiencing fiscal distress. Municipalities may apply for assistance or be designated by OPM as needing this support. The budget also includes approximately \$28 million in both FY 2018 and FY 2019 for financial assistance for municipalities designated as severely distressed and \$20 million in both FY 2018 and FY 2019 for municipal restructuring. The 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 Revenue 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 15% of net General Fund appropriations, up from 10%. The Revenue Volatility Cap requires 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. 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. Based on the January 2018 consensus revenue estimates, the level of final and estimated taxes for FY 2018 are estimated to exceed \$3.15 billion. In KBRA’s view, the establishment of this provision is a positive credit factor which will significantly reduce the budget volatility associated with budgeting final and estimated revenues going forward. The General Assembly also passed statutes that requires the Treasurer to include many of the statutory provisions discussed above in the pledge in any new GO or revenue

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.



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 2016 was \$69,311, which was 113.1% and 140.7% of New England and U.S. levels, respectively. 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. The State’s per capita income is still the highest in the nation, but the rate of growth has slowed. Since 2010, Connecticut’s per capita personal income has grown by 11.6% while the region and nation has seen higher growth rates. This is reflective of losses of many financial sector jobs in the State which have decreased by 3.8% 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.

	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%	
	2016 Personal Income (\$ Billions)	Chg. from 2010	2016 Per Capita Personal Income	Chg. from 2010	2016 Real Gross State Product (\$ Billions)	Chg. from 2010	2016 Real GSP Per Capita	Chg. from 2010
Connecticut	\$247.9	11.5%	\$69,311	11.6%	\$227.6	-2.1%	\$63,636	-2.0%
New England	\$903.3	19.9%	\$61,299	17.7%	\$870.6	6.0%	\$59,079	4.1%
United States	\$15,912.8	27.7%	\$49,246	22.3%	\$16,385.2	12.0%	\$50,708	7.2%
Connecticut as % of New England	N/A		113.1%		N/A		107.7%	
Connecticut as % of U.S.	N/A		140.7%		N/A		125.5%	

Source: US Census Bureau and Bureau of Economic Analysis

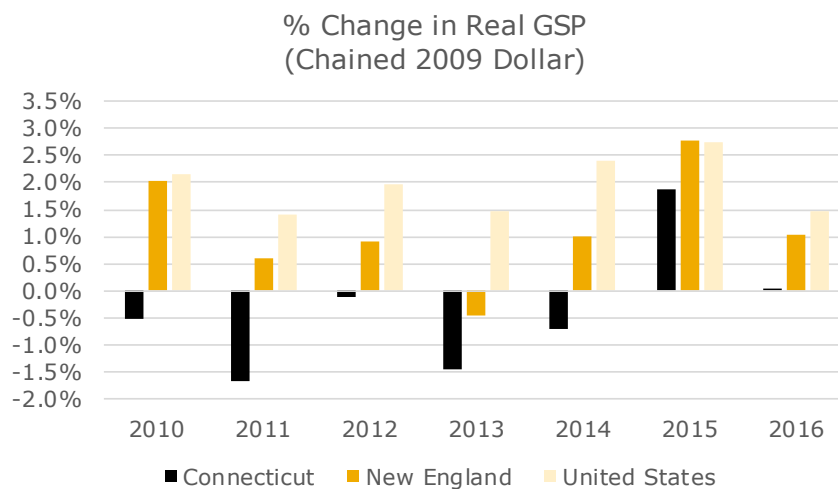
¹ Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs.

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

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

⁴ Percent of the population aged 25 and over.

Overall, Connecticut’s real GSP has decreased by 2.1% since 2010 while the GSP of the region and nations grew during the same period. Since 2014, the State’s real GSP has grown by approximately 2.0%.



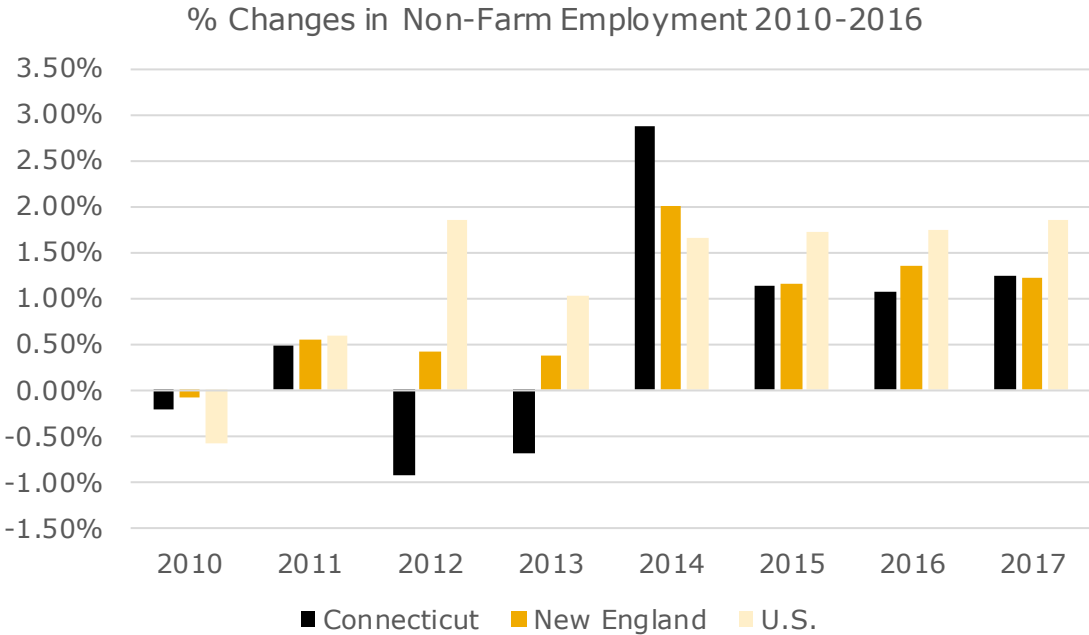
Source: Bureau of Economic Analysis

The State continues to have a fairly 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.

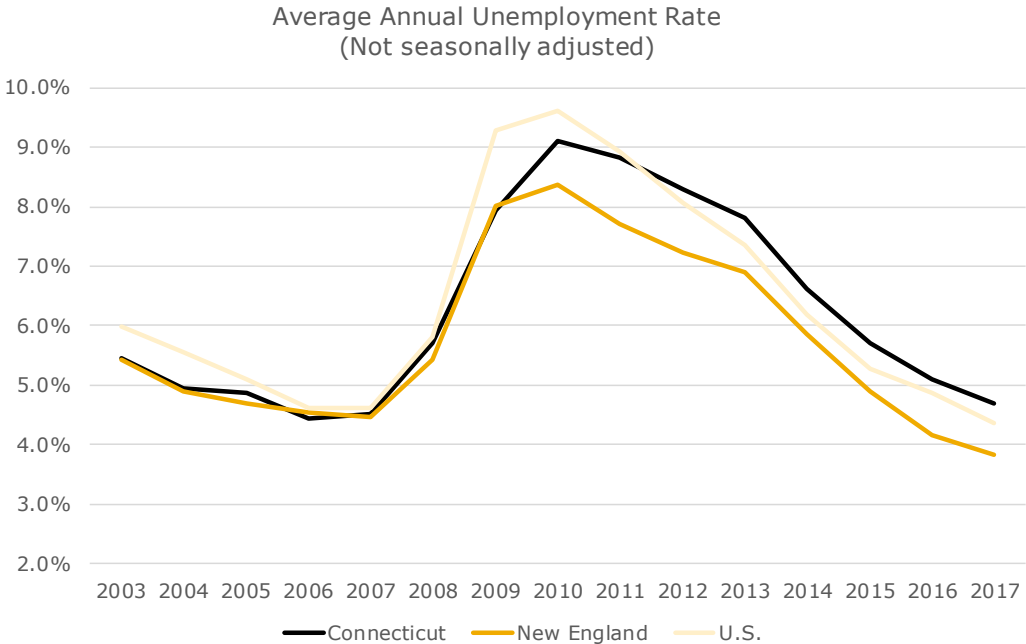
Since 2010, the State has also generally lagged the New England region and the United States in growth in total employment and reduction of the unemployment rate. Between 2010 and 2017, total State

employment grew 5.3%, as compared to 7.3% for the region and 10.3% for the US. Connecticut's lag in employment gains reflect the continued slow growth of the State's economy.



Source: Bureau of Labor Statistic

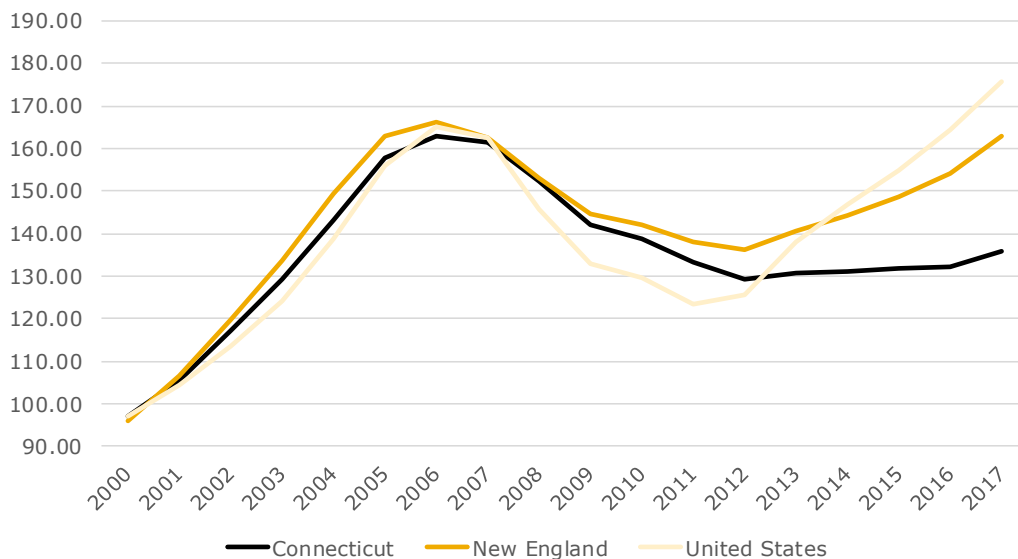
Despite the continued decline of the State's average unemployment rate from a peak of 9.1% in 2010 to 4.7% in 2017, the unemployment rate in Connecticut is still above that of the region and U.S., which averaged 3.8% and 4.4% in 2017, respectively.



Source: U.S. Bureau of Labor Statistics

The State's housing market began to recover in 2013, according to the Freddie Mac Home Price Index as of 2017, represents 83.4% of its pre-recession peak.

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



Source: Freddie Mac Home Price Index

Based on the foregoing, KBRA views the State of Connecticut’s resource base as consistent with a AA-rating.

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 A) and General Obligation Refunding Bonds (2018 Series B). 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.

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