

CREDIT OPINION

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Connecticut (State of)

Update to credit analysis of special tax obligation bonds

Summary

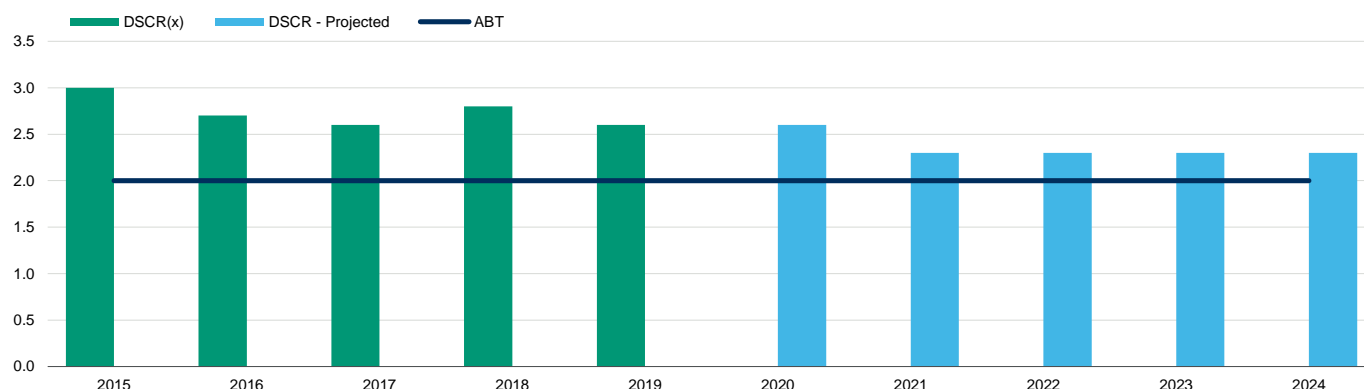
[Connecticut's](#) (A1 stable) Special Tax Obligation (STO) Bonds have been used to finance infrastructure improvements across the state, including some of the state's major transportation-related capital projects. There are currently \$6.425 billion of special tax obligation bonds outstanding and the state plans continued issuances, increasing debt outstanding and tightening coverage of debt service by revenue (see Exhibit 1). The bonds are rated A1 with a stable outlook. The close relationship to the state's broader economic and fiscal condition results in the rating and outlook being linked to the state's.

The bonds benefit from strong legal covenants, a diversified stream of pledged revenue with some sensitivity to economic fluctuations and satisfactory debt service coverage. The credit profile also includes challenges resulting from the state's lagging economic and demographic trajectory, exacerbated by the recession triggered by the coronavirus crisis, which we expect to continue to dampen revenue growth.

We regard the [coronavirus outbreak](#) as a social risk under our ESG framework, given the substantial implications for public health and safety. We do not see any material immediate credit risks for the state of Connecticut. However, the situation surrounding coronavirus is rapidly evolving and the longer term impact will depend on both the severity and duration of the crisis. If our view of the credit quality of Connecticut changes, we will update our opinion at that time.

THIS REPORT WAS REPUBLISHED ON 05 JUNE 2020 WITH EXHIBIT 1 CORRECTED TO SHOW COVERAGE FOR AGGREGATE DEBT SERVICE, INCLUDING THE SUBORDINATE LIEN. THE ORIGINAL CHART SHOWED COVERAGE FOR THE SENIOR LIEN ONLY.

Exhibit 1

Debt service coverage will decline as the state issues more transportation debt

DSCR stands for debt service coverage ratio, the ratio of pledged revenue to annual debt service. Projected coverage includes the effects of annual issuance of \$875 million in additional bonds per year through 2024.

Source: State of Connecticut offering statement for Series 2020 A Special Tax Obligation Bonds

Credit strengths

- » Diversified stream of dedicated transportation-related and retail sales tax revenues
- » Effective management of Connecticut's Special Transportation Fund (STF)
- » Strong legal protections including a two times coverage covenant and constitutional protection of the STF
- » Cash funded debt service reserve fund

Credit challenges

- » Some revenue sensitivity to economic fluctuations
- » Declining expected coverage ratio because of sizable future borrowing plans at \$3.5 billion through fiscal 2024

Rating outlook

The bonds carry the stable outlook of Connecticut's GO rating, which reflects the state's strong provisions to promote fiscal discipline, which pair redressing elements of its high leverage position and requiring GAAP-based budgeting.

Factors that could lead to an upgrade

- » Stronger debt service coverage
- » State rating upgrade

Factors that could lead to a downgrade

- » Revenue declines resulting in debt service coverage falling below covenanted level
- » Weakened legal covenants
- » State rating downgrade

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Connecticut Special Tax Obligation Transportation Infrastructure Purpose

Credit Background

Pledged Revenues	Motor fuels tax, oil companies tax, sales and use taxes, motor vehicle receipts, licenses, permits and fees, DMV sales tax, federal payments
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Legal Structure

Additional Bonds Test	2.0x aggregate annual debt service
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Open or Closed Lien	Open
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Debt Service Reserve Requirement	Maximum aggregate annual debt service
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Coverage

2020 MADS coverage (x)	2.4x
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Trend Analysis

	2015	2016	2017	2018	2019
Debt Outstanding (\$mil)	4,090	4,520	5,042	5,540	5,613
Pledged Revenue (\$mil)	1,376	1,353	1,394	1,630	1,688
Pledged Revenue % Change	8.3%	-1.7%	3.1%	16.9%	2.9%
Annual Debt Service Coverage	3.0x	2.7x	2.6x	2.8x	2.6x

Maximum annual debt service currently takes place in 2023. Debt outstanding and debt service coverage include subordinate lien.

Source: State of Connecticut; Moody's Investors Service

Profile

The State of Connecticut has a population of 3.57 million people located in the coastal northeastern US, bordered by [Rhode Island](#) (Aa2 stable), [Massachusetts](#) (Aa1 stable) and [New York](#) (Aa1 negative) with 618 miles of shoreline, according to the National Oceanic and Atmospheric Administration (NOAA). The state has a large and diverse economy with a gross state product of \$286 billion in 2019. It is the wealthiest state in the country with per capita income of nearly 140% of the US average

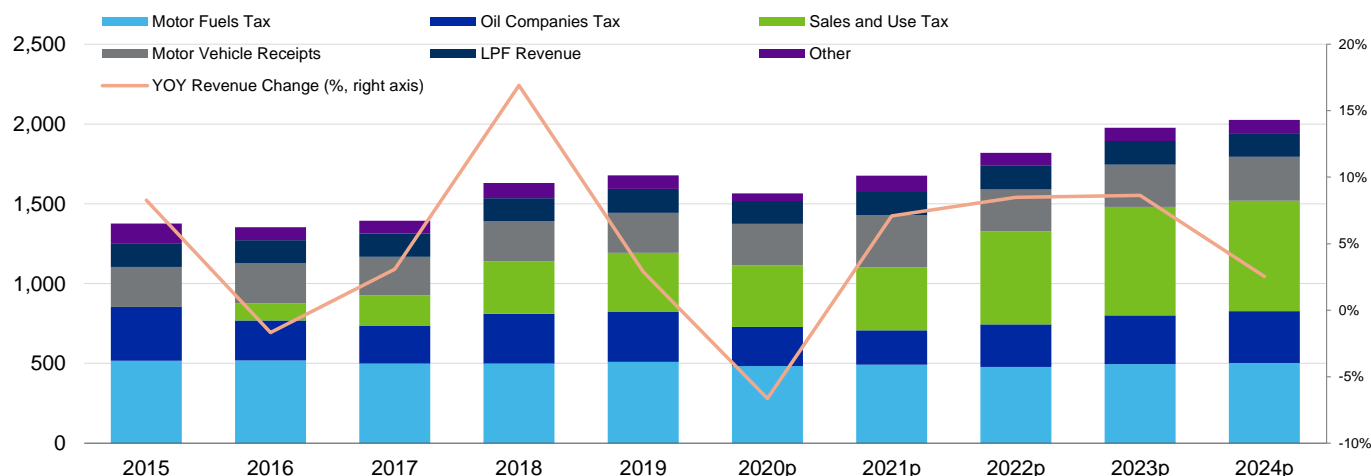
Detailed credit considerations

Tax base and nature of pledge

Connecticut's special tax obligation bonds are payable from multiple pledged revenue streams credited to the special transportation fund (STF). These revenue include motor fuels tax, oil companies tax, general retail sales taxes, motor vehicle receipts, licenses, permits and fees, and DMV sales taxes. The state has from time to time adjusted the allocations of revenue streams to the STF. In fiscal 2015, the legislature enacted law depositing a portion of state general sales tax revenue directly into the STF. In addition, oil companies tax revenue, previously transferred from the general fund, were deposited directly to the STF beginning in fiscal 2016 and general fund transfers were eliminated. The law provided that sales and use tax on motor vehicles would be phased into the STF over 5 years, although subsequent pressure on the state general fund has led the legislature to prolong the phase in schedule. Proposals to add significant resources to the transportation fund through tolling and other measures have so far not gained traction with the legislature.

The addition of sales tax to the revenue stream has helped buffer the impacts on the STF of long term stagnation and decline in driving and fuel usage. Following the addition of sales taxes, the dependence of the STF on motor fuels tax has fallen from 40% in fiscal 2014 to an estimated 30% in fiscal 2020. The sales tax has also softened the effects of declining crude oil prices on oil company taxes: the share of oil company tax revenue of total STF revenue has fallen by half since 2014, to less than 16% of the total. Even in fiscal 2020, when all revenue streams were hit by the coronavirus crisis, only the sales tax and motor vehicle receipts have been less severely affected and are expected to grow while other revenue is in negative territory.

Exhibit 3

Sales taxes a growing portion of transportation fund revenue

Revenue from 2020 to 2024 is projected by the state

Source: State of Connecticut Office of Policy and Management

Debt service coverage and revenue metrics

Pledged revenue are volatile because of fundamental trends in the tax base and changes in state allocations to the STF. The average growth rate (CAGR) of pledged revenue is 3.5% since 2014, including the impact of the coronavirus on fiscal 2020 revenue, which is expected to decline 6.6%.

Debt issuance has outpaced revenue growth, resulting in current coverage of debt service drifting down from 3.0x in fiscal 2015 to a projected 2.4x in fiscal 2020. With planned additional bond issuances, coverage is projected to decline to 2.3x in fiscal 2021 through 2024.

With the issuance of Series 2020 A, maximum annual debt service (MADS) will occur in fiscal 2023. Projected 2020 revenue would provide 2.4x coverage of MADS. Without additional issuances, MADS coverage by 2020 revenue would gradually increase to 3.1x in fiscal 2024 as outstanding bonds mature.

LIQUIDITY

Unlike most transportation programs, Connecticut's special tax obligation bond indenture also requires a debt service reserve account equal to maximum annual debt service. The reserve is currently cash funded.

Debt and legal covenants

Connecticut funds its portion of the state's transportation infrastructure program primarily with debt, which is supplemented with federal funds to invest in highway, transit and aviation projects. Program-related debt issuance since 1985 has totaled \$13.12 billion and the state projects that it will issue \$875 million in STO bonds per year through 2024.

The STO bonds benefit from strong legal covenants and legislative changes ensure the resources of the STF will be expended solely for transportation purposes. The state covenants to provide pledged revenue in each fiscal year equal to at least two times aggregate principal and interest requirements on senior lien and second lien bonds. In addition, there is an additional bonds test of 2.0x aggregate senior lien debt service coverage for current and all succeeding years on outstanding and additional bonds. The indenture contains a reserve requirement whereby maximum annual aggregate debt service is fully funded with cash and held with a trustee.

In fiscal 2015, Connecticut enacted significant legislative changes that enhanced the STO program including a new sales tax pledge and new statutory lockbox. The lockbox established the STF as a perpetual fund, the resources of which shall be expended solely for transportation purposes, which include the payment of debt service on obligations of the state incurred for transportation purposes. In 2018, voters approved the incorporation of these protections into the state constitution.

DEBT STRUCTURE

There are \$6.425 billion of senior lien special tax obligation bonds outstanding. While allowed by the indenture, there is no longer any subordinated lien debt outstanding; however the second line is not closed. All of the debt is fixed rate and approximately 60% of STO principal will amortize over the next 10 years.

DEBT-RELATED DERIVATIVES

There is no derivative exposure.

PENSIONS AND OPEB

Connecticut's adjusted net pension liability (ANPL), our measure of the government's pension burden, is significantly above the [50-state median](#). As of the state's 2018 financial statements, ANPL was \$62 billion, or 22.6% of state GDP, the third highest of the states. The state participates in several pension systems, of which the most significant are the State Employees Retirement System (SERS) and the Teachers Retirement System (TRS). Connecticut is among the handful of states that take responsibility for directly funding teacher pensions. Moody's ANPL reflects certain adjustments made to improve comparability of reported pension liabilities.

Pension contributions remain a very significant and growing part of the state's budget. The state contributes the full amount of its actuarially determined contributions, about \$2.7 billion in fiscal 2019. It is required via bond indenture to pay the full required contribution to the TRS plan and by collective bargaining to do the same for SERS. Even so, its 2019 contributions were not quite enough to prevent its net pension liability (NPL) from growing even if investment returns all the actuarial assumptions associated with the plan had come to fruition.

The state has made substantial changes to its pension funding approach. It has stretched amortization periods for both SERS (in 2016) and TRS (in 2019), combined with lowering the discount rate for both systems to 6.9% and shifting to a level dollar amortization approach. In addition to maintaining an unrealistically high investment rate of return (discount rate) assumption, the state previously followed a less conservative funding approach linked to assumed wage growth that resulted in backloaded pension contributions and rapidly escalating contributions in coming years. Nonetheless, to achieve the actuarially-determined level dollar payment requires several years of escalating contributions, during which time the state will continue to fall short of the tread water benchmark for each system.

Connecticut also has a very high OPEB liability. As reported under GASB 75 reporting standards in the fiscal 2019 financial statements, the net OPEB liability is \$19.7 billion. Adjusted for a common discount rate, we calculate the liability as a slightly lower \$19.1 billion. Employees have been required to make contributions to prefund OPEB benefits since 2011, and the state is now making matching contributions, which total about \$120 million in fiscal 2019.

ESG considerations

Environmental Considerations

The US states sector overall has low credit exposure to [environmental risks](#) because of states' large and diverse economies, revenue raising ability and [federal government support](#) for disaster recovery costs. However, because of its coastline along the Long Island Sound, Connecticut is more exposed than most states to climate risks, according to data from Moody's affiliate and climate intelligence firm Four Twenty Seven. With its southern counties situated along the shore of the Long Island Sound, the state is vulnerable to sea level rise and coastal storms, although the storm risk is mitigated by the protective barrier formed by Long Island to the south. The state does not currently have a systematic climate resiliency plan although state officials report that the state is evaluating the location of key utilities along the coast.

Social considerations

Social issues, such as demographics, labor force, income and education, are [key influencers](#) of Connecticut's economy, governance stability and financial and leverage trends. The coronavirus crisis will intensify social challenges, such as access to healthcare and demands on the social safety net. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. We do not see any material immediate credit risks for the state of Connecticut. However, the situation surrounding coronavirus is rapidly evolving and the longer term impact will depend on both the severity and duration of the crisis. If our view of the credit quality of the state of Connecticut changes, we will update our opinion at that time.

As noted in the Economy section above, Connecticut is wealthy but losing population and lagging the nation in most demographic indicators. The workforce is highly educated, with almost 40% of the population aged 25 or more possessing a bachelor's degree or higher compared to the nationwide rate of just less than 33%.

Governance

Governance is a [material consideration](#) for the entire state sector. Connecticut's financial management is characterized by strong practices that include timely budget adoption and binding consensus revenue forecasting conducted at least three times a year. Annual multiyear Fiscal Accountability reports are produced by both the governor's budget office and the legislative office of fiscal analysis, and the state releases monthly budgetary updates. The state constitution requires a balanced budget, given greater force by the state's recent move to GAAP-basis budgeting. In addition, the state is not constrained by supermajority requirements to enact tax increases, mandated initiatives or voter referendums.

The governor's executive authority to cut expenses midyear without legislative approval is limited to 5% of an individual appropriation not to exceed 3% of any fund providing only moderate flexibility. We consider strong executive flexibility to make midyear spending adjustments a plus. If a deficit exceeds 1% of the general fund, a timely deficit mitigation plan is required to be developed by law. Some of the state's financial provisions are not highly effective, as the state has accumulated high debt levels and did not make a constitutional spending cap operative until 2018.

The state has taken action to address some of its most pressing long-run financial challenges in recent years by implementing pension and OPEB reforms and committing to moving pension contributions to a more adequate level, although the state's long-term obligations remain formidable. In addition, the state legislature recently passed a number of measures designed to contain spending and debt growth, rebuild the state's rainy day fund and more frequently assess the condition of its pension funds. Following some of these provisions will now be required by bond covenants. While the required practices would strengthen the state's long term credit profile, covenanting to follow them reduces budgetary flexibility

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