

# State of Connecticut Special Tax Obligation Bonds Transportation Infrastructure Purposes, 2018 Series A

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## **Executive Summary**

Kroll Bond Rating Agency (KBRA) has taken the following action relating to the State of Connecticut’s Special Tax Obligation Bonds.

<b>Ratings</b>			
<b>Issuer: State of Connecticut</b>			
<b>Series/Bond</b>	<b>Rating</b>	<b>Outlook</b>	<b>Action</b>
Special Tax Obligation Bonds, Transportation Infrastructure Purposes, 2018 Series A	AA+	Stable	Assigned
Special Tax Obligation Bonds, Transportation Infrastructure Purposes	AA+	Stable	Assigned
Second Lien Special Tax Obligation Bonds, Transportation Infrastructure Purposes	AA+	Stable	Assigned

KBRA’s long-term rating assessment is based on its review of the four KBRA rating determinants included in KBRA’s ‘s [\*\*U.S. Special Tax Revenue Bond Rating Methodology\*\*](#) KBRA has assigned the following Rating Determinant ratings:

- Legal Framework: AAA
- Nature of Special Tax Revenues: AAA
- Economic Base and Demographics: AA-
- Revenue Analysis: A+
- Coverage and Bond Structure: AA+

## **Security**

The Senior Bonds are secured by a first lien on Pledged Revenues deposited into the State’s Special Transportation Fund (STF). The Second Lien Bonds are secured by Pledged Revenues on a subordinate basis to the Senior Bonds. Pursuant to Public Act 84-254 of 1984 (Act), both Senior and Second Lien Bonds are payable prior to use of pledged revenues for operations of the STF. Pursuant to the Act, all amounts necessary to pay debt service on both Senior and Second Lien Bonds are deemed appropriated from pledged revenues and no further approval of the General Assembly is required. Both the Senior and Second Lien Bonds are also secured by debt service reserve funds funded to combined maximum annual debt service.

Pledged revenues consist of taxes, fees and charges and other receipts credited to the STF. These revenues include motor fuel taxes, oil company taxes, a portion of the State’s general retail sales taxes, motor vehicles receipts, motor vehicle related licenses, permits and fees, sales taxes imposed on casual sales of motor vehicles, certain federal transportation related revenues (including federal subsidy payments relating to Build America Bonds (BABs) and interest income. The pledged revenues become subject to lien for payment of debt service when received by the State.

## **Use of Proceeds**

Proceeds of the 2018 Series A Bonds will be used to fund various costs of the State’s transportation infrastructure program.

### Key Rating Strengths

- FY 2017 pledged revenues provide MADS coverage after this issuance of 2.4x. Based on projected revenues and planned future debt issuance through 2022, debt service coverage is at least 2.3x.
- State covenant to maintain 2x coverage of debt service from pledged revenues.
- After payment of debt service, pledged revenues are used to fund the operating costs of the State's transportation system, including State Department of Transportation (DOT) and State Department of Motor Vehicles (DMV) operations.
- Strong additional bonds test requiring 2x MADS coverage by historical revenues.
- Fully funded debt service reserve funds.

### Key Rating Concerns

- Substantial increase in Special Tax Obligation debt as State plans to issue \$3.7 billion over the next five years.
- Pledged revenues are sensitive to economic fluctuations including changes in oil prices.
- State delayed or reduced sales tax portion of pledged revenues in FY 2016 and FY 2017 due to State budget stress, raising possibility of further reductions in the future.
- State is under pressure to increase funding for the Special Transportation Fund to support transportation operations and current capital program.

## Rating Summary

KBRA's rating is based on strong coverage of maximum annual debt service (MADS) from historical revenues, the State's coverage covenant to maintain 2x coverage of debt service from pledged revenues and a legal framework that provides strong bondholder protection in the form of a fully funded debt service reserve fund and a strong 2x additional bonds test.

KBRA views debt service coverage as very strong with FY 2017 pledged revenues providing MADS coverage after this issuance of 2.4x. Based on projected revenues and planned future debt issuance through 2022, coverage continues to be at least 2.3x. The State plans to continue to increase Special Tax Obligation (STO) bond issuance significantly to fund the State's Let's Go CT! transportation initiative and other needs and projects issuance of approximately \$3.7 billion over the next five years. It is KBRA's view that debt service coverage will continue to be strong because pledged revenues, after payment of STO Bond debt service, is needed to fund the operating costs of the State's transportation system, including the State Department of Transportation (DOT) and the State Department of Motor Vehicles (DMV) operations.

KBRA views the pledged revenues as providing a strong source of security for the Bonds. While revenues mostly relate to transportation, sources include a broad diversity of taxes and fees. The largest sources of pledged revenues include the motor fuels tax, the oil companies tax and the motor vehicles receipts, which together represent 69% of pledged revenues. Of these sources, the motor fuels taxes and the motor vehicles receipts have generally shown slow but consistent growth. The oil companies tax declined 36% between 2014 and 2017 due to the extended decline of oil prices. Overall, pledged revenues have increased at an average annual rate of 2.5% from 2013 to 2017. Generally, the rate of growth of pledged revenues has been impacted by increasing use of more fuel-efficient cars, lower fuel prices and the relatively slow growth in the State's economy since 2008.

As part of the ongoing State transportation infrastructure initiative, beginning in FY 2016, a specific portion of the state's general retail sales tax revenue (.5% of total sales tax collections as of FY 2018) was allocated for deposit into the STF as a pledged revenue source. In 2017, as part of the FY 2018-FY 2019 biennium budget legislation, an additional allocation of sales tax revenues generated by dealer car sales was approved

with a five-year phase in starting in 2021. In FY 2016 and FY 2017, State General Fund budget stress led to delays in and reduction of allocated State retail sales tax revenues to the STF. The ongoing budget stress in the State's financial operations raises the possibility that sales tax allocations could be reduced in the future. Actions taken in FY 2016 and FY 2017 did not cause the State to breach the State's debt service coverage covenant. KBRA recognizes the passive nature of the pledged revenues and the potential for volatility in certain pledged revenues; however, in KBRA's view, these risks are mitigated by the State's coverage covenant to maintain 2x debt service coverage from pledged revenues in every fiscal year.

KBRA views the legal and statutory framework underlying the issuance of the State's Special Tax Obligations as providing strong bondholder protection. As of January 1, 2018, the State had \$4.80 billion of Special Tax Obligation Bonds outstanding. This includes \$4.62 billion of Senior Bonds and \$186.5 million of Second Lien Bonds. Under the Senior Indenture and Second Lien Indenture, the State covenants to provide pledged revenues in each fiscal year in an amount equal to at least 2x the aggregate debt service on all Bonds. KBRA considers the existence of the State covenant as very positive and views the required 2x coverage level as strong. Pursuant to authorizing legislation and both the Senior and Second Lien Indentures, and subject to the State's 2x coverage covenant, the State may limit reduce or substitute pledged revenues only if projected revenues meet or exceed the projected expenses of the STF for the ensuing fiscal year based on the State's budget. Under the Senior and Second Lien Indenture, additional Bonds may be issued if historical pledged revenues deposited into the STF is equal to 2x combined principal and interest requirements on outstanding and proposed Senior and Second Lien Bonds for the current and each succeeding fiscal year (which includes MADS), which KBRA views as a conservative test. Under the Second Lien Indenture, the additional bonds test requires same 2x coverage requirement based on combined Senior and Second Lien debt service. Given that the Second Lien Indenture includes the same State coverage covenants as the Senior Indenture, the additional bonds test requires coverage of combined Senior and Second Lien debt service and there is a relatively small amount of Second Lien debt outstanding, KBRA assigns the same rating to the Senior and Second Lien Bonds. The outstanding Second Lien Bonds mature in 2022.

## **Outlook: Stable**

The **Stable** Outlook reflects KBRA's expectation that annual debt service coverage on Senior and Second Lien Bonds will continue to be at least 2x, based on the State's coverage covenant and the utilization of pledged revenues after debt service to fund the operating costs of the State's transportation program. The **Stable** Outlook also reflects the security provided by the fully funded debt service reserve fund.

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

- Further reduction in volatility of pledged revenues.
- A sustained trend of significantly higher annual debt service coverage.

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

- Failure of the State to maintain 2x annual debt service coverage under its coverage covenant.
- Increased volatility in pledged revenues.

## **Key Rating Determinants**

### **Rating Determinant 1: Legal Framework**

KBRA views the legal and statutory framework underlying the issuance of the State's Special Tax Obligations as providing strong bondholder protection. As of January 1, 2018, the State had \$4.80 billion of Special Tax Obligation Bonds outstanding. This includes \$4.62 billion of Senior Bonds and \$186 million of Second Lien Bonds. All outstanding Bonds are fixed rate with no derivative exposure. The State established the Second Lien Bond Indenture to enable issuance of variable rate demand bonds but have since refunded the variable rate obligations with fixed rate debt. The State has stated that it currently has no plans to issue variable rate STO Bonds.

In 2015, the General Assembly passed legislation that established the STF as a perpetual fund and stated that, once funds are deposited in the STF, these funds can only be used for transportation purposes. In the State's Transportation Finance Panel's final report, published in January 2016, it was recommended that a constitutional amendment providing protection for funds in the STF be enacted. In the report, it is stated that this action would assist in securing the public support needed to proceed with the Governor's major transportation initiative, Let's Go CT!

Under State law, the Connecticut Constitution can be amended with legislative approval (three-quarters vote), and then voter approval in a general election. If such a joint resolution fails to win a three-quarters vote in each house but obtains a majority, it must receive a majority in each house during the next legislative session before being submitted to the voters. An amendment that wins a majority in the voter referendum is enacted. The full legislature approved the proposed constitutional amendment in December 2015, but did not generate the super majority needed to place the issue on the ballot at that point. In June 2017 the measure achieved approval needed to go to the voters; and the constitutional amendment will be put to the voters on the November 2018 ballot.

Under State statutes, consensus revenue estimates for the State's General Fund and Special Transportation Fund, covering the current biennium and the next three fiscal years, are developed by Office of Policy and Management (OPM) and the Office of Fiscal Analysis (OFA) in November, January and April of the fiscal year. Also by statute, OPM is required to provide the State Comptroller with a letter with monthly updates to revenue and expenditure projections for the General Fund and the Special Transportation Fund in the current fiscal year, along with projections for end of fiscal year surplus or deficits. In addition, on the first of the month, the State Comptroller prepares a monthly letter on financial performance, which is based on OPM's letter.

### **State Coverage Covenant**

Under the Senior Indenture, the State covenants to provide pledged revenues in each fiscal year, computed as of the end of the fiscal year, in an amount equal to at least 2x the aggregate debt service on all Senior Bonds. KBRA considers the existence of the State covenant as positive and views the required 2x coverage level as strong. In the event that debt service coverage does not meet the 2x requirement, the State must pass legislation within a year to satisfy this coverage requirement.

Pursuant to the Act and the Senior Indenture, the State may limit modify, reduce or substitute pledged revenues if, for the ensuing fiscal year based on the State's budget, the 2x debt service coverage requirement is met, and the projected revenues meet or exceed the projected expenses of the STF, including any accumulated deficit and all debt service.

The Second Lien Indenture includes the covenants discussed above with the required debt service coverage level under the State's covenant to maintain coverage based on combined Senior and Second Lien debt service.

## Debt Service Reserve Fund

Both the Senior and Second Lien Bonds are secured by debt service reserve funds cash funded in an amount equal to combined MADS. Under both the Senior and Second Lien Indenture, upon issuance of additional bonds, the debt service reserve funds must be funded to combined MADS.

## Flow of Funds

All pledged revenues collected by the State are identified and credited to the STF held by the State on a daily, monthly or quarterly basis, depending on the source. The State covenants, if necessary, to implement procedures for segregation of pledged revenues from other cash receipts of the State. Pledged revenues will be transferred monthly, as follows:

First, to the debt service accounts in an amount equal to 1/12th of the principal and interest requirement on the Senior Bonds and Senior Notes in the next year. There are currently no Senior Notes outstanding and the State has covenanted not to issue Senior Notes while the Second Lien Bonds are outstanding. Bond Anticipation Notes may be issued as Senior Notes.

Second, to the debt service reserve account under the Senior Indenture to maintain the fund requirement of maximum annual debt service.

Third, to the debt service accounts under the Second Lien Indenture in an amount equal to the principal and interest requirement on the Second Lien bonds in the next year. The State may also issue Second Lien Notes.

Fourth, to the debt service reserve account under the Second Lien Indenture to maintain the fund requirement of combined maximum annual debt service reflecting both the Senior and Second Lien Bonds.

Fifth, after all deposits have been made under the Senior and Second Lien indenture, pledged revenues are used, subject to annual appropriation by the General Assembly, for payment of debt service on State general obligation bonds issued for transportation purposes and to the payment of State budget appropriations for the State Department of Transportation and the DMV. No funds may be used for the general purposes of the State.

## Additional Bonds Test

Additional Bonds may be issued under the Senior Lien Indenture if pledged revenues paid into the STF for any period of 12 consecutive months out of the last 18 months, adjusted for enacted changes in taxes and fees and certified in a certificate issued by the OPM is equal to 2x combined debt service requirements on outstanding and proposed Senior and Second Lien Bonds and interest requirements on Senior Notes for the current and each succeeding fiscal year, which KBRA views as a conservative test. Under the Second Lien Indenture, the additional bonds test requires the same revenue test on the combined Senior and Second Lien debt service for the current and each succeeding fiscal year.

## Bankruptcy Assessment

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

Based on the foregoing, KBRA views the Legal Framework for the issuance of the State of Connecticut's Special Tax Obligation Bonds as being consistent with a AAA rating for this determinant.

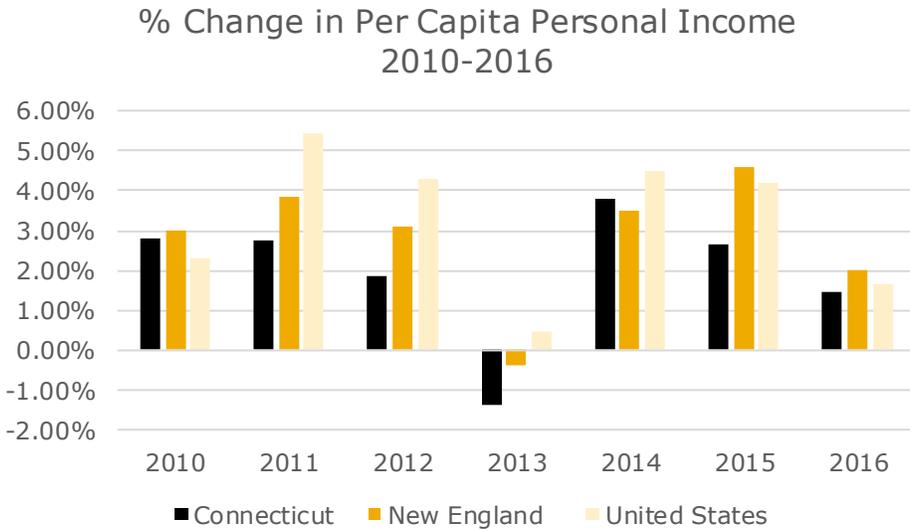
**Rating Determinant 2: Nature of Special Tax Revenues**

KBRA views the pledged special taxes as providing a diverse, broad based source of payment for the bonds. The pledged revenues include a number of taxes and fees on transportation activity across the State: taxes on gasoline and diesel, a tax on gross receipts of oil companies and a diversity of fees and charges related to motor vehicles. In addition, pledged revenues include a portion of the State sales tax which is levied on a broad retail sales base. The pledged revenues are derived from activities and sales which KBRA views as essential goods and services.

Based on the forgoing, KBRA views the nature of the pledged revenue as being consistent with an AAA rating.

**Rating Determinant 3: Economic Base and Demographics**

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



Source: Bureau of Economic Analysis

Income levels, as measured by per capita personal income, have historically been the highest in the nation. Per capita personal income in 2016 was \$69,311, which was 113.1% and 140.7% of New England and U.S. levels, respectively. Over the last twenty years, the State’s high per capita personal income figure has historically been driven, in part, by the relatively large proportion of residents who work in high paying jobs in the finance, insurance, real estate, and certain manufacturing (such as defense) sectors.

The State’s per capita income is still the highest in the nation, but the rate of growth has slowed. Since 2010, Connecticut’s per capita personal income has grown by 14.7% while the region and nation has seen higher growth rates of over 20%. This is reflective of losses of many financial sector jobs in the State which have decreased by 3.8% since 2010. Historically, declines in personal income growth have generally been steeper in Connecticut than the region and the U.S. during periods of economic decline.

	2016 Population	Chg. from 2010	2016 Age Dependency Ratio <sup>1,2</sup>	Chg. from 2010	2016 Population w/ B.A. Degree or Higher <sup>2,4</sup>	Chg. from 2010	2016 Poverty Level <sup>2</sup>	Chg. from 2010
Connecticut	3,576,452	0.0%	59.8%	1.0%	38.6%	3.1%	9.8%	-0.3%
New England	14,735,525	1.9%	57.7%	1.6%	39.1%	3.5%	10.4%	-0.8%
United States	323,127,515	4.5%	61.3%	2.5%	31.3%	3.1%	14.0%	-1.3%
Connecticut as % of New England	N/A		103.6%		98.8%		94.2%	
Connecticut as % of U.S.	N/A		97.4%		123.3%		70.0%	

Source: U.S. Census Bureau

	2016 Personal Income (\$ Billions)	Chg. from 2010	2016 Per Capita Personal Income	Chg. from 2010	2016 Real Gross State Product (\$ Billions)	Chg. from 2010	2016 Real GSP Per Capita	Chg. from 2010
Connecticut	\$247.9	15.2%	\$69,311	14.7%	\$227.6	-2.1%	\$63,636	-2.9%
New England	\$903.3	24.1%	\$61,299	21.3%	\$870.6	6.0%	\$59,079	3.1%
United States	\$15,912.8	31.7%	\$49,246	25.1%	\$16,385.2	12.0%	\$50,708	5.6%
Connecticut as % of New England	N/A		113.1%		N/A		107.7%	
Connecticut as % of U.S.	N/A		140.7%		N/A		125.5%	

Source: Bureau of Economic Analysis

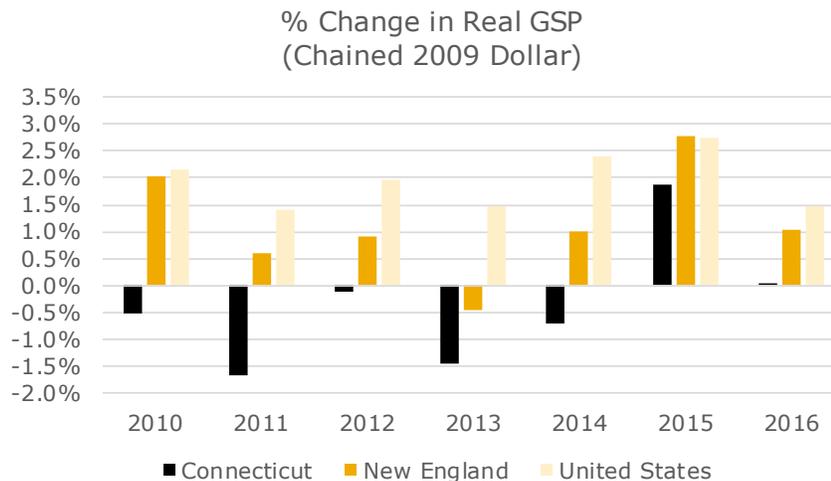
<sup>1</sup> Age dependency ratio is the sum of the population under 18 yrs and over 65 yrs divided by persons age 18 to 64 yrs.

<sup>2</sup> Year over year change shown as nominal change in percentage points.

<sup>3</sup> New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

<sup>4</sup> Percent of the population aged 25 and over.

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

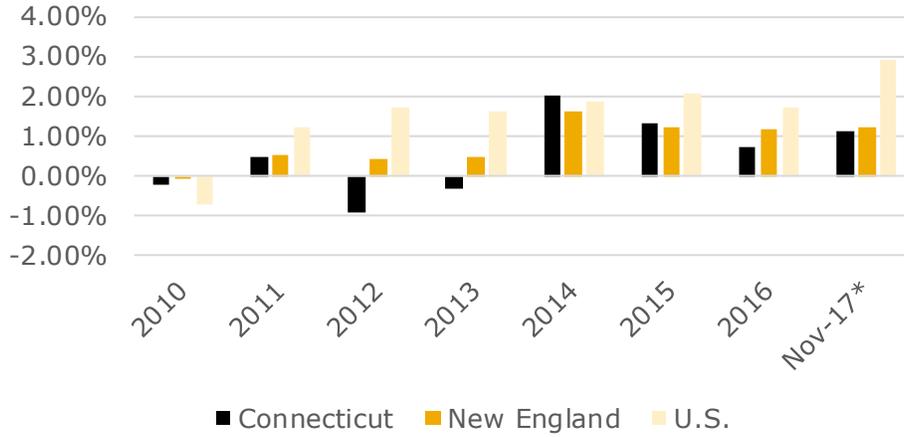


Source: Bureau of Economic Analysis

The State continues to have a fairly diverse economic base. In 2017, eighteen “Fortune 500” companies were headquartered in Connecticut, including United Technologies Corporation (“UTC”), Cigna, Praxair, Priceline Group and Hartford Financial Service Group. KBRA notes that the defense industry, which comprises about one-quarter of the State’s manufacturing employees, is an important component of the State’s economy and has demonstrated renewed strength since 2002 we expect this trend to continue. Major defense companies include United Technologies Corporation and its Pratt and Whitney Aircraft Division, Sikorsky Aircraft (a division of Lockheed Martin), and General Dynamics Corporation’s Electric Boat Division. In September 2016, Governor Malloy announced that Sikorsky Aircraft would remain headquartered in the State for at least another 16 years. General Electric moved its headquarters in 2016 to Boston after moving to Connecticut in the 1970s. Other companies that have historically been in the State such as the Hartford Financial Services Group have stated their continued commitment to the State.

Since 2010, the State has also generally lagged the New England region and the United States in growth in total employment and reduction of the unemployment rate. Between 2010 and 2016, total State employment grew 3.3%, as compared to 5.6% for the region and 10.7% for the US. Connecticut’s employment gains reflect the continued slow growth of the State’s economy.

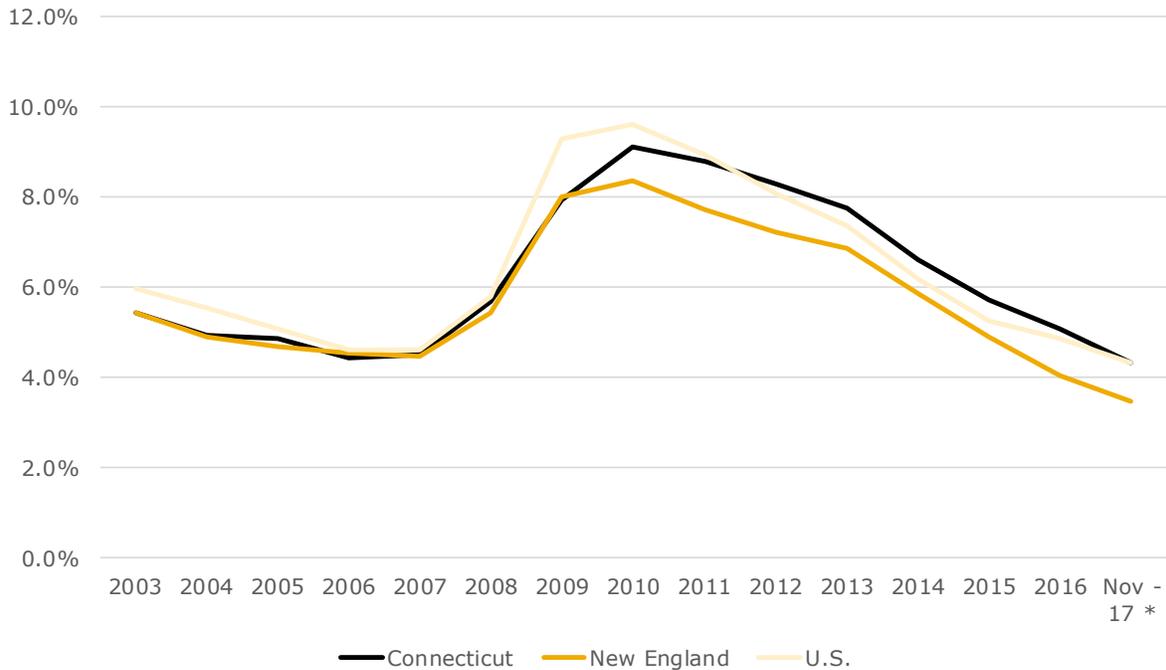
### % Changes in Non-Farm Employment 2010-2016



Source Bureau of Labor Statistic  
\* Preliminary

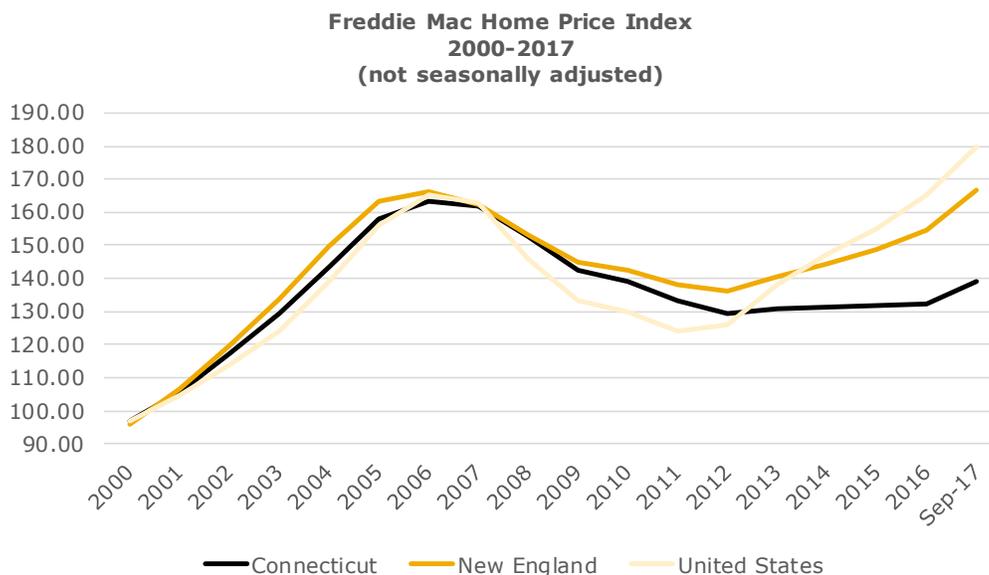
Despite the continued decline of the State’s average unemployment rate from a peak of 9.1% in 2010 to 5.1% in 2016, the unemployment rate in Connecticut is still above that of the region and U.S., which averaged 4.1% and 4.9% in 2016, respectively. As of November 2017, the State’s unemployment rate is 4.3% compared to 3.5% for the New England region and 4.4% nationwide.

### Average Annual Unemployment Rate (Not seasonally adjusted)



Source: U.S. Bureau of Labor Statistics  
\* Preliminary

The State’s housing market began to recover in 2013, according to the Freddie Mac Home Price Index and, as of September 2017, represents 85.1% of its pre-recession peak.



Source Freddie Mac Home Price Index

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

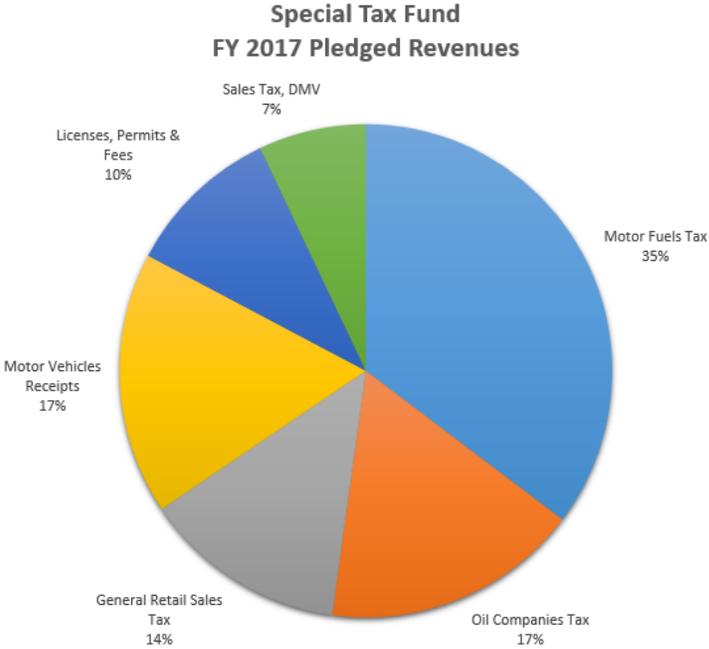
#### Rating Determinant 4: Revenue Analysis

While the majority of pledged revenues relate to transportation, sources include a broad diversity of taxes and fees. On an overall basis, historical pledged revenues have shown limited sensitivity to economic conditions, except for the oil companies tax which is sensitive to wholesale gasoline prices. The general retail sales tax, allocated to STF starting in FY 2016, is subject to the level of economic activity in the State and budget decisions by the General Assembly. In FY 2017, these two sources represented about 31% of revenues, although the share of sales tax dedicated to the STF is scheduled to increase.

Going forward, KBRA views the potential for economic sensitivity and volatility to increase, given the addition of sales tax revenues from dealer car sales to pledged revenues. In FY 2017, pledged revenues underperformed budget by almost 4.8%, largely due to underperformance of the oil companies tax. While KBRA recognizes the passive nature of the pledged revenues and the potential for volatility in certain pledged revenues, these risks are mitigated, in KBRA’s view, by the State’s coverage covenant to maintain 2x debt service coverage from pledged revenues in every fiscal year, which KBRA views as very positive.

Fuel related taxes account for approximately 52% of FY 2017 revenues, which includes the motor **fuel tax** (a per gallon gasoline tax and a diesel tax with a fuel-price dependent component) and the **oil companies tax**, which is highly sensitive to oil prices. Previously a portion of the oil companies tax supported the General Fund, but as of FY 2016, it is fully dedicated to the STF, thus increasing the oil price sensitivity of pledged revenues. The next largest pledged revenue source is motor vehicle receipts (largely registration fees), followed by sales taxes. In 2016 the State dedicated a portion of the general retail sales tax to the STF and, beginning in 2021, an additional allocation of sales tax revenues will be dedicated to the STF. The revenue allocation changes are part of the State’s effort to increase funding for the STF.

CT ranks at the high end for fuel tax rates among northeast states. Nationwide, CT ranks 10th highest for gasoline taxes according to a November 2017 report by the American Petroleum Institute.

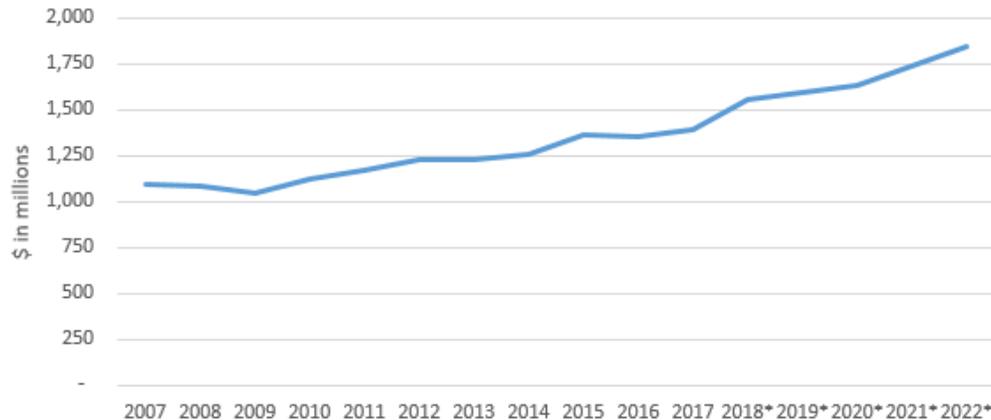


Source: State of CT

**Trends in Revenues**

Total pledged revenues have generally shown slow to moderate growth over the past decade. From FY 2007 to FY 2017, the average annual growth rate for all pledged revenues was 2.5%. Prior to 2015, there were sizable interfund transfers made between the General Fund and the STF, however, the State took action in 2015 to make the STF a standalone fund and segregate its operations from the General Fund. The State does not expect to make General Fund transfers going forward. Starting with FY 2016, the STF received all of the oil companies tax and also beginning in FY 2016, a portion of the sales tax is dedicated to the STF.

## Special Transportation Fund Revenues



\*Projected

Source: Official Statements

Special Transportation Fund Actual and Projected Revenues Budgetary Basis Revenues, \$ in millions										
	2013	2014	2015	2016	2017	2018*	2019*	2020*	2021*	2022*
Motor Fuels Tax	501.3	508.1	516.6	518.2	498.5	501.4	502.3	502.8	500.3	497.8
% change	1.7%	1.4%	1.7%	0.3%	-3.8%	0.6%	0.2%	0.1%	-0.5%	-0.5%
Oil Companies Tax <sup>1</sup>	199.4	380.7	337.9	250	238.4	256.7	279.8	306.9	337.7	359.2
% change	-12.1%	90.9%	-11.2%	-26.0%	-4.6%	7.7%	9.0%	9.7%	10.0%	6.4%
Sales Tax <sup>2</sup>				109	188.4	323.4	331	339.2	413.7	501
% change					72.8%	71.7%	2.4%	2.5%	22.0%	21.1%
Motor Vehicles Receipts	234.5	236.1	249.5	251.5	242.9	244.9	246.8	248.3	250	251.7
% change	-0.4%	0.7%	5.7%	0.8%	-3.4%	0.8%	0.8%	0.6%	0.7%	0.7%
Licenses, Permits & Fees	137.3	138.4	145.4	143.9	144	144	145.2	145.8	146.4	146.9
% change	1.0%	0.8%	5.1%	-1.0%	0.1%	0.0%	0.8%	0.4%	0.4%	0.3%
Sales Tax - DMV	79	82.2	83.9	87.2	85	86	86.8	87.6	88.5	89.4
Federal Payments	12.4	12.1	12.1	12.2	12.2	12.1	12.1	12.1	11.8	11
Interest Income	4.1	6.8	6.9	8.2	9	9.5	10.4	11.2	12.1	13
Transfers	88.7	-83	34.7	-6.5	-6.5	-5.5	-5.5	-5.5	-5.5	-5.5
To Transportation Strategy Board	-15	-15	-15							
<b>Total</b>	<b>1241.7</b>	<b>1266.4</b>	<b>1372.0</b>	<b>1373.7</b>	<b>1411.7</b>	<b>1572.5</b>	<b>1608.9</b>	<b>1648.4</b>	<b>1755.0</b>	<b>1864.5</b>
Refunds	-9.2	-10.6	-11.1	-20.8	-17.3	-18.1	-18.9	-19.7	-20.6	-21.5
<b>Total Net Revenues</b>	<b>1232.5</b>	<b>1255.8</b>	<b>1360.9</b>	<b>1352.8</b>	<b>1394.4</b>	<b>1554.4</b>	<b>1590.0</b>	<b>1628.7</b>	<b>1734.4</b>	<b>1843.0</b>
% change		1.9%	8.4%	-0.6%	3.1%	11.5%	2.3%	2.4%	6.5%	6.3%
<b>Combined Sr. &amp; Second Lien DS<sup>3</sup></b>	<b>430.8</b>	<b>448.7</b>	<b>459</b>	<b>492.4</b>	<b>542</b>	<b>577.7</b>	<b>643.2</b>	<b>693</b>	<b>746.7</b>	<b>772</b>
<b>Annual Combined DS Coverage</b>	<b>2.9</b>	<b>2.8</b>	<b>3.0</b>	<b>2.8</b>	<b>2.6</b>	<b>2.7</b>	<b>2.5</b>	<b>2.4</b>	<b>2.3</b>	<b>2.4</b>

\*Projected, consensus revenue estimates of Nov. 13, 2017.

<sup>1</sup>All of oil companies tax deposited to STF beginning FY2016.

<sup>2</sup>Reallocation of sales tax began in FY2016, at an increasing rate, with phase in of new car sales tax beginning in FY2021.

<sup>3</sup>Includes proposed issues of \$800 million in FY18, \$800 million in FY19, \$750 million in FY20, \$ 650 million in FY21 & \$650 million in FY22; issued with level debt service and 20 year final maturities.

Source: Official statement

**Motor Fuels Tax**

The Motor Fuels Tax revenue consists of three taxes: the gasoline tax, the special fuels tax (includes diesel), and the motor carrier road tax. The gasoline tax is the dominant source of the motor fuel tax. The tax is levied on gallons sold, has limited fuel price exposure and thus does not experience extreme volatility from fuel price swings. Annual revenue growth since 2008 has averaged less than 1%, reflecting constrained consumption growth from both sluggish economic growth and the increasing efficiency of motor vehicles.

The gasoline tax rate is currently 25 cents/gallon and has been unchanged for over ten years. The diesel tax rate is set at a base rate of 29 cents per gallon plus a factor equal to the average wholesale price times the Oil Companies Tax rate. (The wholesale rate is as reported by the Oil Price Information Service weekly, from April 1 to March 31, for period prior to the rate effective date of July 1.)

Growth in the diesel tax rate had been a driver in Motor Fuel Tax revenue growth. Sizable declines in the diesel rate in 2011 and 2017 contributed to revenue dips in those years. Weekly diesel price data to date indicates a substantial increase in diesel prices, which will result in a rate increase in FY 2019.

The CT’s Motor Fuels Tax is paid by distributors monthly to the STF, helping to provide a smooth fund cashflow for the STF.

**Oil Companies Tax**

The Oil Companies Tax revenue is a tax on the gross earnings from the sale of petroleum products, and thus is sensitive to volatility in gasoline prices. The State has frequently adjusted the oil companies tax rate; normalizing for rate changes, gross revenues declined 45% from FY 2013 through FY 2017 due to the decline in fuel prices. Over this period, the State increased the tax rate and the decline in actual total revenue collected for the 2013-2017 period was more moderate, but still down 36%.

The principal petroleum product subject to the tax is motor vehicle fuel, but the tax is also levied on aviation fuel, kerosene, diesel fuel, crude oil, and derivatives of petroleum such as paint, fertilizers and asphalt. The tax rate has been 8.1% since July 1, 2013. Since 2012, earnings on sales in excess of the \$3 per gallon is exempt from tax. State officials report the use of several metrics in forecasting revenues, including IHS Markit and the U.S. Energy Information Administration forecasts. State officials indicate that the \$3 tax cap is not projected to be a constraint over the forecast period. Oil companies tax revenue is projected to increase 7.7% in FY 2018, with annual growth increasing to 10% in 2021. The \$359.2 million in oil companies tax revenue projected for FY 2022 is lower than FY 2014 actual total oil companies tax revenue of \$416.3 million.

The tax is paid quarterly. Beginning July 1, 2015, the Commissioner of Revenue Services deposited 100% of the tax revenues directly into the STF. Previously, statutes specified the amount of oil companies tax revenue to be transferred to the STF from the General Fund.

Motor Vehicle Tax Rate History, cents/gal		
	Gasoline	Diesel
FY	Rate	Rate
2005	25	26
2006	25	26
2007	25	26
2008	25	37
2009	25	43.4
2010	25	45.1
2011	25	39.6
2012	25	46.2
2013	25	51.2
2014	25	54.9
2015	25	54.5
2016	25	50.3
2017	25	41.7

Sources: POS; Transportation Panel Report.

Oil Companies Tax Gross Collections, \$ in millions		
FY	Rate	Collections
2005	5.0%	179.0
2006	5.8%	279.6
2007	6.3%	309.4
2008	7.0%	367.8
2009	7.0%	267.8
2010	7.0%	264.9
2011	7.0%	334.5
2012	7.0%	373.0
2013	7.0%	374.9
2014	8.1%	416.1
2015	8.1%	337.9
2016	8.1%	250.0
2017	8.1%	238.4

Sources: POS; Transportation Panel Report.

**Motor Vehicle Receipts; Licenses, Permits and Fees**

The two categories of Motor Vehicle Receipts, and Licenses, Permits and Fees include approximately 25 different revenues from a basket of transportation related charges. The major revenue source is motor vehicle registration fees, accounting for approximately 50% of this basket’s receipts. Per the Transportation Finance Panel Report published in 2016, many of these fees have not been increased since 1993. Overall, revenues from these combined categories have been relatively flat with growth under 1%, as the State has not periodically adjusted the rates to keep up with inflation. State officials state that changes in administrative and collection procedures at DMV are a factor in revenue increases of over 5% in Motor Vehicle Receipts and License, Permits and Fees in FY 2015 and a 3.4% decline in Motor Vehicle Receipts in FY 2017. Projections indicate average annual growth of .6%.

**Sales Tax**

As part of the ongoing State transportation infrastructure initiative (Let’s Go CT!), beginning in FY 2016, a specific portion of the State’s general retail sales tax revenue was allocated as a new pledged revenue source. The State general retail sales tax rate is 6.35%, with a portion now deposited to the STF (see table below). The dedication of sales taxes to STF increases to .5% of total State sales tax revenues by 2018.

In 2017, as part of the Biennium Budget legislation, an additional sales tax revenue diversion to the STF was approved. Beginning FY 2021, sales tax revenues from dealer car sales to will be deposited to the STF, with a five-year phase-in, increasing 20% per year. The existing .5% allocation of total sales tax will be calculated net of the dealer car sales. Currently, only sales tax generated from “casual sales,” or sales of automobiles between private individuals, is placed into the STF. State officials report that FY 2017 sales tax from car sales totaled \$360 million, based on this figure, a 20% phase-in would equate to approximately \$72 million growth in the first year of deposits to the STF.

<b>Sales Tax Deposits to the STF</b>		
<b>\$ in millions</b>		
<b>Fiscal Year<sup>2</sup></b>	<b>Rate (%)<sup>1</sup></b>	<b>Sales Tax</b>
2016	0.3	\$109.0
2017	0.3 and 0.4	188.4
2018	0.5	323.4
2019	0.5	331
2020	0.5	339.2
2021	.5% plus 20% car sales	413.7
2022	.5% plus 40% car sales	501

<sup>1</sup>Beginning in 2021 car sales taxes are phased in.

<sup>2</sup>Projected deposits for FYs 2018 - 2022.

Source: Official Statement

There are no local sales taxes levied in the State. The State collects sales tax revenues on a monthly, quarterly or annual basis, with the bulk of collections received monthly.

In FY 2016 and FY 2017, State budget stress led to delays in and reduction of allocated state retail sales tax revenues to the STF, as shown in the table below. The ongoing budget stress in the State’s financial operations raise the possibility that sales tax allocations could be reduced in the future. Actions taken in FY 2016 and FY 2017 did not cause the State to breach the State’s 2x debt service coverage covenant

Significant Enacted Adjustments to STF Sales Tax		
(\$ In Millions)		
	2016	2017
<b>2015 December Special Session</b>		
Two Month Deposit Delay	\$ (35.2)	
<b>2016 Legislative Session</b>		
Reduction in Deposit		\$ (50.0)

Sales tax projections mirror State assumptions for the General Fund, and assume an economic growth rate of 1.2% in fiscal 2018, and 2.5% thereafter. Annual sales tax growth averaged 2.5% a year from 2013 through 2017, although the actual growth experienced in fiscal 2017 was a tepid 1.06%.

**Other Sources**

Other pledged revenue sources include federal payments, which are the cash subsidy payments related to the State’s Build America Bonds, as well as a modest amount of interest income. No transfers in are expected, although modest statutory annual transfers out to the Emission Enterprise Fund are planned.

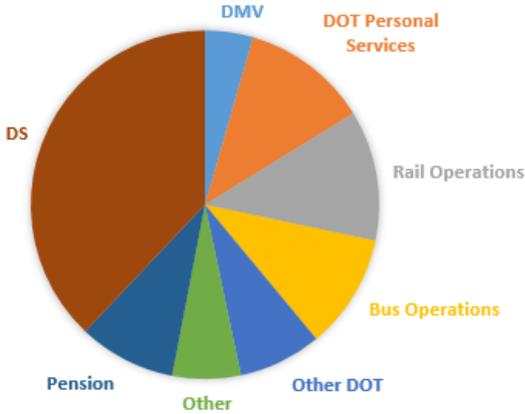
**STF Operations**

The Special Transportation Fund was established in June 1983 to account for the transportation related taxes, revenues and fees pledged for payment of special tax obligation bonds issued by the State and utilized as a source of funding for state transportation programs. The operations of the STF is included in the State CAFR as a major governmental fund. A separate financial report is also produced for the STF, showing each of its major funds. During the year OPM and the legislature’s Office of Fiscal Analysis are required to issue consensus revenue estimates for a five-year period going forward on January 15, April 30 and November 10 of each year.

Pledged revenues constitute the major revenue sources of the STF. Due to budgetary changes at the federal level, the State is not expecting to receive further funding as operating assistance grants from the FTA, which were previously credited as pledged revenues into the STF.

Pledged revenues credited to the STF are first used to pay debt service on Special Tax Obligation Bonds, and then, subject to annual appropriation, used to pay debt service on State general obligation bonds issued for transportation purpose. After payment of debt service, all revenues are used to fund operating and capital costs of the State’s transportation system, specifically the operation of the State Department of Transportation (DOT) and the State Department of Motor Vehicles (DMV).

**SPECIAL TRANSPORTATION FUND EXPENDITURES**



Source: State Comptroller's September 29, 2017 Report

The State's Infrastructure Program began in 1984. The Program funds maintenance and improvement projects for the State's highways and local roads, bridges, transit (including bus and rail projects) and aviation improvements. The major sources of funding for the Infrastructure Program has been federal funding, followed by Special Tax Obligation Bonds and State appropriations. In 2015, Governor Malloy launched a 30-year plan for modernizing and upgrading the State's transportation infrastructure called Let's Go CT! as part of the ongoing Infrastructure Program. Approximately \$2.8 billion of authorization was planned through 2020 for the first phase of this initiative. The Let's Go CT! initiative is the major driving force behind the State's increased issuance of State Special Tax Obligations going forward.

In 2015, in conjunction with the announcement of the "Let's Go CT!" initiative, the Governor established a Transportation Finance Panel charged with exploring funding options and making recommendations on implementation of the "Let's Go CT!" program. The Panel released its final report in January 2016, recommending, among other things, increases to pledged revenues and electronic tolling on state and interstate highways to support the initiative. Over the years, a number of factors have impacted financial condition of the STF including increased fuel efficiency in motor vehicles, volatility in oil prices over the last several years, actions taken by the General Assembly and increased debt service obligations due to increased issuance since 2015. The General Assembly has taken action to raise STF revenues since 2015 by dedicating up to .5% of state sales tax to the STF and dedicating sales tax on dealer car sales, starting in 2021, to the STF, however significant additional revenue is needed. Absent additional revenues, the State DOT is projecting a reduction in the capital program over the next five years, as well as significant scaling back of highway, rail and bus services and increases in transit fares. Assuming these adjustments and no additional sources of revenue, the balance in the STF is projected to be in deficit by fiscal year end 2020.

Based on the forgoing, KBRA views the revenue analysis determinant as being consistent with an A+ rating.

## Rating Determinant 5: Coverage and Bond Structure

KBRA views debt service coverage on combined Senior Bonds and Second Lien Bonds as strong based on MADS coverage from actual FY 2017 pledged revenues of 2.4x, which KBRA considers to be very strong. MADS occurs in 2019 and includes debt service on outstanding Senior and Second Lien Bonds as of January 1, 2018, and the current issuance of \$800 million of 2018 Series A Bonds. Current combined debt service coverage in 2017 from FY 2017 pledged revenues is 2.6x.

Through FY 2022, pledged revenue projections are based on the November 2017 consensus revenue estimates and annual debt service projections based on future issuance plans discussed below. Annual debt service coverage is projected to be 2.3x or higher in FY 2018 through FY 2022, which KBRA considers to be very strong. While KBRA recognizes the need for additional funding for the STF to continue funding the State's Let's Go CT! transportation initiative and other needs, it is KBRA's view that debt service coverage will continue to be strong given that pledged revenues after payment of STO obligations is needed to fund the operating cost of the State's transportation system, including State Department of Transportation (DOT) and State Department of Motor Vehicles (DMV) operations.

Issuance of Special Tax Obligation Bonds has increased since 2015 when Governor Malloy launched the Let's Go CT! transportation initiative to modernize and upgrade the State's transportation infrastructure. Since 2015, the amount of Special Tax Obligation Bonds issued annually has increased from \$600 million to \$800 million in FY 2017. Based on the Official Statement for this issuance, projected issuance for the next several years is as follows: \$800 million in FY 2018, \$800 million in FY 2019, \$750 million in FY 2020, \$650 million in FY 2021 and \$650 million in FY 2022.

All outstanding STO Bonds are fixed rate and the State has stated that it currently has no intention of issuing variable rate debt. Based on the current amortization schedule for the Special Tax Obligation Bonds (which includes the January 2018 issuance of \$800 million), combined Senior and Second Lien debt service declines after FY 2019.

Given that KBRA views some sources of pledged revenues as being subject to certain risks, we have developed a stress scenario to assess the impact of potential declines in certain pledged revenues on debt service coverage in FY 2018 through FY 2022. The KBRA stress scenario assumes a decline of 50% in the level of the general retail sales tax allocations to the STF through FY 2022. We have also assumed, based on uncertainty in oil prices, that growth in the oil companies tax is flat through 2022. Based on the KBRA stress scenario, projected annual debt service coverage on combined debt service for both Senior and Second Lien Bonds declines from 2.6x in 2018 to 1.9x in 2022, which KBRA still considers to be strong.

Based on the foregoing, KBRA views the Coverage and Bond Structure Framework for the issuance of the State of Connecticut's Special Tax Obligation Bonds as being consistent with a AA+ rating for this determinant.

## Conclusion

KBRA has assigned a long-term rating of AA+ with a Stable Outlook to the State of Connecticut Special Tax Obligation Bonds Transportation Infrastructure Purposes, 2018 Series A, outstanding Special Tax Obligation Bonds and outstanding Second Lien Special Tax Obligation Bonds.

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