State of Connecticut

General Obligation Refunding Bonds (2016 Series B) and General Obligation Bonds (2016 Series C) (Variable Rate Demand Bonds)

Analytical Contacts:

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

Gopal Narsimhamurthy, Senior Analyst
gnarsimhamurthy@kbra.com, (646) 731-2446

May 19, 2016

Table of Contents

KBRA KROLL BOND RATING AGENCY

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 $501.4 million General Obligation Refunding Bonds (2016 Series B) and $300 million General Obligation Bonds (2016 Series C) (Variable Rate Demand Notes). More specifically, KBRA is not rating the demand feature on the 2016 Series C Bonds. KBRA has also **affirmed** the long-term rating of **AA** and **Negative Outlook** 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 B and Series C 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, 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 March 10, 2016.

Security

The 2016 Series B and 2016 Series C 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 B Bonds will be used to refund select maturities of the State's outstanding General Obligation debt. Proceeds of the 2016 Series C Bonds will be used to fund 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 $64,864 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 continues to view the financial condition of the State as under pressure, based on the difficulty in maintaining balanced financial operations and sufficient reserves in light of reduced personal income tax revenues and increased uncertainty in predicting tax revenues related to the performance of volatile financial markets. 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 been 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 volatility of the stock market in the last nine months has significantly impacted the State's revenue projections for FY 2016 and FY 2017 and has necessitated significant cuts in General Fund spending by the Governor and the Legislature. 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 a level equal to 2.3% of General Fund expenditures and the State is projecting that it will be further drawn down in FY 2016 to a level equal to less than 1% of 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 action taken by the General Assembly on May 14 in passing significant midterm budget revisions for FY 2017, 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 the Office of Policy and Management (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 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: AA-
- State Resource Base: AA-

Outlook: Negative

KBRA's **Negative Outlook** 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 level of market volatility in the last nine months has significantly impacted the State's revenue collections in FY 2016 and FY 2017. The negative outlook also reflects the State's relatively modest level of reserves, which provides less cushion to absorb these market fluctuations than in pre-recession times. The State has stated that it is probable that the Budget Reserve Fund will be drawn down to $147 million or less than 1% of General Fund expenditures by the end of FY 2016. 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 collected in FY 2015 were 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.

Statement of Revenues, Expenditures, and Net Surplus for General Fund General Fund (budgetary modified cash basis) FY 2012-2015 (ending June 30)				
(in $ millions)	**2015**	**2014**	**2013**	**2012**
Operating Revenues	17,282.0	17,009.1 [1,2]	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
Net Surplus (Deficit) June 30th	**$0**	**$0**	**$0**	**$0**
Budget Reserve Fund	**$406.0**	**$519.2**	**$270.7**	**$93.5**
% of Operating Expenditures	**2.3%**	**3.1%**	**1.4%**	**0.5%**
Source: Connecticut 2015 Annual Information Statement				

[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 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

In FY 2016, the State has revised the General Fund revenue projections at several points. Based on the monthly letter published by OPM dated February 19, 2016, OPM projected a $19.9 million General Fund deficit at the end of FY 2016, which reflects the January 15, 2016 consensus revenue estimates jointly issued by OPM and the OFA. Based on these January 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.

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. 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, as part of a statutorily required deficit mitigation plan

Based on its letter dated May 1, 2016, OPM is projecting a $259.1 million deficit in the General Fund. This update is based on the April consensus revenue estimates published on April 29, 2016 and reflects continuing unanticipated declines in personal income taxes. Based on the April consensus estimates, total personal income tax revenues for FY 2016 are projected to decline by $559.4 million, or 5.7% lower than originally budgeted. The projected level of personal income taxes for FY 2016 represents a 1.4% increase from actual personal income tax revenues received in the General Fund in FY 2015. FY 2016 General Fund expenditures are projected to be $170 million below the original budget. The May 1 projections reflect spending cuts under the deficit mitigation plan passed by the Legislature in March. Administrative actions continue to be taken to reduce the current budget deficit, including layoffs, hiring limitations and contract cancellations. OPM states that, while the State will continue to implement spending cuts, it is probable that the Budget Reserve Fund will be drawn on to fund the currently projected FY 2016 deficit, given the limited time remaining in the fiscal year. Assuming the BRF was drawn on to fully fund the currently projected deficit, the Budget Reserve Fund would end the fiscal year at $147 million or 0.8% of FY 2016 General Fund expenditures.

For FY 2016, personal income tax revenues from withholding were originally budgeted to increase 5.2% over FY 2015 levels; actual growth for FY 2016 is currently projected at 3.3%. Personal income taxes from final and estimated collections were originally budgeted to increase by 7.1%. Actual collections from final and estimated income taxes are currently projected to decline by 5.6%. OPM states that this decline in FY 2016 in final and estimated taxes is due to due to declines in capital gains taxes paid by the State's largest income taxpayers. The State has found it difficult to project the level of estimated and final income taxes as actual collections have been lower than budgeted levels in four out of five years since FY 2012, specifically in FY 2015 and FY 2016.

Governor's Midterm Budget Revisions for FY 2017

Based on the April 2016 consensus revenues estimates, the General Fund deficit for FY 2017 is projected at approximately $1 billion, which reflects declines in personal income taxes of $835 million under the original FY 2017 budget. On May 13, 2016, the General Assembly passed legislation implementing mid-term budget revisions for FY 2017, which closes this budget gap and ends the fiscal year with a minimal surplus of $.2

million. Under the FY 2017 revised budget, personal income taxes from withholding are projected to increase 3.3% while revenues from final and estimated collections are projected to increase 2%.

The adopted midterm budget revisions addresses the shortfall by instituting deep spending cuts across most state agencies and programs, which the State has been implementing since April. OPM states that the majority of these spending reductions are recurring with approximately half of the cuts related to reduction of personnel levels. The adopted revisions include plans for elimination of positions through layoffs and attrition and also include cuts in Medicaid spending, aid to municipalities, higher education programs and the State's transportation program. Overall, the General Fund expenditures were reduced 4.4% through these budget revisions. The state's pension contributions are fully funded under the FY 2017 budget. The FY 2017 budget includes no tax increases.

KBRA recognizes that the State's unanticipated revenue shortfalls have been significant and views favorably the decisive actions of the Governor and General Assembly to restore balance to the operating budget.

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 exceeded growth rates for the region and U.S. Historically, declines in personal income growth have generally been steeper than the region and the U.S. during periods of economic decline.

	Connecticut		New England[1]			U.S.		
	2014	% Chg from 2010	2014	% Chg from 2010	CT as % of NE Avg	2014	% Chg from 2010	CT as % of U.S. Avg
Population	3,596,080	0.5%	14,618,806	1.1%	**24.6%**	316,128,839	2.2%	**1.1%**
Age Dependency Ratio[2]	58.7%	0.0%	56.2%	0.1%		60.2%	1.3%	
Population with B.A. Degree or higher[3]	38.0%	2.5%	37.7%	2.2%	**100.8%**	30.1%	1.9%	**126.2%**
Poverty Level	10.8%	0.7%	11.7%	0.5%	**92.4%**	15.5%	0.2%	**69.7%**
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%	**113.8%**	$46,871	16.8%	**140.5%**
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%	**111.7%**	$54,407	15.0%	**129.3%**

Source: U.S. Census Bureau, U.S. Bureau of Economic Analysis
[1] New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont
[2] Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs
[3] Percent of the population aged 25 and older

The State continues to have a diverse economic 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.

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.

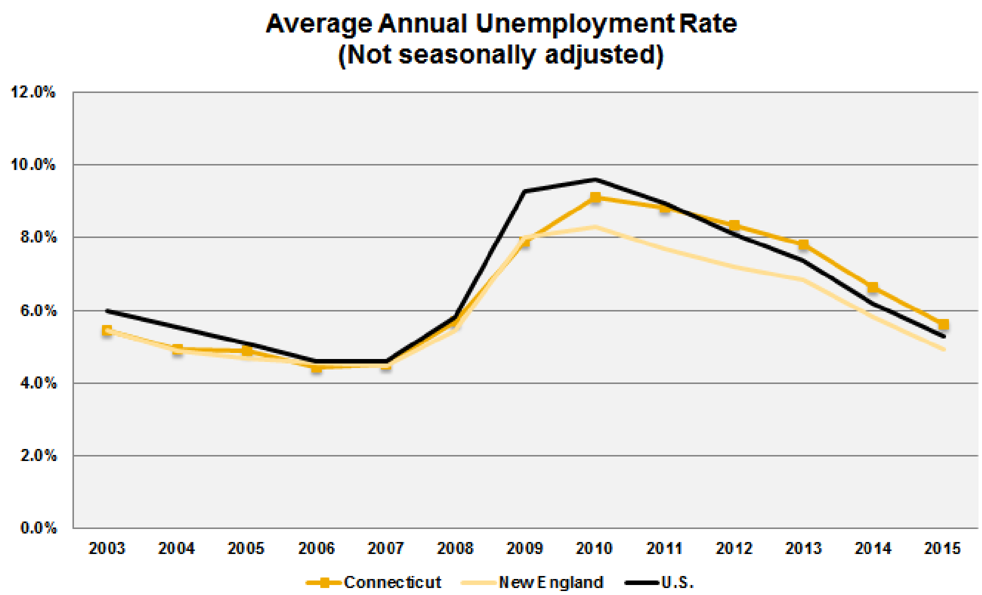
Over the past several decades, Connecticut's employment base has shifted significantly from manufacturing to service industries. In 2014, over 90% of the State's workforce was in non-manufacturing jobs, a significant increased from approximately 50% in the early 1950s. KBRA notes that the defense industry, 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 is 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 State 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 (BLS) 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.	
in thousands	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]	1,746.0	0.5%	7,141.5	0.5%	131,932.0	1.2%
2012 [1]	1,730.7	-0.9%	7,173.1	0.4%	134,175.0	1.7%
2013 [1]	1,726.9	-0.2%	7,212.3	0.5%	136,381.0	1.6%
2014 [1]	1,761.6	2.0%	7,330.1	1.6%	138,958.0	1.9%
2015 [1]	1,781.5	1.1%	7,393.2	0.9%	141,865.0	2.1%

Source: U.S. Bureau of Labor Statistics
[1] BLS employment estimates revised since KBRA's last report
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.



Source: U.S. Bureau of Labor Statistics

Conclusion

KBRA has assigned a long-term rating of **AA** and a **Negative Outlook** to the State of Connecticut's $501.4 million General Obligation Refunding Bonds (2016 Series B) and $300 million General Obligation Bonds (2016 Series C), (Variable Rate Demand Notes). In addition, KBRA has affirmed the long-term rating of **AA** and **Negative Outlook** on the State's outstanding General Obligation Bonds, excluding bonds backed by a letter of credit or liquidity facility.