

# State of Connecticut General Obligation Bonds (2016 Series A)

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## Executive Summary

Kroll Bond Rating Agency (KBRA) has **assigned** a long-term rating of **AA** with a **Negative Outlook** to the State of Connecticut's \$550 million General Obligation Bonds (2016 Series A) ("2016 Series A Bonds"). KBRA has also **affirmed** the long-term rating of **AA** and revised the outlook from **Stable to Negative** on the State's outstanding General Obligation Bonds, excluding bonds backed by a letter of credit or liquidity facility. After issuance of the 2016 Series A Bonds, the State's outstanding general obligation debt will total approximately \$18 billion.

This rating is based on KBRA's [U.S. State General Obligation Rating Methodology](#), published on March 28, 2012. 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
- 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 November 13, 2015.

## Security

The 2016 Series A 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. The 2016 Series A Bonds will be issued as fixed rate bonds.

## Use of Proceeds

Proceeds of the 2016 Series A Bonds will be used for various capital projects 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 \$65,846 for calendar year 2014.
- Available cash balances provide good liquidity for operations, without utilization of external borrowing.

### Key Rating Concerns

- Uncertainty as to the State's ability to maintain balanced financial operations and sufficient reserves in light of reduced personal income tax revenues and increased difficulty in predicting income tax revenues related to the performance of financial markets.
- In FY 2015, the State's Budget Reserve Fund was drawn down to an amount equal to 2.3% of FY 2015 General Fund appropriations, a level KBRA considers to be low, given the volatility of the State's revenue base.
- State debt burden is high 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 revision of the State's outlook from **Stable** to **Negative** reflects uncertainty as to the State's ability to maintain balanced financial operations and sufficient reserves in light of reduced personal income tax revenues and increased difficulty in predicting tax revenues related to the performance of volatile financial markets. Since 2008, there has been a material shift in the personal income tax revenue base of the State which has reduced the level of income tax collections. Connecticut's economic recovery has been slow and since the recession, the State has lost a significant number of high paying finance jobs, replacing them with jobs in relatively lower paying sectors. Since FY 2012, annual growth in the withholding portion of personal income taxes has hovered around 3%-4%, as compared to annual growth in the 6%-7% range in periods prior to the recession.

Connecticut's revenue base is reliant on revenues generated by growth in the financial markets, specifically capital gains taxes. The stock market's sell off and level of volatility in the last six months have significantly impacted the State's revenue projections for FY 2016 and FY 2017. In KBRA's view, there are indications that income tax revenues may decline further, below the State's Office of Policy and Management's (OPM) current projections for FY 2016 and FY 2017. The level of these market generated income tax revenues has always been difficult to predict, however the State's relatively modest level of reserves provides less cushion to absorb market fluctuations than in pre-recession times. In FY 2015, the State's Budget Reserve Fund was drawn down to \$406 million or 2.3% of General Fund expenditures. The State budget continues to experience pressure on the expenditure side, including future increases in the level of its pension contributions.

In KBRA's view, the current administration of the State has demonstrated the ability and willingness to take action to balance its financial operations over the last few years. In KBRA's view, based on the Governors' Midterm budget proposal in February 2016, the State has recognized the need to make long-term structural changes to its General Fund budget to reflect its current economic and revenue realities. KBRA will continue to monitor both the State's progress in making necessary changes and the trends in its personal income tax collections over the FY 2016-FY 2017 biennium.

As with many states, the revenue base of the State's General Fund is largely comprised of economically sensitive revenues, including revenues from personal income, sales and corporate taxes. The slower than anticipated economic growth over the last several years, as well as the loss of high paying jobs, has created challenges in maintaining balanced financial operations. The volatility of the State's revenue base is impacted by its fairly progressive income tax as well as the relatively high level of capital gains tax revenues, which is reflected in the State's high wealth levels. The State revises its revenue forecasts three times a year through a consensus revenue forecasting process undertaken by OPM and the legislative Office of Fiscal Analysis (OFA). The State 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. KBRA expects that the State will continue to actively monitor revenue projections and budget performance.

Based on the review of the four KBRA Rating Determinants included in the KBRA Methodology for rating State General Obligation debt, KBRA has revised the Rating Determinant rating to AA- from AA for the third Rating Determinant, **Financial Performance and Liquidity Position**. The other three 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: AA- (revised from AA)
- State Resource Base: AA-

## **Outlook: Revised from Stable to Negative**

KBRA's revision of the State's outlook from **Stable** to **Negative** reflects uncertainty as to the State's ability to maintain balanced financial operations and sufficient reserves in light of reduced personal income tax revenues and increased difficulty in predicting of income tax revenues related to the performance of volatile financial markets. Connecticut remains reliant on revenues generated by activity in the financial markets, specifically capital gains taxes and the market's sell off and its level of level of volatility in the last six months has significantly impacted the State's revenue collections in FY 2016 and FY 2017. In KBRA's view, there are indications that revenues may decline below the State's current projections for FY 2016 and FY 2017. The negative outlook also reflects the State's relatively modest level of reserves which provides less cushions to absorb these market fluctuations than in pre-recession times. In FY 2015, the State's Budget Reserve Fund was drawn down to \$406 million or 2.3% of General Fund expenditures. The State budget continues to experience pressure on the expenditure side, including future increases in the level of its pension contributions. KBRA will continue to monitor both the trends in its personal income tax collections over the FY 2016-FY 2017 biennium 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:

- Several years of structurally balanced budgets and actual results showing General Fund operating surpluses.
- Restoration of the Budget Reserve Fund to a level equal to 10.0% of annual expenditures (State statutory Budget Reserve Fund target).
- 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 further shifts in the State's employment base, decline in economic activity or continued volatility in the financial markets.
- Failure to take actions necessary to maintain budget discipline and balanced financial operations.

- Significant decline in the level of the State's Budget Reserve Fund.
- 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 actual personal income tax revenues for FY 2015 were down \$113.5 million, or 1.2% under budget. Based on State statute, the Budget Reserve Fund was drawn down to fund the end of year deficit. As a result of this transfer, the Budget Reserve Fund 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 projected FY 2015 deficit as minimal, it does represent a material drawdown of the State's Budget Reserve Fund.

For FY 2015, total General Fund revenues increased at an economic growth rate of 1.8% from FY 2014. Personal income taxes collected as withholding taxes increased at an economic growth rate of 3.1% and taxes collected as estimated and final payments increased 9.9% in FY 2015. The economic growth rate for sales and use taxes was 3.9% in FY 2015.

<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
Net Operating Surplus (Deficit)	(113.2)	57.7	398.0	(143.6)
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

<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

### **FY 2016-FY 2017 Biennium Budget**

On June 3, 2015, the General Assembly passed a biennial budget bill for FY 2016 and FY 2017, which was subsequently amended in special session. The final adopted budget, as amended, included significant revenue enhancements and also modifications to spending cuts, as compared to the Governor's proposed budget. The budget included an increase of General Fund appropriations of 4.0% in FY 2016 and 3.0% in FY 2017. Total General Fund revenues were projected to grow at an economic growth rate of 4.0% in FY 2016 and 3.7% in FY 2017. Personal Income taxes and sales taxes were projected to grow at an economic growth rate of 5.2% and 3.2%, respectively, in FY 2016. The biennial budget projected a budget surplus of \$0.8 million in FY 2016 and \$2.5 million in FY 2017.

The FY 2016 - FY 2017 biennial budget also includes \$802.1 million in revenue enhancements for FY 2016 and \$664.4 million in revenue enhancements for FY 2017. Significant revenue changes include an increase to the top personal income tax marginal rate, limits on the use of deductions in the corporate tax and increases in the health provider tax. Under the new budget, significant portions of the sales tax revenues will be intercepted to fund an increased municipal aid program for property tax relief and to fund the "Let's Go CT" transportation initiative beginning in FY 2016. In both FY 2016 and FY 2017, the use of one-time revenues is minimal, representing 1.0% or less of revenues.

Under the adopted budget, significant expenditure reductions from current service levels were made in the General Fund in both FY 2016 and FY 2017, which reduces appropriations to State agencies and programs. Areas of spending cuts included the Medicaid program, Department of Social Services and other social service programs. The budget held K-12 school aid relatively flat and funding for the State's higher education system was reduced somewhat. The budget included the State's full actuarially required contributions for its pension funds. The budget also included approximately \$48 million in each year for the amortization of the remaining GAAP based fund deficit in the General Fund; this amortization is scheduled to commence in FY 2016.

## **FY 2016 Financial Performance**

Based on the monthly letter published by OPM dated February 19, 2016, which reflects operations through January 31, 2016, OPM is projecting a \$19.9 million General Fund deficit at the end of FY 2016. The February OPM projections reflect the January 15, 2016 consensus revenue estimates by OPM and the Legislature's Office of Fiscal Analysis (OFA), as required by statute. Based on the January 15 consensus revenue estimates, personal income tax revenues are projected by OPM to be \$264.4 million or 2.7% lower than originally budgeted in FY 2016. Sales and use tax are projected to be 2.7% higher than budgeted in FY 2016. Income tax revenues from withholding collections are close to budgeted levels but estimated and final income tax payments have been lower than anticipated to date in this fiscal year, which is related to stock market performance in the third quarter of FY 2015. Based on the January 15 consensus revenue estimates, the economic growth rate for General Fund revenues is projected at 1.9% in FY 2016 and 2.1% in FY 2017. The economic growth rate of personal income taxes from withholding taxes is projected to be 3.3% in both FY 2016 and FY 2017 and the economic growth rate of estimated and final taxes is projected to be 2.6% in FY 2016 and 2.2% in FY 2017. Estimated and final personal income tax collections include taxes on capital gains, dividends and estimated personal income taxes. The economic growth rate for sales and use taxes is 3.8% in FY 2016 and 3.9% in FY 2017.

OPM's projection of the \$19.9 million deficit also reflects significant action taken by the Governor and the Legislature to adjust the expenditure side of the General Fund budget in FY 2016. On September 18, 2015, the Governor made \$103 million in rescissions and the Legislature acted to make additional spending reductions in a December 2015 special legislative session for a total of \$323.5 million in expenditure reductions and revenue adjustments. The Governor presented a plan for these December reductions to the Legislature as part of a statutorily required Deficit Mitigation Plan. OPM states that action will be taken to balance operations in FY 2016, but also states that, depending on income tax performance, there is a possibility that FY 2016 would end with a modest operating deficit. In the event that the fiscal year ends in deficit, statutes require that the Budget Reserve Fund be drawn down to fund the deficit.

At the time of the last KBRA review in early November 2015, based on FY 2016 results to date and revenue revisions by both internal State and third party forecasters, OPM had reduced its projections for growth for personal income taxes from levels included in the adopted FY 2016 budget. The consensus revenue projections released by OPM and OFA on January 2016 essentially mirrored these November OPM revisions to revenue projections.

On February 25, 2016, the OFA issued a revenue update that further reduced the January 15, 2016 consensus revenue estimates for FY 2016 by \$200 million in personal income tax collections. OFA states that this reduction in income tax projection is largely driven by the continuing negative trend in the estimated and final income tax payments in the January 2016 collection period. Through January 2016, year to date estimated and final payments were 4% below last fiscal year at this time. Based on its February 25, 2016 report, the OFA is projecting that withholding income taxes will increase by 3% from FY 2015 levels in FY 2016 and by 2.8% in FY 2017. OFA is projecting that estimated and final income tax collections will decline by 2.5% for FY 2016 and will decline by approximately 1% in FY 2017. Based on these latest OFA revenue updates, OFA is projecting a FY 2016 deficit of \$266.1 million and the State Comptroller is projecting a FY 2016 deficit of \$219.9 million. Based on OFA's revised revenue projections for FY 2017, OFA is projecting that FY 2017 will end with a deficit of \$339.4 million. OFA's deficit projections assume passage of Governor's midterm budget adjustment proposal discussed later in this report. OPM has stated that it does not currently agree with these revised projections though it does recognize the negative trends in the estimated and final income tax collections and will continue to monitor these collections. Typically more than 50% of income tax collections are received after January 31.

In FY 2015 personal income taxes accounted for 53% of the State's 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 estimated personal income tax payments. Approximately half of the estimated and final 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, specifically in FY 2015 and FY 2016 to date.

The State of Connecticut's continuing slow recovery from the recent Great Recession has also challenged management's ability to accurately budget and grow revenues. As discussed further in this report, despite growth in statewide employment consistent with pre-recession levels, a lack of commensurate growth in wages continues to challenge the State's ability to grow its personal income tax revenues. Over the last several years, the growth in employment has been in mid- to lower-wage jobs, rather than higher wage jobs such as finance. Annual employment growth in two similar periods - FY 2004-FY 2008 and FY 2011-FY 2015 - was essentially the same at approximately 3.7%. However, wage growth in these respective periods was significantly different. The once prominent financial services industry in the State continues to consolidate across the tristate area and growth in these higher paying sectors in Connecticut has been limited. The financial impact of this shift in the State's employment profile has been a reduction in the annual growth rate for withholding taxes to around 3% a year compared to the 6%-8% annual increases prior to the recession. Since FY 2013, the collection of estimated and final income tax payments has fluctuated significantly, as discussed previously. OPM states that the State's ability to project personal income taxes generated by capital gains is impacted not only by financial market performance but by the level of capital gains held by investors, which has been diminished by market sell offs and changes in tax laws over the last several years. The level of capital gains tax collections has also been impacted by an increase in the sophistication of certain tax shelter strategies.

## **Governor's Midterm Budget Revisions for FY 2017**

On February 3, 2016, the Governor presented to the General Assembly a status report on the FY 2016-FY 2017 biennium budget. This midterm status report is statutorily required and includes updated revenue and expenditure projections and makes recommendations for revisions and adjustments for the second biennium budget year. This midterm budget proposal closes a budget shortfall of approximately \$560

million between the originally adopted budget for FY 2017 and the January 2016 consensus revenue estimates. This budget gap is driven primarily by declines in personal income taxes, specifically in estimated and final income tax payments. The projected operating deficit for FY 2017, based on the February 25, 2016 OFA revenue projections, is \$339.4 million. This OFA projection came out after the Governor's midterm proposal and has not formally been accepted by OPM.

The Governor's proposed midterm budget revisions addresses the projected shortfall by proposing a 5.75% cut across most state agencies and programs, extending the expenditure reductions made in FY 2016 under the December Deficit Reduction Plan into FY 2017 (\$91 million) and making approximately \$118 million in specific budget reductions. The agency-wide cuts would not be applied to certain areas of municipal aid, entitlements, and debt service and pension contributions. The Governor's proposal includes plans for elimination of over 1,000 positions through layoffs and attrition. As part of the process of making these cuts, the Governor is proposing certain procedural and administrative changes to agency budget process. Under the Governor's midterm budget proposal, FY 2017 is projected to end with a \$10.6 million surplus. The Governor's proposed budget recommendations are expected to be considered throughout the legislative session, which adjourns in early May of 2016. KBRA views favorably the Governor's action to address its budget shortfalls for FY 2017 and will continue to monitor revenue trends and budget implementation.

## **Development of Long-Term Approach for Maintaining Budget Balance**

OPM states that the Governor has put forth the need to develop a sustainable budget framework, based on the State's new economic and revenue reality, by restructuring the General Fund budget to achieve a 15% expenditure reduction across all agencies and programs before the end of FY 2018. OPM states that the 15% expenditure reduction would be achieved through service and workforce reductions, efficiencies and through negotiations with the labor unions. The State is currently in negotiations with its unions on labor contracts that expire this coming June 30.

OPM states that the development of a sustainable budget plan will include a restructuring of the state employees' and teachers' pension plans to moderate the rate of growth of these obligations and reduce future contribution requirements. For the state employees' SERS plan alone, the projected increase in future pension payments for Tier 1 SERS retirees under lowered investment return scenarios is significant. If all the plans' actuarial assumptions are met and the pension systems achieve the current assumed investment return of 8.0%, it is estimated that the State's actuarially required contribution (ARC) will rise steadily to \$3.1 billion by 2032 under the current plan. If actual annual investment returns are 5.5%, it is estimated that the ARC would potentially have to rise to \$6.7 billion in order to achieve full funding within the current closed amortization period ending in 2032. Last year, the State engaged the Center for Retirement Research at Boston College (CRR) to study the condition of the State's retirement systems. CRR has published a report recommending various changes to the actuarial assumptions of the State's multiple employer defined benefit pension plans. The Governor has appointed a Task Force made up of the Comptroller, the State Treasurer, OPM, and union representatives. The Task Force is scheduled to meet in late March to develop a solution to the State's pension contribution funding issue. KBRA views favorably the State's efforts for planning to address both its short-term and long-term fiscal challenges. KBRA will continue to monitor the State's efforts to address these challenges and assess the impact of specific programs on its financial operations.

## **Liquidity Position**

The State's liquidity position remains fairly strong. As of January 30, 2016, the State's available cash was \$2.1 billion and the common cash pool was \$751.6 million. The State's level of available cash at a given point in the fiscal year reflects the seasonality of cash flow and any year-to-date deficits or surpluses.

The common cash pool represents cash resources directly available on a daily basis to fund State operations. 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 has no plans to issue cash flow notes.

Based on the foregoing, KBRA has **revised** its view of Connecticut's financial performance and liquidity position as being consistent with an AA- Rating Determinant rating.

## **State Resource Base Update**

KBRA believes that the trends that Connecticut is experiencing as it continues to recover from the Great Recession is indicative of a longer-term shift from historically strong economic and wage growth. Over the last decade, Connecticut's population growth has been below the population growth rate for the New England region and the U.S. From 2006 to 2015, the State's population grew by 3%, as compared to 3.3% for New England and 7.6% for the U.S. Since 2011, Connecticut's population has remained essentially unchanged at 3.6 million residents. 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 38.0%, 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 126.2% of the national level. Connecticut's age dependency ratio, which measures the nonworking population against the working population, remained steady at 58.7% from 2010 to 2014, indicating that the age concentration of the state's population remains relatively consistent. Connecticut's estimated poverty level grew 0.7% from 2010 to 2014 to 10.8% 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 2014 was \$64,864, which was 114% and 141% 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. In 2014, finance jobs comprised 7.7% of non-agricultural employment in the State, as compared to 5.7% in the U.S. 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 exceed growth rates for the region and U.S. Historically, declines in personal income growth has generally been steeper than the region and the U.S. during periods of economic decline.

	Connecticut		New England <sup>1</sup>			U.S.		CT as % of U.S. Avg
	2014	% Chg from 2010	2014	% Chg from 2010	CT as % of NE Avg	2014	% Chg from 2010	
Population	3,596,080	0.5%	14,618,806	1.1%	<b>24.6%</b>	316,128,839	2.2%	<b>1.1%</b>
Age Dependency Ratio <sup>2</sup>	58.7%	0.0%	56.2%	0.1%		60.2%	1.3%	
Population with B.A. Degree or higher <sup>3</sup>	38.0%	2.5%	37.7%	2.2%	<b>100.8%</b>	30.1%	1.9%	<b>126.2%</b>
Poverty Level	10.8%	0.7%	11.7%	0.5%	<b>92.4%</b>	15.5%	0.2%	<b>69.7%</b>
Personal Income (in billions)	\$236.8	19.8%	\$849.5	18.9%		\$14,945	20.4%	
Personal Income per capita	\$65,864	19.2%	\$57,862	17.1%	<b>113.8%</b>	\$46,871	16.8%	<b>140.5%</b>
Gross State Product (in billions)	\$253.0	8.8%	\$924.9	12.7%		\$17,348	18.5%	
GSP per capita	\$70,353	8.3%	\$63,003	11.0%	<b>111.7%</b>	\$54,407	15.0%	<b>129.3%</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 and employment base. The State's Gross State Product (GSP) in 2014 was focused in finance, insurance and real estate services, manufacturing, and government sectors. Together, these four areas comprised 77.2% of the State's GSP in 2014, which is higher than the 71% for the U.S. Manufacturing as a contributor to GSP continues to decline, and decreased by nearly one-third (32.3%) in recent years, to 10.7% in 2014 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 Gross State Product (GSP), which measures a state's economic output, 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 2014, the State's GSP grew by 2.5% from the prior year compared to 3.5% for New England and 4.1% for the U.S.

KBRA views the State's employment base as also diverse. In 2015, seventeen "Fortune 500" companies were headquartered in Connecticut, including United Technologies Corporation (UTC), 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 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 2014, 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 federal fiscal year 2014, the State ranked fourth in total defense contract amounts awarded and second in per capita dollars awarded, by state. Major defense companies include UTC and its Pratt and Whitney Aircraft Division, and General Dynamics Corporation's Electric Boat Division.

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. Based on preliminary figures as of September 2015, total State employment has grown 3.4% since 2010 and 2.1% since the end of 2014 alone. The State's employment growth has been somewhat slower than the 4.2% growth for the region and 9.4% 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.

Over the last several years, the growth in employment has been in mid- to lower-wage jobs, rather than higher wage jobs such as finance. Annual employment growth in two similar periods - FY 2004-FY 2008 and FY 2011-FY 2015 - was essentially the same at approximately 3.7%. However, wage growth in these respective periods was significantly different. In the earlier period (FY 2004-FY 2008), average annual wage growth was a strong 16.9%. In the FY 2011-FY 2015 period, average annual wage growth was much lower at 5.6%, indicating that the same number of people were working but they were earning less. From March 2008 to February 2010, nearly one-half (47.4%) of the approximately 109,200 jobs lost in Connecticut were in higher-wage industries (annual wages greater than \$80,000). However, only 6.4% of the 102,500 jobs gained since February 2010 (through 2015) were in higher-wage industries, such as finance and insurance, information, technology and professional services. Most of the jobs gained were in lower- and mid-wage industries, with 37.1% and 56.5% of the jobs gained since February 2010, respectively.

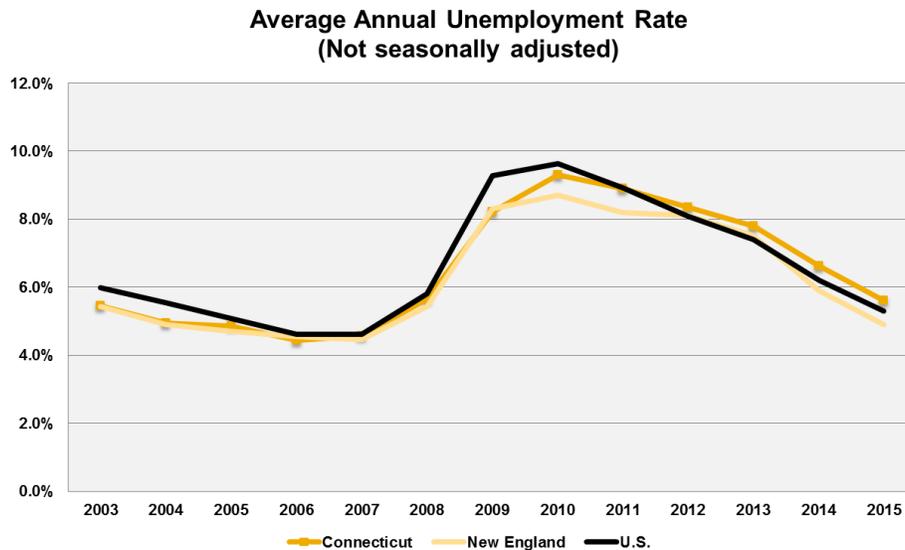
In comparison, the New England region and the U.S. also saw a large proportion of jobs lost from March 2008 to February 2010 in higher-wage industries (57.8% and 46.6%, respectively). In contrast, a greater proportion of jobs gained (since February 2010) were in the higher wage industries compared to Connecticut. New England and the U.S. saw 17.6% and 25.9% of the jobs gained, respectively, in higher-wage industries. In addition, a lower proportion of jobs gained for New England and the U.S. were in lower-wage industries (paying less than \$50,000), at 44.3% and 42.6%, respectively. Again, this is lower than the 56.5% for the State.

<b>Non-Agricultural Employment (Not Seasonally Adjusted)</b>						
<i>in thousands</i>	<b>Connecticut</b>		<b>New England</b>		<b>U.S.</b>	
	<b>Employment</b>	<b>% Chg</b>	<b>Employment</b>	<b>% Chg</b>	<b>Employment</b>	<b>% Chg</b>
2009	1,741.0		7,108.8		131,233.0	
2010	1,737.4	-0.2%	7,102.7	-0.1%	130,275.0	-0.7%
2011	1,744.9	0.4%	7,140.1	0.5%	131,842.0	1.2%
2012	1,730.4	-0.8%	7,169.4	0.4%	134,104.0	1.7%
2013	1,724.5	-0.3%	7,202.1	0.5%	136,393.0	1.7%
2014	1,760.4	2.1%	7,326.8	1.7%	139,042.0	1.9%
2015	1,692.7	-3.8%	7,256.5	-1.0%	141,865.0	2.0%

Source: U.S. Bureau of Labor Statistics

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 10.1% 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.



Source: U.S. Bureau of Labor Statistics

## Conclusion

KBRA has assigned a long-term rating of **AA** and **Negative Outlook** to the State of Connecticut's \$550 million General Obligation Bonds (2016 Series A). In addition, KBRA has affirmed the long-term rating of AA and revised the Outlook from **Stable** to **Negative** on the State's outstanding General Obligation Bonds, excluding bonds backed by a letter of credit or liquidity facility.

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