

## CREDIT OPINION

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 Rate this Research

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# Vermont (State of)

## Update to credit analysis

### Summary

The [State of Vermont](#) (Aa1 stable) maintains a strong financial position, putting it in a good place to weather lingering challenges that may be brought about by the coronavirus pandemic. Employment recovery in Vermont is slow among US states, though it is sufficient to drive current year revenue that is slightly outpacing the state's budget assumption. As a result, the state is on track to close the fiscal year (June 30) with a solid fund balance and healthy cash reserves.

Vermont has the smallest US state economy and has the second smallest population, but resident income is above average and educational attainment is high. Over the long term, an aging population may be a drag on future growth and Vermont's performance on multiple economic measures has lagged that of the US for years.

With slower than average growth, Vermont's long-term liabilities will weigh more heavily on its economic base. Vermont's leverage, measured by combined debt and unfunded post-employment obligations relative to GDP, is high among US states. Still, we do not anticipate a major negative shift in the state's fixed cost burden in the coming years and, overall, we expect the state's credit standing to remain strong. As a US state, Vermont has broad flexibility to adjust its finances in response to operating challenges.

Exhibit 1

### Vermont's outstanding debt, as of the close of fiscal year 2020 (June 30, 2020)

Type of debt	Principal outstanding (\$m)	Moody's rating
General Obligation	\$613	Aa1
Special tax - motor fuel assessment	\$23	Aa2
Special tax - property transfer tax	\$33	Aa2
Appropriation - mental health services	\$8	A1
Moral obligation - student loan revenue	\$8	Aa3
Capital leases	\$9	N/A

We exclude the student loan revenue bonds from the calculation of Vermont's net tax-supported debt.

Source: State of Vermont and Moody's Investors Service

## Credit strengths

- » Although Vermont's economy is the smallest of all US states, resident income is above average, educational attainment is high, and unemployment is low
- » Financial operations and budget reserves are sound and stable, and liquidity is very healthy

## Credit challenges

- » The state's economic performance lags that of the US and many state peers, and an aging population may be a drag on future growth
- » Relative to state GDP, Vermont's leverage (combined debt and unfunded post-employment liabilities) is higher than most states

## Rating outlook

The stable outlook reflects the expectation that Vermont's economic fundamentals, financial position and fiscal management will remain strong and support the current rating.

## Factors that could lead to an upgrade

- » Improved demographic and economic trends that more closely track those of the nation and other highly rated states
- » Moderated leverage, especially unfunded pensions and retiree health care liabilities, relative to state GDP

## Factors that could lead to a downgrade

- » Substantial growth in debt or unfunded post-employment liabilities
- » A slowdown in economic expansion or revenue growth
- » A departure from strong fiscal management practices

## Key indicators

Exhibit 2

Vermont (State of)	2016	2017	2018	2019	2020	50-State Median (2019)
Operating Fund Revenues (000s)	\$2,927,613	\$2,963,227	\$3,113,669	\$3,542,301	\$3,503,207	\$12,439,906
Available Balances as % of Operating Fund Revenues	6.2%	5.0%	7.1%	7.8%	8.8%	9.1%
Nominal GDP (billions)	\$31.4	\$32.0	\$33.0	\$34.0	\$33.3	\$250.6
Nominal GDP Growth	2.5%	1.9%	2.9%	3.1%	-2.2%	3.6%
Total Non-Farm Employment Growth	0.3%	0.6%	0.2%	0.1%	-9.7%	0.9%
Fixed Costs as % of Own-Source Revenue	7.6%	8.1%	8.2%	8.4%	9.7%	7.8%
Adjusted Net Pension Liabilities (000s)	\$4,034,179	\$5,123,076	\$4,882,266	\$4,563,037	\$5,737,409	\$11,258,253
Net Tax-Supported Debt (000s)	\$666,935	\$615,759	\$713,886	\$661,983	\$687,007	\$3,864,531
(Adjusted Net Pension Liability + Net Tax-Supported Debt) / GDP	15.0%	17.9%	17.0%	15.4%	19.3%	6.9%

Source: Vermont's audited financial statements, the US Bureau of Economic Analysis and Moody's Investors Service

## Profile

The State of Vermont is located in the northeast United States. Its population of just under 627,000 is the second lowest in the country. It has the smallest economy among US states, measured by a 2019 gross domestic product of about \$34 billion.

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## Detailed credit considerations

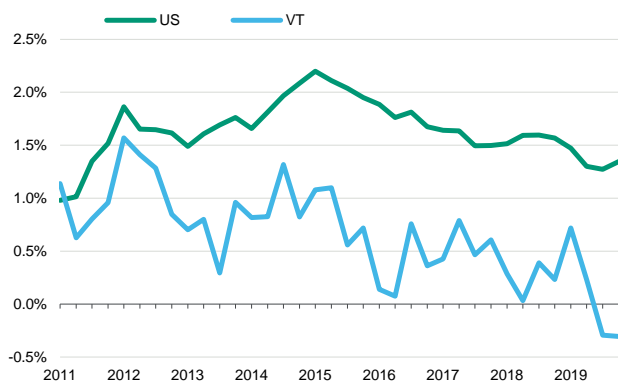
### Economy

Vermont is recovering jobs more slowly than most states. As of the final quarter of calendar year 2020, Vermont's total nonfarm employment was 9% below its level as of the first quarter of 2020. This marks the eighth weakest recovery in jobs among the 50 states and [District of Columbia](#) (Aaa stable).

The long-term economic impact of the coronavirus outbreak on Vermont remains uncertain, as it is for the other forty-nine states. Vermont's capacity to recover jobs at a rate more on par with other states may be stymied by the role that certain sectors play in the state's employment base and other underlying demographic challenges. Tourism and hospitality play important roles in the state's economy and those sectors could face delays in returning to their prior levels of output. Further, slow population growth in Vermont has been a driver of economic performance that lagged the US for several years (see Exhibits 3 & 4) and could be a drag on the state's long-term growth.

Exhibit 3

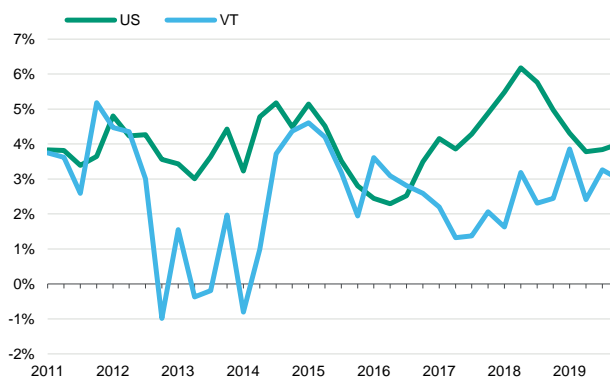
#### Year-over-year change in quarterly nonfarm employment



Source: US Bureau of Labor Statistics

Exhibit 4

#### Year-over-year change in quarterly nominal GDP



Source: US Bureau of Economic Analysis

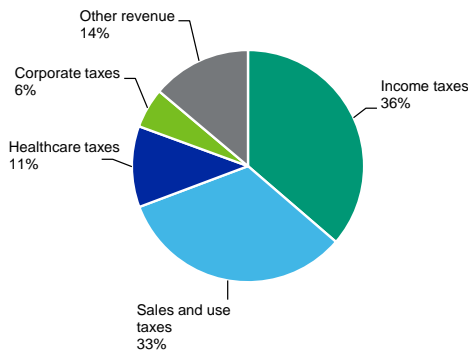
### Finances

Vermont's year-to-date financial performance in fiscal 2021 is sound. The slower recovery in employment means Vermont has seen less of a positive variance in revenue relative to its current year forecast than is the case in other states. However, the state continues to hold strong reserves, positioning it to weather a period of slow revenue growth.

Through February of the current fiscal year 2021, revenue collected within the state's three primary operating funds – general, transportation and education – was tracking about 2.5% above forecast assumptions. Vermont relies most heavily on personal income and sales taxes (see Exhibit 5). The state also accounts for school district property taxes in its financial statements because the taxes are pooled in the state's education fund. However, the property taxes are restricted for education and levied, per statute, as an education tax. The state cannot use the property taxes to cover state spending other than education.

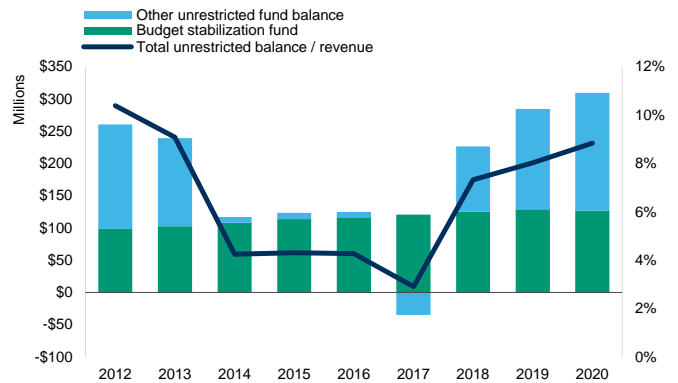
Despite the disruption to revenue caused by the coronavirus outbreak, Vermont still closed fiscal 2020 with healthy reserves. The state maintained its formal budget stabilization balances in its three main operating funds at a total \$127 million, which was down only slightly from the \$129 million with which the state had closed fiscal 2019. Vermont maintains its formal budget stabilization reserves at 5% of the prior year's spending. In addition to its budget stabilization reserves, Vermont's unrestricted fund balance across its key operating funds remained strong as a share of state revenue in fiscal 2020 (see Exhibit 6).

Exhibit 5  
**Composition of revenue in Vermont's three primary operating funds, fiscal 2019**



Sources are shown as percentages of combined general, transportation and education fund revenue less property taxes and federal funds.  
 Source: State of Vermont

Exhibit 6  
**Budget stabilization reserves and other fund balance across Vermont's three primary operating funds**

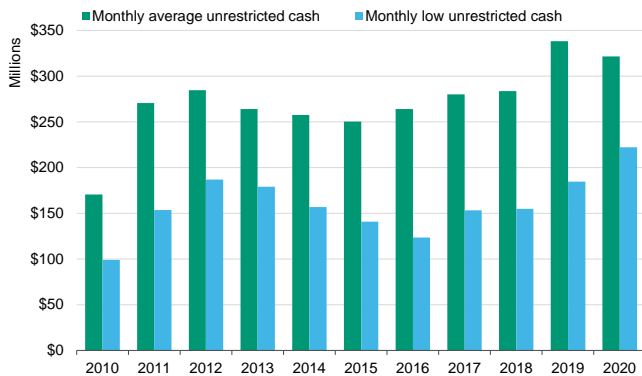


Balances and revenue reported in the state's general, transportation and education funds.  
 Source: Vermont's comprehensive annual financial reports and Moody's Investors Service

**Liquidity**

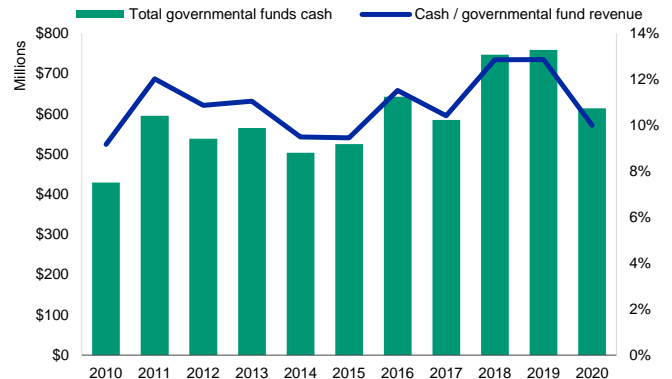
Across government activities, Vermont's cash balances also remain healthy. Exhibit 7 below shows the monthly low and average balance of unrestricted cash held for core operations by fiscal year as reported by the state treasurer. Exhibit 8 shows year-end cash and investments held across all governmental funds as reported in the state's comprehensive annual financial reports. Both charts exclude federal CARES Act funds.

Exhibit 7  
**Monthly unrestricted cash balances reported by state treasurer**



Source: State of Vermont and Moody's Investors Service

Exhibit 8  
**Cash and investments across total governmental funds**



Source: Vermont's comprehensive annual financial reports and Moody's Investors Service

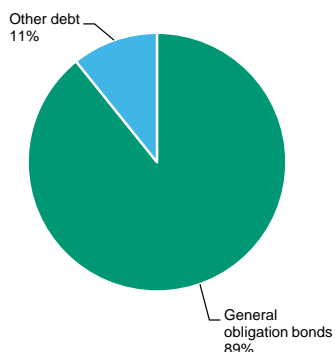
**Debt and pensions**

Vermont's debt burden will remain moderate, but it will continue to carry a heavy post-employment liability burden. Vermont's net tax supported debt (NTSD) primarily consists of general obligation bonds (see Exhibit 9) and its debt ratios are very close to the state medians. However, as a share of state nominal GDP, Vermont's adjusted net pension liability (ANPL) is consistently among the ten highest of the 50 states. The ANPL is our measure of a state or local government's pension burden that uses a market-based interest rate to value accrued liabilities.

Vermont's unfunded pension liability, as measured by our ANPL, is the principal component of its leverage (see Exhibit 10). Though Vermont's combined debt and pension burden remains above the state median, it is not on a rapidly growing path and the state's contribution practices are sound. ANPL growth in 2020 is largely a consequence of a decline in the market-based interest rate we use to discount liabilities, an effect that will be fairly consistent across states.

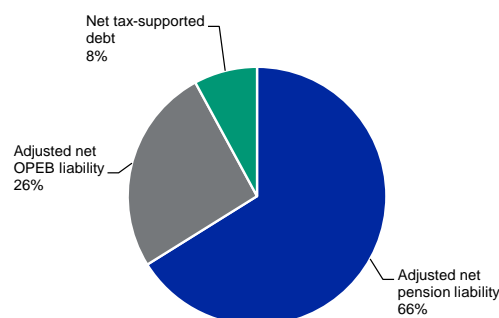
Despite being above average, Vermont's debt and pension burden is much lower than those of the most highly leveraged states. And, importantly, Vermont's pension burden incorporates all liabilities associated with statewide school districts because the state accounts for all primary and secondary education financial activities in its own financial statements. This is a big driver of Vermont's high pension burden relative to other states.

Exhibit 9  
**The majority of net tax-supported debt consists of general obligation bonds**



Source: State of Vermont

Exhibit 10  
**Unfunded post-employment benefits liabilities dominate Vermont's leverage**



Source: State of Vermont and Moody's Investors Service

**Legal security**

Exhibit 1 above details the different types of bonds outstanding that we consider to be net tax-supported debt of Vermont. Exhibit 11 below details the legal security associated with each type of bond.

Exhibit 11  
**Legal security of Vermont's debt**

Type of debt	Legal security
General obligation	Full faith and credit obligation of the state backed by the state's authority to levy taxes without limitation as to rate or amount.
Special tax - motor fuel assessment	Receipts of a 2% assessment on the retail price of each gallon of gasoline sold by distributors in the state and receipts of a \$0.03 assessment on each gallon of diesel fuel sold in the state.
Special tax - property transfer tax	Statutory transfer of the first \$2.5 million of property transfer tax receipts from the state to the Vermont Housing Finance Agency (HFA). Act 85 of 2017 specifically allocates the first \$2.5 million of collections to the HFA to pay debt service on the authorized bonds. The bonds have been issued by the HFA.
Appropriation - mental health services	Payments appropriated by the state to providers of developmental disability services; the bonds have been issued by the Vermont Economic Development Authority and Vermont Educational and Health Buildings Finance Agency.
Moral obligation - student loan revenue	Payments made by student loan borrowers and a debt service reserve fund that the state pledges to replenish, subject to appropriation, should a draw on the reserve be made to pay debt service; the bonds have been issued by the Vermont Student Assistance Corporation.

Source: Respective bond offering documents and Moody's Investors Service

**Debt structure**

All of Vermont's debt is fixed rate.

**Debt-related derivatives**

Vermont is not party to any debt-related derivatives.

### Pensions and OPEB

Across both of its retirement plans (the Vermont State Retirement System and State Teachers' Retirement System), Vermont's pension contribution of \$211 million in fiscal 2020 consumed 5.5% of own-source revenue. This contribution was just below the \$220 million we calculate as the state's aggregate pension "tread water" indicator. The "tread water" indicator, which we calculate based on pension plan disclosures, measures the annual employer contribution necessary to forestall growth in plan reported net pension liabilities, assuming other plan actuarial assumptions hold and after accounting for employee contributions. It is a measure of a government's capacity and willingness to control growth in unfunded liabilities. The gap between Vermont's actual contribution and the "tread water" indicator was a modest 0.2% of own-source revenue. Vermont's fiscal 2018 and 2019 contributions had slightly exceeded those years' respective "tread water" indicators.

As of fiscal 2020, Vermont reported a net OPEB liability of \$2.3 billion under GASB statement 75. As with pensions, we adjust OPEB liabilities using a market-based interest rate. However, because many public OPEB plans are not prefunded, they are already discounted at a lower rate than public pensions plans tend to use. In the case of Vermont, our discount rate adjustment results in an adjusted net OPEB liability of \$2.3 billion as well, which is about 6.5% of the state's 2019 GDP. As with pensions, Vermont's net OPEB liability includes 100% of state teacher retiree health care liabilities. Vermont contributed \$73 million to its OPEB plans in fiscal 2020, which is also incorporated in our fixed cost ratio reported in Exhibit 2.

### ESG considerations

#### Environmental

As a US state with a wealthy and diverse economy, the flexibility to raise revenue, and support from the federal government, Vermont will continue to demonstrate high resilience to environmental risks. In general, US states face [low credit risk stemming from environmental events](#), the most likely to occur being natural disasters. Even among US states, Vermont's environmental risks are low. With no coastal exposure, Vermont local governments are primarily exposed to extreme rainfall risk, according to data from Moody's affiliate Four Twenty Seven. Increased rainfall could result in more frequent local or regional flooding. We expect the state and most of its local governments have the resources and capacity to address flood events.

#### Social

[Key social considerations for US states](#) include demographics, health services and housing. Vermont has one of the slowest growing populations in the US and the most rapid decline in prime working age population (residents aged 25-54). Since 2000, the state's prime working age population fell just over 16% and it has fallen nearly 10% since 2010. These are the highest rates of decline over these two periods among the 50 states and the District of Columbia. Since 2010, the prime working age population in the US grew nearly 5%.

Support for health services by the federal government, mainly through Medicaid grants, represents a vulnerability for states and Vermont is no exception. According to data of the federal government, approximately 27% of Vermont residents are currently enrolled in Medicaid and the Children's Health Insurance Program (CHIP), a ratio higher than the 24% of the national population enrolled. This indicates that Vermont is a bit more vulnerable to a change in federal policy or funding than other states. Statewide, housing affordability has not fallen as much in Vermont as it has in many parts of the US. Though slow population growth could be a drag on future economic growth, it could keep housing affordable in most parts of the state.

#### Governance

[Governance is a material consideration](#) for the sector and all of the state's ratings. Vermont's governance is strong. The state updates its consensus revenue forecast twice per year, in January and July. The January update covers the remainder of the current fiscal year as well as the two upcoming fiscal years. The July update then revises the forecast for the newly begun fiscal year and the immediately following fiscal year. The two forecast updates are required by statute. During economic downturns, such as the 2007-09 recession, the state has updated its revenue forecast more frequently to aid responses to weakened revenue performance.

## Rating methodology and scorecard factors

The US States and Territories Rating Methodology includes a scorecard, which summarizes the 10 rating factors generally most important to state and territory credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 12

### US state and territories rating methodology scorecard

Vermont (State of)

Rating Factors	Measure	Score
<b>Factor 1: Economy (25%)</b>		
a) Per Capita Income Relative to US Average [1]	97.9%	Aa
b) Nominal Gross Domestic Product (\$ billions) [1]	\$33.3	A
<b>Factor 2: Finances (30%)</b>		
a) Structural Balance	Aa	Aa
b) Fixed Costs / State Own-Source Revenue [2]	9.7%	Aa
c) Liquidity and Fund Balance	Aa	Aa
<b>Factor 3: Governance (20%)</b>		
a) Governance / Constitutional Framework	Aaa	Aaa
<b>Factor 4: Debt and Pensions (25%)</b>		
a) (Moody's ANPL + Net Tax-Supported Debt) / State GDP [2] [3]	19.3%	Aa
<b>Factors 5 - 10: Notching Factors [4]</b>		
Adjustments Up: Financial Stability	0.5	
Adjustments Down: None	0	
<b>Rating:</b>		
a) Scorecard-Indicated Outcome		Aa1
b) Actual Rating Assigned		Aa1

[1] Economy measures are based on data from the most recent year available.

[2] Fixed costs and debt and pensions measures are based on data from the most recent debt and pension medians report published by Moody's.

[3] ANPL stands for adjusted net pension liability.

[4] Notching factors 5-10 are specifically defined in the US States and Territories Rating Methodology.

Source: US Bureau of Economic Analysis, Vermont's audited financial statements and Moody's Investors Service

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