

RatingsDirect[®]

Connecticut; Appropriations; General Obligation; General Obligation Equivalent Security; Moral Obligation

Primary Credit Analyst:

Timothy W Little, New York + 1 (212) 438 7999; timothy.little@spglobal.com

Secondary Contact:

David G Hitchcock, New York (1) 212-438-2022; david.hitchcock@spglobal.com

Table Of Contents

Rating Action

Stable Outlook

Credit Opinion

A Recession Will Exacerbate Connecticut's Already Slow Economic Growth

Recently Strong Budgetary Performance Cushions The State From Near-Term Economic Effects

High Debt Burden Limits Fiscal Flexibility

Pension And OPEB Liabilities

Government Framework Provides Management Tools During A Recession

Strong Financial Policies And Budgetary Management Benefit The State During The Recession

Connecticut; Appropriations; General Obligation; General Obligation Equivalent Security; Moral Obligation

Credit Profile		
US\$500.0 mil taxable GO bnds ser 2020A due 07/01/2030		
Long Term Rating	A/Stable	New
US\$400.0 mil GO bnds ser 2020C due 06/01/2040		
Long Term Rating	A/Stable	New
Connecticut GO		
Unenhanced Rating	A(SPUR)/Stable	Affirmed

Rating Action

S&P Global Ratings has assigned its 'A' rating to the State of Connecticut's series 2020A and 2020C general obligation (GO) bonds. We have also affirmed our 'A' rating on the state's GO bonds outstanding, our 'A-' rating on state appropriation-backed debt, and our 'BBB' rating on its moral obligation debt. The outlook on all the ratings is stable.

The state is issuing approximately \$500 million of series 2020A (taxable) and \$400 million of series 2020C (tax-exempt) GO bonds for various capital purposes. The full faith and credit of the state is pledged for the payment of principal and interest on the bonds.

Credit overview

Connecticut released updated consensus revenue forecasts at the end of April, projecting a \$934.0 million deficit (4.8% of expenditures) in the general fund for fiscal 2020. To balance the budget this year, the state will use all of its expected volatility cap transfer to the reserve fund (\$318.3 million) and a draw from its rainy day fund (\$615.7 million). Prior to the COVID-19 pandemic, it was on track to increase reserve levels to over 15% during the biennium. The strong position of the state entering into fiscal 2020 is likely to weaken, with reserve balances at 12.9% of appropriations expected to decline to 9.4% following the drawdown for this year's deficit.

The projections also forecast a \$2.2 billion deficit (10.7% of expenditures) for fiscal 2021 that the state will need to address through some combination of expenditure and revenue changes or continued use of reserves. The level of reserves at the end of fiscal 2020 is expected to be \$1.9 billion and is insufficient to make up all of the projected deficit for fiscal 2021. The state has begun considering how to address the fiscal 2021 shortfall with revenue changes and other expenditure adjustments. However, the significance of the shortfall will likely result in some reserve use. During the last recession, the state issued nine-year deficit bonds to close its shortfall.

Despite these challenges, Connecticut enters the current recession in a significantly better position than in the past, with reserves at historically high levels. Bond covenants allow reserve drawdowns on a supermajority legislative vote, which the majority party holds at present. Previously, Connecticut had a history of carrying low reserves and ended

fiscal 2017 with a reserve balance of only 1.1% of expenditures.

Further pressuring the state's finances during the recession are its extremely high fixed costs. An estimated 50% of fiscal 2020 budgeted expenditures constitute debt service, required pension and retiree health care benefit contributions, the state share of Medicaid costs, and other entitlements. The state also enacted an annual GO bond allocation cap of \$2 billion and an issuance cap of \$1.9 billion (with certain exclusions such as UConn 2000 Bonds), but the state has self-imposed a GO issuance limit of \$1.6 billion in fiscal years 2020 and 2021. Bond allocations are determined by the state's Bond Commission, whose agenda is controlled by the governor. During calendar year 2019, GO bond allocations by the Bond Commission totaled \$1.2 billion, well below the 2011 through 2018 bond allocation average of \$1.975 billion. Connecticut remains the only state with a high enough debt load to trigger a one-notch downward override rating adjustment under our state rating methodology. The recently enacted bond bill authorizations are in line with prior years and we do not expect the debt profile to significantly moderate in the near term.

In our opinion, lower rated states are most exposed to credit pressure derived from exogenous shocks given their comparatively weaker credit metrics that may include lower reserve levels, cyclical revenue streams, and elevated fixed costs (e.g., pensions, debt service, other postemployment benefits [OPEBs]); for more information, see "All U.S. Public Finance Sector Outlooks Are Now Negative" (published April 1, 2020 on RatingsDirect).

Environmental, social, and governance factors

Our rating incorporates our view regarding the health and safety risks posed by the COVID-19 pandemic. S&P Global Ratings considers health and safety a social risk under our view of environmental, social, and governance (ESG) factors. Absent the social risks of COVID-19, we consider Connecticut to have elevated social risks compared to the sector given its older population and higher cost of living. These demographic trends could present long-term credit risks to the state's economic and budgetary performance. However, we believe Connecticut's historically strong management and policy framework will help manage this risk. Environmental risks are considered above those of other states due to its 618 miles of coastline along Long Island Sound. Connecticut's shoreline roads and communities are at risk from rising sea levels. However, we view the state's governance risks as being in line with the sector and it has historically maintained a strong management and policy framework to respond to developing risks.

Based on the analytic factors we evaluate for states, on a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a composite score of '2.2' to Connecticut, an anchor of the 'AA-' rating. However, we also calculate that a majority of Connecticut's debt ratios in our state scoring criteria may lie more than one-third above the level necessary to score a '4', which triggers a one-notch rating override under our state scoring criteria. We are further using our discretionary ability to rate one notch below the anchor rating and overriding factors to maintain our 'A' rating due to our view of the state's high fixed-cost burden and lagging economic growth compared to peers.

Stable Outlook

Generally, our rating outlook timeframe is up to two years. Given the current uncertainty around the pandemic, our view of the credit risks to the state of Connecticut and its obligations centers on the more immediate budget effects in 2020 and is subject to change.

Downside scenario

Should a significant structural gap emerge and the state no longer continues making required pension contributions, uses significant one-time budgetary maneuvers (including deficit bonds), or sees its reserves deteriorate to low levels as they were before bond covenants were imposed, we may lower the rating. We also note that the state's three-year average pension funding ratio is close our threshold, 40%, and may result in further downward rating action if pension funding levels deteriorate. We recognize that state governments across the nation will face unprecedented challenges in the near term. The duration and severity of recent events affecting the state's fiscal profile may result in faster deterioration of its credit quality as economic conditions change.

Upside scenario

If the state is able to weather the economic recession, maintaining good reserve balances and demonstrating a moderating debt burden, we may consider a higher rating. We currently estimate that the majority of our debt ratios will remain at least one-third higher than the threshold triggering our one-notch lower rating over our outlook horizon. This threshold was first triggered at the end of fiscal 2017.

Credit Opinion

A Recession Will Exacerbate Connecticut's Already Slow Economic Growth

In our opinion, Connecticut's economic profile makes it highly exposed to the potential effects of the next recession. Elements that exacerbate its exposure include 10 years of economic growth that lagged the nation, a high concentration in financial services employment, and a weak demographic profile.

Despite increased recessionary risks, very strong wealth and income levels remain a hallmark of the state's economic profile. In 2019, its per capita personal income was \$79,087 and 140% of the nation. However, its growth in personal income significantly slowed following the Great Recession to a compounded annual growth rate (CAGR) of 2.5% (2009-2018). Economic output has also lagged the nation the past five years, with a real gross state product (GSP) CAGR of 0.91% compared to 2.43% for the nation. Connecticut experienced a greater decline in GSP than national GDP during the last recession, although annual growth was stronger than that of the U.S. in 2007 and in 2006 before the recession.

We believe the state's high employment concentration in the financial sector increases its exposure to recessionary risk. IHS Markit has reported that Connecticut's important financial industry, with its well-paying jobs, shrank every year from 2008 through 2018, except for a small increase in 2015 and perhaps another jump in 2019. In 2018, the well-paying financial activities sector made up 7.5% of statewide employment, compared with 5.7% for the nation, according to the Bureau of Labor Statistics.

In our opinion, the state's economy is expected to contract this year based on S&P Global Economics' forecast (see "An Already Historic U.S. Downturn Now Looks Even Worse," published on April 16, 2020). The COVID-19-induced recession will have a material negative effect on the state's economy and finances.

A future challenge for economic recovery reflects the state's population characteristics. Over the past five years, its

population has experienced modest annual declines, falling to an estimated 3.57 million residents in 2019. Like most of New England, it is aging faster than the rest of the country as prime working-age adults seek opportunities elsewhere, contributing to slower economic growth (see "Increasing Generational Dependency Poses Long-Term Social Risks to U.S. States' Fiscal And Economic Stability," published Feb. 24, 2020).

On a scale from '1.0' (strongest) to '4.0' (weakest), S&P Global Ratings assigned a '2.2' to Connecticut's economy.

Recently Strong Budgetary Performance Cushions The State From Near-Term Economic Effects

On a GAAP basis, Connecticut had a \$967.7 million general fund surplus for fiscal 2019. On a budgetary basis, income taxes were 49% of realized revenues, followed by sales and use taxes at 22%. On average, personal income taxes are approximately 50% of realized revenues. The state budget reserve fund (BRF, a rainy day fund) totaled \$2.5 billion compared to the prior year's balance of \$1.2 billion. On a budgetary basis, the fiscal 2019 ending balance is about 13% of net general fund appropriations.

The deposit to reserves was primarily the result of the state's revenue volatility cap, first implemented in fiscal year 2018. This statutory provision requires revenues above a certain threshold to be transferred to the BRF. At fiscal year-end 2019, a volatility transfer of \$949.7 million was made to that fund.

Over the course of the year, we expect Connecticut to experience a significant erosion in personal income tax receipts. The state's reliance on this revenue stream and financial services economic activity indicate a propensity for greater volatility primarily due to its linkages to equity market volatility via taxes on nonwage capital gains income (see "Market Volatility Has Varying Impact On U.S. States' Capital Gains Tax Exposure," published March 10, 2020). The state has followed the federal government and delayed income tax filings for three months to July 15. Such a timing delay will require it to lean more heavily on internal sources of liquidity.

Connecticut released updated consensus revenue forecasts at the end of April projecting a \$934.0 million deficit (4.8% of expenditures) in the general fund for fiscal 2020. To balance the budget this year, the state will use all of its expected volatility cap transfer to the reserve fund (\$318.3 million) and a draw from its rainy day fund (\$615.7 million). Prior to the COVID-19 pandemic, it was on track to increase reserve levels to over 15% during the biennium. The strong position of the state entering fiscal 2020 will be weakened, with reserve balances at 12.9% of appropriations likely to decline to 9.4% following the drawdown this year.

The projections also forecast a \$2.2 billion deficit (10.7% of expenditures) for fiscal 2021 that the state will need to address through some combination of expenditure and revenue changes or continued use of reserves. The level of reserves at the end of fiscal 2020 is expected to be \$1.9 billion and is insufficient to make up all of the projected deficit. The state has begun considering how to address the fiscal 2021 shortfall with revenue changes and other expenditure adjustments. However, the significance of the shortfall will likely result in some reserve use. During the last recession, the state issued nine-year deficit bonds to close its shortfall.

On a scale from '1.0' (strongest) to '4.0' (weakest), S&P Global Ratings assigned a score of '1.7' to Connecticut's

budgetary performance.

High Debt Burden Limits Fiscal Flexibility

In our opinion, Connecticut's debt burden is high by all measures when compared with those of state peers, in part reflecting debt issued for education and other programs that in other states might be handled at the local level of government.

We calculate that Connecticut's approximately \$24.7 billion in GO and tax-supported debt at fiscal year-end 2019 puts the state's total tax-supported debt per capita at about \$6,900, a level we consider high. Debt levels rose previously rose should stabilize as the state anticipates GO bond issuance in amounts below the GO debt cap, but given adopted bond authorizations, we do not expect levels to moderate in the near term. We calculate debt to personal income as high at 9% at fiscal year-end 2019 and tax-supported debt service also as high at 14.7% of total GAAP general governmental expenditures, less federal revenue and restricted grants. Tax-supported debt includes GO debt, capital leases, and special tax-supported transportation bonds.

Tolling proposed in the governor's CT2030 plan to remedy perceived underinvestment in the state's transportation infrastructure program did not receive sufficient legislative approval. As a result, the governor's "debt diet" reducing annual GO authorizations by approximately \$1 billion annually over the current biennium compared to prior years did not come to fruition either. The adopted bonding bill authorizes GO issuances of \$1.6 billion in fiscal years 2021 and 2022, a level in line with past authorizations.

Connecticut continues to adequately fund its pension liabilities and has adopted more conservative assumptions, although we view unfunded pension and OPEB liabilities as a significant credit pressure. When determining the state's liabilities, we view in aggregate its proportionate share of liabilities in its three defined-benefit pension systems and its retiree health care plan as a part of the State Employee OPEB Plan (SEOPEBP). Through an appropriation of the general fund, the state pays for one-third of plan costs to the Retired Teacher Healthcare plan (RTHP).

- We view the state's pension funding discipline as adequate as it annually contributes an amount in its major pension plans to cover static funding, but not enough to meet our minimum funding progress metric. We also consider the state's net pension liability high compared to peers and extremely underfunded.
- The state's OPEB liability is a source of credit pressure as the liability is high compared to peers, but recent actions to reduce the liability and pre-funding of an OPEB trust have resulted in a relatively stabilized unfunded liability.

On a scale from '1.0' (strongest) to '4.0' (weakest), S&P Global Ratings assigned a score of '3.5' to Connecticut's debt and long-term liabilities.

Pension And OPEB Liabilities

As of June 30, 2019, the state's overall average pension funded ratio across all plans was only 44%. The three-year average pension funded ratio for was also 44%. The total unfunded liability of all plans is about \$11,250 per capita, or a high 14% of state personal income.

Plans representing a significant portion of the state's unfunded pension liability as of June 30, 2019, include:

- State Employees' Retirement System (SERS): 37% funded with the state's applicable net pension liability \$22.8 billion
- Teachers' Retirement System (TRS): 52% funded with the state's applicable net pension liability \$17.1 billion

We believe, on the whole, management factors and actuarial inputs do not significantly encumber or improve our view of the state's overall pension funding discipline. As of fiscal year-end reporting, SERS used a 6.9% assumed rate of return, a closed level-percent of payroll amortization method phasing to level dollar, and a weighted amortization period of 26.8 years. For TRS, the state adopted a 6.9% discount rate (down from 8%) and reset the amortization period to a closed 30-year period with future amortizations using a layered 25-year period, and amortized at a level-percent of pay and will gradually move to a level-dollar method beginning with the June 30, 2024 valuation. In our opinion, reduction of the assumed rate of return and using a level-dollar amortization method should improve funding over time if funding discipline is maintained. We view the changes assumptions favorably, but recognize the reset in the amortization period to a longer duration was necessary to offset increasing costs. While the changes in assumptions more closely align with our guidance for evaluation pension risk, the state's large unfunded liability presents a continuing credit pressure.

The treasurer's office indicated that actions taken in 2019 ensure that there is adequate liquidity to meet all benefit obligations and to take advantage of investment opportunities in the current market environment. Asset smoothing through the actuarial valuations will mitigate the effects of returns lower than the rate of return assumption in any one year. The 2020 valuations will set the actuarially determined contributions for fiscal years 2022 and 2023.

For additional information on states' funding progress for pension liabilities, see our report "U.S. State Pension Reforms Partly Mitigate The Effects Of The Next Recession," published on Sept. 26, 2019.

OPEB liabilities

As of June 30, 2018, the state's applicable net OPEB liability for SEOPEBP was \$17.2 billion, or about \$4,800 per capita and approximately 6% of personal income, which is above medians. Recent actions to reduce the liability and pre-funding of an OPEB trust have resulted in a relatively stabilized unfunded liability. The plan was 4.7% pre-funded as the state has shown a commitment to increasing contributions above pay-as-you-go levels.

The unfunded state employee OPEB liability had been a larger \$26.6 billion at June 30, 2008. The lower liability reflects a change in the discount rate due to the creation of a trust fund, lower liabilities resulting from changes in plan design negotiated with the State Employee Bargaining Agent Coalition, and various health care cost-containment initiatives. Before the state reformed its OPEB system, OPEB costs had been forecast to rise sharply, reaching approximately \$45 billion by fiscal 2017.

Benefits provided by SEOPEBP to members of the plan include health care and life insurance benefits to eligible retirees and their spouses not part of TRS or the Municipal Employees' Retirement System. Plan benefits required contributions of plan participants and the state, and other plan provisions are described in statute.

Connecticut is also statutorily required to fund one-third of teacher pension OPEB costs, plus the shortfall left after

employer and employee contributions. The teachers' net OPEB liability alone was \$2.6 billion as of June 30, 2018, and only 1.5% funded.

For additional information on states' funding progress for OPEB liabilities, see our report "U.S. States Are Slow To Reform OPEBs As Decline In Liabilities Masks Increased Risk," published on Dec. 3, 2019.

Government Framework Provides Management Tools During A Recession

The government framework--including fiscal policy and intergovernmental funding within which each state taxes, spends, and issues debt--influences Connecticut's ability to manage through economic cycles.

A key feature of Connecticut's governmental framework is a balanced budget requirement. The state constitution provides that the amount of general budget expenditures authorized in any fiscal year must not exceed the estimated amount of revenue for that fiscal year. In developing its budget, Connecticut operates under a constitutional expenditure cap that limits spending growth to the greater of personal income growth or the inflation rate, unless the governor declares a state of emergency, or three-fifths of each house of the legislature votes to exceed the limit due to extraordinary circumstances. The expenditure cap excludes debt service, payments from federal grants, and matching payments, while certain pension costs are phased in under the cap in stages beginning in 2023. There is no statutory or constitutional prohibition against borrowing for operating purposes, and the state has done so in the past. Connecticut is authorized to issue GO debt, special tax obligation debt, and special obligation and revenue debt. Debt outstanding, authorized and payable from the general fund, is limited by statute to 1.6x total general fund tax receipts. Cancellation of debt authorization must be considered by state statute when Connecticut's debt approaches 90% of the state debt limit.

There are no constitutional or statutory provisions providing for, or precluding, a priority of payment for GO debt service over other claims of the state. Funds for debt service are considered to be appropriated and, as part of the contract between bondholders and Connecticut, the state must appropriate all amounts necessary for the punctual payment of principal and interest.

Connecticut, which is not a voter-initiative state, has the autonomy to raise taxes and has adjusted its tax structure over time. Although it has legal flexibility to adjust funding to local governments, we believe it might be politically difficult to make large municipal aid cuts. The state has previously avoided sharp midyear reductions in these areas in recent years.

Connecticut is required to put certain current statutory spending limitations into bond covenants for GO bonds sold after May 15, 2018. The covenants are in place until July 1, 2023, as an essentially unbreakable contractual obligation. These provisions include budgeting for only 99.5% of forecast revenues in fiscal 2020, transferring a new business pass-through tax, and certain annual income tax revenue above \$3.15 billion (adjusted annually for inflation), to the budget reserve, and various bonding caps, unless the governor and three-fifths of the legislature declare a financial emergency.

New statutory law also limits use of the budget reserve to instances when revenues are forecast to decline 1% or more,

or if the budget reserve equals 5% or more of current-year appropriations of the amount in excess of the 5% for the payment of unfunded past service liability of the employees' and teachers' pension systems, which are in excess of regular contributions.

On a scale from '1.0' (strongest) to '4.0' (weakest), S&P Global Ratings assigned a '1.9' score to Connecticut's governmental framework.

Strong Financial Policies And Budgetary Management Benefit The State During The Recession

We consider Connecticut's management practices strong under our Financial Management Assessment (FMA) methodology. An FMA of strong indicates that, in our opinion, practices are robust, well embedded, and likely sustainable.

Beginning Oct. 15, 2009, the Office of Policy and Management (OPM) and the legislature's Office of Fiscal Analysis have been required by statute to issue consensus revenue estimates each year. An update to the estimate is required by Nov. 10, Jan. 15, and April 30 of each year, and must cover a five-year period. In addition to its internal resources, Connecticut bases its revenue estimates for budget forecasting on a number of outside data sources and economic forecasting firms. The state's long-term financial planning includes a three-year forecast for the legislature in addition to the biennial budget. The financial plan is updated annually and submitted to the legislature by Nov. 15.

The state produces a five-year capital improvement plan as part of the November update. State statutes require monthly revenue and expenditure forecasts measured against the budget. The OPM and the Office of the Comptroller generate monthly reports projecting year-end surpluses or deficits.

State statutes also prescribe investment of state funds. Dedicated staff monitors investments and generates monthly reports. Connecticut also holds at least quarterly meetings with the investment advisory commission. The state has debt management policies that guide amortization and issuance.

State statute authorizes a BRF at a maximum of 15% of general fund appropriations. State statutes prescribe that all unappropriated general fund surpluses must be transferred into the state's BRF, and that the fund can only be drawn on to fund operating deficits. Before 2018, and the imposition of bond covenants mandating revenues above its volatility cap to go into the reserve, the state typically held low reserves in recent years despite the economic recovery.

Connecticut maintains a formal schedule for updating revenues and expenditures on a monthly basis, and this is done by both OPM and the comptroller. If the comptroller reports a projected general fund deficit of greater than 1%, the governor is required to file a deficit mitigation plan. Although the governor might reduce appropriations, this is limited to 5% of total appropriations and 3% of any fund, with any additional reductions requiring legislative approval. Legislative deliberation relating to interim budget adjustments has contributed to a delay in addressing budget gaps at times. The state is allowed to end the year in a deficit position, which has periodically been addressed with deficit bonds. However, statutory provisions provide that any new budget deficit after fiscal 2013 must be funded in the budget of the year following the next fiscal year (when the magnitude of the previous budget deficit has become fully known). Gap-closing solutions in previous bienniums have relied on significant nonrecurring measures and structural solutions.

On a scale from '1.0' (strongest) to '4.0' (weakest), S&P Global Ratings assigned a score of '1.5' to Connecticut's financial management.

Ratings Detail (As Of May 15, 2020)		
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut APPROP		
Long Term Rating	A-/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/A-1/Stable	Affirmed
Connecticut GO		
Long Term Rating	A/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	
Connecticut GO bnds ser 2019 A dtd 04/11/2019 due 04		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO bnds ser 2019 A dtd 04/11/2019 due 04		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed

Ratings Detail (As Of May 15, 2020) (cont.)		
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SECMKT)		A (C)
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SEC MKT)		A 66
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SEC MKT)	A(CDIID) (Stable	Affirmed
	A(SPUR)/Stable	Ammed
Connecticut GO (AGM) (SEC MKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
	A(SFOR)/ Stable	Ammed
Connecticut GO (AGM) (SEC MKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
	A(b) O(f) Stable	Ammeu
Connecticut GO (AGM) (SEC MKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SEC MKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (AGM) (SEC MKT)	(
Unenhanced Rating	A(SPUR)/Stable	Affirmed
0		

Ratings Detail (As Of May 15, 2020) (cont.)		
Connecticut GO (AMBAC)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		A (C 1
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		A 66
	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	A(CDIID) (Stable	Affirmed
	A(SPUR)/Stable	Ammed
Connecticut GO (BAM) (SECMKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
	A(SI OK)/Stable	Ammed
Connecticut GO (BAM) (SECMKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
	A(5) OI() Stable	Ammed
Connecticut GO (BAM) (SECMKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		- Ammou
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	()	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
U U		

Ratings Detail (As Of May 15, 2020) (cont.)		
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		4 00 I
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		A () 1
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	A (CDLID) (Stable	Affirmed
	A(SPUR)/Stable	Amrmed
Connecticut GO (BAM) (SECMKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
C C	A(SI OK) Stable	Ammed
Connecticut GO (BAM) (SECMKT) Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		7 minined
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	()	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	()	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)	· · · ·	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SECMKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed

Ratings Detail (As Of May 15, 2020) (cont.)		
Connecticut GO (BAM) (SEC MKT)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (BAM) (SEC MKT)	(
Unenhanced Rating	A(SPUR)/Stable	Affirmed
-	A(DI OIG) Diable	Ammidu
Connecticut GO (BAM) (SEC MKT)		A fG
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (FGIC)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (FGIC) (National)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (MBIA) (National)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut GO (MBIA) (National)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Capital Region Development Authority, Connection	cut	
Connecticut		
Capital City Econ Dev Auth (Connecticut) GOEQUIV		
Long Term Rating	A/A-1/Stable	Affirmed
Capital Region Dev Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Capital Region Dev Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Capital Region Dev Auth (Connecticut) GOEQUIV		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth, Connecticut		
Connecticut		
Connecticut Hlth & Educl Facs Auth (Connecticut) APP	ROP	
Long Term Rating	A-/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) APP	ROP	
Long Term Rating	A-/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GO		
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GO		
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOE		
Long Term Rating	A/Stable	Affirmed
Connecticut HIth & Educl Facs Auth (Connecticut) GOE		
Long Term Rating	A/Stable	Affirmed
Connecticut HIth & EducI Facs Auth (Connecticut) GOE		
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOE		
Long Term Rating	A/Stable	Affirmed

Patings Datail (As Of May 15, 2020) (cont.)		
Ratings Detail (As Of May 15, 2020) (cont.)		
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC		A (C) 1
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC		
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC		
Long Term Rating	A/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC	QUIV (AGM)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC	QUIV (AGM)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC	QUIV (BAM)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GOEC	QUIV (BAM)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) GO ed	quiv (BAM) (SECMKT)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) MOR	ALOB (ASSURED GTY)	
Unenhanced Rating	BBB(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) (BAM) (SEC MKT)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) (BAM	. ,	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hlth & Educl Facs Auth (Connecticut) (BAM	. ,	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Hsg Fin Auth, Connecticut		
Connecticut		
	en oblig hade	
Connecticut Hsg Fin Auth (Connecticut) state-supported		A fGuuna a d
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) state-supported		
6 6	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) state-supported	,	
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Connecticut Hsg Fin Auth (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Connecticut Innovations Incorporated, Connecticu	t	
Connecticut		

Ratings Detail (As Of May 15, 2020)	(cont.)	
Connecticut Dev Auth (Connecticut) GO (A	AGM)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Dev Auth (Connecticut) GO (I	MBIA) (National)	
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Connecticut Innovations Inc (Connecticut) GOEQUIV		
Long Term Rating	A/Stable	Affirmed
Hartford, Connecticut		
Connecticut		
Connecticut GO (ASSURED GTY)		
Unenhanced Rating	A(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Copyright © 2020 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Ratingrelated publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.