

# State of Connecticut

## General Obligation Refunding Bonds (2016 Series G)

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## Executive Summary

Kroll Bond Rating Agency (KBRA) has assigned a long-term rating of **AA-** with a **Stable** outlook to the State of Connecticut's ("the State") approximately \$320.0 million General Obligation Refunding Bonds (2016 Series G). Additionally, KBRA has affirmed the long-term rating of **AA-** with a **Stable** outlook on the State of Connecticut's outstanding General Obligation Bonds. After the issuance of the 2016 Series G Refunding Bonds, the State's outstanding general obligation debt will total approximately \$18.3 billion.

KBRA has also affirmed the long-term rating of **AA-** with a **Stable** outlook on the State of Connecticut General Fund Obligation Bonds 2014 Series A issued by Connecticut Innovations, Inc. 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.

This rating is based on KBRA's [U.S. State General Obligation Rating Methodology](#). KBRA's rating evaluation of the long-term credit quality of state general obligation bonds focuses on the following four key rating determinants:

- Management Structure, Budgeting Practices and Policies,
- Debt and Additional Continuing Obligations,
- Financial Performance and Liquidity Position, and
- State Resource Base.

For further information and a full discussion of the key Rating Determinants, please see the [State of Connecticut General Obligation Bonds, Series 2015 A and Taxable Series 2015 A](#) report published on March 11, 2015. KBRA's [most recent rating report](#) was published on October 12, 2016.

## Security

The 2016 Series G Refunding Bonds 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 2016 Series G Refunding Bonds will be used to refund outstanding general obligation bonds of the State.

### Key Rating Strengths

- Current 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.
- Connecticut has the highest personal per capita income in the country at \$68,704 for calendar year 2015.
- Available cash balances provide good liquidity for operations, without utilization of external borrowing.

### Key Rating Concerns

- State's inability over the last two years to maintain balanced financial operations without significantly reducing the Budget Reserve Fund. In FY 2016, the Budget Reserve Fund will be drawn down to an amount equal to approximately 1.3% of FY 2016 General Fund expenditures.

- 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.
- State debt burden is high, compared to other states, on a per capita basis and as a percentage of personal income.
- Connecticut has a relatively high level of unfunded pension liabilities.

## **Rating Summary**

KBRA's assignment of the AA- rating and Stable outlook on the 2016 Series G Bonds reflects the State's inability, over the last two years, to maintain balanced financial operations without significantly reducing its Budget Reserve Fund (BRF). The drawdown of the BRF stems from the State's recent difficulty in accurately projecting capital gains tax revenue levels impacted by the performance of volatile financial markets and continued lack of significant growth in wage levels across the State, both of which has resulted in significant personal income tax revenue shortfalls during the fiscal year. The State closely monitors budget to actual performance on a monthly basis and both the Governor and the Legislature have taken action on a regular basis to balance financial operations, as needed, over the last two years, which KBRA views very positively. However, in both fiscal year 2015 and FY 2016, revenue shortfalls continued until the end of the fiscal year when, based on discussions with the State's Office of Policy and Management (OPM), options to cut spending were limited. In FY 2016, the State's BRF was drawn down from \$406.0 million, or 2.9% of FY 2016 General Fund expenditures, to \$235.6 million, or 1.3% of FY 2016 expenditures, which KBRA considers to be low given the progressive nature of the State's income tax structure.

Based on the May 2016 OPM projections, the General Fund deficit for FY 2017 was projected at approximately \$1 billion, which reflected shortfalls in personal income taxes of approximately \$835 million from the original FY 2017 budget. The General Assembly passed legislation in its May 2016 Special Session to make mid-term budget revisions for FY 2017 and the revised budget was estimated to result in a General Fund surplus of approximately \$200,000 for FY 2017.

On November 10, 2016, OPM and the State's Office of Fiscal Analysis (OFA) released consensus revenue estimates for FY 2017 – FY 2020. The November consensus revenue estimates for FY 2017 General Fund revenues reflect anticipated shortfalls in personal income taxes, sales and use taxes, and federal grants. In total, the consensus revenue estimates project that FY 2017 General Fund revenues have declined by 0.3%, since the State's midterm budget revisions. OPM also projects an additional \$29.5 million in net General Fund expenditure requirements for FY 2017. As a result, OPM projects a deficit in the State's General Fund of \$67.7 million, or 0.4% of projected FY 2017 General Fund expenditures. The State expects the currently projected FY 2017 deficit to be resolved through reduced hiring for discretionary positions, attrition, and additional cost efficiencies.

In KBRA's view, the State's revenue projections included in the revised FY 2017 budget continue to be somewhat optimistic given the State's recent revenue performance and the potential for volatility in financial markets. KBRA also notes that revenue shortfalls may continue until the end of the fiscal year, when the ability to cut spending is more limited. KBRA will continue to monitor the State's FY 2017 revenue performance and the impact on the State's financial operations. Additionally, KBRA will continue to monitor and assess the State's response to the ongoing budgetary pressure in FY 2018 and beyond.

The State closely monitors its budget to actual financial performance on a monthly basis. Under State statutes, the Governor may implement a certain level of expenditure reductions, or rescissions, without legislative approval, to maintain a balanced budget and may submit proposals to the General Assembly for

additional reductions if necessary. Over the last several years, the Governor has implemented expenditure reductions a number of times through this process and the General Assembly has taken action at the request of the Governor. If the monthly statement on financial performance indicates a projected General Fund deficit greater than 1.0% of total General Fund appropriations, the Governor is required to submit a report to the General Assembly that outlines a plan to reduce expenditures and prevent a deficit.

Based on the review of the four KBRA Rating Determinants included in the KBRA Methodology for rating State General Obligation debt, KBRA has determined that the ratings assigned to all of the four Rating Determinants remain consistent with previously designated levels. KBRA continues to assign an overall rating of AA- to the State's General Obligation Bonds. KBRA's Rating Determinant ratings are summarized as follows:

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

## **Outlook: Stable**

KBRA's **Stable** outlook on the State of Connecticut's General Obligation bonds reflects the expectation that the State will manage its finances to maintain balanced operations. The State has revised its revenue projections down for FY 2017 and it is KBRA's expectation that the Governor and Legislature will take action to make budget adjustments as needed. Connecticut remains reliant on capital gains tax revenues which are impacted by the performance of volatile capital markets. KBRA will continue to monitor both the trends in personal income tax collections and the State's progress in restructuring the expenditure side of their General Fund budget.

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

- Trend of structurally balanced budgets and actual financial results showing General Fund operating surpluses.
- Sustained increase in the 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:

- Continued pressure on personal income tax collections from volatility in the financial markets, further shifts in the State's employment base or decline in economic activity.
- Failure to take actions necessary to maintain budget discipline and balanced financial operations.
- Significant reliance on non-recurring revenues to balance the budget.

## **Financial Performance and Liquidity Position Update**

### **FY 2015 Results**

Based on the Annual Report of the State Comptroller for FY 2015, dated November 30, 2015, the State's General Fund ended FY 2015 with a deficit of \$113.2 million on a budgetary basis, which represented 0.6% of FY 2015 General Fund expenditures. The deficit was largely driven by higher than expected expenditures and lower than anticipated revenues. Total income tax collections were down \$113.2 million

which was 1.2% under budget. As discussed, OPM monitors budget performance on a monthly basis. Though revenue collections showed shortfalls throughout the fiscal year, increased shortfalls in income tax collections began to be reported in April of 2015, by which time options to cut spending were more limited. State statutes dictate that the BRF must be drawn down to fund the end of fiscal year deficit. To fund the FY 2015 deficit, the BRF was drawn down from \$519.2 million to \$406.0 million, or approximately 2.3% of FY 2015 General Fund appropriations. While KBRA views the magnitude of the FY 2015 deficit as minimal, it does represent a material drawdown of the State's Budget Reserve Fund.

Financial results for FY 2015 reflect actions taken by the Governor in November 2014 and January 2015 to cut spending under the gubernatorial authority to implement a certain level of expenditure reductions, or rescissions, without legislative approval, if necessary to maintain a balanced budget. FY 2015 operations also reflect action by the Legislature to address budget shortfalls and restore fiscal balance.

<b>Statement of Revenues, Expenditures, and Net Surplus for General Fund</b>				
<b>General Fund (budgetary modified cash basis) FY 2012-2015 (ending June 30)</b>				
<i>(in \$ millions)</i>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Operating Revenues	17,282.0	17,009.1 <sup>1,2</sup>	19,405.0	18,561.6
Operating Expenditures	17,419.7	16,980.0	19,025.7	18,781.6
Other Resources	24.5	28.7	18.7	76.5
<b>Net Operating Surplus (Deficit)</b>	<b>(113.2)</b>	<b>57.7</b>	<b>398.0</b>	<b>(143.6)</b>
Transfer (to) from Budget Reserve Fund	113.2	(248.5)	(177.2)	143.6
Reserved for Subsequent Years Expenditure	0	0.0	220.8	0.0
Reserved from Prior Year Resources	0	190.8	0.0	0.0
<b>Net Surplus (Deficit) June 30th</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Budget Reserve Fund</b>	<b>\$406.0</b>	<b>\$519.2</b>	<b>\$270.7</b>	<b>\$93.5</b>
<b>% of Operating Expenditures</b>	<b>2.3%</b>	<b>3.1%</b>	<b>1.4%</b>	<b>0.5%</b>
Source: Connecticut 2015 Annual Information Statement - February 2016				
<sup>1</sup> 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.				
<sup>2</sup> FY 2014 revenues do not include \$599 million of GAAP Conversion Bonds				

## Preliminary FY 2016 Results

Based on preliminary figures from the FY 2016 year-end financial report provided by the State Comptroller, OPM is projecting a \$170.4 million deficit in the General Fund or approximately 0.9% of FY 2016 General Fund expenditures. This outcome is largely the result of a significant shortfall in personal income tax collections totaling \$654 million, or 7.1% below the FY 2016 budget. These FY 2016 shortfalls stem from the State's difficulty in projecting the level of capital gains taxes to be collected as well as lower than expected receipts of withholding taxes, which reflects lower than anticipated wage growth in the labor force. The State's BRF will be drawn down to fund this FY 2016 deficit, reducing the balance from \$406 million to \$235.6 million, or 1.3% of FY 2016 expenditures, which KBRA considers to be low.

Based on the State Comptroller's report for FY 2016, actual General Fund revenues increased 2.9% in FY 2016, from FY 2015 levels, due to revenue enhancements; this level is significantly below the FY 2016 assumptions. Actual revenues from the withholding portion of income taxes grew by 3.4%, while actual revenues from the final and estimated portion dropped by 4.4%, despite an increase in rates for upper tax brackets.

In FY 2016, the economic growth rate (not reflecting revenue enhancements) for the withholding portion of personal income taxes was 2.8% and the economic growth rate for the final and estimated portion was a negative 7.6%, compared to FY 2016 budget projections of 5.2% and 7.1% growth in withholding and estimated and final collections, respectively. Sales tax revenues increased at an economic growth rate of 2.8% in FY 2016.

In FY 2016, personal income taxes accounted for 52% of the State's projected General Fund revenues. Historically, withholding taxes represent 60%-70% of total personal income tax collections with estimated and final payments representing the balance. Estimated and final personal income tax collections include taxes on capital gains, dividends and bonuses as well as estimated personal income tax payments. Approximately half of the estimated and final collections, or 15% of total personal income tax collections, represent taxes on capital gains, which is impacted by financial market performance and taxpayer decisions on the sale of securities. Since FY 2012, the personal income taxes from withholding have shown an annual increase of 3%-4%. Annual collections of estimated and final income tax collections have fluctuated significantly with annual declines of over 6%-7% in FY 2012 and FY 2014 and annual increase of 22% and 10% in FY 2013 and FY 2015, respectively. Capital gains tax collections reflect capital gains taken in the immediately preceding fiscal year. The State has found it difficult to project the level of estimated and final income taxes and actual collections have been lower than budgeted levels in four out of five years since FY 2012.

The FY 2016 year-end financial results for the State's General Fund reflect actions taken by the Governor and State Legislature during the fiscal year to restore fiscal balance. The financial market correction in August 2015 impacted the State's ability to meet projections for capital gains. The Governor instituted \$103.0 million in rescissions in September 2015. In November 2015, the State revised its General Fund revenue projections down, based on the November consensus revenue estimates, however actual revenues continued to be lower. Under the deficit mitigation statutes of the State, the Legislature passed legislation in a December 2015 special legislative session that reduced spending or increased revenues by a total of \$303.6 million. The December 2015 total package includes the September 2015 rescissions. Additional legislation was passed instituting the line item reductions to State agency budgets as well as delaying certain transfers to certain transportation funds and municipal revenue sharing funds. Revenues continued to be received under budget and legislative action was taken again in March 2016 for an additional \$200 million in spending cuts and revenue increases. A total of \$523.6 million in budget actions were taken by the Governor or Legislature in FY 2016. Since July 2011, the State workforce has been reduced by 4.6%.

## **Midterm Budget Revisions for FY 2017**

Based on the April consensus revenue estimates available at the time of the May 2016 OPM projections, the General Fund deficit for FY 2017 was projected at approximately \$1 billion, which reflected shortfalls in personal income taxes of approximately \$835 million from the original FY 2017 budget. Under the revised budget passed by the General Assembly in May 2016, General Fund spending was reduced by \$847.2 million, or 4.5%. The revised FY 2017 budget also included policy changes that were projected to result in approximately \$136.3 million in additional revenue above the most recent estimates. The midterm budget revisions addressed the shortfall by instituting deep spending cuts across most state agencies and programs, which the State had been implementing since April 2016. OPM states that the majority of these spending reductions was recurring with approximately half of the cuts related to reduction of personnel levels. The most significant reductions to spending in the revised FY 2017 budget include across the board reductions in funding for personnel services and related fringe benefits, reductions of block grants for higher education, and reductions in certain municipal and education related grants. The budget revisions also included a reduction in sales and use tax revenue transfers to municipal revenue sharing and special transportation funds. The State's pension contributions are fully funded under the revised FY 2017 budget.

## **Projected FY 2017 Financial Performance**

The November consensus revenue estimates for FY 2017 assume economic growth rates of 3.3% for the withholding component of personal income taxes and 3.1% for sales and use taxes. The projected growth rate for the estimated and final portion of personal income taxes is 2.9%, down from 4.8% in prior

estimates. In total, the consensus revenue estimates project that FY 2017 General Fund Revenues have declined by an additional \$45.9 million on a net basis, or 0.3%, since the State's midterm budget revisions. The November consensus revenue projections for FY 2017 General Fund revenues reflect an anticipated shortfall of \$66.5 million in personal income taxes and \$48.9 million in sales and use taxes. OPM also revised the State's projected health provider tax revenues upwards by \$18.1 million and added an additional \$80.0 million in legal settlement fees which were not previously included in General Fund revenue estimates.

OPM also projects an additional \$29.5 million in net General Fund expenditure requirements. As a result, OPM projects a deficit in the State's General Fund of approximately \$67.7 million, or 0.4% of projected FY 2017 General Fund expenditures. Based on conversations with OPM, the \$67.7 million deficit is expected to be resolved through reduced hiring for discretionary positions, attrition, and additional cost efficiencies.

In KBRA's view, the State's FY 2017 revenue projections remain somewhat optimistic given the State's recent revenue performance and the potential for volatility in the financial markets. KBRA also notes that, over the last few years, unanticipated revenue shortfalls continue until the end of the fiscal year, when the ability to cut spending is more limited and optimistic revenue projections could exacerbate this situation. KBRA will continue to monitor the State's FY 2017 revenue performance and the impact on the State's financial operations.

## **FY 2017 – FY 2020 Consensus Revenue Estimates and Financial Forecast**

The November consensus revenue estimates for FY 2017 – FY 2020 assume moderate growth in both personal income tax and sales and use tax revenues. Between FY 2017 and FY 2020, personal income tax revenues are expected to grow at an average annual growth rate of 3.5%. Sales and use tax revenues will initially decline from \$4.3 billion in FY 2017 to \$3.9 billion in FY 2018, due to the dedication of a portion of these revenues for both the municipal revenue sharing program and the Special Transportation Fund. By FY 2020, the non-dedicated portion of sales tax revenues is projected to be approximately \$4.2 billion. In total, the consensus revenue estimates project General Fund revenues to grow at an annualized rate of 1.2%.

Based on OPM's Fiscal Accountability Report, published on November 15, 2016, growth in General Fund fixed costs is projected to exceed General Fund revenue growth in FY 2018 by nearly \$1.3 billion. Fixed costs are comprised of debt service, employer pension contributions, retiree health contributions, Medicaid expenditures, and other entitlements. Due to changes in actuarial assumptions related to the State Teachers' Retirement System (TRS), employer contributions made by the State will increase by \$278.3 million in FY 2018. Employer contributions to TRS are projected to gradually increase in the following fiscal years. The State is also expected to fully repay the Series 2009 Economic Recovery Notes in FY 2018, which accounts for an additional \$178.7 million in scheduled debt service. The State's FY 2018 retiree health contributions and Medicaid expenditures are also projected to increase by \$206.3 million and \$246.7 million, respectively. Beyond FY 2018, however, the State's projected revenue and expenditure growth is expected to be more closely aligned. Given the State's constitutional requirement to adopt a balanced budget, KBRA expects that the State's FY 2018 – FY 2019 biennium budget will close the currently projected budget gap. KBRA will continue to monitor and assess the State's response to the ongoing budgetary pressure in FY 2018 and beyond.

## **Pension Funding Changes**

In November 2015, OPM released a report by the Boston College Center for Retirement Research which identified certain risks in the State's pension programs which potentially could increase the State's pension contributions significantly in the future. In early 2016, the Governor directed that a study group be convened to develop recommendations on how the funding for pension plans could be restructured and how budgeting uncertainty for pension funding could be reduced for the State Employee's Retirement System (SERS). OPM is currently in active discussions with the State Employees Bargaining Agent

Coalition (SEBAC) regarding these recommendations and parameters that will be used in the current valuation process. Based on the GASB 68 accounting and disclosure standards for defined benefit pension plans, as of June 30, 2014, SERS had a total pension liability of \$27.2 billion and a fiduciary net position of \$10.7 billion. This equates to an asset sufficiency ratio of 39.2%. The State expects to publish an updated actuarial valuation for SERS shortly.

In 2015, the Board of the Connecticut State Teachers' Retirement System (TRS) opted to reduce the TRS long-term investment return assumption from 8.5% to 8.0%. This change impacts the actuarially required funding requirements of TRS beginning in FY 2018. The State's actuarially required employer contribution is expected to increase from approximately \$1.0 billion in FY 2017 to nearly \$1.3 billion in FY 2018. The State's required employer contribution to TRS is estimated to reach \$1.4 billion by FY 2020. Based on GASB 68 accounting and disclosure standards for defined benefit pension plans, as of June 30, 2014, TRS had a total pension liability of \$27.1 billion and a fiduciary net position of \$16.1 billion. This equates to an asset sufficiency ratio of 59.5%. The TRS actuarial valuation based on GASB 68 accounting and disclosure standards does not reflect the plan's reduced long-term investment return assumption.

## **Education Funding Litigation**

On September 7, 2016, a state Superior Court ruled in the case titled Connecticut Coalition for Justice in Education Funding, et al, ruled that the State was spending more than constitutionally required on K-12 education and that the State must propose a plan to distribute its education funding on a more consistent basis among school districts. The State has filed an appeal with the State Supreme Court. OPM states that certain aspects of the ruling may be included in the proposed FY 2018 biennium budget but that overall spending for education would not increase.

## **State Resource Base Update**

In KBRA's view, the State economy continues to improve but still lags regional and national growth trends. Over the last decade, Connecticut's population growth rate has been below that of the New England region and the U.S. From 2010 to 2015, the State's population grew by 0.4%, as compared to 1.9% for New England and 3.9% for the U.S. Going forward, KBRA expects that Connecticut's population growth will continue to be slower than that for New England and the U.S.

Overall, the State's population has a high level of educational attainment at 38.3%, defined as the population ages 25 and over with a Bachelor's degree or higher and it ranks among the top 15% of states at 125.2% of the national level. Connecticut's age dependency ratio, which measures the nonworking population against the working population, remained steady at 59.0% from 2010 to 2015, indicating that the age concentration of the State's population remains relatively consistent. Connecticut's estimated poverty level grew 0.4% from 2010 to 2015 to 10.5% despite the increased per capita income.

Income levels, as measured by per capita personal income, have historically been the highest in the nation. Per capita personal income in 2015 was \$68,704, which was 114% and 148% of New England and U.S. levels, respectively. The State's high per capita personal income figure has historically been driven by the greater proportion of residents who work in high paying jobs in the finance, insurance, real estate, and certain manufacturing (such as defense) sectors. Despite the loss of a significant number of high-paying jobs since 2008, the State still has an above-average proportion of jobs in services, manufacturing and finance industries compared to the rest of the nation. As of August 2016, finance jobs comprised an estimated 7.9% of non-agricultural employment in the State, compared to 5.8% nationwide. KBRA notes that this elevated concentration of high paying jobs has resulted in rates of annual personal income growth within the State that have generally exceeded growth rates for the region and U.S. Historically, declines in personal income growth have generally been steeper in Connecticut than the region and the U.S. during periods of economic decline.

	Connecticut		New England <sup>1</sup>		CT as % of NE Avg	U.S.		CT as % of U.S. Avg
	2015	% Chg from 2010	2015	% Chg from 2010		2015	% Chg from 2010	
Population	3,590,886	0.4%	14,727,584	1.9%	<b>24.4%</b>	321,418,821	3.9%	<b>1.1%</b>
Age Dependency Ratio <sup>2</sup>	59.0%	0.3%	56.7%	0.7%		60.7%	1.8%	
Population with B.A. Degree or higher <sup>3</sup>	38.3%	2.8%	38.2%	2.7%	<b>100.2%</b>	30.6%	2.4%	<b>125.2%</b>
Poverty Level	10.5%	0.4%	11.2%	0.1%	<b>93.4%</b>	13.4%	-1.9%	<b>78.4%</b>
Personal Income (in billions)	\$246.7	19.8%	\$886.6	24.1%		\$14,945	20.4%	
Personal Income per capita	\$68,704	24.4%	\$60,200	21.8%	<b>114.1%</b>	\$46,498	15.8%	<b>147.8%</b>
Gross State Product (in billions)	\$258.5	11.2%	\$951.9	15.9%		\$17,830	21.8%	
GSP per capita	\$71,997	10.8%	\$64,634	13.8%	<b>111.4%</b>	\$55,474	17.2%	<b>129.8%</b>

Source: U.S. Census Bureau, U.S. Bureau of Economic Analysis

<sup>1</sup> New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

<sup>2</sup> Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs

<sup>3</sup> Percent of the population aged 25 and older

The State continues to have a diverse economic base. The State's Gross State Product (GSP), which measures a state's economic output, in 2015, was focused in finance, insurance and real estate services, manufacturing, and government sectors. Together, these areas represented 49.0% of the State's GSP in 2015, which is higher than 44.9% for the U.S. Manufacturing as a contributor to GSP continues to decline, and decreased by nearly one-third (33.5%) in recent years, to 10.5% in 2015 from 15.8% in 2007. The State cites increased competition with foreign countries and with other states as key factors contributing to this decline in manufacturing. Connecticut's GSP has increased annually since 2005, with the exception of two years. In 2008 and 2009, the State's GSP declined by 1.4% and 2.0%, respectively. KBRA notes that since 2009, the State's GSP growth has lagged that of New England and the U.S. In 2015, the State's GSP grew by 3.1% from the prior year compared to 3.8% for New England and 3.5% for the U.S.

In 2015, seventeen Fortune 500 companies were headquartered in Connecticut, including United Technologies Corporation, Cigna, Praxair, and Priceline Group. Included in the aforementioned 17 companies is General Electric Co. (GE) which announced in January of this year its plans to move its headquarters from Fairfield, CT to Boston, MA by 2018. This move would result in the relocation of 200 of the 800 employees at GE headquarters to Boston. However, the State notes that GE will continue to have a presence in Connecticut, with an estimated 5,000 employees at other General Electric divisions.

Over the past several decades, Connecticut's employment base has shifted significantly from manufacturing to service industries. In 2015, over 90% of the State's workforce was in non-manufacturing jobs, a significant increase from approximately 50% in the early 1950s. 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. In fiscal year 2014, the State ranked fourth in total defense contract amounts awarded and second in per capita dollars awarded. 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 September 2016, Governor Dannel Malloy announced that Sikorsky Aircraft would remain headquartered in the State for at least another 16 years, which is expected to add thousands of additional jobs to the local economy.

Although the State lags the New England region and the United States on various employment indicators, recent improvement in overall employment and a notable decline in the unemployment rate suggest an improving employment picture statewide. Connecticut's overall employment did not experience growth until 2014, unlike the rest of the New England region and the United States where overall employment began to increase in 2011. Between 2010 and 2015, total state employment grew 2.5%. The State's employment growth has been somewhat slower than the 4.1% growth for the region and 8.8% for the U.S. since 2010. Connecticut's recent employment gains reflect the continued recovery of the State's

economy and increased employment opportunities in industries such as insurance and leisure and hospitality. State management is projecting further employment growth in research and development (“R&D”) and management & business sectors. KBRA notes that, due to a revision in modeling assumptions, the Bureau of Labor Statistics retroactively republished employment and unemployment figures dating back to 2009. This could lead to inconsistencies in reported figures in KBRA’s published reports.

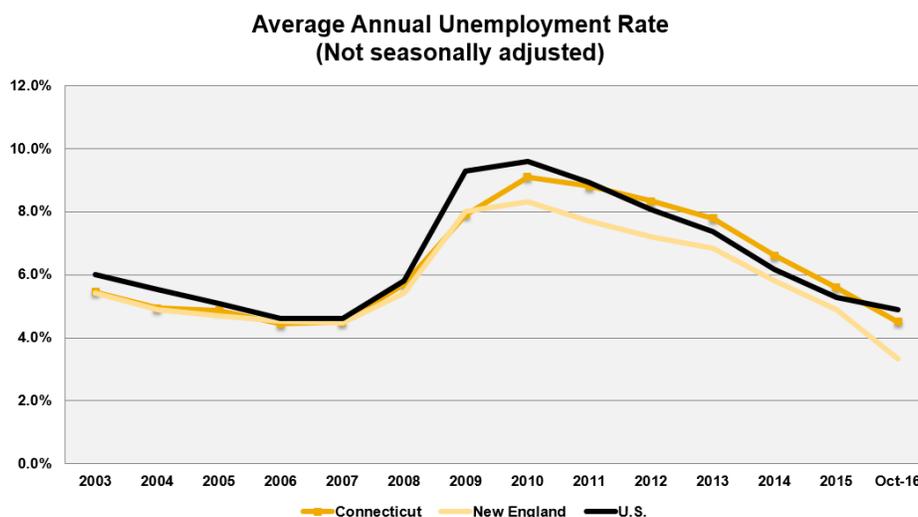
Non-Agricultural Employment (Not Seasonally Adjusted)						
	Connecticut		New England		U.S.	
<i>in thousands</i>	Employment	% Chg	Employment	% Chg	Employment	% Chg
2009	1,741.0		7,108.8		131,313.0	
2010	1,737.4	-0.2%	7,102.7	-0.1%	130,361.0	-0.7%
2011	1,746.0	0.5%	7,141.5	0.5%	131,932.0	1.2%
2012	1,730.7	-0.9%	7,173.1	0.4%	134,175.0	1.7%
2013	1,726.9	-0.2%	7,212.3	0.5%	136,381.0	1.6%
2014	1,761.6	2.0%	7,330.1	1.6%	138,958.0	1.9%
2015	1,781.5	1.1%	7,393.2	0.9%	141,865.0	2.1%
2016*	1,811.0	1.7%	7,563.6	2.3%	145,928.0	2.9%

Source: U.S. Bureau of Labor Statistics

\* October 2016 Estimates

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

Despite the continued decline of the State’s average unemployment rate from a peak of 9.1% in 2010 to 5.6% in 2015, the unemployment rate in Connecticut is still above that of the region and U.S., which averaged 4.9% and 5.3%, respectively. After declines in the early part of 2016, the State’s estimated unemployment rate increased to 5.6% in August 2016. Based on preliminary estimates for October 2016, the State’s unemployment rate has notably declined to 4.5%, compared to 4.1% for the New England region and 4.9% nationwide.



Source: U.S. Bureau of Labor Statistics

## Conclusion

KBRA has assigned a long-term rating of **AA-** with a **Stable outlook** to the State of Connecticut’s General Obligation Refunding Bonds (2016 Series G). Additionally, KBRA has affirmed the long-term rating of **AA-** with a **Stable** outlook on the State of Connecticut’s outstanding General Obligation Bonds. KBRA has also affirmed the long-term rating of **AA-** with a **Stable** outlook on the State of Connecticut General Fund Obligation Bonds 2014 Series A issued by Connecticut Innovations, Inc.

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