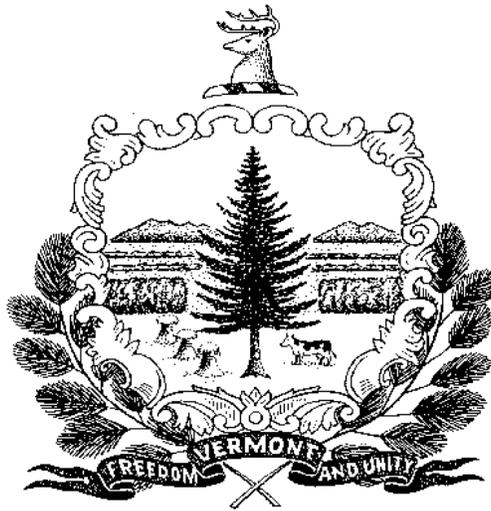**CAPITAL DEBT AFFORDABILITY
ADVISORY COMMITTEE**

State of

Vermont

**RECOMMENDED ANNUAL NET TAX-SUPPORTED
DEBT AUTHORIZATION**

2025 Report

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INTRODUCTION

Background and Purpose

The Capital Debt Affordability Advisory Committee (the "Committee" or "CDAAC") was created by Act No. 258 of 1989. The Committee is required, on or before September 30 of each year, to submit to the Governor and the General Assembly the Committee's estimate of net State tax-supported debt that prudently may be authorized for the next fiscal year, together with a report explaining the basis for that estimate. The full text of 32. V.S.A. Chapter 13, Subchapter 8, "Management of State Debt," which details CDAAC's statutory mandate in its entirety, is included as **Appendix A** to this Report.

In its 2012 Capital Construction and State Bonding Budget Adjustment Act (Sec. 1 of Act No. 104 of 2012), the General Assembly expressed its intent to move permanently to a biennial capital budgeting cycle "to accelerate the construction dates of larger projects and thus create jobs for Vermonters sooner than would be possible under a one-year capital budgeting cycle." In response, starting with its 2012 Report the Committee began presenting a two-year debt recommendation.

As in years past, this report relies upon U.S. State debt medians contained in a report from Moody's Investor's Service (included as **Appendix B**), which is the source of data for calculating the peer state debt ratios that inform the State's debt guidelines. Because Moody's 2025 report was not available by the time the report was finalized and approved, this report uses Moody's 2024 medians.

Biennial Net Tax-Supported Debt Recommendation

In its 2024 Report, the Committee's two-year recommendation for fiscal years 2026 and 2027 was $100,000,000. This year, the Committee is reaffirming its previous recommendation.

Consistent with statutory requirements, this final report also analyzes each of the following considerations; updated statutory language added from the BIG BILL – Fiscal Year 2026 Appropriations Act (Sec. E.131.2 of Act No. 27 of 2025), is underlined:

1. The amount of net State tax-supported indebtedness that, during the next fiscal year, and annually for the following nine fiscal years, will be outstanding; and has been authorized but not yet issued (see Section 1, "State Debt");

2. A projected schedule of affordable net State tax-supported bond authorizations for the next fiscal year and annually for the following nine fiscal years (see Section 1, "State Debt");

3. Projected debt service requirements during the next fiscal year, and annually for the following nine fiscal years, based upon existing outstanding debt; previously authorized but unissued debt; and projected bond authorizations (see Section 1, "State Debt");

4. The criteria that recognized bond rating agencies use to judge the quality of issues of State bonds, including (A) existing and projected total debt service on net tax-supported debt as a percentage of combined General and Transportation Fund revenues, (B) existing and projected total net tax-supported debt outstanding as a percentage of total State personal income, (C) <u>existing and projected pension and other postemployment benefit liability metrics, (D) and other metrics at the Committee's discretion, including long-term liabilities not covered in subdivisions (A)-(C) of this subsection</u> (see Section 3, "Debt Guidelines" and Section 5, "Additional Credit and Affordability Considerations");

5. The principal amounts currently outstanding, and balances for the next fiscal year, and annually for the following nine fiscal years, of existing obligations of instrumentalities of the State for which the State has a contingent or limited liability; any other long-term debt of instrumentalities of the State not secured by the full faith and credit of the State, or for which the State Legislature is permitted to replenish reserve funds; and to the maximum extent obtainable, all long-term debt of municipal governments in Vermont that is secured by general tax or user fee revenues (see Section 1, "State Debt");

6. The impact of capital spending upon the economic conditions and outlook for the State (see Section 2, "Economic and Financial Forecasts");

7. The cost-benefit of various levels of debt financing, types of debt, and maturity schedules (see Section 1, "State Debt");

8. Any projections of capital needs authorized or prepared by the Agency of Transportation, the Joint Fiscal Office, or other agencies or departments (see Section 5, "Additional Credit and Affordability Considerations");

9. Any other factor that is relevant to the ability of the State to meet its projected debt service requirements for the next five fiscal years; or the interest rate to be borne by, the credit rating on, or other factors affecting the marketability of State bonds (see Section 5, "Additional Credit and Affordability Considerations"); and

10. The effect of authorizations of new State debt on each of the above considerations.

11. <u>The capital asset depreciation ratio reflecting unfunded capital maintenance costs.</u>

During its 2025 discussions the Committee discovered that the above revisions reflected an interim draft of the proposed statutory revisions, that inadvertently was included in the Treasurer's Office's legislative testimony. As such, the Treasurer's Office intends to bring the final, Committee-approved proposed changes to the General Assembly for consideration during the 2026 Legislative Session. The markup of statute incorporating the Committee's final proposed changes is included as **Appendix F**.

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1. STATE DEBT

In general, the State has borrowed money by issuing General Obligation (G.O.) bonds, which the State pledges its full faith and credit to repay. From 2010 through 2013, the State also issued three series of Special Obligation Transportation Infrastructure Bonds (TIBs), however these bonds were redeemed in June 2022. Also, with the implementation of GASB 87 and GASB 96 in fiscal year 2022, the State was required to report both leases and subscription-based information technology arrangements (SBITAs) that exceed 12 months in length as liabilities (i.e., debt).

The State has also authorized the Vermont Housing Finance Agency (VHFA) to issue bonds to finance affordable housing projects and to use a portion of the State's property transfer tax to pay the bonds' debt service. The State also has established certain statewide authorities that have the power to issue revenue bonds that are not secured by State taxes, but for which the State has contingent or limited liability, sometimes referred to as "moral obligation."

The Committee and the rating agencies include the State's G.O. debt, leases, SBITAs and the VHFA Property Transfer Bonds as net tax-supported debt. If the State issued TIBs again, these would also be included as net tax-supported debt[1].

General Obligation Bonds
The State has no constitutional or other limit on its power to issue G.O. bonds besides borrowing only for public purposes. Pursuant to various appropriation acts, the State has authorized and issued G.O. bonds for a variety of projects or purposes. Each appropriation act historically specified projects or purposes and the amount of General Fund, Transportation Fund or Special Fund bonds to be issued, but as a practical matter the State has issued General Obligation bonds financed exclusively from the State's General Obligation Debt Service Fund since 2010. Currently, the State's G.O. Debt Service Fund is capitalized almost entirely by transfers from the State's General Fund, with a small amount of outstanding debt ($1.0 million, or slightly less than 0.2%) supported by the Transportation Fund that will be repaid in 2029. The last G.O. bonds supported by other special funds were repaid in 2017.

The State Treasurer, with the approval of the Governor, is authorized to issue and sell bonds that mature not later than twenty (20) years after the issue date of such bonds and such bonds must be payable in substantially equal or diminishing amounts annually (i.e., level principal). Under the General Obligation Bond Law, except with respect to refunding bonds, the first of such annual payments is to be made not later than five years after the issue date of the bonds; as a practical matter the first payment typically occurs within one year. All terms of the bonds shall be determined by the State Treasurer with the approval of the Governor as he or she may deem for the best interests of the State.

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[1]Additionally, Moody's Investor's Service includes certain bonds that have been issued by Vermont Economic Development Authority and Vermont Educational and Health Buildings Financing Agency on behalf of borrowers that are State-designated providers of developmental and mental health services, among other services, and has been licensed and authorized pursuant to State statutes to provide such services. The current amount of the designated provider bonds that Moody's considers as State Net Tax Supported Debt is $12 million; the Committee does not include this amount because the other two agencies do not, and because the amount is de minimis.

The CDAAC has recommended reduced or level debt authorizations starting with the fiscal year 2016-2017 biennium. Recommended authorizations, which have been adopted by the Governor and the General Assembly have been reduced by 37.5% since the 2014-2015 biennium.

STATE OF VERMONT
HISTORICAL GENERAL OBLIGATION BOND AUTHORIZATIONS, ISSUANCE
AND CUMULATIVE AUTHORIZED BUT UNISSUED AMOUNTS BY BIENNIUM [1][2][3][4]
(IN MILLIONS OF DOLLARS)
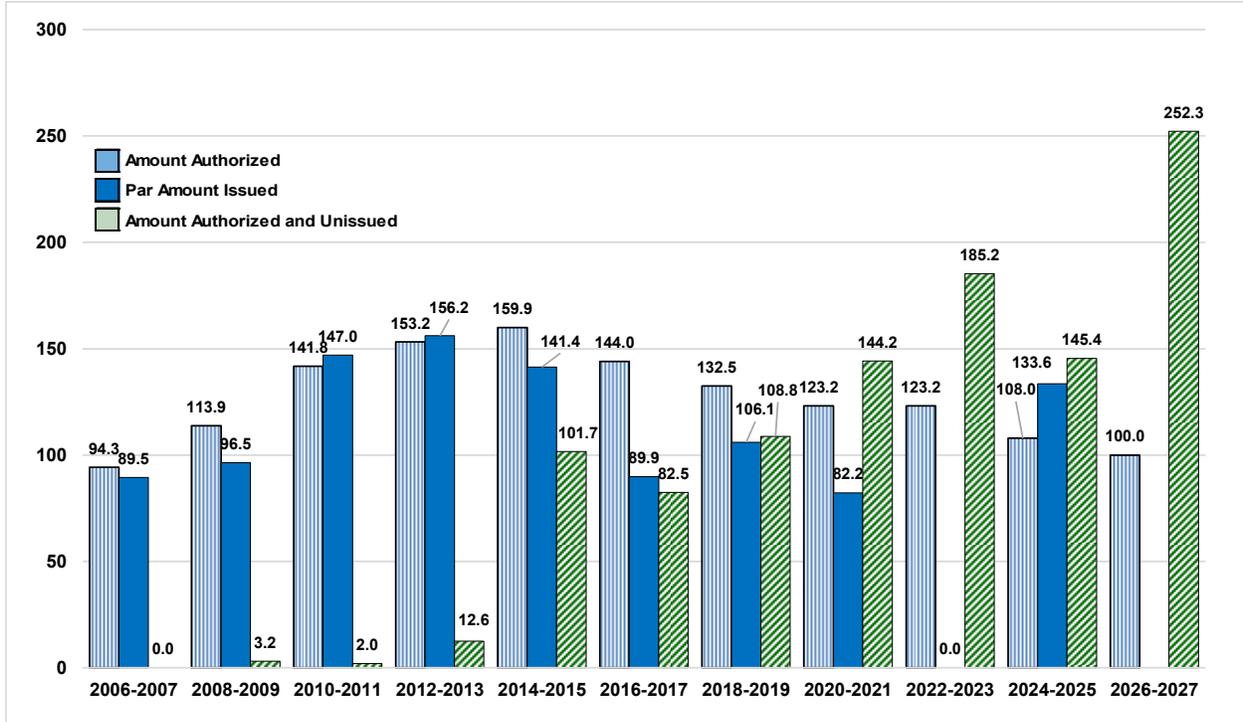
Notes:
[1] Annual issuances do not include refunding bonds. Authorized but unissued debt has been carried forward and employed in subsequent years' bond issuances.
[2] Pursuant to Section 34 of Act 104 of 2011, commencing in fiscal year 2013, premium received from the sale of bonds may be applied towards the purposes for which such bonds were authorized.
[3] The "Authorized" amount reflects the two-year authorized amount of the General Assembly. These amounts exclude any amounts authorized that relate to the principal amount of bonds authorized in prior biennial capital bills but not issued due to the use of original issue bond premium to fund capital projects.
[4] Amount Authorized and Unissued shown for 2026-2027 is unaudited as of June 30, 2025.

VHFA Property Transfer Bonds

The VHFA Property Transfer Bonds were issued in January 2018 and are payable from revenues received from a State tax upon the transfer by deed of title to property located within the State. The bonds were issued generally with a level debt service amortization structure, had an outstanding par amount of $25.745 million as of June 30, 2025, and are scheduled to mature in November 2037.

Leases
The total amount of Leases as of June 30, 2024, with a fair market value of $65.000 million, is included as net tax-supported debt; the prior fiscal year's audited Lease balances and annual payments were the latest available as of September 30, 2025.

Subscription Based Information Technology Arrangements (SBITAs)
The total amount of SBITAs as of June 30, 2024, with a fair market value of $22.141 million, is being added to the State's calculation of net tax-supported debt; the prior fiscal year's audited SBITA balances and annual payments were the latest available as of September 30, 2025.

Net Tax-Supported Debt Outstanding
The State's aggregate net tax-supported debt principal amount decreased from $727.168 million as of June 30, 2024, to $663.006 million as of June 30, 2025, a decrease of 8.8%. This decrease is due primarily to the State not issuing new money G.O. Bonds since June 2024, and to the "roll-forward" of last year's Lease and SBITA balances that does not reflect any new Leases or SBITAs that may have been entered into since June 30, 2024. The VHFA Bonds' outstanding principal decreased by $1.535 million, the net principal amount of Leases outstanding decreased by $11.839million, and the net amount of SBITAs increased by $5.337 million due to an adjustment from the preliminary estimate used in last year's report to the balance reported in the State's 2024 Annual Comprehensive Financial Report (ACFR). The table below sets forth the sources of the change in net tax-supported debt outstanding from fiscal year 2024 to fiscal year 2025 (in thousands).

Net Tax-Supported Debt as of 6/30/24	$727,168
Plus: New G.O. Bonds	0
Plus: New Lease Principal	0
Plus: New SBITA Principal	23,155
Less: Retired G.O. Bonds	(56,125)
Less: Retired VHFA Property Transfer Bonds	(1,535)
Less: Lease Principal Payments	(11,839)
Less: SBITA Principal Payments	(17,818)
Net Tax-Supported Debt as of 6/30/25	$663,006

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STATE OF VERMONT
Debt Statement
As of June 30, 2025 (In Thousands)

General Obligation Bonds[1]:

General Fund	$549,080
Transportation Fund	1,040

VHFA Property Transfer Tax Bonds:

Property Transfer Tax Bonds, Series 2018	$25,745

Leases & SBITAs[4]:

Leases	$65,000
Subscription Based Information Technology Arrangements	22,141

Reserve Fund Commitments[2]:

Vermont Municipal Bond Bank	$686,735
Vermont Housing Finance Agency	155,000
Vermont Economic Development Authority	181,000
Vermont Student Assistance Corporation	50,000
Vermont Telecommunications Authority[3]	40,000
University of Vermont/State Colleges	100,000

Gross Direct and Contingent Debt	**$1,875,741**
Less:	
Reserve Fund Commitments	$1,212,735
Net Tax-Supported Debt	**$663,006**

[1]Since 2010, debt service on general obligation bonds is paid for from the State's General Obligation Debt Service fund. Amounts given above represent financing sources of the General Obligation Debt Service fund.

[2]Figures reflect the maximum amount permitted by statute. However, many of the issuers have not issued debt or have not issued the maximum amount of debt permitted by their respective statute. See "Moral Obligation Indebtedness" herein for additional information.

[3]The General Assembly dissolved the Vermont Telecommunications Authority in 2014, however, this amount remains available to the Vermont Telecommunications Authority by statute should it ever be reconstituted.

[4]The Lease and SBITA balances as of June 30, 2025, were not available at the time of publication. The above amounts represent balances as of June 30, 2024 net of scheduled principal payments through June 30, 2025.

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STATE OF VERMONT
LONG-TERM NET TAX-SUPPORTED DEBT OUTSTANDING FY 2015-2025
(in millions of dollars, by fiscal year)
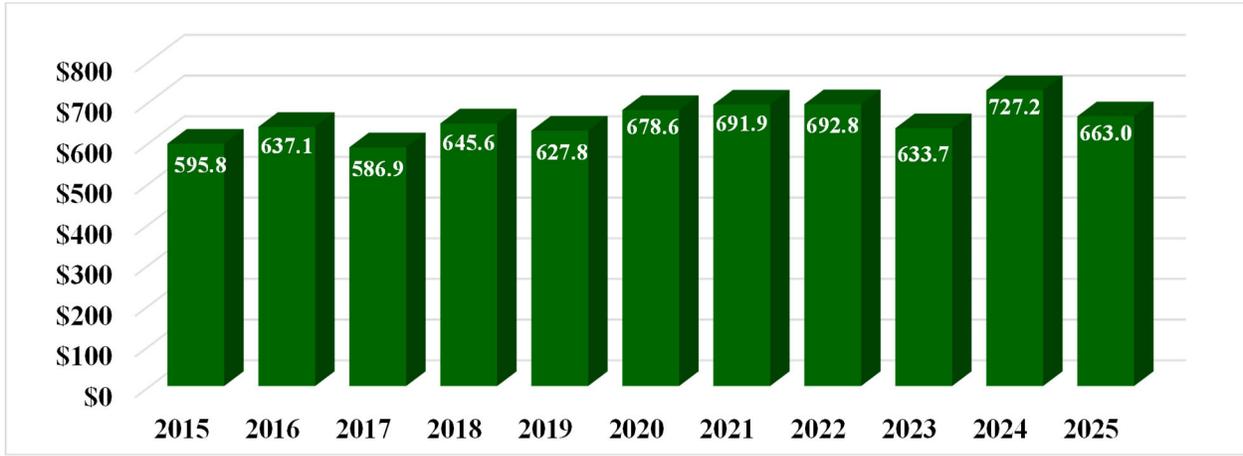
STATE OF VERMONT
GENERAL OBLIGATION DEBT OUTSTANDING, FY 2006-2025
ADJUSTED FOR INFLATION[1,2] (in millions of dollars)
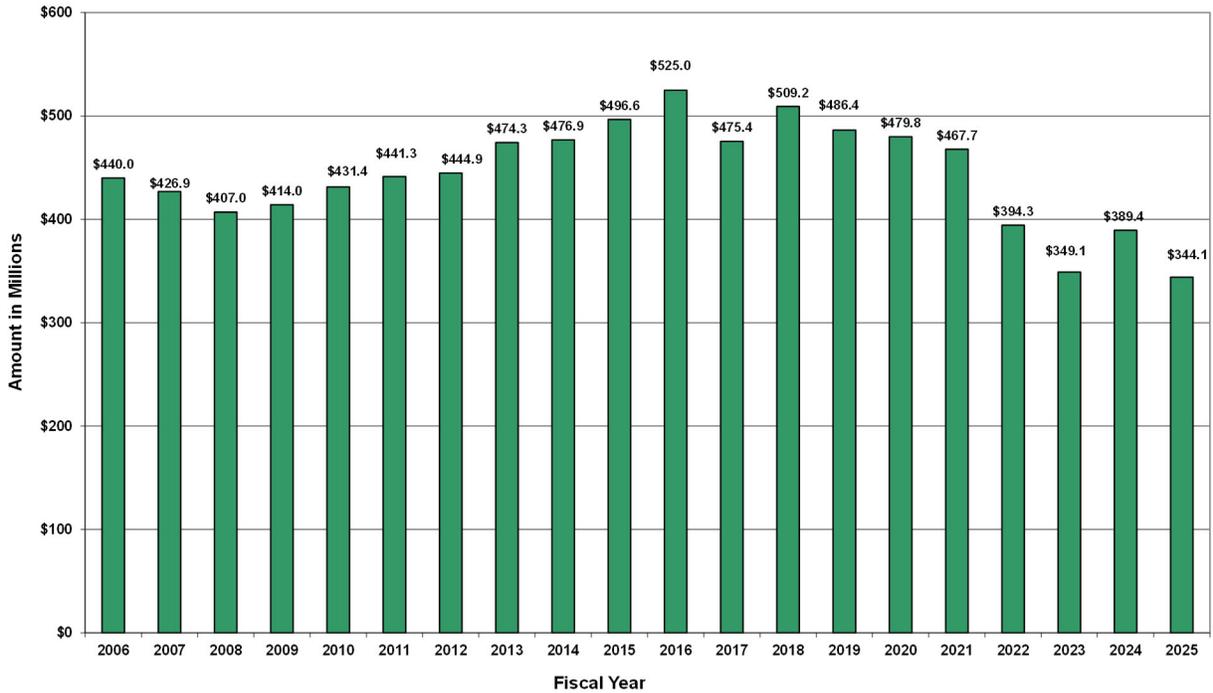
[1]Does not include VHFA Property Transfer Bonds, Leases or SBITAs.
[2]Adjusted for Consumer Price Index for All Urban Consumers to FY 2006. However, debt issuance supports capital construction projects for which costs have outpaced CPI in recent years.

The table below sets forth the State's existing principal amounts outstanding and annual debt service requirements, as of June 30, 2025, without the issuance of any additional debt. Rating

agencies consider Vermont's rapid debt amortization, with almost 80% of current principal retired by fiscal year 2035, to be a positive credit factor.

OUTSTANDING NET TAX-SUPPORTED DEBT
(in thousands of dollars)

	NET TAX-SUPPORTED DEBT												
	GO Debt				**Revenue Bonds**								
	General Fund		Transportation Fund		VHFA Transfer Tax Bonds		Leases		SBITAs		Total		
Fiscal Year	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service
2025	549,080	78,235	1,040	317	25,745	2,496	65,000	13,191	22,141	18,760	663,006	112,998
2026	495,235	75,552	780	306	24,155	2,502	55,116	11,051	8,312	14,343	583,597	103,753
2027	443,050	71,526	520	295	22,515	2,500	45,786	10,327	4,216	4,228	516,087	88,876
2028	393,260	66,890	260	283	20,820	2,501	37,089	9,521	2,695	1,577	454,124	80,772
2029	345,475	62,753	-	272	19,070	2,498	28,989	8,765	1,838	884	395,372	75,170
2030	299,715	58,715	-	-	17,255	2,501	20,824	8,679	1,249	602	339,043	70,498
2031	257,080	53,665	-	-	15,375	2,499	12,710	8,473	697	561	285,862	65,198
2032	220,705	45,761	-	-	13,420	2,501	7,092	5,835	140	561	241,357	54,658
2033	184,330	44,276	-	-	11,390	2,501	2,872	4,322	-	140	198,592	51,239
2034	152,605	38,260	-	-	9,280	2,502	457	2,446	-	-	162,342	43,208
2035	124,065	33,868	-	-	7,090	2,500	4	456	-	-	131,159	36,824
2036	98,855	29,511	-	-	4,820	2,496	-	4	-	-	103,675	32,011

Notes:

1. This table sets forth the existing G.O. net tax-supported debt without the issuance of any additional debt.

2. The Principal Outstanding and Debt Service shown for Leases and SBITAs is from the State's 2024 ACFR.

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Long-Term Net Tax-Supported Debt and Debt Service Projections
The State's projected annual Long-Term Net Tax-Supported Debt service and debt outstanding are presented on the following pages and summarized below. The projected debt service assumes interest rates of 5%, the issuance of $37,000,000 in fiscal year 2026, $91,313,000 in each of fiscal years 2027 through 2030, and $50,000,000 each fiscal year from 2031 through 2036. The amounts projected to be issued from fiscal year 2027 through 2030 would fully utilize the State's previously authorized but unissued debt.

PROJECTED LONG-TERM NET TAX-SUPPORTED DEBT
DEBT SERVICE AND DEBT OUTSTANDING*
(in thousands of dollars)

Fiscal Year Ending	Long-Term Net Tax Supported Debt Debt Service	% Change	Long-Term Net Tax Supported Debt Outstanding	% Change
6/30/2026	103,753	-8.18%	620,597	-6.40%
6/30/2027	92,576	-10.77%	642,550	3.54%
6/30/2028	93,515	1.01%	665,480	3.57%
6/30/2029	96,728	3.44%	687,051	3.24%
6/30/2030	100,642	4.05%	706,475	2.83%
6/30/2031	103,699	3.04%	683,164	-3.30%
6/30/2032	97,153	-6.31%	666,030	-2.51%
6/30/2033	97,603	0.46%	648,135	-2.69%
6/30/2034	93,315	-4.39%	634,255	-2.14%
6/30/2035	90,550	-2.96%	622,941	-1.78%
6/30/2036	89,230	-1.46%	612,827	-1.62%

* Please see table titled "Historic and Projected Debt Ratios" for projected debt relative to projected Vermont revenues.

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		EXISTING AND PROJECTED LONG-TERM NET TAX-SUPPORTED DEBT SERVICE ($000)										
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
	Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.
FY	D/S*	$37.000M	91.313M	91.313M	91.313M	91.313M	50.000M	50.000M	50.000M	50.000M	50.000M	50.000M	D/S
2026	103,753	0	0	0	0	0	0	0	0	0	0	0	103,753
2027	88,876	3,700	0	0	0	0	0	0	0	0	0	0	92,576
2028	80,772	3,608	9,136	0	0	0	0	0	0	0	0	0	93,515
2029	75,170	3,515	8,907	9,136	0	0	0	0	0	0	0	0	96,728
2030	70,498	3,423	8,679	8,907	9,136	0	0	0	0	0	0	0	100,642
2031	65,198	3,330	8,450	8,679	8,907	9,136	0	0	0	0	0	0	103,699
2032	54,658	3,238	8,222	8,450	8,679	8,907	5,000	0	0	0	0	0	97,153
2033	51,239	3,145	7,993	8,222	8,450	8,679	4,875	5,000	0	0	0	0	97,603
2034	43,208	3,053	7,765	7,993	8,222	8,450	4,750	4,875	5,000	0	0	0	93,315
2035	36,824	2,960	7,536	7,765	7,993	8,222	4,625	4,750	4,875	5,000	0	0	90,550
2036	32,011	2,868	7,308	7,536	7,765	7,993	4,500	4,625	4,750	4,875	5,000	0	89,230

		EXISTING AND PROJECTED LONG-TERM NET TAX-SUPPORTED DEBT PRINCIPAL PAYMENTS ($000)										
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
	Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.
FY	Principal*	$37.000M	91.313M	91.313M	91.313M	91.313M	50.000M	50.000M	50.000M	50.000M	50.000M	50.000M	Principal
2026	79,409	0	0	0	0	0	0	0	0	0	0	0	79,409
2027	67,510	1,850	0	0	0	0	0	0	0	0	0	0	69,360
2028	61,963	1,850	4,570	0	0	0	0	0	0	0	0	0	68,383
2029	58,752	1,850	4,570	4,570	0	0	0	0	0	0	0	0	69,742
2030	56,329	1,850	4,570	4,570	4,570	0	0	0	0	0	0	0	71,889
2031	53,181	1,850	4,570	4,570	4,570	4,570	0	0	0	0	0	0	73,311
2032	44,505	1,850	4,570	4,570	4,570	4,570	2,500	0	0	0	0	0	67,135
2033	42,765	1,850	4,570	4,570	4,570	4,570	2,500	2,500	0	0	0	0	67,895
2034	36,250	1,850	4,570	4,570	4,570	4,570	2,500	2,500	2,500	0	0	0	63,880
2035	31,184	1,850	4,570	4,570	4,570	4,570	2,500	2,500	2,500	2,500	0	0	61,314
2036	27,484	1,850	4,570	4,570	4,570	4,570	2,500	2,500	2,500	2,500	2,500	0	60,114

		EXISTING AND PROJECTED LONG-TERM NET TAX-SUPPORTED DEBT OUTSTANDING ($000)										
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
	Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.
FY	Debt*	$37.000M	91.313M	91.313M	91.313M	91.313M	50.000M	50.000M	50.000M	50.000M	50.000M	50.000M	Debt
2026	583,597	37,000	0	0	0	0	0	0	0	0	0	0	620,597
2027	516,087	35,150	91,313	0	0	0	0	0	0	0	0	0	642,550
2028	454,124	33,300	86,743	91,313	0	0	0	0	0	0	0	0	665,480
2029	395,372	31,450	82,173	86,743	91,313	0	0	0	0	0	0	0	687,051
2030	339,043	29,600	77,603	82,173	86,743	91,313	0	0	0	0	0	0	706,475
2031	285,862	27,750	73,033	77,603	82,173	86,743	50,000	0	0	0	0	0	683,164
2032	241,357	25,900	68,463	73,033	77,603	82,173	47,500	50,000	0	0	0	0	666,030
2033	198,592	24,050	63,893	68,463	73,033	77,603	45,000	47,500	50,000	0	0	0	648,135
2034	162,342	22,200	59,323	63,893	68,463	73,033	42,500	45,000	47,500	50,000	0	0	634,255
2035	131,159	20,350	54,753	59,323	63,893	68,463	40,000	42,500	45,000	47,500	50,000	0	622,941
2036	103,675	18,500	50,183	54,753	59,323	63,893	37,500	40,000	42,500	45,000	47,500	50,000	612,827

*Includes State G.O. Bonds, VHFA Property Transfer Bonds, Leases and SBITAs.

Net Tax-Supported Debt Service by Fiscal Year
The State's projected scheduled Long-Term Net Tax-Supported Debt Service requirement ("D/S") for fiscal year 2026 is $103.8 million, 8.2% less than the $113.0 million paid in fiscal year 2025.

STATE OF VERMONT
CHANGE IN NET TAX SUPPORTED DEBT SERVICE (FY 25 – FY 26)
(in $ thousands)

Long-Term Net Tax-Supported D/S Paid in FY 2025	$112,998
Decrease in D/S Requirement FY 2025	(9,245)
Long-Term Net Tax-Supported D/S Due in FY 2026	$103.753

STATE OF VERMONT
HISTORICAL LONG-TERM NET TAX-SUPPORTED DEBT
DEBT SERVICE [1,2]
(in millions of dollars)
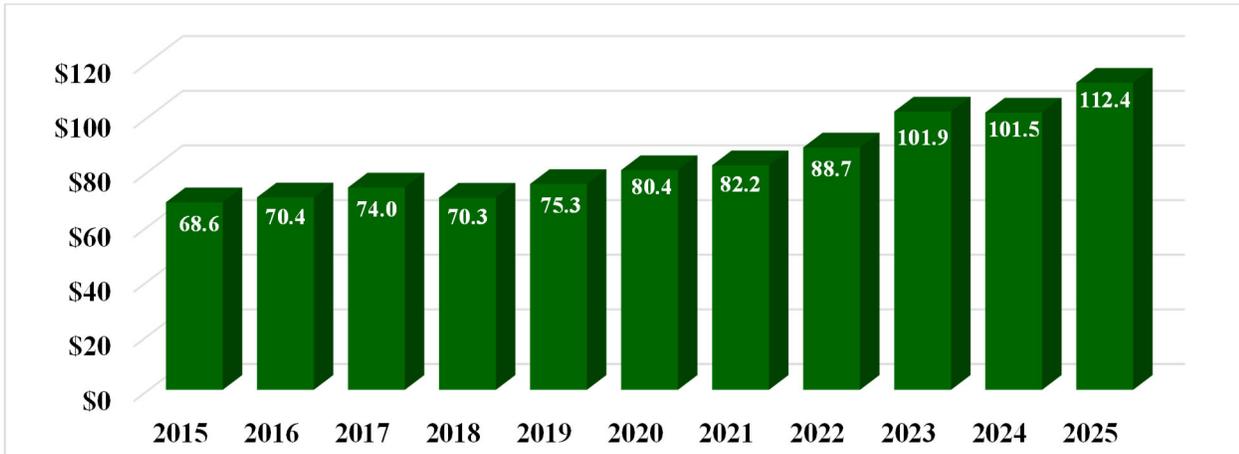
[1]
See table titled "Historic and Projected Debt Ratios" for debt ratios relative to historic Vermont revenues and economic data.

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STATE OF VERMONT
GENERAL OBLIGATION DEBT SERVICE, FY 2006-2025
ADJUSTED FOR INFLATION [1,2] (in millions of dollars)
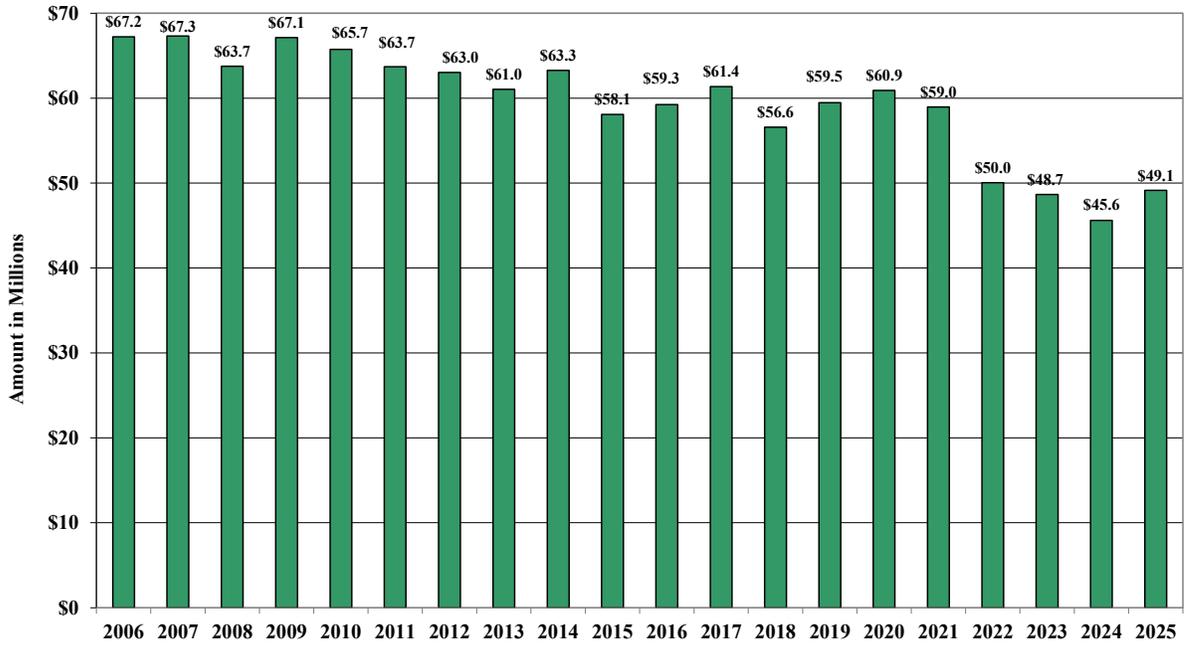
[1]Does not include VHFA Property Transfer Bonds, Leases or SBITAs.
[2]Adjusted for Consumer Price Index for All Urban Consumers to FY 2006. However, debt issuance supports capital construction projects for which costs have outpaced CPI in recent years.

Moral Obligation Indebtedness

Provided below is a summary of the State's moral obligation commitments as of June 30, 2025:

Reserve Fund Commitments (all figures as of June 30, 2025):

1. **Vermont Bond Bank (VBB):** The VBB was established by the State in 1970 for the purpose of aiding governmental units in the financing of their public improvements by making available a voluntary, alternate method of purchasing their obligations in addition to the ordinary competitive bidding channels. By using the VBB, small individual issues of governmental units can be combined into one larger issue that attracts more investors.

   As of June 30, 2025, the VBB has issued 87 series of bonds (including refundings) under its general bond resolution adopted on May 3, 1988 (the "1988 Resolution"). The principal amount of bonds outstanding as of June 30, 2025, was $686,735,000, and the principal amount of loans outstanding to municipal borrowers under the 1988 Resolution was $658,055,118 as of June 30, 2025. For bonds issued under the 1988 Resolution, the VBB is required to maintain a reserve fund equal to the lesser of: the maximum annual debt service requirement, 125% of average annual debt service, or 10% of the proceeds of any series of bonds. If the reserve funds have less than the required amount, the VBB chair shall notify the Governor or Governor-elect of the deficiency. The General Assembly is legally authorized, but not legally obligated, to appropriate money to maintain the reserve funds at their required levels. Since the participating municipalities have always met their obligations on their bonds the State has never needed to

appropriate any money to the reserve fund, and it is not anticipated that it will need to make an appropriation in the future.

Based on the long history of the VBB program, the rating agencies credit assessment of the underlying loans of the portfolio, the G.O. pledge of the underlying borrowers for a high percentage of the loan amounts and the State intercept provision for the payment of debt, it is not anticipated that it will be necessary for the State to appropriate money for the reserve fund.

As of June 30, 2025, the VBB has also issued two series of bonds under a new general bond resolution adopted on March 30, 2017 (the "2017 Resolution") for the Vermont State Colleges System ("VSCS") Program. The 2017 Resolution is for VSCS financings only. As of June 30, 2025, the principal amount of bonds outstanding under the 2017 Resolution was $79,005,000. The 2017 Resolution bonds are not supported by a reserve fund, but do benefit from the State intercept.

The State Treasurer, the VBB and the Commissioner of the Vermont Department of Finance and Management entered into a State Intercept Memorandum of Agreement to establish procedures with respect to the intercept of State funds.

On August 11, 2022, the VBB issued the first series of bonds that included consent for changes to the General Resolution through the purchase of new bonds. Once effective upon receipt of requisite consents, the proposed modifications will create two new categories of General Resolution bonds called the Community Revenue Bonds and Enhanced Community Revenue Bonds. Bonds issued prior to the effective date of the modifications will be called the Legacy Bonds and will no longer be issued once the modifications are effective.

The Community Revenue Bonds will continue to benefit from the State intercept, but will not include a debt service reserve fund and therefore will have no ability to access the moral obligation. The Community Revenue Bonds will be superior to the Enhanced Community Revenue Bonds that will benefit from a debt service reserve fund. The net impact of this structure may be a reduction in VBB's use of the moral obligation.

The proposed modifications will become effective when 66.67% of holders consent to the changes. As of June 30, 2025, approximately 44.7% of the owners of the General Resolution Bonds consented to the proposed modifications.

For additional information about the VBB, see its most recent disclosure document, which can be found on the Electronic Municipal Market Access ("EMMA") system at https://emma.msrb.org.

2. **Vermont Housing Finance Agency:** The VHFA was created by the State in 1974 for the purpose of promoting the expansion of the supply of funds available for mortgages on residential housing and to encourage an adequate supply of safe and decent housing at reasonable costs. The VHFA is empowered to issue notes and bonds to fulfill its corporate purposes. The VHFA's act requires the creation of debt service reserve funds for each issue of bonds or notes based on the VHFA's resolutions and in an amount not to exceed the "maximum debt service." Of the debt that the VHFA may issue, up to $155,000,000 of principal outstanding may be backed by the moral obligation of the State, which means that the General Assembly is authorized, but not legally obligated, to appropriate money for any shortfalls in the debt service reserve funds for that debt. If the reserve fund requirement for this debt has less than the required amount, under the act, the chairman of the VHFA will notify the

Governor or the Governor-elect, the president of the senate and the speaker of the house of the deficiency. As of June 30, 2025, the principal amount of outstanding debt covered by this moral obligation was $48,953,849, the debt service reserve fund requirement for this debt was $2,945,436, and the value of the debt service reserve fund was $3,121,156. Since the VHFA's creation, it has not been necessary for the State to appropriate money to maintain this debt service reserve fund requirement. For additional information about the VHFA, see its most recent disclosure document which can be found on the EMMA system at https://emma.msrb.org.

3. **Vermont Economic Development Authority (VEDA):** VEDA has established credit facilities with two banks to fund loans to local and regional development corporations and to businesses under certain programs. VEDA's debt is a combination of commercial paper and variable and fixed-rate notes payable. The amount of commercial paper outstanding under this program at June 30, 2025, was $87.25 million, and is supported by two direct-pay letters of credit totaling $83 million from one of the banks. The direct-pay letters of credit are collateralized from various repayment sources, including a $8 million collateral reserve fund held by a trustee and a debt service reserve fund pledge from the State in an amount of $80 million. VEDA has one variable-rate and four fixed-rate notes payable from a second bank totaling $98 million. The notes are collateralized from various repayment sources, including a $9.4 million collateral reserve fund held by a trustee and a debt service reserve fund pledge from the State in an amount of $75 million. The debt service reserve pledges totaling $155 million are based on a similar structure utilized by both the Vermont Municipal Bond Bank and the Vermont Housing Finance Agency as discussed above. Act No. 79, enacted in June 2019, increased the State's moral obligation commitment for VEDA from $175 million to $181 million, effective July 1, 2019. For additional information about VEDA, see its most recent disclosure document, which can be found on the EMMA system at https://emma.msrb.org.

4. **Vermont Telecommunications Authority (VTA):** VTA was created in 2007 to facilitate broadband and related access to Vermonters, and received authorization for $40 million of debt with the State's moral obligation pledge. The passage of Act No. 190 of 2014 created the Division for Connectivity as the successor entity to the VTA. The VTA did not issue any debt prior to ceasing operations on July 1, 2015.

5. **University of Vermont and the Vermont State Colleges:** Legislation was passed in 2008 to provide a moral obligation pledge from the State to the University of Vermont in the amount of $66 million and to the Vermont State Colleges in the amount of $34 million. No moral obligation pledge bonds have been issued to date. Currently, if bonds are issued, it is not expected that the State will need to appropriate money to the respective reserve funds for these purposes.

6. **Vermont Student Assistance Corporation (VSAC):** The State has provided $50 million of moral obligation commitment by the State to VSAC. Like VHFA, in 2009, the State authorized increased flexibility for VSAC's use of the moral obligation commitment specifically allowing for "pledged equity" contributions from the State's operating funds and increased flexibility in the use of the traditional debt service reserve structure. VSAC has no moral obligation debt outstanding, and thus it is not expected that the State will need to appropriate money to the respective reserve funds for VSAC.

As shown below, the State's moral obligation commitments have increased modestly over the past ten (10) years, by approximately $107.6 million or 13.7%. The increases came from VEDA, at $25 million, VBB at $90.6 million, and VHFA at $2.0 million with a reduction of $10.1 million from VSAC.

In the absence of explicit rating agency guidelines for moral obligation debt, or comparative data from Vermont's triple-A peer group, or a consistent approach among the triple-A peer group regarding the size, nature and role of such debt, CDAAC has since 2008 employed a guideline that moral obligation commitments should not exceed a range of between 200% and 225% of the State's Long-Term Net Tax-Supported Debt. Using this guideline, the State's moral obligation capacity would be between $1.326 billion and $1.492 billion, so the State would have between $113 million and $279 million of additional moral obligation capacity.

Reserve Fund Commitments:

State of Vermont
Moral Obligation Commitments and Debt Outstanding
As of June 30, 2025

Issuer Name	As of June 30, 2015		As of June 30, 2025		10-Year Change	
	Amount Provided In Statute	Actual Par Amount Outstanding	Amount Provided In Statute	Actual Par Amount Outstanding	Amount Provided In Statute	Actual Par Amount Outstanding
VBB	$596,110,000	$596,110,000	$686,735,000	$686,735,000	$90,625,000	$90,625,000
VEDA	130,000,000	130,000,000	181,000,000	155,000,000	51,000,000	25,000,000
VHFA	155,000,000	46,900,000	155,000,000	48,953,849	-	2,053,849
VSAC	50,000,000	10,120,000	50,000,000	-	-	(10,120,000)
UVM	66,000,000	-	66,000,000	-	-	-
VSCS	34,000,000	-	34,000,000	-	-	-
VTA	40,000,000	-	40,000,000	-	-	-
	$1,071,110,000	$783,130,000	$1,212,735,000	$890,688,849	$141,625,000	$107,558,849

*The Vermont Municipal Bond Bank's debt obligations are secured first by the general obligation or revenue pledge of the participating municipalities, and second by State intercept of payments to municipalities, before the moral obligation is utilized.

CDAAC continues to believe that a range of 200-225% is appropriate in determining the amount of moral obligation commitments that should be outstanding in comparison to the State's Long-Term Net Tax-Supported Debt. Ultimately, the effect of contingent liabilities and reserve fund commitments on the State's debt affordability depends upon this debt's reliance on the State's general operating revenues. The rating agencies do not include contingent obligations in the State's net tax-supported indebtedness until such debt becomes actual (through a payment or a replenishment obligation being made). As such, as long as the State has not been called upon to pay for the debt components, as envisioned in Subparagraph (5) of the CDAAC legislation, then those items should not become quantifiable factors included in the affordability analysis.

Information on the principal amount and the debt service associated with the moral obligation commitments is found in the comprehensive annual financial statements for each of the entities:

Vermont Municipal Bond Bank*:
http://www.vtbondbank.org/investors

Vermont Economic Development Authority:
http://www.veda.org/about-veda/annual-reports/

Vermont Housing Finance Authority
http://www.vhfa.org/partners/initiatives/vhfa-publications

Vermont Student Assistance Corporation
https://www.vsac.org/news/annual-reports

*Financials are based on a December 31 year end.

Municipal Debt

In conformance with the standards followed by the rating agencies, this evaluation does not set forth or incorporate any debt obligations of Vermont municipalities. Should any such obligations be required to be payable by the State (e.g., through assumption or support of local debt as part of a financial emergency), a corresponding and appropriate amount related to the State's contribution would then be required to be included in the analysis. At present, no such liability has occurred, and, therefore, none has been included in this review.

Analysis of Types of Debt and Structure

Each year CDAAC performs an extensive analysis to determine the "cost-benefit of various levels of debt financing." The cost-benefit is demonstrated by CDAAC's determination of the amount of debt that the State should annually authorize and still achieve compliance with CDAAC's affordability guidelines.

Second, with respect to the "types of debt," Vermont and its financing agencies have utilized a variety of debt types: VSAC, VHFA and VEDA sell revenue bonds, and Vermont has also issued TIBs. The State Treasurer's office also has considered a variety of financing options for the State's infrastructure needs, but because of Vermont's high credit ratings G.O. Bonds have generally offered the most cost-effective financing solution.

The State G.O. indebtedness maturity schedules are directly tied to State statute. Moreover, as indicated elsewhere herein, Vermont's current debt repayment for its G.O. bonds allow the State to recapture debt capacity at an attractive pace. Shortening the debt service payments would have the effect of placing more fixed costs in the State's annual operating budget, leaving less funds available for discretionary spending. Lengthening debt payments would increase the aggregate amount of the State's outstanding indebtedness, which would cause Vermont's debt per capita and debt as a percentage of personal income to rise, reducing the State's ability to comply with its affordability guidelines. Likewise, the State is precluded by Federal regulations from structuring tax-exempt debt to have an average life materially longer than the useful life of the asset(s) being financed. Notwithstanding these limitations, there may be opportunities for the State in the future to adjust the maturity of its indebtedness to achieve various debt management goals over time.

2. ECONOMIC AND FINANCIAL FORECASTS

This section of the report includes independent and consensus official State forecasting information provided by Economic and Policy Resources, Inc. ("EPR"), the State Economist for the Administration, dated September 12,2025, in conjunction with Kavet Rockler & Associates, LLC, the State Economist for the Legislature. As shown in the table below, total revenue for fiscal year 2025 was $185.1 million more than in fiscal year 2024, an increase of 6.8%. The average annual revenue growth rate during the fiscal year period, 2025 through 2036, inclusive, is projected to be 3.3%.

STATE OF VERMONT
PRIOR YEAR, CURRENT AND PROJECTED STATE REVENUE[1]
(in millions of dollars)

Fiscal Year	General Fund	Transportation Fund	Property Transfer Tax[2]	Total Revenue[3]	Y-o-Y Change ($)	Y-o-Y Change(%)
2024	2,410.6	303.0	2.5	2,716.1	-	-
2025	2,585.2	313.6	2.5	2,901.3	185.1	6.8%
2026	2,618.8	318.5	2.5	2,939.8	38.5	1.3%
2027	2,671.2	321.1	2.5	2,994.8	55.1	1.9%
2028	2,757.9	325.7	2.5	3,086.0	91.2	3.0%
2029	2,856.0	330.8	2.5	3,189.3	103.3	3.3%
2030	2,966.0	335.8	2.5	3,304.3	115.0	3.6%
2031	3,084.4	340.2	2.5	3,427.1	122.8	3.7%
2032	3,214.4	344.3	2.5	3,561.2	134.1	3.9%
2033	3,314.4	348.4	2.5	3,665.3	104.1	2.9%
2034	3,417.6	352.5	2.5	3,772.6	107.3	2.9%
2035	3,528.8	356.8	2.5	3,888.1	115.5	3.1%
2036	3,646.0	361.1	2.5	4,009.6	121.5	3.1%

[1] Administration-Legislative Consensus Long-Term Forecast (Calendar Years 2024-2036). These figures were prepared by EPR. Amounts shown are "current law" revenue forecasts, based on a consensus between the State's administration and legislature. As of September 12, 2025.

[2] Represents a portion of the State's property transfer tax set-aside to pay debt service on the VHFA Property Transfer Bonds.

[3] Totals may not agree due to rounding.

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Provided below are the forecasts of population, personal income, and nominal gross State product. Over the next ten years, Vermont's population is forecast to grow between 0.1% and 0.2% per year, personal income between 3.5% and 5.6% per year, and nominal gross state product between 3.3% and 4.7% per year.

STATE OF VERMONT
PRIOR YEAR, CURRENT AND PROJECTED ECONOMIC DATA[1]

Year	Population (in thousands)	Change from Prior Year	Personal Income (in $ billions)	Change from Prior Year	Nominal GSP (in $ billions)	Change from Prior Year
2024	648.5	-	45.5	-	45.7	-
2025	649.2	0.1%	48.0	5.6%	47.9	4.7%
2026	650.0	0.1%	50.2	4.5%	49.8	4.0%
2027	650.8	0.1%	52.2	4.0%	51.5	3.5%
2028	651.7	0.1%	54.2	3.9%	53.4	3.7%
2029	652.7	0.2%	56.4	4.0%	55.4	3.7%
2030	653.7	0.2%	58.7	4.1%	57.6	4.0%
2031	654.6	0.1%	61.1	4.1%	60.0	4.1%
2032	655.5	0.1%	63.6	4.0%	62.2	3.7%
2033	656.4	0.1%	66.0	3.8%	64.4	3.5%
2034	657.2	0.1%	68.3	3.6%	66.5	3.3%
2035	658.1	0.1%	70.7	3.5%	68.7	3.3%
2036	658.9	0.1%	73.2	3.5%	71.0	3.4%

(1) Administration-Legislative Consensus Long-Term Forecast (Calendar Years 2024-2036). These figures were provided by EPR, as of September 12, 2025.

Below are official State consensus 2025 economic projections as compared to its 2024 economic projections. As shown, the 2025 projections show a decrease in population in all years of the forecast, but an increase in nominal personal income through 2032. However, revenue projections both absolutely and as a percentage of nominal personal income are projected to increase during the entire forecast period.

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STATE OF VERMONT
POPULATION, PERSONAL INCOME AND REVENUE PROJECTIONS
2025 COMPARED TO 2024

	Population (Thousands)					Nominal Dollar Personal Income (Billions)			
Year	**2024**	**2025**	**Change**	**% Change**	**Year**	**2024**	**2025**	**Change**	**% Change**
2024	648.6	648.5	-0.1	0.0%	2024	45.19	45.47	0.3	0.6%
2025	649.7	649.2	-0.5	-0.1%	2025	47.22	48.02	0.8	1.7%
2026	650.6	650.0	-0.7	-0.1%	2026	49.30	50.18	0.9	1.8%
2027	651.6	650.8	-0.7	-0.1%	2027	51.42	52.18	0.8	1.5%
2028	652.5	651.7	-0.8	-0.1%	2028	53.68	54.22	0.5	1.0%
2029	653.6	652.7	-0.9	-0.1%	2029	55.99	56.39	0.4	0.7%
2030	654.7	653.7	-1.0	-0.2%	2030	58.45	58.70	0.2	0.4%
2031	655.8	654.6	-1.2	-0.2%	2031	60.97	61.11	0.1	0.2%
2032	656.9	655.5	-1.4	-0.2%	2032	63.53	63.55	0.0	0.0%
2033	658.0	656.4	-1.6	-0.2%	2033	66.19	65.97	-0.2	-0.3%
2034	659.0	657.2	-1.7	-0.3%	2034	68.84	68.34	-0.5	-0.7%
2035	659.9	658.1	-1.8	-0.3%	2035	71.60	70.73	-0.9	-1.2%
2036	-	658.9	n.a.	n.a.	2036	-	73.21	n.a.	n.a.

	General Fund, Transportation Fund, TIBs and Property Transfer Tax Revenue (Millions)					General Fund, Transportation Fund and Property Transfer Tax Revenue as a Percent of Nominal Personal Income			
Year	**2024**	**2025**	**Change**	**% Change**	**Year**	**2024**	**2025**	**Change**	**% Change**
2024	2,716.1	2,716.1	0.0	0.0%	2024	6.01%	5.97%	0.0%	-0.6%
2025	2,760.7	2,901.3	140.5	5.1%	2025	5.85%	6.04%	0.2%	3.3%
2026	2,824.7	2,939.8	115.1	4.1%	2026	5.73%	5.86%	0.1%	2.3%
2027	2,890.8	2,994.8	104.0	3.6%	2027	5.62%	5.74%	0.1%	2.1%
2028	2,988.0	3,086.0	98.1	3.3%	2028	5.57%	5.69%	0.1%	2.3%
2029	3,099.8	3,189.3	89.5	2.9%	2029	5.54%	5.66%	0.1%	2.2%
2030	3,207.2	3,304.3	97.1	3.0%	2030	5.49%	5.63%	0.1%	2.6%
2031	3,314.4	3,427.1	112.7	3.4%	2031	5.44%	5.61%	0.2%	3.2%
2032	3,420.8	3,561.2	140.4	4.1%	2032	5.38%	5.60%	0.2%	4.1%
2033	3,531.9	3,665.3	133.4	3.8%	2033	5.34%	5.56%	0.2%	4.1%
2034	3,644.3	3,772.6	128.4	3.5%	2034	5.29%	5.52%	0.2%	4.3%
2035	3,761.8	3,888.1	126.3	3.4%	2035	5.25%	5.50%	0.2%	4.6%
2036	-	4,009.6	n.a.	n.a.	2036	-	5.48%	n.a.	n.a.

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3. DEBT GUIDELINES

Since September 2004, the Committee has pursued a strategy to achieve a triple-A rating from all three nationally recognized credit rating agencies by benchmarking Vermont against triple-A rated states. To facilitate this goal, CDAAC and the State have employed conservative debt load guidelines that are consistent with the measures that the rating agencies use to measure debt burden. These guidelines historically have been:

1. Debt Per Capita;
2. Debt as a Percentage of Personal Income; and
3. Debt Service as a Percentage of Revenues.

Since 2011, CDAAC has also measured Debt as a Percentage of Gross State Product. While the rating agencies continue to report on this metric, it is highly correlated with Debt as a Percentage of Personal Income, and CDAAC has not used it as a basis for its 10-year projections. For brevity, starting with this year's report CDAAC has elected to discontinue including this measure.

CDAAC notes that Debt as a Percentage of Personal Income and Debt Service as a Percentage of Revenues are generally understood to be the primary credit indicators of the State's ability to pay, and are identified specifically in CDAAC's statutory charge. However, certain rating agencies continue to calculate and monitor the State's Debt Per Capita, and indeed, S&P's recently released new rating methodology (discussed in more detail starting on page 29) relies heavily upon both direct debt, and pension and other post-employment benefits (OPEB) unfunded liabilities per capita in its issuer credit profile measures. Debt per capita is also S&P's sole bond-related (as opposed to pension/OPEB or combined liabilities) debt measure.

At present, for its relative measures of Debt Per Capita and Debt as a Percent of Personal Income, CDAAC uses a peer group made up of all states rated by Moody's, S&P and Fitch that have at least <u>two</u> triple-A ratings from the national rating agencies (the "Peer Group"). The states within the Peer Group differ throughout the years as rating agencies upgrade or downgrade a specific state's rating, and since the Committee began using this approach in 2004 the Peer Group of triple-A rated states has expanded from nine (9) to seventeen (17) states.

For its 2025 report, the Committee has elected to retain the current triple-A states Peer Group and to continue its practice of using Debt Per Capita and Debt as a Percent of Personal Income projections relative to this Peer Group. However, the Committee may consider adjusting the Peer Group states in future reports, or may expand its use of absolute measures as it currently does for Debt Service as a Percent of Revenues, in which case it could de-emphasize Peer Group metrics and provide them for information and context, or eliminate relative metrics altogether.

Debt Per Capita
The Committee considers a guideline of the State's performance versus the 5-year average of the mean and median debt per capita of the Peer Group of triple-A rated states over the nine-year projection period. Moody's state debt medians for 2024 were the most recently available by the report's due date, with the 5-year average of the mean of the Peer Group increasing from $1,021 to $1,060, the 5-year average of the median of the Peer Group increasing from $630 to $645, and Vermont's 5-year average debt per capita figure down from $1,132 to $1,124, which was above the 5-year mean and 5-year median for triple-A rated states. Please see the table titled "Debt Per Capita Comparison" for a detailed view of the Peer Group's Debt Per Capita.

The debt per capita State guideline calculation is based on a starting point of the 5-year average of the median debt per capita median of Peer Group states, and an annual inflation factor, in order to achieve a realistic perspective on the future direction of debt per capita median for these states. CDAAC currently uses an inflator of 2.7% or 90% of an assumed 3% inflation rate, which in turn has been a reasonable assumption for long-term consumer price inflation. This is also in line with the most recent monthly level of year-over-year consumer price inflation of 2.9% and with the 10-year annualized CPI of 3.1%, in both cases as of August 2025.

Starting with its 2013 report, CDAAC's debt recommendation has exceeded its 10-year Debt Per Capita projection in some or all years, but this was deemed to reflect certain Peer Group states with very little debt more than indicating Vermont had excessive debt, and the Committee de-emphasized this measure accordingly. However, as mentioned above, with S&P explicitly including an absolute direct debt per capita measure in its new rating criteria, as well as a per capita measure of pension and OPEB unfunded liabilities, the Committee likely will want to keep tracking per capita metrics going forward.

Debt as a Percent of Personal Income
The Committee also adopted a guideline for the State to equal or perform better than the 5-year mean and 5-year median of the Peer Group on the basis of debt as a percent of personal income. At present, the target is 1.8% for the median (the five-year averages of Moody's Mean and Moody's Median for the Peer Group are 1.7% and 1.1%, respectively). Based on data from Moody's, Vermont's 5-year average net tax supported debt as a percent of personal income is 1.9%, which is slightly higher than the 5-year mean and the 5-year median for triple-A rated states. Please see the table titled "Debt As % of Personal Income Comparison" for a detailed view of the Peer Group's information.

The Committee discussed the limitations of personal income as a measure particularly as it pertains to Vermont, because the number does not include realized capital gains; it was suggested that if this information were available by state, Vermont's relative position might improve.

Debt Service as a Percentage of Revenues
In the absence of a readily available peer group measure from the rating agencies, this guideline is an absolute number versus a mean or median relative to triple-A rated states. CDAAC's adopted standard starting in 2024 is a ratio of no greater than 4%, reduced from 6% since 2004 and 8% prior to that, for annual Long-Term Net Tax-Supported Debt service as a percent of the annual aggregate of the General and Transportation Fund revenues, as well as the dedicated property transfer tax revenues associated with the VHFA Property Transfer Bonds. At present, this ratio equals approximately 3.9%, as can be seen within the table titled "Historic and Projected Debt Ratios." Vermont's debt service as a percentage of revenues has improved from 4.2% in 2015 to 3.9% in 2025. With the growth in General and Transportation Funds and relative stability of the State's annual debt service, this measure has not exceeded 4% since 2020, nor is it projected to under the current recommended authorization.

In terms of the debt service projections provided in the table titled "Historic and Projected Debt Ratios," the analysis assumes future interest rates (coupons) on pro forma G.O. bond issues at 5.0% in fiscal years 2026 through 2036.

The CDAAC statute defines operating revenues as General and Transportation Fund revenues based upon the historic general flexibility in the uses of these funds for meeting financial operational needs of the State.

STATE OF VERMONT
2025 STATES RATED TRIPLE-A BY TWO OR MORE RATING AGENCIES
(as of September 30, 2025)

Triple-A Rated States [1]	Moody's	S&P	Fitch
Delaware	Yes	Yes	Yes
Florida	Yes	Yes	Yes
Georgia	Yes	Yes	Yes
Idaho	Yes	**No**	Yes
Indiana [2]	Yes	Yes	Yes
Iowa	Yes	Yes	Yes
Maryland [3]	**No**	Yes	Yes
Minnesota	Yes	Yes	Yes
Missouri	Yes	Yes	Yes
North Carolina	Yes	Yes	Yes
Ohio	Yes	Yes	Yes
South Carolina	Yes	**No**	Yes
South Dakota	Yes	Yes	Yes
Tennessee	Yes	Yes	Yes
Texas [2]	Yes	Yes	Yes
Utah	Yes	Yes	Yes
Virginia	Yes	Yes	Yes
VERMONT	**No**	**No**	**No**

(1) Seventeen (17) states rated by nationally recognized rating agencies Moody's, S&P and Fitch have at least two triple-A ratings as of September 30, 2025.

(2) Indicates issuer credit rating since state does not have any G.O. debt or the rating agency does not provide a rating on the state's G.O. debt.

(3) Moody's downgraded Maryland from Aaa to Aa1 on May 14, 2025.

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STATE OF VERMONT
MEAN DEBT RATIOS COMPARISON

Per Capita	2020	2021	2022	2023	2024	5-Year CAGR[2]
All States	$1,506	$1,535	$1,872	$1,808	$1,807	3.7%
Triple-A[1]	950	962	1,070	1,163	1,153	4.0%
VERMONT	**1,061**	**1,102**	**1,185**	**1,173**	**1,100**	**0.7%**

% of Personal Income	2020	2021	2022	2023	2024	5-Year CAGR[2]
All States	2.6%	2.5%	3.0%	2.7%	2.6%	0.0%
Triple-A[1]	1.7	1.7	1.8	1.8	1.7	-0.2%
VERMONT	**1.9**	**1.9**	**2.0**	**1.9**	**1.6**	**-3.4%**

(1) These calculations exclude all Vermont numbers and include only states rated by Moody's, S&P and Fitch with at least two triple-A ratings during the year shown. See table titled "Debt Per Capita Comparison" for complete listing of triple-A states and respective ratings and triple-A time periods.
(2) Compound annual growth rate.

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STATE OF VERMONT
DEBT PER CAPITA COMPARISON

Peer Group States (All states with at least two triple-A rating)
5-Year Average Mean and 5-Year Average Median Excluding Vermont:
MEAN: $1,060   MEDIAN: $645
5-Year Average Vermont: $1,124

Triple-A Rated States[1]	Moody's Ratings[2]	S&P Ratings[2]	Fitch Ratings[2]	Moody's Debt Per Capita					
				2020	2021	2022	2023	2024	5-Year Average
Delaware	Aaa/Stable	AAA/Stable	AAA/Stable	3,289	3,400	4,143	4,266	4,526	3,925
Maryland	Aa1/Stable	AAA/Stable	AAA/Stable	2,323	2,410	2,818	3,147	2,952	2,730
Virginia	Aaa/Stable	AAA/Stable	AAA/Stable	1,677	1,746	1,823	2,047	2,035	1,866
Ohio	Aaa/Stable	AAA/Stable	AAA/Stable	1,158*	1,146*	1,718*	1,642	1,558	1,600
Minnesota	Aaa/Stable	AAA/Stable	AAA/Stable	1,406	1,400	1,462	1,638	1,542	1,490
VERMONT	**Aa1/Stable**	**AA+/Stable**	**AA+/Stable**	**1,061**	**1,102**	**1,185**	**1,173**	**1,100**	**1,124**
Georgia	Aaa/Stable	AAA/Stable	AAA/Stable	971	987	1,087	1,144	1,100	1,058
Utah	Aaa/Stable	AAA/Stable	AAA/Stable	720	866	899	827	693	801
Florida	Aaa/Stable	AAA/Stable	AAA/Stable	780	710	756	661	711	724
North Carolina	Aaa/Stable	AAA/Stable	AAA/Stable	586	581	686	700	635	638
Idaho	Aaa/Stable	AA+/Stable	AAA/Stable	540*	490*	464	591	784	613
Texas	Aaa/Stable	AAA/Stable	AAA/Stable	379	365	682	680	654	552
South Dakota	Aaa/Stable	AAA/Stable	AAA/Stable	493	482	561	557	560	531
South Carolina	Aaa/Stable	AA+/Stable	AAA/Stable	469	415	435	444	421	437
Missouri	Aaa/Stable	AAA/Stable	AAA/Stable	464	413	398	378	397	410
Iowa	Aaa/Stable	AAA/Stable	AAA/Stable	150	157	408	392	408	303
Indiana	Aaa/Stable	AAA/Stable	AAA/Stable	251	233	217	366	356	285
Tennessee	Aaa/Stable	AAA/Stable	AAA/Stable	292	266	285	294	271	282
MEAN[3]	_____	_____	_____	950	962	1,070	1,163	1,153	1,060
MEDIAN[3]	_____	_____	_____	586	581	684	680	693	645

(1) States rated by Moody's, S&P and Fitch that carry at least two triple A ratings.
(2) Ratings as of September 30, 2025.
(3) These calculations exclude all Vermont numbers.
* Indicates that the state was not rated triple-A by two or more of this rating agencies during the year shown and amount not used in calculating the mean or median for the indicated year.

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STATE OF VERMONT
DEBT AS % OF PERSONAL INCOME COMPARISON

Peer Group States (All states with at least two triple-A ratings)
5-Year Average Mean and 5-Year Average Median Excluding Vermont:
MEAN: 1.7%   MEDIAN: 1.1%
5-Year Average Vermont: 1.9%

Triple-A Rated States	Moody's Debt as % of Personal Income					
	2020	**2021**	**2022**	**2023**	**2024**	**5-year Average**
Delaware	6.1	6.0	7.0	6.9	6.8	6.6
Maryland	3.5	3.5	4.1	4.4	3.9	3.9
Virginia	2.8	2.8	2.8	3.0	2.8	2.8
Ohio	2.1*	2.1*	3.0*	2.8	2.5	2.7
Minnesota	2.4	2.3	2.2	2.4	2.1	2.3
Georgia	2.0	1.9	2.0	2.0	1.8	1.9
VERMONT	**1.9**	**1.9**	**2.0**	**1.9**	**1.6**	**1.9**
Utah	1.5	1.7	1.6	1.4	1.1	1.5
Florida	1.5	1.3	1.2	1.0	1.0	1.2
North Carolina	1.2	1.2	1.2	1.2	1.0	1.2
Idaho	1.2*	1.0*	0.9	1.1	1.3	1.1
Texas	0.7	0.7	1.1	1.1	1.0	0.9
South Carolina	1.0	0.9	0.8	0.8	0.7	0.8
South Dakota	0.9	0.8	0.9	0.8	0.8	0.8
Missouri	0.9	0.8	0.7	0.7	0.6	0.7
Indiana	0.5	0.5	0.4	0.6	0.6	0.5
Iowa	0.3	0.3	0.7	0.7	0.6	0.5
Tennessee	0.6	0.5	0.5	0.5	0.4	0.5
MEAN[1]	**1.7**	**1.7**	**1.8**	**1.8**	**1.7**	**1.7**
MEDIAN[1]	**1.2**	**1.2**	**1.2**	**1.1**	**1.0**	**1.1**

(1) These calculations exclude all Vermont numbers and include only states rated by Moody's, S&P and Fitch that are rated triple-A by two or more of the rating agencies during the periods shown, as of September 30, 2025.

*Indicates that the state was not rated triple-A by two or more of the rating agencies during the year shown. Amount not used in calculating the mean or median for the year.

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STATE OF VERMONT
HISTORIC AND PROJECTED DEBT RATIOS

Fiscal Year (ending 6/30)	Net Tax-Supported Debt Per Capita (in $)			Net Tax-Supported Debt as Percent of Personal Income			Net Tax-Supported Debt Service as Percent of Revenues [5]		
	State of Vermont	Moody's Median	State's Rank [4]	State of Vermont	Moody's Median	State's Rank [4]	State of Vermont [5]	Moody's Median	State's Rank [4]
Actual [1]									
2015	954	1,012	28	2.1	2.5	31	4.2	5.3	n.a.
2016	1,002	1,027	27	2.1	2.5	30	4.2	4.3	n.a.
2017	1,068	1,006	24	2.2	2.5	27	4.3	4.1	n.a.
2018	987	987	25	2.0	2.3	28	4.0	4.2	n.a.
2019	1,140	1,068	25	2.2	2.2	26	4.1	4.1	n.a.
2020	1,061	1,071	26	1.9	2.0	29	4.3	3.8	n.a.
2021	1,102	1,039	24	1.9	1.9	27	4.0	3.9	n.a.
2022	1,185	1,179	25	2.0	2.1	26	3.7	2.1	n.a.
2023	1,173	1,178	26	1.9	2.2	27	3.7	n.a.	n.a.
2024	1,100	1,189	29	1.6	2.0	29	3.7	n.a.	n.a.
2025	1,100	1,189	n.a.	1.6	2.0	n.a.	3.7	n.a.	n.a.
Current [2]	1,021	n.a.	n.a.	1.3	n.a.	n.a.	3.9	n.a.	n.a.
Projected (FYE 6/30) [3]		State Guideline [6]			State Guideline			State Guideline	
2026	955	662		1.2	1.8		3.5	4.0	
2027	987	680		1.2	1.8		3.1	4.0	
2028	1,021	699		1.2	1.8		3.0	4.0	
2029	1,053	718		1.2	1.8		3.0	4.0	
2030	1,081	737		1.2	1.8		3.0	4.0	
2031	1,044	757		1.1	1.8		3.0	4.0	
2032	1,016	777		1.0	1.8		2.7	4.0	
2033	987	798		1.0	1.8		2.7	4.0	
2034	965	820		0.9	1.8		2.5	4.0	
2035	947	842		0.9	1.8		2.3	4.0	
2036	930	865		0.8	1.8		2.2	4.0	
5-Year Average of Moody's Mean for Triple-A States	1,060			1.7			n.a.		
5-Year Average of Moody's Median for Triple-A States	645			1.1			n.a.		

Note: Shaded figures in the State's debt per capita projection in fiscal years 2026-2036 represent the period when Vermont is expected to exceed the projected, respective State Guideline consistent with the current guideline calculation methodology and the assumption that the State will issue bonds consistent with the proposed two-year authorization (footnote (3)).

(1) Actual data compiled by Moody's Investors Service, reflective of all 50 states. Moody's uses states' prior year figures to calculate the "Actual" year numbers in the table. NOTE: 2025 numbers are the same as 2024 pending availability of Moody's 2025 state debt medians.

(2) Calculated by Public Resources Advisory Group, Inc. using outstanding Long-Term Net Tax-Supported Debt of $663.006 million as of 6/30/2025 divided by Vermont's 2025 population of 649,206 as projected by EPR.

(3) Projections assume issuance of $37 Million in FY2026, $91.3 Million from FY2027-FY2030, $50 Million from FY2031-FY2036.

(4) Rankings are in numerically descending order (i.e., from high to low debt).

(5) Revenues are aggregate of State's General Fund, including changes related to Act 11 as calculated by EPR, and Transportation Fund. Projected debt service is based on estimated interest rates at 5% over the projected period. Calculated by Public Resources Advisory Group, Inc.

(6) State Guideline equals the 5-year average of Moody's median for the Peer Group of $645 increasing annually at 2.70%.

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"Dashboard" Indicators

	Vermont[a]	Median Triple-A States[b,c]
Long-Term Net Tax-Supported Debt:	$663,006,006	$4,670,416,000
Debt As A Percent Of Gross State Product:	1.39%	0.9%
Debt Per Capita:	$1,021	$693
Debt As A Percent Of Personal Income:	1.38%	1.0%
Debt Service As A Percent Of Operating Revenue[d]:	3.89%	N/A
Rapidity Of Debt Retirement:	48.9% (In 5 Years)	N/A
	80.2% (In 10 Years)	N/A
	95.3% (In 15 Years)	N/A
	100.0% (In 20 Years)	N/A

(a) Debt statistics for Vermont are as of June 30, 2025. Estimates of FY 2025 Gross State Product, Population, Personal Income and Operating Revenue consensus official State forecasts provided by EPR.

(b) These calculations exclude all Vermont numbers and include only states rated by Moody's, S&P and Fitch that are rated triple-A by two or more of the rating agencies during the periods shown, year ended September 30, 2024.

(c) Source: Moody's Investors Service, 2024 State Debt, Pension and OPEB Medians Report calculated by Public Resources Advisory Group, Inc.

(d) Aggregate of State's General Fund, including changes related to Act 11 as calculated by EPR, and Transportation Fund, as well as the dedicated property transfer tax revenues associated with the VHFA Property Transfer Bonds.

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4. NATIONAL CREDIT RATING METHODOLOGIES AND CRITERIA

Standard & Poor's Methodology for U.S. State Ratings

On September 9, 2024, S&P released its "Methodology for Rating U.S. Governments," which fully superseded its "U.S. State Ratings Methodology" that had been the basis of the State of Vermont's rating since October 17, 2016. S&P's new methodology consolidates its rating criteria for U.S. states, counties, municipalities, school districts, and special government districts under a single framework. Importantly, S&P stated that all U.S. state and territory ratings would remain unchanged under the new criteria.

The State's most recent S&P rating report from May 30, 2024, uses the previous methodology, which includes the important categories of review, referred to as "factors," as follows:

    (i)   Government Framework,
    (ii)   Financial Management,
    (iii)   Economy,
    (iv)   Budgetary Performance and Flexibility, and
    (v)   Debt and Liability Profile.

In addition, the sub-categories, or "metrics" within each factor are weighted. Specifically, S&P assigns a score of 1 (strongest) to 4 (weakest) for twenty-eight metrics, grouped into the five factors listed above. Each of the metrics is given equal weight within the category, and then each factor is given equal weight in an overall 1 through 4 score. The overall scores correspond to the following indicative credit levels for the highest three ratings categories:

Score	Indicative Credit Level
1.0-1.5	AAA
1.6-1.8	AA+
1.9-2.0	AA
2.1-2.2	AA-
2.3-2.5	A+
2.5-2.6	A
2.7-3.0	A-
3.1-4	BBB category

In S&P's most recent report, Vermont's composite score was 1.8, unchanged from the 2022 and 2023 reports. The scores for each factor are as follows:

1.6	Government Framework
1.0	Financial Management,
2.4	Economy,
1.4	Budgetary Performance and Flexibility, and
2.6	Debt and Liability Profile.

S&P notes that they review debt service expenditures and how debt payments are prioritized versus funding of other long-term liabilities and operating costs for future tax streams and other revenue sources. They evaluate three key metrics which they score individually and weight equally: debt burden, pension liabilities, and other post-employment benefits. For each metric there may be multiple indicators (as they are for the debt metric) that they score separately and then average to develop the overall score for the metric.

Provided on below is a table with S&P's most recent debt statistics and scores for Vermont.

S&P Debt Score Card Metrics

	Low Ranking (Score of 1)	Moderate Ranking (Score of 2)	Vermont's Statistics[1]	Vermont's Score
Debt per Capita	Below $500	$500 - $2,000	1,190	2
Debt as a % of Personal Income	Below 2%	2% - 4%	1.8%	1
Debt Service as a % of Spending	Below 2%	2%- 6%	2.1%	1
Debt as a % of Gross State Product	Below 2%	2% - 4%	1.7%	1
Debt Amortization (10 year)	80% - 100%	60%-80%	80%	2

[1] As calculated and reported by S&P.

Regarding pension liabilities, S&P assesses two indicators: (i) three-year average of the pension funded ratio and (ii) pension funding discipline. As described within their methodology, S&P analysis covers changes in assets and liabilities, funded ratios, funding discipline, and unfunded pension liability. S&P considers a state's commitment to funding annual contributions that address the long-term pension liability is a key credit consideration. The scoring of the three-year average of the pension funded ratio is detailed below.

Three-Year Average of Pension Funded Ratio	Indicator	Score
90% or above	Strong	1
80% - 90%	Good	2
60% - 80%	Relatively Low	3
60% or below	Weak	4

*Shaded grey indicates the State's three-year pension funded ratio of 63% in accordance with S&P's methodology based on S&P's rating report of the State dated May 30, 2024.

Based on the State's most recent rating report in May 2024, the State's three-year average of the pension funded ratio was 63%, which is considered relatively low and results in a score of 3.

S&P's review of a state's pension funding discipline includes an assessment of a state's funding policy, specifically reviewing whether it has an actuarial basis, and whether annual contributions usually meet or exceed the actuarially determined levels. S&P also reviews whether total annual plan contributions typically cover certain costs that drive the annual changes in the unfunded pension liability across plans, as well as an estimated annual amortization component of the unfunded liability. S&P also considers management factors and actuarial inputs to inform their assessment of a state's funding discipline.

S&P noted within Vermont's rating report in August 2023, and reiterated in May 2024, that they "believe that retirement liabilities are less of a source of credit pressure than they were before pension reform but are still sizable relative to those of state peers."

The last component of the debt and liability profile is a review of other post-employment benefits risks. For this assessment, S&P focuses on the relative level of unfunded OPEB liability compared to other states and the legal and practical flexibility that a state has to adjust these liabilities and the overall strategy to manage the costs of these benefits given the impact to future contribution rates and budgetary requirements.

In S&P's most recent rating report from May 2024, it noted that "the improvements represent meaningful gains, but we note that the per capita OPEB liability…. is still large and well above what is typical among other states."

The State's next rating report from S&P is anticipated to be received in late November 2025, in connection with the ratings for the State's next G.O. Bond issue.

Moody's US States Rating Methodology

On July 24, 2024, Moody's published its "US States and Territories Rating Methodology" to replace its "US States and Territories Rating Methodology," updated as of March 22, 2022. The State's first rating under this new methodology was published on August 1, 2025, as part of Moody's annual surveillance. The new scorecard is summarized below:

Rating Factors	Factor Weighting	Rating Sub-Factors	Sub-Factor Weighting	State Measure	State Score
Economy	30%	Resident Income (PCI Adjusted for RPP / US PCI)	15%	99.6%	Aa
		Economic Growth (5-Year CAGR real GDP – 5-Year CAGR US real GDP)	15%	-0.8%	Aa
Governance	20%		20%	Aaa	Aaa
Financial Performance	20%		20%	Aaa	Aaa
Leverage	30%	Long-term Liabilities Ratio (Debt + Moody's-adjusted Net Pension Liability + Moody's adjusted Net OPEB Liability + Other Long-term Liabilities)/Own-Source Revenue	20%	161.6%	Aa
		Fixed-Costs Ratio (Adjusted Fixed Costs / Own-Source Revenue)	10%	8.7%	Aaa
Total	**100%**	**Total**	**100%**		
Notching Factors		Very Limited and Concentrated Economy	**2 to 0**		0
Scorecard-Indicated Outcome					**Aa1**
Assigned Rating					**Aa1**

Vermont's Aa1 actual rating matches the State's indicative scorecard rating of Aa1. Moody's is anticipated to update its report in late November 2025 in connection with the ratings for the State's next G.O. Bond issue.

Fitch Rating Criteria for US State and Local Governments

On February 4, 2025, Fitch released its updated "U.S. Public Finance State Governments and Territories Rating Criteria," which did not substantially change the rating criteria for U.S. States.

Notable aspects of the criteria included published assessments of four key rating factors that drive rating analysis in the context of the economic base. The four key rating factors driving state and local government ratings include:

--Revenues;
--Expenditures;
--Long-term liabilities; and
--Operating performance.

On May 31, 2017, Fitch updated their criteria based on analysis of defined benefit pension liabilities. Specifically, Fitch lowered the discount rate adjustment to 6% from 7%, which is used to establish comparable liability figures. The adjustment was refined based on information within GASB 67 and 68 reporting.

Fitch considers the credit impact of OPEBs in evaluating a government's expenditure framework and operating performance but does not include this liability as part of an issuer's long-term liability burden except in limited cases. Fitch does not view OPEB liabilities akin to debt and net pension.

Please see the guidance table on the following page that outlines general expectations for a given rating category.

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	aaa	aa	a	bbb	bb
Revenue Framework (aa)					
Growth Prospects for Revenues Without Revenue-Raising Measures	Strong Growth in line with or above the level of U.S. economic performance	Solid Growth below U.S. economic performance but above the level of inflation	Slow Growth in line with the level of inflation	Stagnant Growth below the level of inflation or flat performance	Negative Declining revenue trajectory
Independent Legal Ability to Raise Operating Revenues Without External Approval (in Relation to Normal Cyclical Revenue Decline)	High Minimum revenue increase at least 300% of the scenario revenue decline	Substantial Maximum revenue increase at least 200% of the scenario revenue decline	Satisfactory Maximum revenue increase at least 100% of the scenario decline	Moderate Maximum revenue increase at least 50% of the scenario revenue decline	Limited Maximum revenue increase less than 50% of the scenario revenue decline
Expenditure Framework (aaa)					
Natural Pace of Spending Growth Relative to Expected Revenue Growth	Slower to equal	In line with to marginally above	Above	Well above	Very high
Flexibility of Main Expenditure Items (Ability to Cut Spending Throughout the Economic Cycle)	Ample	Solid	Adequate; legal or practical limits to budget management may result in manageable cuts to core services at times of economic downturn	Limited; cuts likely to meaningfully, but not critically, reduce core services at times of economic downturn	Constrained; adequate delivery of core services may be compromised at times of economic downturn
Long-Tern Liability Burden (aa)					
Combined Burden of Debt and Unfunded Pension Liabilities in Relation to Resource Base	Low Liabilities less than 10% of personal income	Moderate Liabilities less than 20% of personal income	Elevated but still in the moderate range Liabilities less than 40% of personal income	High Liabilities less than 60% of personal income	Very High Liabilities 60% or more of personal income
Operating Performance (aaa)					
Financial Resilience Through Downturns (Based on Interpretation of Scenario Analysis)	Exceptionally strong gap-closing capacity; expected to manage through economic downturns while maintaining a high level of fundamental financial flexibility.	Very strong gap-closing capacity; expected to manage through economic downturns while maintaining an adequate level of fundamental financial flexibility.	Strong gap-closing capacity; financial operations would be more challenged in a downturn than is the case for higher rating levels but expected to recover financial flexibility.	Adequate gap-closing capacity; financial operations could become stressed in a downturn, but expected to recover financial flexibility	Limited gap-closing capacity; financial operations could become distressed in a downturn and might not recover.
Budget Management at Times of Economic Recovery	Rapid rebuilding of financial flexibility when needed, with no material deferral of required spending/ nonrecurring support of operations.	Consistent efforts in support of financial flexibility, with limited to no material deferral of required spending/nonrecurring support of operations.	Some deferral of required spending/ nonrecurring support of operations.	Significant deferral of required spending/ nonrecurring support of operations.	Deferral of required spending/ nonrecurring support of operations that risks becoming untenable given tools available to the issuer.
Overall Additional Considerations	In addition to the key rating driver assessments discussed above, the final rating assigned also considers certain additional risk factors that may affect the rating conclusion. These additional risk factors work asymmetrically, where only below-standard features are factored into the final rating levels. For U.S. state and local governments, these risk factors are management and economic characteristics that are significantly outside the U.S. norm.				

Fitch reviews scenarios that consider how a government's revenues may be affected in a cyclical downturn and the options available to address the resulting budget gap. Also under the criteria, Fitch provides more in-depth opinions on reserve adequacy related to individual issuers' inherent budget flexibility and revenue volatility.

In 2017, Vermont was rated under the new criteria and there was no change to the State's AAA rating at that time as the result of the new criteria. However, the State was downgraded to AA+ by Fitch in July 2019, as previously discussed, and the AA+ rating was affirmed most recently in May 2024. In its 2024 report, Fitch scored the State as follows based on the four key rating factors:

Revenue Framework: 'aa'
Expenditure Framework: 'aaa'
Long-term Liability Burden: 'aa'
Operating Performance: 'aaa'

Under long-term liability burden Fitch notes that "Vermont's long-term liabilities burden is above the U.S. state median but remains moderate compared to the state's economic resource base. Vermont's elected leaders maintains close oversight and management of debt issuance, and have engaged in multiple efforts to improve the sustainability of retirement liabilities over time."

Similar to S&P, the State's next rating report from Fitch is anticipated to be received in late November 2025, in connection with the ratings for the State's next G.O. Bond issue.

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5. ADDITIONAL CREDIT AND AFFORDABILITY CONSIDERATIONS

Moody's Adjustment to Pension Data and Adjusted State Pension Liability Medians
As previously discussed in Section 4, "National Credit Rating Methodologies and Criteria," in recent years Moody's, S&P and Fitch have added other "long-term liabilities" primarily pension and OPEB liabilities as rating factors.

On October 7, 2023, Moody's published its annual state liability report titled "Revenue growth and lower ANPLs boost capacity to manage long-term debt," which reports each states' debt, adjusted net pension liability, adjusted net OPEB liability and other long-term liabilities as a percentage of own-source revenue, among other liability information and comparative ratios.

Moody's pension data reflected on the upcoming pages reflects 2024 data based on 2022 liabilities and utilizes a FTSE Pension Liability Index of 4.92% as a discount rate to value liabilities in standard adjustments.

The following two tables provide Vermont's relative position among the 50 states with respect to its ANPL for the fiscal years indicated and a comparison of Vermont and Peer Group states with respect to Moody's pension ratios.

	State of Vermont Rankings			
Moody's Pension Ratios	**2020[1,2]**	**2021[1,2]**	**2022[1,2]**	**2023[1,2]**
ANPL as % of Personal Income	8	8	7	7
ANPL as % of State Gross Domestic Product	7	7	6	5
ANPL Per Capita	9	8	8	8
ANPL as % of Own-Source Revenue	14	12	10	9
Debt + ANPL + ANOL + Other Long-term Liabilities as a % of Own-Source Revenue	N/A	13	11	10

[1]Rankings are in numerically descending order, with the state having the highest Moody's Adjusted Net Pension Liability statistic ranked 1st and the state having the lowest Adjusted Net Pension Liability statistic ranked 50th.

[2]Based on a FTSE Pension Liability Index of 4.92% as of June 30, 2023.

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**STATE OF VERMONT AND PEER GROUP STATES'
MOODY'S PENSION LIABILITIES METRICS***

Triple-A Rated States	Moody's Adjusted Net Pension Liability (ANPL)[1]			
	As % of PI	As % of State GDP	Per Capita ($)	As % of Revenues
South Carolina	8.6	8.1	4,918	124.0
Maryland	8.7	7.9	6,577	117.7
VERMONT[3]	13.2	13.1	8,819	114.9
Texas	5.3	4.2	3,516	95.1
Missouri	3.4	3.0	2,100	69.0
Iowa	7.8	5.5	5,211	60.8
Delaware	3.3	2.8	2,020	48.4
Indiana	1.9	1.5	1,167	34.2
Ohio	1.7	1.4	1,074	29.0
Minnesota	2.3	2.0	1,692	25.4
Florida	1.7	1.7	1,025	24.0
Georgia	1.1	1.1	764	23.2
Virginia	1.4	1.2	877	22.3
North Carolina	1.4	1.3	1,035	22.1
Utah	1.1	1.0	715	17.1
South Dakota	1.2	1.0	800	17.0
Idaho	1.1	0.9	680	15.7
MEAN[2]	1.3	1.2	946	14.3
MEDIAN[2]	3.1	2.7	2,066	44.7
VERMONT's 50 STATE RANK[4]	7	5	8	9

Source: Moody's *Revenue growth and lower ANPLs boost capacity to manage long-term debt,* October 7, 2024.

[1]Based on a FTSE PLI of 4.92%.

[2] Calculated by Public Resources Advisory Group, Inc. These calculations exclude all Vermont numbers and include only states rated by Moody's, S&P and Fitch that are rated triple-A by two or more of the rating agencies, as of September 30th, 2025.

[3]Vermont numbers include the combined defined benefits plans of the Vermont State Employees' Retirement System and the Vermont State Teachers' Retirement System.

[4]Rankings are in numerically descending order, with the state having the highest Moody's Adjusted Net Pension Liability statistic ranked 1st and the state having the lowest Adjusted Net Pension Liability statistic ranked 50th.

*Source does not take into account differing retirement benefits among states.

As discussed in Section 4, "Moody's US States Rating Methodology," the updated methodology includes a "Leverage" factor with a weight of 30% and adjusted OPEB liabilities and other long-term liabilities along with debt and pensions. As can be seen in the table below, Vermont is currently ranked 10th out of the 50 states in long-term liabilities ratio (lower numbers indicate relatively greater liabilities). Please see below for a chart comparing Vermont's Moody's long-term liabilities ratio compared to those of the other 49 states.
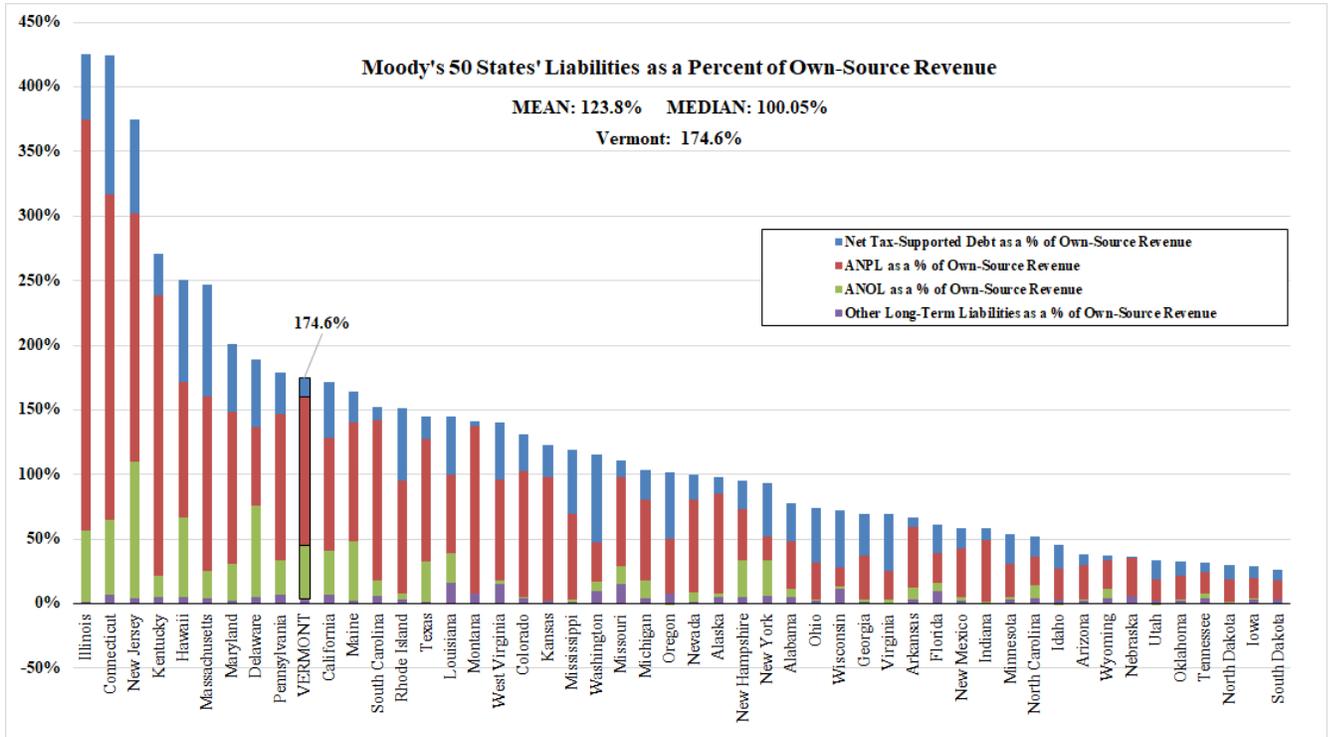
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Moody's – Review of State and Local Budget Capacity

Moody's has raised concerns with state and local governments' long-term debt liabilities as they relate to percentage of fixed cost to total operating budget capacity. With many states expecting the costs for pensions, debt and OPEBs expected to rise, the agencies are concerned that other funding priorities will be squeezed and for some states this could create reduced financial flexibility.

Moody's Fixed Cost Ratio, which was also previously discussed, is a ratio within the "Leverage" factor that compares implied debt service, OPEB contributions and pension tread water costs to state own-source revenue. Please see below for a chart comparing Vermont's Moody's Fixed Cost Ratio compared to the ratios for the other 49 states; currently Vermont is ranked 15th out of 50 (lower numbers indicate relatively higher fixed costs).
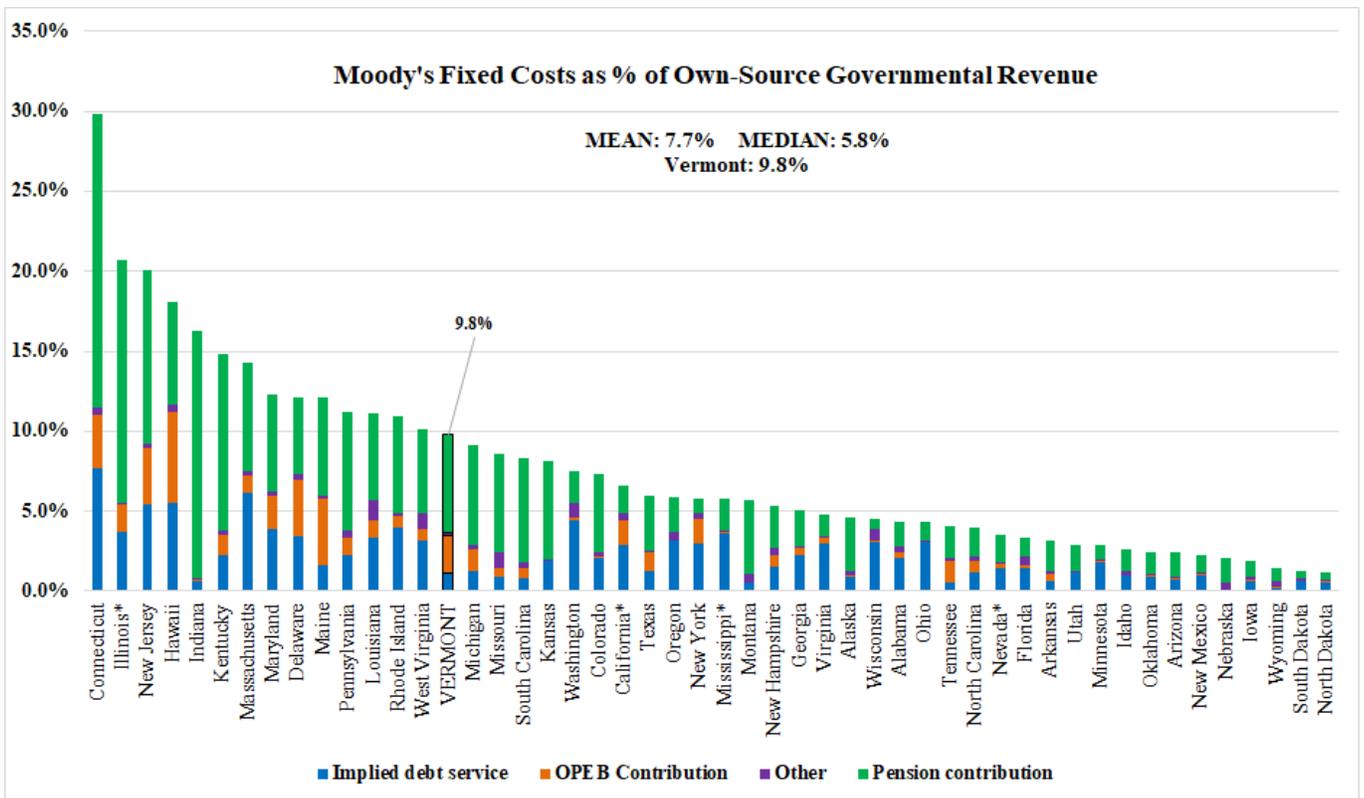
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S&P State Liability Information

In October 2024, S&P published a report titled "U.S. States' Fiscal 2023 Liabilities: Stable Debt, With Pension And OPEB Funding Trending Favorably." The report highlighted that state debt had decreased 1.3% in fiscal year 2023, while pension and OPEB liabilities had decreased 8.8% while funding ratios improved slightly, as states took advantage of federal stimulus to pursue pay-as-you-go funding for projects in lieu of debt, and as investment performance exceeded benchmarks. The chart below represents each state's ratio of direct debt, pension liabilities and OPEB liabilities to personal income. At the time, Vermont was ranked 8th out of the 50 states (note: higher ranked states have less debt, pension liabilities and OPEB liabilities).
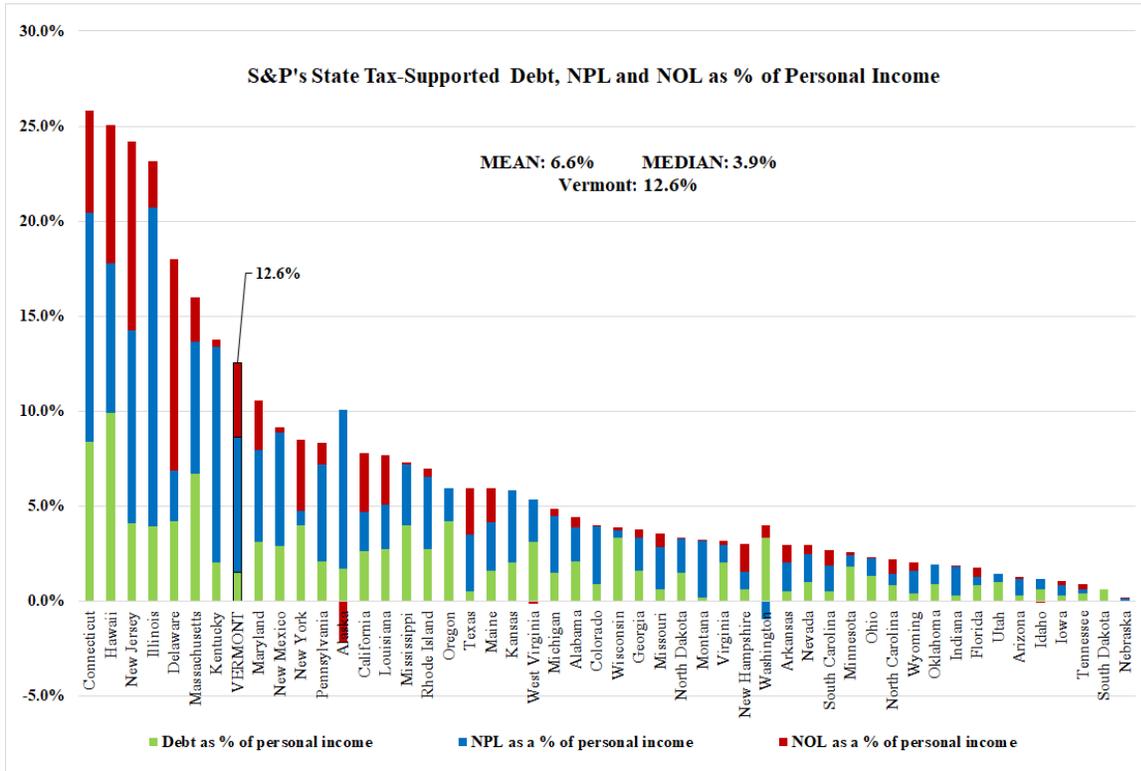
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Fitch Annual State Liability Report

Fitch annually publishes a state liability report. In November 2024, Fitch released their "2024 State Liability Report," which stated that 2022's surge in asset market values reversed in 2023, increasing long-term liability burdens. However, Fitch believed that stronger state contribution practices could lower net pension liabilities over time. In the chart below, Fitch presents each state's ratio of direct debt and net pension liabilities to personal income. Vermont is currently ranked 8th out of the 50 states (note: lower numbered rankings correspond to higher debt and pension liabilities).

Fitch 50 States' Direct Debt and Adjusted Net Pension Liability (ANPL) as a % of Personal Income

MEAN: 6.4%   MEDIAN: 4.2%
Vermont: 10.9%
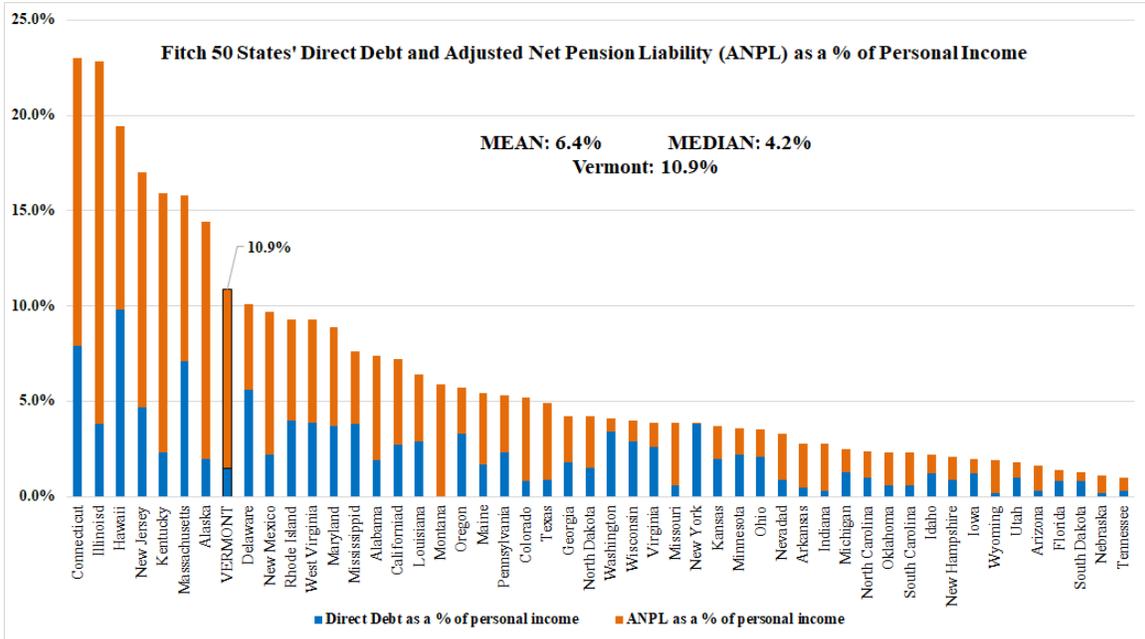
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Reserve or Rainy-Day Fund Balances

The rating agencies are also putting greater emphasis on the importance of having robust general fund reserve fund balances, commonly referred to as rainy-day funds. Well-funded rainy-day funds were particularly important for states during the onset of the COVID-19 pandemic to maintain adequate liquidity in order to deliver essential services. Historically, a rainy-day fund target of 5% of general fund expenditures was considered conservative and a credit positive by the rating agencies, but rating agencies now consider higher reserve funds to be consistent with triple-A ratings. Moody's considers the level of states fund balance (funds that are classified as unassigned, assigned or committed in the total governmental funds section of a state or territory's audited financial statements) as one factor in its assessment of the Financial Performance score (see Section 4, "National Credit Rating Methodologies and Criteria"). In its US States Rating Methodology, Moody's provides expectations for fund balance levels by credit rating category, specifying that triple-A rated states' fund balances should approximate or exceed 15% of revenues and double-A rated states' levels should approximate or exceed 10% of revenues. With respect to the Vermont's rainy day fund balances, in the State's most recent Standard and Poor's report published in May 2024, S&P states that its stable outlook "reflects our expectation that Vermont will continue to realize structurally balanced operations with fully funded reserves and robust cash balances in the coming few years" despite the likelihood of a near-term economic slowdown. S&P's criteria update on September 9, 2024, relocated the reserves and liquidity by moving it out of budgetary performance and to a separate factor, which highlights the role reserves and liquidity play in paying debt service and supporting operations during economic downturns. The table below shows the fiscal year 2022 through 2026 rainy day fund balances of the other triple-A states.

As mentioned in Section 4, "National Credit Rating Methodologies and Criteria," Fitch has a different approach to evaluating reserve or rainy-day balances. Rather than having a set target percentage of general fund expenditures, Fitch determines reserve adequacy taking into consideration revenue volatility and budget flexibility.

Vermont has several reserve funds to dampen the effect of revenue volatility that are considered "available reserve funds." These are statutorily defined in 32 V.S.A. §§ 308-308e. The General Fund Stabilization Reserve and Transportation Fund Stabilization Reserve are determined on a self-building 5% budgetary basis and administered by the Commissioner of Finance and Management. The General Fund Balance Reserve is known as the "Rainy Day Reserve." Any remaining and undesignated General Fund amount is determined by the Commissioner of Finance & Management and reported to the Joint Fiscal Committee after all codified transactions have been completed. Act No. 27 of 2025 increased this reserve's cap from 5% to 10% of the prior year's General Fund appropriations. Act No. 27 also adjusted the restriction on use of this fund from 50% of the amounts added to the reserve in the prior year to 10% of the balance, and adjusted the characterization of the General Assembly's action from "may specifically appropriate" to "may unreserve and appropriate."

In fiscal year 2017, the State recognized the pressures placed on the budget by periodic 53rd week Medicaid vendor payments and 27th payroll payments. The State created new reserves to build over time the amount to fully fund these payments when needed. See the table on the following page for a summary of the State's final FY 2025 and budgeted FY 2026 operating reserves as a percentage of General Fund Appropriations.

State of Vermont Summary of Operating Reserves		
	Fiscal Year 2025 Final	**Fiscal Year 2026 As Passed**
Total General Fund Appropriations	$2,367.17	$2,501.32
Reserves:		
Stabilization Reserve	$120.05	$118.36
27/53 Reserve	14.58	20.28
Human Services Caseload Reserve	94.53	91.81
Rainy Day Reserve	99.06	99.06
Other Reserve	0.00	60.00
TOTAL	**$328.22**	**$389.51**
Operating Reserves as a Percentage of Total General Fund Appropriations and Carried Forward Amount:	13.9%	15.6%

Note: $'s in millions. Totals may not agree due to rounding.

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The chart below provides the State's FY2022 through 2024 actual, estimated FY2025, and recommended FY2026 rainy day funds as a percentage of general government expenditures compared to the Peer Group.

Triple-A Rated States	Fiscal 2022	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2026	5-Year Average
Rainy Day Fund Balances						
As a Percentage of General Fund Expenditures						
Texas	17.3	23.2	24.5	28.3	N/A	23.3
Idaho	18.8	24.1	23.9	23.9	23.2	22.8
Georgia[1]	18.3	17.6	15.3	N/A	N/A	17.1
VERMONT	**11.4**	**13.8**	**12.8**	**19.3**	**13.5**	**14.2**
North Carolina	12.1	17.8	16.3	11.4	10.7	13.7
Minnesota	13.2	12.5	16.7	9.9	10.8	12.6
Virginia	10.0	12.1	15.1	13.0	12.7	12.6
South Dakota	15.0	10.7	10.1	9.3	11.7	11.4
Ohio	10.0	10.0	10.6	12.7	13.1	11.3
South Carolina	19.3	7.2	8.5	10.5	9.2	10.9
Utah	11.6	13.8	8.7	9.3	9.8	10.6
Iowa	10.2	11.0	11.2	10.4	9.3	10.4
Tennessee	9.8	10.5	9.6	9.3	8.4	9.5
Indiana	8.8	9.7	8.5	7.8	8.0	8.6
Maryland	7.8	10.6	8.8	7.9	7.6	8.5
Florida	7.2	6.4	7.5	7.6	9.4	7.6
Missouri	7.4	6.8	5.9	6.1	5.6	6.4
Delaware	5.5	5.4	5.3	5.0	5.0	5.2
Mean[2]	**11.9**	**12.3**	**12.1**	**11.4**	**10.3**	**11.6**
Median[2]	**10.2**	**10.7**	**10.1**	**9.6**	**9.4**	**10.0**

Source: "The Fiscal Survey of States, Spring 2025. A report by the National Governors Association and the National Association of State Budget Officers." Fiscal Year 2022 and 2023 are "Actuals" from previous years' reports, Fiscal Year 2024 are "Actuals," Fiscal Year 2025 are "Estimated" and Fiscal 2026 are 'Recommended' figures.

[1] Information for Georgia's Fiscal Year 2025 and 2026 rainy day fund balance was not provided in the reports.

[2] Calculated by Public Resources Advisory Group, Inc. These calculations exclude all Vermont numbers and include only states rated by Moody's, S&P and Fitch that are rated triple-A by any two of the three rating agencies, as of September 30, 2025.

Capital Planning Program

All three rating agencies include the condition of Vermont's economy as a significant factor in their respective ratings. Capital improvements – whether financed through the use of debt, funded through direct appropriation or federal funds, or advanced through public private collaboration have a significant impact on the State's economy. Further, the link between investment in infrastructure and economic development is widely accepted. As noted in a March 2012 report prepared by the United States Department of Treasury with the Council of Economic Advisors, titled *A New Economic Analysis of Infrastructure Investment*, states that "well-designed infrastructure investments can raise economic growth, productivity, and land values, while also providing significant positive spillovers to areas such as economic development, energy efficiency, public health, and manufacturing." These points notwithstanding, the report also states that not every infrastructure project is worth the investment. Metrics are needed to ensure that economic growth through infrastructure investment is done in an affordable and sustainable manner.

Moody's began publishing the Capital Asset Depreciation Ratio (Accumulated Depreciation divided by Gross Depreciable Assets) as part its annual medians in 2020. The higher the ratio, the more a state may have a pressing debt issuance need for infrastructure investment. Vermont's and its peer states' median 5-year average ratios are both 46%.

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Triple-A Rated States	Moody's Capital Asset Depreciation Ratio					5-Year Average
	2020	2021	2022	2023	2024	
Indiana	64%	66%	58%	59%	62%	61%
Maryland	56%	57%	59%	58%	61%	59%
Ohio	57%*	57%*	57%*	58%	55%	57%
Georgia	52%	53%	54%	53%	56%	54%
Iowa	51%	51%	52%	53%	53%	52%
Minnesota	48%	50%	51%	52%	54%	52%
Missouri	50%	51%	51%	51%	52%	51%
Florida	48%	49%	50%	52%	51%	51%
Idaho	47%*	47%*	48%	47%	48%	48%
Delaware	44%	45%	47%	47%	48%	47%
VERMONT	**45%**	**45%**	**46%**	**49%**	**47%**	**47%**
Tennessee	44%	44%	44%	45%	46%	45%
Utah	44%	44%	46%	44%	44%	45%
South Carolina	41%	41%	42%	43%	44%	43%
South Dakota	41%	41%	42%	42%	42%	42%
Virginia	39%	40%	41%	40%	40%	40%
Texas	34%	35%	35%	36%	37%	36%
North Carolina	34%	34%	34%	34%	35%	34%
MEAN[1]	**46%**	**47%**	**47%**	**48%**	**49%**	**47%**
MEDIAN[1]	**44%**	**45%**	**48%**	**47%**	**48%**	**46%**

There is always a concern at the rating agencies when a state meaningfully enlarges its debt program to ameliorate periodic economic downturns. The rating agencies will often advise that long-term annual costs, in the form of higher debt service and frequently higher administrative and operating expenses, can accompany such an increased debt program. The Committee believes it is of critical importance to strike the correct balance between infrastructure investment and economic growth on the one hand and maintaining affordable and sustainable levels of debt authorizations and capital spending on the other.

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6. ACKNOWLEDGEMENTS

We would like to express our gratitude to the State Treasurer's Office, the Department of Finance and Management, EPR, and various officers and staff members of the State, whose assistance has been invaluable in completing this report. Certain computations and projections were made based on consensus official State population, personal income, and revenue projections provided by EPR. The numbers presented herein have not been audited and are, therefore, subject to change, possibly in a substantial manner.

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7. APPENDICES

A. Full Text of 32 V.S.A. Chapter 13, Subchapter 8, "Management of State Debt"

B. 2024 State Debt, Pension and OPEB Medians (Moody's Investors Service)

C. 2024 Fitch Ratings Credit Report

D. 2025 Moody's Investors Service Credit Report

E. 2024 S&P Global Credit Report

F. Proposed Updates to 32 V.S.A. § 1001(b) and (c)

APPENDIX A

Full Text of 32 V.S.A. Chapter 13, Subchapter 8, "Management of State Debt"

Title 32: Taxation and Finance

Chapter 13: Debts and Claims

Subchapter 8: MANAGEMENT OF STATE DEBT

§ 1000. Affordable amount of general obligation bond authorization

When the General Assembly authorizes the issuance of new long-term general obligation bonds, it shall consider the maximum amount of such bonds recommended as prudent for the fiscal year concerned by the Capital Debt Affordability Advisory Committee created for this purpose by this subchapter. This requirement shall apply to the authorizations of all State tax supported general obligation bonds, which are secured by the State General and Transportation Funds. (Added 1989, No. 258 (Adj. Sess.), § 1.)

§ 1001. Capital Debt Affordability Advisory Committee

(a) Committee established. A Capital Debt Affordability Advisory Committee is hereby created with the duties and composition provided by this section.

(b) Committee duties.

(1) The Committee shall review annually the size and affordability of the net State tax-supported indebtedness and submit to the Governor and to the General Assembly an estimate of the maximum amount of new long-term net State tax-supported debt that prudently may be authorized for the next fiscal year. The estimate of the Committee shall be advisory and in no way bind the Governor or the General Assembly.

(2) The Committee shall conduct ongoing reviews of the amount and condition of bonds, notes, and other obligations of instrumentalities of the State for which the State has a contingent or limited liability or for which the General Assembly is permitted to replenish reserve funds, and, when deemed appropriate, recommend limits on the occurrence of such additional obligations to the Governor and to the General Assembly.

(3) The Committee shall conduct ongoing reviews of the amount and condition of the Transportation Infrastructure Bond Fund established in 19 V.S.A. § 11f and of bonds and notes issued against the Fund for which the State has a contingent or limited liability.

(c) Committee estimate of a prudent amount of net State tax-supported debt; affordability considerations. On or before September 30 of each year, the Committee shall submit to the Governor and the General Assembly the Committee's estimate of net State tax-supported debt that prudently may be authorized for the next fiscal year, together with a report explaining the basis for the estimate. The Committee's estimate shall not take into consideration the balance remaining at the end of each fiscal year in the subaccounts of

the Cash Fund for Capital and Essential Investments, established pursuant to section 1001b of this title. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subsection. In developing its annual estimate, and in preparing its annual report, the Committee shall consider:

(1) The amount of net State tax-supported indebtedness that during the next fiscal year and annually for the following nine fiscal years:

(A) will be outstanding; and

(B) has been authorized but not yet issued.

(2) A projected schedule of affordable net State tax-supported bond authorizations for the next fiscal year and annually for the following nine fiscal years. The assessment of the affordability of the projected authorizations shall be based on all of the remaining considerations specified in this section.

(3) Projected debt service requirements during the next fiscal year, and annually for the following nine fiscal years, based upon:

(A) existing outstanding debt;

(B) previously authorized but unissued debt; and

(C) projected bond authorizations.

(4) The criteria that recognized bond rating agencies use to judge the quality of issues of State bonds, including:

(A) existing and projected total debt service on net tax-supported debt as a percentage of combined General and Transportation Fund revenues, excluding surpluses in these revenues that may occur in an individual fiscal year;

(B) existing and projected total net tax-supported debt outstanding as a percentage of total State personal income;

(C) existing and projected pension and other postemployment benefit liability metrics; and

(D) other metrics at the Committee's discretion, including long-term liabilities not covered in subdivisions (A)–(C) of this subdivision (4).

(5) The principal amounts currently outstanding, and balances for the next fiscal year, and annually for the following nine fiscal years, of existing:

(A) obligations of instrumentalities of the State for which the State has a contingent or limited liability;

(B) any other long-term debt of instrumentalities of the State not secured by the full faith and credit of the State, or for which the General Assembly is permitted to replenish reserve funds; and

(C) to the maximum extent obtainable, all long-term debt of municipal governments in Vermont that is secured by general tax or user fee revenues.

(6) The impact of capital spending upon the economic conditions and outlook for the State.

(7) The cost-benefit of various levels of debt financing, types of debt, and maturity schedules.

(8) Any projections of capital needs authorized or prepared by the Agency of Transportation, the Joint Fiscal Office, or other agencies or departments.

(9) Any other factor that is relevant to:

(A) the ability of the State to meet its projected debt service requirements for the next five fiscal years; or

(B) the interest rate to be borne by, the credit rating on, or other factors affecting the marketability of State bonds.

(10) The effect of authorizations of new State debt on each of the considerations of this section.

(11) The capital asset depreciation ratio reflecting unfunded capital maintenance costs.

(d) Committee composition.

(1) Committee membership shall consist of:

(A) As ex officio members:

(i) the State Treasurer;

(ii) the Secretary of Administration; and

(iii) a representative of the Vermont Municipal Bond Bank chosen by the directors of the Bank.

(B) Two individuals with experience in accounting or finance, who are not officials or employees of State government appointed by the Governor for six-year terms.

(C) The Auditor of Accounts who shall be a nonvoting ex officio member.

(D) One person who is not an official or employee of State government with experience in accounting or finance appointed by the State Treasurer for a six-year term.

(E) The Legislative Economist or other designee of the Joint Fiscal Office, who shall be a nonvoting ex officio member.

(2) The State Treasurer shall be the Chair of the Committee.

(e) Other attendants of committee meetings. Staff of the Legislative Counsel and the Joint Fiscal Committee shall be invited to attend Committee meetings for the purpose of fostering a mutual understanding between the Executive and Legislative Branches on the appropriate statistics to be used in committee reviews, debt affordability considerations, and recommendations.

(f) Information. All public entities whose liabilities are to be considered by the Committee shall annually provide the State Treasurer with the information the Committee deems necessary for it to carry out the requirements of this subchapter. (Added 1989, No. 258 (Adj. Sess.), § 1; amended 2007, No. 121 (Adj. Sess.), § 28; 2007, No. 200 (Adj. Sess.), § 25, eff. June 9, 2008; 2009, No. 50, § 31; 2013, No. 142 (Adj. Sess.), § 65; 2019, No. 42, § 26a, eff. May 30, 2019; 2021, No. 105 (Adj. Sess.), § 478, eff. July 1, 2022; 2023, No. 78, § C.107, eff. June 20, 2023.)

§ 1001a. Reports

(a) The Capital Debt Affordability Advisory Committee shall prepare and submit consistent with 2 V.S.A. § 20(a) a report on:

(1) general obligation debt, pursuant to subsection 1001(c) of this title; and

(2) how many, if any, Transportation Infrastructure Bonds have been issued and under what conditions.

(b) The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the reports to be made under this section. (Added 2003, No. 122 (Adj. Sess.), § 294h; amended 2009, No. 50, § 32, eff. June 1, 2009; 2013, No. 142 (Adj. Sess.), § 66; 2017, No. 84, § 28, eff. June 16, 2017.)

APPENDIX B

2024 State Debt, Pension and OPEB Medians (Moody's Investors Service)

MOODY'S
RATINGS

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States – US

Revenue growth and lower ANPLs boost capacity to manage long-term debt

States' ability to service long-term liabilities further improved in fiscal 2023 as the sector saw moderate revenue growth, while adjusted net pension liabilities (ANPLs), the largest long-term liability for most states, declined because of higher interest rates. Total net tax-supported debt (NTSD), the second-largest liability for most states, fell slightly. Other post-employment benefit (OPEB) liabilities generally remained small compared with pension liabilities, though a number of states with high pension liabilities also have above-average OPEB liabilities.

» **Total long-term liabilities fell by 16.7%, mainly because of declines in adjusted net pension liabilities.** Fiscal 2023 long-term liabilities totaled $2.4 trillion, down from $2.9 trillion in fiscal 2022. The median ratio of total long-term liabilities to own-source revenue was 100.5% in fiscal 2023,[1] down from 131.0% in fiscal 2022.

» **The median ratio of fixed costs to own-source revenue rose to 5.4% as pension tread water contribution requirements increased following negative investment returns in 2022.** Pension contributions remained strong in fiscal 2023 as over two third of states contributed above tread water indicators in fiscal 2023, up from half in fiscal 2021. Total fiscal 2023 implied debt service grew modestly by 0.7% from a year ago, less than own-source revenue growth (2.9%).

» **Total net tax-supported debt fell by 1.3% to $613.4 billion, while total own-source revenue grew by 2.9%.** Total NTSD in fiscal 2023 represented 37.0% of aggregate own-source revenue, down from 38.5% the previous year. The median ratio of NTSD to personal income was 2.0%.

» **Total ANPL across states' governmental activities decreased by 23.3% to $1.3 trillion, representing 80.1% of aggregate own-source revenue.** Higher interest rates have substantially reduced ANPLs. The median ratio of ANPL to own-source revenue was 54.6% in fiscal 2023, down from 79.8% in fiscal 2022. ANPLs are expected to decrease in fiscal 2024 reporting because of higher rates and will decline further in fiscal 2025 because of higher interest rates and strong investment performance in 2024.

» **Total adjusted net OPEB liabilities (ANOL) fell by 16.1% to $376.3 billion, representing 22.7% of aggregate own-source revenue.** Unfunded OPEB liabilities are typically smaller than NTSD and ANPL. The median ratio of ANOL to own-source revenue was 6.5%.

» **Other long-term liabilities are typically small.** These liabilities include claims and judgments, compensated absences and environmental remediation.

Exhibit 1

Illinois' fiscal 2023 total long-term liabilities relative to state revenue were the highest among states, while South Dakota's were the lowest

State	Issuer Rating	Fiscal 2023 total long-term liabilities				
		NTSD (billions)	ANPL (billions)	ANOL (billions)	Other liabilities (billions)	(NTSD + ANPL + ANOL + other long-term liabilities) as % of own-source revenue
Illinois*	A3	$36.0	$225.5	$39.4	$1.1	425.2%
Connecticut	Aa3	$28.5	$66.7	$15.3	$1.8	424.8%
New Jersey	A1	$44.1	$115.9	$64.3	$2.4	374.8%
Kentucky	Aa2	$6.5	$44.2	$3.5	$1.0	270.5%
Hawaii	Aa2	$9.9	$13.1	$7.7	$0.6	250.1%
Massachusetts	Aa1	$48.5	$75.7	$11.6	$2.5	247.4%
Maryland	Aaa	$18.2	$40.7	$9.7	$0.9	201.2%
Delaware	Aaa	$4.7	$5.4	$6.3	$0.4	189.5%
Pennsylvania	Aa2	$19.7	$69.3	$15.9	$4.4	179.1%
Vermont	Aa1	$0.7	$5.7	$2.1	$0.2	174.7%
California*	Aa2	$98.0	$202.6	$77.4	$15.9	171.2%
Maine	Aa1	$1.7	$6.6	$3.3	$0.2	164.7%
South Carolina	Aaa	$2.3	$26.4	$2.5	$1.2	152.3%
Rhode Island	Aa2	$3.4	$5.2	$0.3	$0.2	151.5%
Texas	Aaa	$20.0	$107.2	$34.6	$1.9	145.1%
Louisiana	Aa2	$8.9	$12.0	$4.5	$3.1	144.9%
Montana	Aa1	$0.2	$5.9	$0.0	$0.3	141.7%
West Virginia	Aa2	$4.5	$7.9	$0.3	$1.5	140.6%
Colorado	Aa1	$6.0	$19.7	$0.2	$0.9	131.5%
Kansas	Aa2	$4.0	$15.3	$0.0	$0.3	123.1%
Mississippi*	Aa2	$5.6	$7.5	$0.1	$0.2	119.2%
Washington	Aaa	$27.4	$12.0	$3.1	$3.9	115.4%
Missouri	Aaa	$2.5	$13.0	$2.7	$2.8	111.1%
Michigan	Aa1	$10.2	$28.5	$6.3	$2.0	103.3%
Oregon	Aa1	$13.1	$11.0	$0.0	$1.9	101.2%
Nevada*	Aa1	$2.2	$7.9	$0.8	$0.1	99.9%
Alaska	Aa3	$1.4	$8.6	$0.3	$0.6	97.7%
New Hampshire	Aa1	$1.1	$1.9	$1.3	$0.3	95.3%
New York	Aa1	$67.6	$30.3	$45.1	$9.7	93.4%
Alabama	Aa1	$5.7	$7.2	$1.2	$1.0	77.3%
Ohio	Aaa	$18.4	$12.7	$0.4	$0.9	74.0%
Wisconsin	Aa1	$11.1	$3.8	$0.5	$2.9	72.2%
Georgia	Aaa	$12.1	$12.9	$0.8	$0.4	69.7%
Virginia	Aaa	$17.7	$9.0	$1.1	$0.3	69.2%
Arkansas	Aa1	$0.9	$6.0	$1.2	$0.4	66.5%
Florida	Aaa	$16.1	$17.3	$4.9	$7.1	61.0%
New Mexico	Aa2	$3.6	$8.7	$0.7	$0.4	58.8%
Indiana	Aaa	$2.4	$13.9	$0.1	$0.3	58.1%
Minnesota	Aaa	$8.9	$9.7	$0.6	$1.3	53.6%
North Carolina	Aaa	$6.9	$9.5	$4.0	$1.9	52.3%
Idaho	Aaa	$1.5	$2.0	-$0.1	$0.3	44.8%
Arizona	Aa1	$2.2	$6.8	$0.5	$0.5	38.1%
Wyoming	NR	$0.2	$1.0	$0.3	$0.2	37.5%
Nebraska	Aa1	$0.1	$2.5	$0.0	$0.5	36.1%
Utah	Aaa	$2.4	$2.7	$0.0	$0.3	33.6%
Oklahoma	Aa1	$1.9	$3.0	$0.1	$0.3	33.0%
Tennessee	Aaa	$1.9	$5.1	$1.1	$1.2	31.3%
North Dakota	Aa1	$0.9	$1.4	$0.1	$0.1	30.1%
Iowa	Aaa	$1.3	$2.2	$0.2	$0.4	29.2%
South Dakota	Aaa	$0.5	$0.9	$0.0	$0.2	25.9%
Median		**$5.1**	**$9.3**	**$1.1**	**$0.7**	**100.5%**

See Exhibit 3 for definitions of key terms. NR stands for no rating.
*Fiscal 2023 debt, ANPL and revenue figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report. Other long-term liabilities and OPEB data are based on fiscal 2022 state audited reporting.
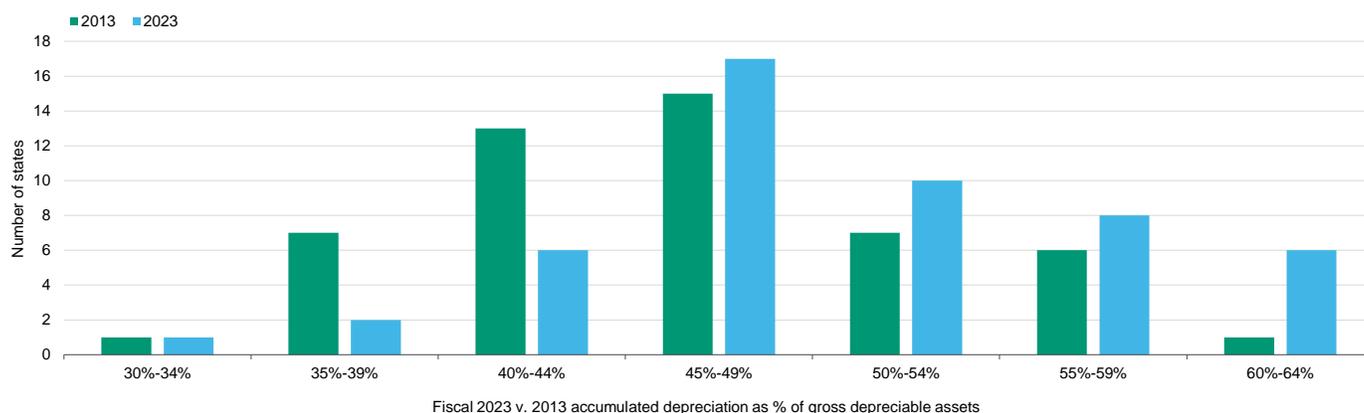*Sources: State and pension plan audited financial statements and unaudited draft statements (for Arizona and Nevada), and Moody's Ratings*

Exhibit 2

Connecticut's fiscal 2023 total fixed costs relative to state revenue were the highest among states, while South Dakota's were the lowest

State	Issuer Rating	Implied debt service (millions)	Pension tread water payment (millions)	OPEB contribution (millions)	Other long-term liabilities carrying cost (millions)	(Implied debt service + pension tread water payment + OPEB contribution + other long-term liabilities carrying cost) as % of own-source revenue
Connecticut	Aa3	$2,023.1	$3,271.9	$861.0	$127.0	23.8%
Illinois*	A3	$2,629.4	$11,312.7	$1,204.5	$74.4	21.4%
New Jersey	A1	$3,253.3	$6,256.4	$2,123.8	$170.1	19.5%
Hawaii	Aa2	$691.7	$798.1	$716.0	$62.9	18.1%
Kentucky	Aa2	$462.0	$2,192.2	$251.8	$58.9	14.5%
Massachusetts	Aa1	$3,400.4	$3,393.7	$638.9	$183.5	13.6%
Maryland	Aaa	$1,354.9	$1,866.1	$727.1	$65.0	11.6%
Delaware	Aaa	$303.4	$246.2	$316.7	$30.6	10.1%
Maine	Aa1	$111.6	$246.9	$299.2	$11.9	9.4%
Rhode Island	Aa2	$237.1	$258.1	$39.1	$13.6	9.2%
Vermont	Aa1	$53.0	$263.3	$120.5	$9.2	9.0%
Pennsylvania	Aa2	$1,390.3	$3,117.1	$637.0	$319.1	8.9%
Louisiana	Aa2	$642.0	$495.0	$218.3	$246.6	8.2%
West Virginia	Aa2	$328.9	$266.8	$69.6	$105.8	7.6%
South Carolina	Aaa	$163.9	$1,097.6	$125.4	$78.7	6.9%
Michigan	Aa1	$606.5	$1,684.4	$592.8	$140.6	6.6%
Texas	Aaa	$1,426.5	$4,581.9	$1,210.7	$92.7	6.5%
Missouri	Aaa	$163.0	$681.4	$100.4	$196.5	6.0%
Kansas	Aa2	$305.1	$626.7	$5.3	$20.6	6.0%
Oregon	Aa1	$835.1	$561.2	$12.0	$119.5	5.9%
California*	Aa2	$6,765.8	$2,415.6	$3,346.8	$1,094.9	5.9%
Washington	Aaa	$1,780.5	$137.1	$91.2	$352.3	5.9%
New York	Aa1	$4,863.7	$1,443.8	$2,485.2	$725.1	5.8%
Mississippi*	Aa2	$408.9	$224.4	$5.7	$12.3	5.8%
Montana	Aa1	$22.5	$203.7	$0.0	$25.9	5.5%
Colorado	Aa1	$427.4	$568.0	$22.8	$45.5	5.2%
Alabama	Aa1	$419.5	$383.5	$49.1	$68.7	4.7%
New Hampshire	Aa1	$73.7	$88.4	$40.4	$17.9	4.6%
Georgia	Aaa	$871.8	$603.7	$143.1	$28.6	4.4%
Virginia	Aaa	$1,241.4	$393.5	$107.4	$25.6	4.3%
Wisconsin	Aa1	$784.4	$75.1	$21.9	$188.7	4.2%
Alaska	Aa3	$99.5	$316.8	$13.1	$37.8	4.2%
Ohio	Aaa	$1,348.0	$242.8	$3.9	$61.3	3.8%
Indiana	Aaa	$174.5	$731.7	$22.4	$19.2	3.3%
North Carolina	Aaa	$522.7	$451.6	$277.7	$137.1	3.3%
Nevada*	Aa1	$152.7	$164.0	$33.4	$8.4	3.2%
Florida	Aaa	$1,026.5	$791.6	$136.3	$416.9	3.2%
Arkansas	Aa1	$75.5	$225.8	$58.6	$30.7	3.1%
Minnesota	Aaa	$693.3	$375.4	$36.8	$52.2	3.0%
Tennessee	Aaa	$145.0	$198.4	$431.7	$68.6	2.8%
New Mexico	Aa2	$232.9	$331.6	$23.9	$29.1	2.7%
Idaho	Aaa	$80.0	$113.6	$0.8	$24.8	2.6%
Utah	Aaa	$195.2	$101.7	$7.3	$21.2	2.0%
North Dakota	Aa1	$38.4	$107.1	$4.5	$4.1	1.9%
Oklahoma	Aa1	$143.2	$129.2	$23.9	$17.0	1.9%
Iowa	Aaa	$87.6	$117.1	$13.8	$27.9	1.8%
Arizona	Aa1	$175.1	$200.5	$22.3	$32.8	1.7%
Nebraska	Aa1	$5.4	$70.3	$1.9	$33.8	1.3%
Wyoming	NR	$8.4	$33.6	$3.9	$13.9	1.3%
South Dakota	Aaa	$35.4	$24.2	$0.0	$12.9	1.2%
Median		**$368.9**	**$353.5**	**$64.1**	**$48.8**	**5.4%**

See Exhibit 3 for definitions of key terms. NR stands for no rating.
*Fiscal 2023 revenue figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report. Implied debt service, other long-term liabilities carrying costs, OPEB contribution and pension tread water data are based on fiscal 2022 state audited reporting.
Sources: State and pension plan audited financial statements and unaudited draft statements (for Arizona and Nevada), and Moody's Ratings

Glossary of key metrics

Exhibit 3
Key metrics and definitions

| Metric	Definition
Revenue	
Own-source revenue	Total revenue, typically reported in the governmental funds section of the audited financial statements, minus revenue received from the federal government. Federal funding may include revenue under different categories, such as earmarked grants, annual disbursements and one-time payments.
Leverage	
Net tax-supported debt (NTSD)	Debt secured by statewide taxes and other general resources, net of obligations that are self-supporting from pledged sources other than state taxes or resources such as utility or local government revenue. NTSD typically includes public-private partnership (P3 or PPP) agreements that include contractual obligations of the government to make scheduled payments. We typically incorporate debt that the state is supporting from its taxes or general resources even if that debt is not reported in the state's or territory's governmental activities or in financial statements altogether. Our NTSD figure includes unamortized bond premiums and accreted interest because they represent long-term liabilities that must be repaid by states.
Adjusted net pension liabilities (ANPL)	Governmental net pension liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits.
Adjusted net OPEB liabilities (ANOL)	Governmental net other post-employment benefit (OPEB) liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits.
Other long-term liabilities	Miscellaneous long-term liabilities reported under the governmental activities entry in a state's financial statements for obligations such as claims and judgments, compensated absences and environmental remediation.
Long-term liabilities ratio	(NTSD + ANPL + ANOL + Other long-term liabilities) / Own-source revenue.
Fixed costs	
Implied debt service	Annual cost to amortize the state's net tax supported debt over 20 years with level payments.
Pension contribution	Actual governmental pension contribution as reported in a state's financial statement.
Pension tread water contribution	Moody's estimate of the pension contribution necessary to prevent reported unfunded pension liabilities from growing, year over year, in nominal dollars, if all actuarial assumptions are met. This indicator is the sum of the employer portion of the service cost and the implied interest on the net pension liability at the beginning of the plan's fiscal year.
OPEB contribution	Actual governmental OPEB contribution as reported in a state's financial statement.
Implied cost of other long-term liabilities	Annual cost to amortize the state's other long-term liabilities over 20 years with level payments.
Fixed costs ratio	(Implied debt service + Pension tread water contribution + OPEB contribution + Implied cost of other long-term liabilities) / Own-source revenue.

Notes: additional adjustments to own-source revenue have been made for Delaware, Alaska and Washington for more consistent treatment of revenue types across all states.
Source: Moody's Ratings

Net tax-supported debt: Outstanding debt declined modestly in fiscal 2023

Exhibit 4
Total state net tax-supported debt (NTSD) declined modestly in fiscal 2023
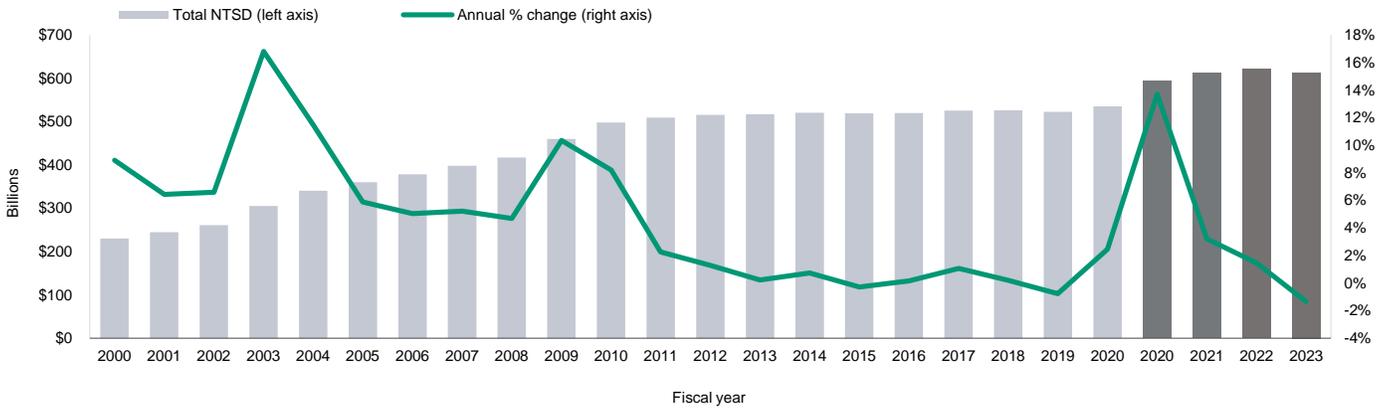
Note: Data from fiscal 2020 and after has been revised using our new method of calculating states' long-term liabilities, which provides more consistency when comparing liabilities across states. Fiscal 2023 debt figures for California, Illinois and Mississippi are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
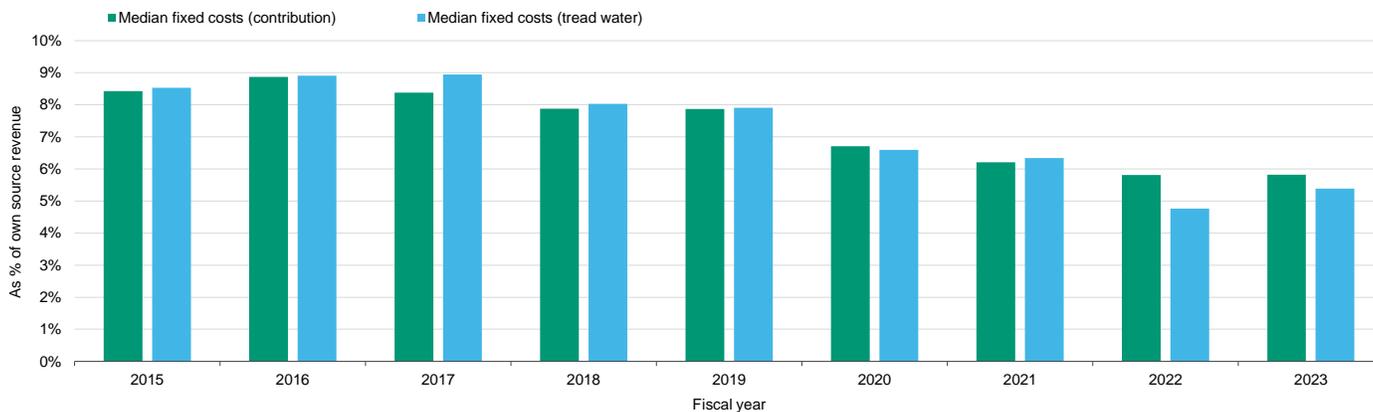*Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), US Bureau of Economic Analysis, and Moody's Ratings*

» Total state NTSD declined by 1.3% to $613.4 billion, while aggregate own source revenue increased slightly (2.9%). Some states paid down debt or limited new borrowings, helped by budget surpluses or reserves built up.

» NTSD declined in 35 states in fiscal 2023. At the end of fiscal 2023, Nebraska (Aa1 positive) had the least amount of debt outstanding of all states, at only $86.0 million.

» On the other hand, Michigan (Aa1 stable), Oregon (Aa1 stable) and Washington (Aaa stable) each added over $1 billion in debt in fiscal 2023, ranging from a 7% increase for Washington to a 18% increase for Michigan.

Capacity to pay debt: Median debt per capita increased slightly, while debt as a percentage of personal income decreased

Exhibit 5
Median NTSD per capita increased slightly, while median NTSD as a percentage of personal income fell in fiscal 2023
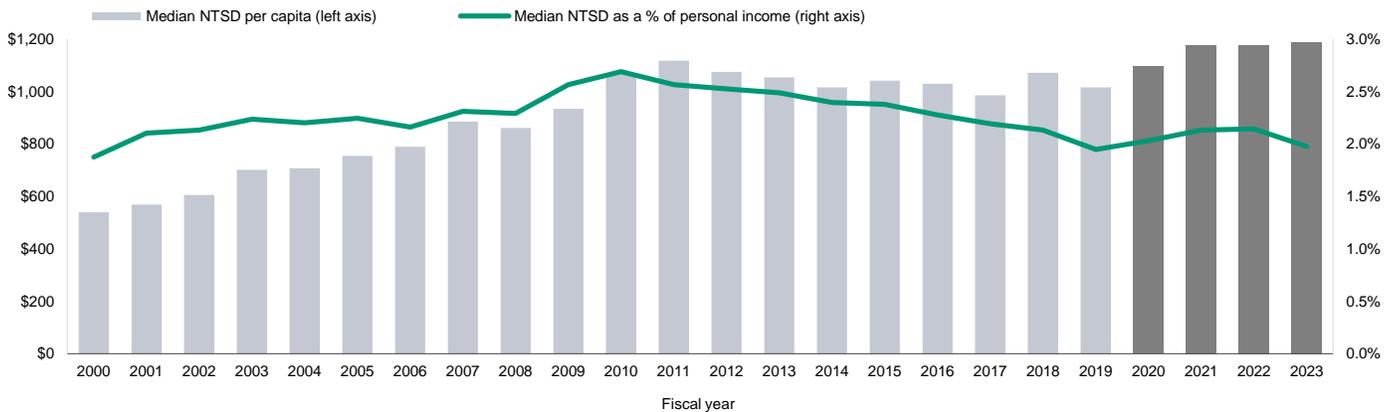
Note: Data starting with fiscal 2020 has been spread under our latest method of calculating states' long-term liabilities, which provides more consistency when comparing liabilities across states. Fiscal 2023 debt figures for California, Illinois and Mississippi are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), US Bureau of Economic Analysis, and Moody's Ratings

» Median NTSD per capita was $1,189 in fiscal 2023, slightly up from fiscal 2022 ($1,178).

» States' NTSD per capita ranged from just $44 in Nebraska, a state that has issued debt only sparingly, to $7,874 in Connecticut (Aa3 positive).

» Connecticut also has the highest NTSD as a percentage of own-source revenue at 107.8%. Connecticut's debt burden is relatively higher in part because it takes on liabilities that in many states are the responsibility of other levels of government, such as school construction costs.

» The sector's median NTSD as a percentage of personal income was 2.0% in fiscal 2023, down slightly from 2.1% the previous year.

» Hawaii (Aa2 stable) has the highest NTSD as a percentage of personal income (10.4%) and GDP (8.9%) among states. Hawaii's debt burden is higher than peers because it is responsible for several functions, such as public education, hospitals and jails, which are typically supported by regional and local governments in other states.

Future issuance needs: 14 states may face more urgent needs to issue bonds for capital investments

Exhibit 6
States with high capital asset depreciation ratios have a more pressing need to issue debt in the near term for infrastructure investment

Fiscal 2023 v. 2013 accumulated depreciation as % of gross depreciable assets

Only assets subject to depreciation are incorporated in the capital asset depreciation ratio.
For states without fiscal 2023 audited financials available (California, Illinois, Mississippi, Nevada), fiscal 2022 data was used.
Sources: State audited financial statements, unaudited draft statements (for Arizona and Nevada), and Moody's Ratings

» The capital asset depreciation ratio compares accumulated depreciation to gross depreciable assets. 42 states' capital asset depreciation ratio increased between 2013 and 2023, indicating that as assets age, there is a growing need for states to invest in maintenance or capital renewal projects.

» Louisiana (Aa2 stable) and Connecticut have the highest capital depreciation ratios, exceeding 62% as of fiscal 2023. North Carolina (Aaa stable), Texas (Aaa stable) and Mississippi (Aa2 stable) have the lowest, at less than 40%.

» Nearly all states have seen a significant increase in gross capital assets over a 10-year period, reflecting investment in infrastructure and other capital projects. State and local governments' infrastructure investments have reached new high nominally, but inflation erodes gains. At the same time, accumulated depreciation has increased, which is expected as assets age.

» Many states have used operating revenue to support infrastructure investment in recent years, providing capacity to issue debt for infrastructure in the future.

Adjusted net pension liabilities: Total state ANPL will fall further in fiscal 2024 following declines in fiscal 2023 and 2022

Exhibit 7
Total state pension liabilities will continue to decrease in fiscal 2024 given higher interest rates
Adjusted net pension liabilities (ANPL); fiscal 2024 is an estimate
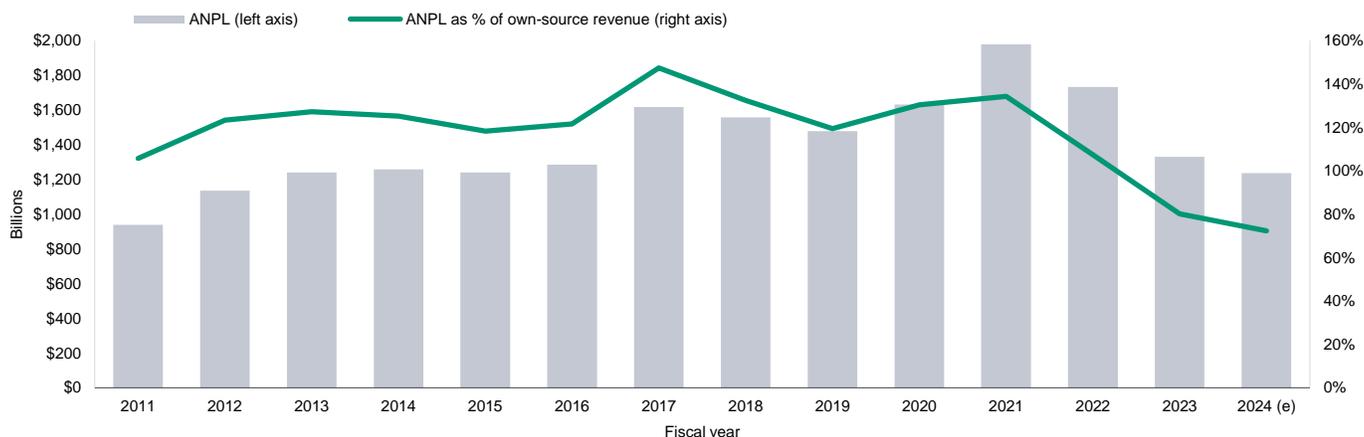
With the adoption of GASB 68, most state pension data is reported with a 6-to-12 month lag. Only a small number of states report plan liabilities (9 of 234 plans) without a lag. California, Illinois, Mississippi and Nevada's fiscal 2023 ANPL and revenue figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Where applicable, we estimate fiscal 2024 ANPLs based on data from fiscal 2023 pension plan financial statements and assume a 3% increase in aggregate own-source revenue. Fiscal 2023 estimates are used for California, Illinois, Mississippi and Nevada when determining the full 2024 estimate.
Sources: State audited financial statements, unaudited draft statements (for Arizona and Nevada), pension plan valuation reports and Moody's Ratings

» Total ANPL across states' governmental activities decreased to $1.33 trillion in fiscal 2023, representing 4.9% of US GDP and 80.1% of aggregate state own-source revenue. Higher interest rates contributed to the decline in total state ANPL.

» Iowa (Aaa stable), Wisconsin (Aa1 stable), South Dakota (Aaa stable), Utah (Aaa stable) and Washington had the largest ANPL decreases, all at over 40%.

» ANPLs in fiscal 2024 will decrease further because of higher market interest rates. We estimate aggregate state ANPL will decrease to $1.24 trillion, down 7.0% from fiscal 2023. [2] The FTSE Pension Liability Index (FTSE PLI), which we use as the discount rate to value liabilities in our standard adjustments, rose to 4.92% on June 30, 2023, the measurement date for most states' fiscal 2024 reporting, from 4.48% on June 30, 2022. This will be followed by another decrease in fiscal 2025 due to double-digit investment returns in 2024, as well as higher interest rates.

Inclusion of unrecognized teacher liabilities substantially increases some states' liabilities

» We also review unrecognized teacher liabilities as part of a state's overall pension burden (see Exhibit 8) because states provide significant aid to school districts.

» For states that already report a 100% share of teacher liabilities in their financial statements, we add no additional teacher liability. For states that have a separate teacher pension system and currently report a proportionate share of the liability, we add the balance of teacher liabilities to ANPLs to determine the state's "all-in" liability as an additional analytical assessment.

» In most cases, we allocate pension liabilities based on states' reported shares, including for teacher retirement systems. About a dozen states already report the full teacher liability, or nearly the full liability, as part of their pension liabilities.

» Some states do not have a separate teacher retirement system. Instead, teachers participate in the state's employees' retirement system. To determine the unrecognized teacher liability for these states, if not reported, we estimate the share of the employees' retirement system liability related to school districts based on the percentage of total plan members or the share of total covered payroll related to public schools.[3]

Exhibit 8
Total liabilities increase significantly for some states when adding all teacher liabilities
Fiscal 2023 total liabilities including currently unrecognized teacher liabilities as a % of state own-source revenue
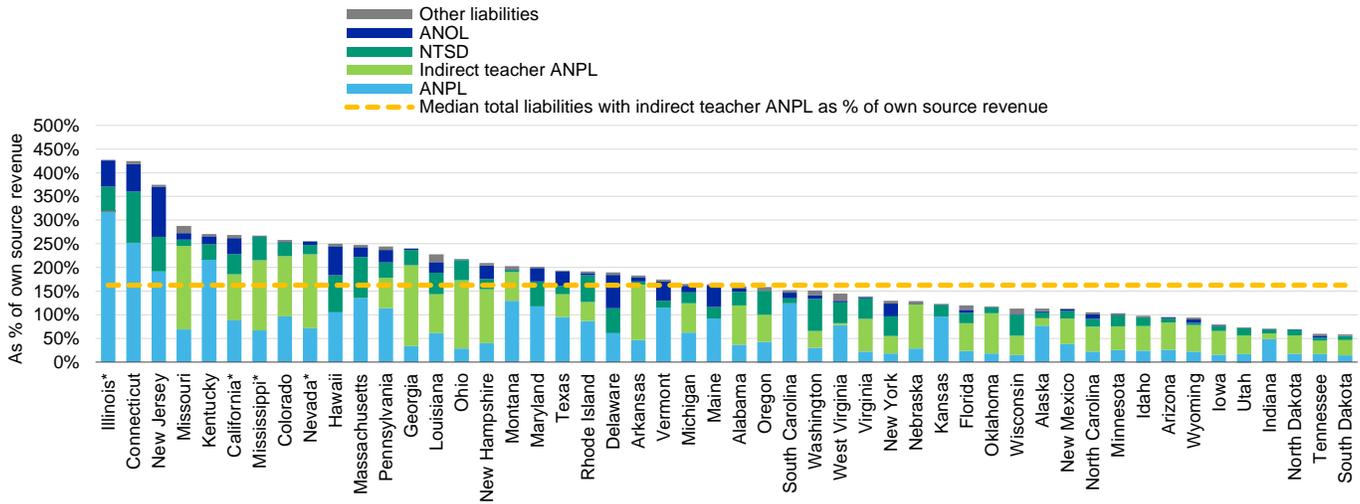
*California, Illinois, Mississippi and Nevada's fiscal 2023 ANPL, own-source revenue and indirect teacher ANPL figures are estimated by Moody's because these states did not have fiscal 2023 audited financial statements available as of the publication of this report. Other long-term liabilities and OPEB data are based on fiscal 2022 state audited reporting
Sources: State and pension plan financial statements, unaudited financial statements (for Arizona and Nevada), and Moody's Ratings

» Missouri's (Aaa stable) fiscal 2023 total long-term liabilities represented 288% of own- source revenue when unrecognized teacher liabilities are included, versus 111% of own-source revenue based on direct liabilities.

» Georgia's (Aaa stable) fiscal 2023 total long-term liabilities represented 240% of own-source revenue when unrecognized teacher liabilities are included, versus 70% of own-source revenue based on direct liabilities.

» Not all states make direct on-behalf payments to teacher pension systems, but K-12 public education is nevertheless a key service priority and all states provide significant aid to school districts. According to the National Association of State Budget Officers, elementary and secondary education accounted for 18.6% of total state expenditures in fiscal 2023.

Pension assets: States continue to have relatively low risks of large pension investment losses relative to budget

Exhibit 9
States with a larger relative size of pension assets are more sensitive to investment losses
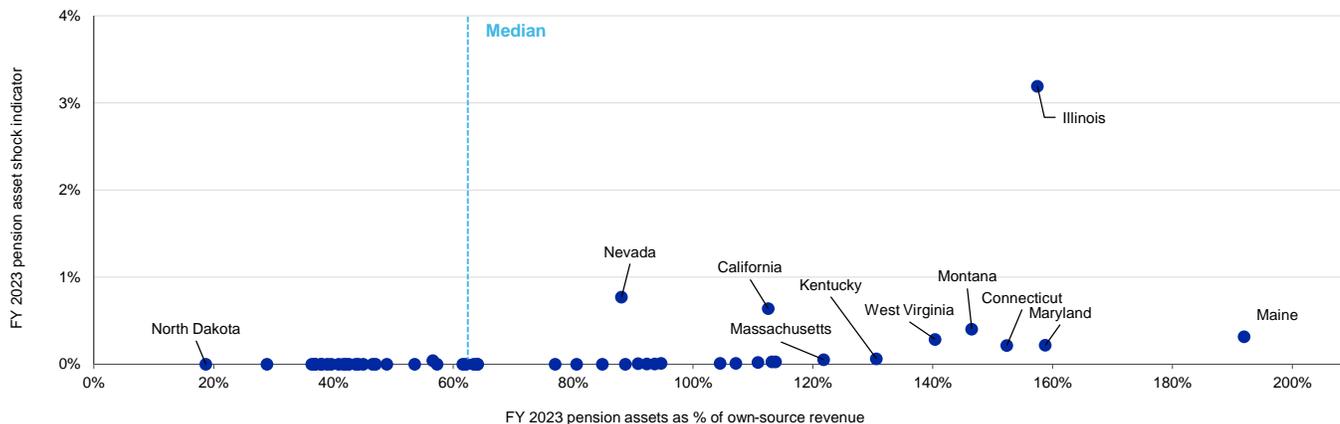
See Exhibit 3 for a definition of the pension asset shock indicator. Fiscal 2022 data for California, Illinois, Mississippi and Nevada is included because their fiscal 2023 audited financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), and Moody's Ratings

»   States' pension assets are often concentrated in volatile investments and in some cases are material in size relative to their budgets. Thus, investment shocks could saddle budgets with significant new costs to make up for lost pension assets.

»   Higher rates, however, are boosting long-term investment return potential of fixed-income securities, signaling lower volatility risks in 2023 than 2022. Our 2023 risk-return map reflects the lowest levels of risk since our earliest annual gauge of investment volatility for US public pension systems, contributing to lower pension asset shock indicators (PASI) for states for fiscal 2023.

»   We gauge the risk of pension investment losses using our pension asset shock indicator, which estimates the probability of a pension investment loss amounting to 25% or more of a government's own-source revenue.

»   The overall risk of pension investment losses amounting to a large share of budgets for the state sector remains very low compared with the local government sector.

»   The fiscal 2023 PASI was above 1% for only one state and less than 1% for the rest.

»   Maine (Aa1 stable) had the highest ratio of pension assets to revenue in fiscal 2023, at almost 192%. Maryland (Aaa negative) had the second-highest ratio of pension assets to revenue, at 158.8%.

»   Fourteen states have large pension systems with less than 10 years of asset/benefit coverage. Of these states, Alabama (Aa1 stable) had negative non-investment cash flow (NICF) worse than -5% of assets (see Exhibit 18 in Appendix II).

»   Five states had positive NICF for their largest plans in fiscal 2023, including Indiana (Aaa stable) at 59.9%.

Adjusted net OPEB liabilities: States with high pension burdens also tend to have elevated OPEB burdens

Exhibit 10
Adjusted net OPEB liabilities (ANOL) vary widely across states
Fiscal 2023 ANOL as a percentage of own-source revenue
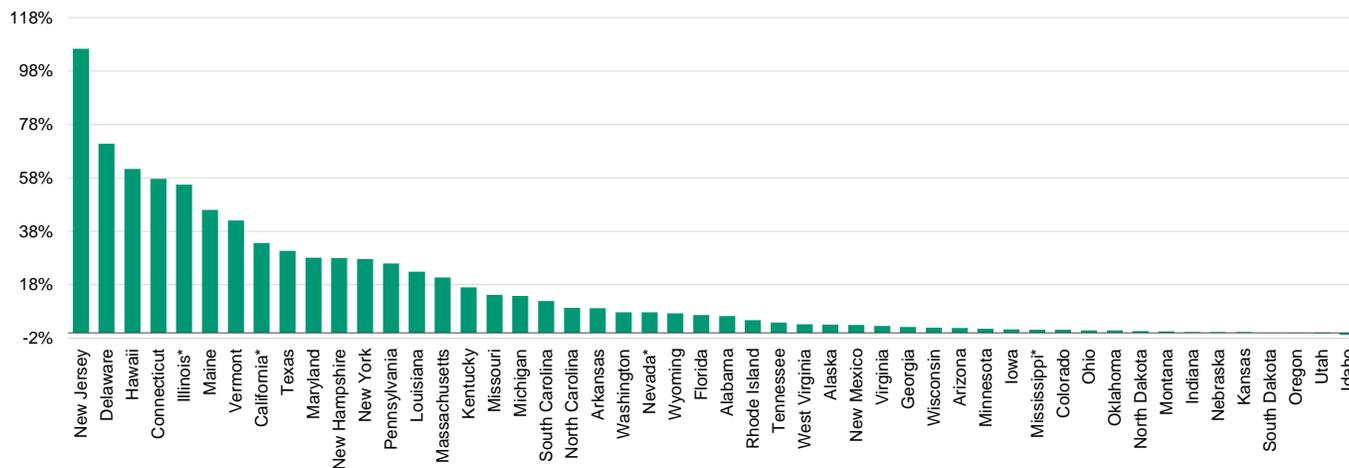
California, Illinois, Mississippi and Nevada's ANOL reflects fiscal 2022 data based on fiscal 2022 state audited reporting because it did not have fiscal 2023 audited financial statements available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), and Moody's Ratings

» New York (Aa1 stable) and Delaware (Aaa stable) are the only states with unfunded OPEB liabilities larger than their respective unfunded pension liabilities. New York's fiscal 2023 ANOL was 27.6% of own-source revenue compared with ANPL at 18.5%. Delaware's fiscal 2023 ANOL was 70.8% of own-source revenue compared with ANPL at 60.8%.

» Unfunded OPEB liabilities represent a large source of balance-sheet leverage for some states and a very small obligation for others.

» The fiscal 2023 50-state median adjusted net OPEB liability (ANOL) as a percentage of own-source revenue was 6.5%, down from 8.8% last year, and much smaller than the 50-state median ANPL as a percentage of own-source revenue of 54.6%.

» New Jersey (A1 positive) continued to have the largest OPEB burden. Its fiscal 2023 ANOL represented 106.3% of own-source revenue, although it was down from 129.0% as of fiscal 2022.

» Many states with high pension burdens, such as Hawaii, Connecticut and Illinois, also have high OPEB burdens.

» South Dakota has ended retiree healthcare benefits and has no OPEB liability. A number of other states have very low OPEB liabilities that primarily comprise implicit rate subsidies because they only provide retirees with the option to purchase health and other insurance under the states' group rates. States generally have more legal flexibility to change OPEB benefits than pensions, although significant changes to OPEB benefits may be politically difficult.

Total fixed costs: Majority of states contributed above tread water indicator in fiscal 2023

Exhibit 11
Fixed costs increased slightly in fiscal 2023
Median fixed costs (debt, pension, OPEB and other long-term liabilities) as a percentage of own-source revenue on a contribution and tread water basis

Note: beginning in fiscal 2020, fixed costs were calculated based on our updated method described in the US States and Territories Methodology. For California, Illinois, Mississippi and Nevada, fiscal 2023 revenue figures are estimated by Moody's because the states' fiscal 2023 financial statements were not available as of the publication of this report. Implied debt service, other long-term liabilities carrying costs, OPEB contribution and pension tread water data are based on fiscal 2022 state audited reporting.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), and Moody's Ratings

» Median fixed costs relative to revenue increased to 5.4% in fiscal 2023 from 4.8% in fiscal 2022. This is primarily because many states' tread water indicators bounced back in fiscal 2023 due to investment losses in 2022, a reversal of material declines experienced in fiscal 2022 due to huge investment returns in 2021.

» Around 42 of states' pension contributions exceeded out tread water indicators in fiscal 2023, compared to 25 as of fiscal 2021.

» Connecticut and Illinois have the highest fixed costs among states, with fiscal 2023 fixed costs on a tread water basis exceeding 20% of own-source revenue. New Jersey's fixed costs for fiscal 2023 ranked third highest among all states, at 19.5% of own-source revenue, followed by Hawaii, at 18.1% of own-source revenue. Positively, all four of these states' fixed costs are down from a few years ago.

» Nebraska, Wyoming (NR), and South Dakota have the lowest fixed costs on a tread water basis at less than 1.5% of own-source revenue.

Appendix I: Debt

Basis for state debt data

When considering debt burdens, our focus is on net tax-supported debt (NTSD), which we characterize as debt secured by statewide taxes and other governmental revenue, net of obligations that are paid with revenue other than taxes and other governmental revenue and that is accounted for in nongovernmental activities (such as utility or higher education funds). Please see Exhibit 3 for more information on what is included in NTSD.

The debt ratios of some states, such as Hawaii and Connecticut, are relatively high because they issue debt for purposes that in other states would be financed at the local level, such as for schools or mass transit.

These ratios are calculated based on our definition of NTSD, implied debt service and own-source revenue and, in most cases, differ from a states' own published calculations of debt limits or debt affordability. There is no correlation between our ratios and a state's compliance with its internal policies.

Exhibit 12
Fiscal 2023 state net tax-supported debt (NTSD) metrics
Ranking based on fiscal 2023 NTSD as % of own-source revenue

FY 2023 rank	State	FY 2023 NTSD ($ thousands)	FY 2023 NTSD as % of own-source revenue	FY 2023 NTSD per capita	FY 2023 NTSD as % of personal income	FY 2023 NTSD as % of state GDP
1	Connecticut	$28,483,437	107.8%	$7,874	8.8%	8.2%
2	Massachusetts	$48,519,859	86.7%	$6,930	7.6%	6.6%
3	Hawaii	$9,857,635	78.9%	$6,869	10.4%	8.9%
4	New Jersey	$44,098,292	72.9%	$4,746	5.8%	5.5%
5	Washington	$27,366,335	68.0%	$3,503	4.3%	3.4%
6	Rhode Island	$3,389,850	56.6%	$3,093	4.6%	4.4%
7	Maryland	$18,244,719	52.8%	$2,952	3.9%	3.5%
8	Delaware	$4,670,416	52.8%	$4,526	6.8%	4.8%
9	Oregon	$13,095,466	50.9%	$3,093	4.6%	4.1%
10	Illinois*	$36,000,000	50.7%	$2,869	4.0%	3.3%
11	Mississippi*	$5,572,386	49.6%	$1,896	3.8%	3.7%
12	Louisiana	$8,859,762	45.1%	$1,937	3.3%	2.8%
13	West Virginia	$4,501,092	44.4%	$2,543	4.8%	4.4%
14	Wisconsin	$11,113,288	43.9%	$1,880	2.9%	2.6%
15	Virginia	$17,735,365	43.6%	$2,035	2.8%	2.5%
16	California*	$98,000,000	42.6%	$2,515	3.1%	2.5%
17	Ohio	$18,360,027	42.1%	$1,558	2.5%	2.1%
18	New York	$67,573,000	41.3%	$3,453	4.2%	3.1%
19	Pennsylvania	$19,744,826	32.3%	$1,523	2.2%	2.0%
20	Georgia	$12,135,383	32.3%	$1,100	1.8%	1.5%
21	Kentucky	$6,524,973	32.0%	$1,442	2.6%	2.3%
22	Alabama	$5,738,690	29.4%	$1,123	2.1%	1.9%
23	Colorado	$5,969,100	29.3%	$1,016	1.3%	1.1%
24	Kansas	$3,981,960	24.9%	$1,354	2.0%	1.7%
25	Maine	$1,732,247	24.2%	$1,241	1.9%	1.9%
26	Minnesota	$8,850,170	23.1%	$1,542	2.1%	1.8%
27	Michigan	$10,239,400	22.5%	$1,020	1.7%	1.5%
28	New Hampshire	$1,058,626	22.0%	$755	1.0%	0.9%
29	Florida	$16,070,098	21.6%	$711	1.0%	1.0%
30	Nevada	$2,185,711	19.7%	$684	1.0%	0.9%
31	Idaho	$1,539,887	18.4%	$784	1.3%	1.3%
32	Texas	$19,950,107	17.7%	$654	1.0%	0.8%
33	North Carolina	$6,875,856	16.1%	$635	1.0%	0.9%
34	New Mexico	$3,573,969	15.7%	$1,690	3.1%	2.6%
35	Utah	$2,367,452	14.8%	$693	1.1%	0.8%
36	Vermont	$712,241	14.3%	$1,100	1.6%	1.6%
37	Missouri	$2,459,794	13.0%	$397	0.6%	0.6%
38	Alaska	$1,373,043	12.4%	$1,872	2.6%	2.0%
39	Oklahoma	$1,905,185	11.8%	$470	0.8%	0.7%
40	North Dakota	$891,033	11.2%	$1,137	1.6%	1.2%
41	South Carolina	$2,263,546	10.6%	$421	0.7%	0.7%
42	Iowa	$1,308,333	9.4%	$408	0.6%	0.5%
43	Arizona	$2,226,292	8.5%	$300	0.5%	0.4%
44	Indiana	$2,441,308	8.5%	$356	0.6%	0.5%
45	South Dakota	$514,789	8.4%	$560	0.8%	0.7%
46	Arkansas	$899,731	7.0%	$293	0.5%	0.5%
47	Tennessee	$1,931,115	6.5%	$271	0.4%	0.4%
48	Wyoming	$197,159	4.2%	$338	0.4%	0.4%
49	Montana	$188,225	4.1%	$166	0.3%	0.3%
50	Nebraska	$86,602	1.0%	$44	0.1%	0.0%
TOTAL		$613,377,779	37.0%	$1,835	2.6%	2.2%
MEAN		$12,267,556	31.2%	$1,807	2.6%	2.2%
MEDIAN		$5,121,401	23.7%	$1,189	2.0%	1.8%

*Fiscal 2023 debt and revenue figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Exhibit 13
Fiscal 2023 capital assets and capital asset depreciation ratio
Ranking based on fiscal 2023 capital asset depreciation ratio

State	Capital assets subject to depreciation				Capital assets not subject to depreciation		
	Gross capital assets ($ million)	Gross capital assets (% of GDP)	Accumulated depreciation ($ million)	Capital asset depreciation ratio (%) [1]	Gross capital assets ($ million)	Gross capital assets (% GDP)	Share of capital assets not subject to depreciation
Louisiana[4]	36,636	11.6%	-23,231	63%	5,314	1.7%	12.7%
Connecticut	39,698	11.5%	-24,796	62%	9,461	2.7%	19.2%
Indiana[3][4]	5,195	1.0%	-3,197	62%	17,859	3.6%	77.5%
Alaska	24,161	35.5%	-14,821	61%	3,368	4.9%	12.2%
Maryland[4]	50,545	9.8%	-30,866	61%	16,892	3.3%	25.0%
Hawaii[4]	26,322	23.9%	-15,981	61%	5,453	4.9%	17.2%
Maine[3][4]	1,571	1.7%	-934	59%	4,148	4.4%	72.5%
New Mexico	21,696	16.1%	-12,636	58%	2,826	2.1%	11.5%
Nebraska[3][4]	1,910	1.1%	-1,102	58%	9,443	5.2%	83.2%
Wisconsin[3][4]	17,751	4.1%	-10,166	57%	26,387	6.2%	59.8%
West Virginia	25,101	24.6%	-13,992	56%	4,282	4.2%	14.6%
Georgia	71,619	8.6%	-39,760	56%	13,747	1.7%	16.1%
Ohio[3]	22,054	2.5%	-12,180	55%	29,970	3.4%	57.6%
Pennsylvania	87,884	9.0%	-48,396	55%	12,070	1.2%	12.1%
New Hampshire	9,877	8.7%	-5,405	55%	1,054	0.9%	9.6%
Oklahoma[4]	44,971	17.5%	-24,128	54%	4,313	1.7%	8.8%
Rhode Island	12,634	16.3%	-6,778	54%	2,280	2.9%	15.3%
Minnesota[3]	25,900	5.4%	-13,858	54%	21,432	4.4%	45.3%
Arkansas	32,493	18.2%	-17,375	53%	4,345	2.4%	11.8%
Iowa	36,040	14.2%	-19,182	53%	2,285	0.9%	6.0%
New Jersey[4]	42,004	5.2%	-22,042	52%	12,237	1.5%	22.6%
Missouri	72,663	16.9%	-37,888	52%	7,168	1.7%	9.0%
Florida[3]	50,234	3.1%	-25,475	51%	112,857	7.0%	69.2%
Washington[3][4]	35,294	4.4%	-17,721	50%	33,553	4.2%	48.7%
Illinois[2]	65,862	3.2%	-32,432	49%	8,435	0.8%	11.4%
Arizona[3][5]	18,008	3.4%	-8,822	49%	26,046	5.0%	59.1%
Massachusetts	25,741	3.5%	-12,525	49%	3,228	0.4%	11.1%
Michigan[3]	17,331	2.6%	-8,421	49%	23,026	3.4%	57.1%
Wyoming[3][4]	2,146	4.1%	-1,037	48%	485	0.9%	18.4%
Idaho[3]	6,915	5.7%	-3,338	48%	6,897	5.7%	49.9%
Nevada[2][3]	7,285	1.8%	-3,490	48%	10,068	4.7%	58.0%
Delaware[3][4]	6,835	7.0%	-3,257	48%	6,215	6.3%	47.6%
California[2][3][4]	127,327	1.9%	-60,637	48%	136,843	3.8%	51.8%
Kansas[3]	10,653	4.7%	-5,061	48%	14,577	6.4%	57.8%
New York[3][4]	138,272	6.4%	-65,422	47%	13,000	0.6%	8.6%
Vermont[4]	5,148	11.8%	-2,424	47%	858	2.0%	14.3%
Alabama[3]	24,479	8.0%	-11,496	47%	23,304	7.6%	48.8%
Tennessee[3]	17,451	3.3%	-8,018	46%	32,731	6.3%	65.2%
Colorado[4]	37,371	7.1%	-17,087	46%	5,730	1.1%	13.3%
Kentucky[3]	15,802	5.6%	-7,206	46%	27,700	9.9%	63.7%
North Dakota	13,432	17.7%	-6,097	45%	1,040	1.4%	7.2%
Utah[3]	22,072	7.8%	-9,806	44%	23,667	8.4%	51.7%
South Carolina	41,413	12.6%	-18,164	44%	9,867	3.0%	19.2%
Oregon	30,718	9.6%	-13,140	43%	5,163	1.6%	14.4%
South Dakota	8,785	11.9%	-3,705	42%	1,323	1.8%	13.1%
Montana	10,060	13.7%	-4,046	40%	2,716	3.7%	21.3%
Virginia	92,661	12.9%	-37,189	40%	14,661	2.0%	13.7%
Mississippi[2]	26,618	12.0%	-9,954	37%	6,150	4.4%	18.8%
Texas	207,423	8.0%	-76,101	37%	52,489	2.0%	20.2%
North Carolina	89,994	11.4%	-31,049	35%	31,056	3.9%	25.7%

[1] The capital asset depreciation ratio measures the ratio of accumulated depreciation to gross depreciable assets.
[2] Fiscal 2023 financial statements for California, Illinois, Mississippi and Nevada were not available as of publication. Fiscal 2022 data for California, Illinois, Mississippi and Nevada are included.
[3] These states use a modified approach, under GASB 34, for reporting certain capital assets, which allows the state to expense certain maintenance and preservation costs and not report depreciation on the respective assets.
[4] Capital assets for certain component units are excluded for these states because of state financial reporting.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Exhibit 14
Fiscal 2023 versus Fiscal 2013 capital asset depreciation ratio
Ranking based on % change in capital asset depreciation ratio

State	FY 2013 Capital assets subject to depreciation				FY 2023 Capital assets subject to depreciation			
	Gross capital assets ($ million)	Accumulated depreciation ($ million)	Capital asset depreciation ratio (%) [1]	Share of capital assets not subject to depreciation	Gross capital assets ($ million)	Accumulated depreciation ($ million)	Capital asset depreciation ratio (%) [1]	Share of capital assets not subject to depreciation
Texas	67,657	-35,928	53%	53%	207,423	-76,101	37%	44%
North Dakota	6,681	-4,077	61%	14%	13,432	-6,097	45%	13%
Oregon	24,776	-12,502	50%	12%	30,718	-13,140	43%	17%
Massachusetts	14,487	-7,356	51%	17%	25,741	-12,525	49%	18%
Montana	6,799	-2,827	42%	19%	10,060	-4,046	40%	29%
Virginia[4]	56,315	-23,252	41%	15%	92,661	-37,189	40%	21%
Kentucky[3]	8,502	-3,884	46%	72%	15,802	-7,206	46%	77%
Nebraska[3]	1,097	-634	58%	88%	1,910	-1,102	58%	90%
New Mexico[4]	21,845	-12,652	58%	5%	21,696	-12,636	58%	11%
Tennessee[3]	9,439	-4,302	46%	73%	17,451	-8,018	46%	78%
Kansas[3]	6,021	-2,826	47%	66%	10,653	-5,061	48%	71%
Utah[3]	9,576	-4,191	44%	62%	22,072	-9,806	44%	71%
Mississippi[2]	17,163	-6,242	36%	29%	26,618	-9,954	37%	26%
Vermont[4]	2,507	-1,149	46%	21%	5,148	-2,424	47%	25%
Arizona[3][5]	10,521	-5,007	48%	65%	18,008	-8,822	49%	71%
Ohio[3]	12,062	-6,453	53%	67%	22,054	-12,180	55%	71%
South Dakota	5,869	-2,341	40%	16%	8,785	-3,705	42%	18%
Alabama[3][4]	15,142	-6,658	44%	57%	24,479	-11,496	47%	61%
Missouri	58,912	-28,776	49%	10%	72,663	-37,888	52%	11%
Connecticut	26,988	-15,952	59%	16%	39,698	-24,796	62%	26%
Illinois[2][4]	49,747	-22,785	46%	8%	65,862	-32,432	49%	14%
Hawaii[4]	17,150	-9,806	57%	19%	26,322	-15,981	61%	24%
Iowa	20,293	-10,081	50%	9%	36,040	-19,182	53%	10%
North Carolina	55,012	-17,005	31%	27%	89,994	-31,049	35%	36%
New Hampshire	7,085	-3,598	51%	13%	9,877	-5,405	55%	13%
California[2][3]	80,056	-34,751	43%	56%	127,327	-60,637	48%	63%
Louisiana[4]	36,705	-21,684	59%	15%	36,636	-23,231	63%	13%
Oklahoma	30,496	-15,021	49%	8%	44,971	-24,128	54%	12%
Michigan[3]	12,527	-5,488	44%	60%	17,331	-8,421	49%	65%
New York[3]	75,791	-31,686	42%	8%	138,272	-65,422	47%	15%
Nevada[2][3]	5,315	-2,227	42%	47%	7,285	-3,490	48%	65%
Indiana[3]	2,755	-1,527	55%	83%	5,195	-3,197	62%	87%
South Carolina[4]	28,567	-10,744	38%	20%	41,413	-18,164	44%	26%
Washington[3]	22,295	-9,733	44%	53%	35,294	-17,721	50%	60%
Arkansas	21,004	-9,813	47%	12%	32,493	-17,375	53%	17%
Florida[3]	32,473	-14,074	43%	71%	50,234	-25,475	51%	78%
Georgia[4]	48,661	-23,406	48%	14%	71,619	-39,760	56%	22%
Rhode Island[4]	7,503	-3,418	46%	16%	12,634	-6,778	54%	23%
Idaho[3][4]	4,458	-1,782	40%	51%	6,915	-3,338	48%	61%
Wyoming[3][4]	2,216	-879	40%	9%	2,146	-1,037	48%	18%
Alaska[4]	15,891	-8,150	51%	16%	24,161	-14,821	61%	17%
Wisconsin[3][4]	10,787	-5,086	47%	66%	17,751	-10,166	57%	71%
West Virginia	18,578	-8,475	46%	12%	25,101	-13,992	56%	19%
Colorado	22,860	-8,084	35%	13%	37,371	-17,087	46%	20%
Maryland	35,469	-17,891	50%	18%	50,545	-30,866	61%	32%
New Jersey	28,341	-11,625	41%	21%	42,004	-22,042	52%	30%
Delaware[3][4]	4,451	-1,603	36%	52%	6,835	-3,257	48%	58%
Minnesota[3]	17,847	-7,465	42%	39%	25,900	-13,858	54%	55%
Pennsylvania	47,686	-20,266	42%	12%	87,884	-48,396	55%	20%
Maine[3][4]	1,141	-527	46%	81%	1,571	-934	59%	78%

[1] The capital asset depreciation ratio measures the ratio of accumulated depreciation to gross depreciable assets.
[2] Fiscal 2023 financial statements for California, Illinois, Mississippi and Nevada were not available as of publication. Fiscal 2022 data for California, Illinois, Mississippi and Nevada are included.
[3] These states use a modified approach, under GASB 34, for reporting certain capital assets, which allows the state to expense certain maintenance and preservation costs and not report depreciation on the respective assets.
[4] Capital assets for certain component units are excluded for these states because of state financial reporting.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Appendix II: Pensions and OPEB

Explanation of analytical adjustments and measurement date alignment of key pension and OPEB metrics

GASB 67 and 68 enable analytical refinements for pensions

GASB 67 and 68 introduced significant changes in reporting of pension liabilities beginning in fiscal reporting year 2015, which increased transparency. Governments now disclose their proportionate share of cost-sharing liabilities, which we previously estimated using pro rata shares of plan contributions. The rules also require reporting the sensitivity of plan net pension liabilities to 100-basis-point changes in the discount rate, enabling more precise estimates on plan-specific liability adjustments. Governments and/or their plans now also report "service cost," also referred to as "normal cost," for actuarial funding. Other changes include the requirement that some poorly funded plans report liabilities based on a blended discount rate, and placement of the net pension liability on government-wide and business-type activities balance sheets.

GASB 74 and 75 enable analytical refinements for OPEB

GASB 74 and 75 provide disclosure for OPEB liabilities similar to the disclosure for pension liabilities beginning in fiscal reporting year 2018. Governments now disclose their proportionate share of the cost-sharing liabilities and the sensitivity of plan net OPEB liabilities to 100-basis-point changes in the discount rate, as required for pensions.

Pension and OPEB measurement dates often misaligned with government reporting years

GASB 68 and 75 allow governments to report net pension and OPEB liabilities measured up to one year prior to their own fiscal year-end. Our balance-sheet adjustments reflect liabilities as of the measurement date(s) reported in the government's financial statements. Nearly every state reported liabilities and assets in their 2023 financial statements based on a fiscal 2022 measurement date. Only nine pension plans were reported based on a 2023 measurement date, most of which were single-employer plans.

Measurement date misalignment with government fiscal years complicates income statement metrics. Pension and OPEB contributions are reported based on the government fiscal year. However, the elements of the tread water indicator may not be. For cost-sharing plans, our tread water indicator matches the government fiscal year with the plan fiscal year. In some circumstances, the plan fiscal year-end does not align with the government's. For single-employer and agent plans, reported service cost and interest may lag by up to 12 months.

Key adjustments to pension and OPEB data:

» For the tread water metric, if a state's fiscal 2023 pension plan financials were not available, we used the fiscal 2022 plan financials.

» California (Aa2 negative), Illinois and Mississippi did not have its fiscal 2023 audit available at the time of publication of this report. California, Illinois and Mississippi's fiscal 2023 data included throughout this report is estimated by Moody's using available unaudited disclosures.

» California's fiscal 2022 audit provides all information required to calculate the ANOL, with the exception of the discount rate sensitivity for each OPEB plan. We have applied a duration estimate of 18 years in such cases to calculate the adjusted net OPEB liability. In addition, the plan information reported by the state consists of 53 OPEB plans, some of which apply blended and single discount rates within specified ranges. Using the various discount rates reported across these plans, we estimated a blended reported discount rate of 2.62% for these plans.

» States' fiscal 2024 estimated ANPL were based on information from fiscal 2023 pension plan financial statements. We based the estimates on states' proportionate share of cost-sharing liabilities reported in their fiscal 2023 audits. If the fiscal 2023 pension plan financial statements were not available, we used fiscal 2022 plan information and the FTSE PLI discount rate for the 2023 measurement date to estimate the ANPL.

The following tables summarize our calculations of key pension and OPEB metrics and rank the states accordingly. Pension and OPEB burdens are one of many factors we use to determine state credit quality. Our analysis of pension and OPEB risk also considers measures of the strength of annual funding contributions

Exhibit 15
Selected characteristics of state pension plans

State	Rating	# of pension plans	Measurement date for largest plan	Reported discount rate for largest plan	Aggregate reported net pension liability ($000)	Moody's adjusted discount rate for largest plan	State share for largest plan
Alabama	Aa1	3	9/30/2022	7.45%	$4,617,464	5.17%	96.7%
Alaska	Aa3	4	6/30/2022	7.25%	$3,907,441	4.48%	58.6%
Arizona	Aa1	7	6/30/2022	7.00%	$2,372,055	4.48%	12.3%
Arkansas	Aa1	4	6/30/2022	7.15%	$2,218,750	4.48%	61.8%
California*	Aa2	9	6/30/2021	7.10%	$47,920,644	2.84%	33.5%
Colorado	Aa1	4	12/31/2022	7.25%	$11,446,317	5.02%	63.3%
Connecticut	Aa3	3	6/30/2022	6.90%	$40,395,205	4.48%	100.0%
Delaware	Aaa	5	6/30/2022	7.00%	$1,561,141	4.48%	86.2%
Florida	Aaa	3	6/30/2022	6.70%	$7,636,951	4.48%	15.2%
Georgia	Aaa	12	6/30/2022	7.00%	$6,510,399	4.48%	83.5%
Hawaii	Aa2	1	6/30/2022	7.00%	$6,580,526	4.48%	50.7%
Idaho	Aaa	2	6/30/2022	6.35%	$800,926	4.48%	19.8%
Illinois*	A3	5	6/30/2021	7.00%	$139,632,474	2.84%	98.8%
Indiana	Aaa	9	6/30/2022	6.25%	$10,097,140	4.48%	100.0%
Iowa	Aaa	3	6/30/2022	7.00%	$721,520	4.48%	12.1%
Kansas	Aa2	3	6/30/2022	7.00%	$7,130,244	4.48%	97.8%
Kentucky	Aa2	6	6/30/2022	7.10%	$28,624,869	4.48%	98.1%
Louisiana	Aa2	7	6/30/2022	7.25%	$6,602,409	4.48%	76.1%
Maine	Aa1	3	6/30/2022	6.50%	$2,246,384	4.48%	93.7%
Maryland	Aaa	2	6/30/2022	6.80%	$17,646,639	4.48%	84.5%
Massachusetts	Aa1	3	6/30/2022	7.00%	$41,043,792	4.48%	100.0%
Michigan	Aa1	6	9/30/2022	6.00%	$22,634,960	5.17%	40.3%
Minnesota	Aaa	9	6/30/2022	6.75%	$3,398,468	4.48%	66.3%
Mississippi*	Aa2	3	6/30/2021	7.55%	$2,579,163	2.84%	16.7%
Missouri	Aaa	3	6/30/2022	6.95%	$7,729,952	4.48%	83.1%
Montana	Aa1	9	6/30/2022	7.30%	$2,458,361	4.48%	53.8%
Nebraska	Aa1	6	6/30/2022	7.20%	$493,745	4.48%	17.3%
Nevada*	Aa1	3	6/30/2021	7.25%	$1,489,810	2.84%	16.4%
New Hampshire	Aa1	2	6/30/2022	6.75%	$1,054,786	4.48%	17.7%
New Jersey	A1	7	6/30/2022	7.00%	$79,780,727	4.48%	100.0%
New Mexico	Aa2	5	6/30/2022	7.25%	$3,934,128	4.48%	52.6%
New York	Aa1	2	3/31/2022	5.90%	($3,141,000)	3.54%	39.8%
North Carolina	Aaa	6	6/30/2022	6.50%	$3,747,701	4.48%	21.9%
North Dakota	Aa1	4	6/30/2022	5.10%	$1,149,200	4.48%	37.5%
Ohio	Aaa	4	12/31/2022	6.90%	$6,379,210	5.02%	19.8%
Oklahoma	Aa1	6	6/30/2022	6.50%	$908,373	4.48%	40.1%
Oregon	Aa1	1	6/30/2022	6.90%	$3,619,004	4.48%	23.6%
Pennsylvania	Aa2	2	6/30/2022	7.00%	$41,105,153	4.48%	50.6%
Rhode Island	Aa2	7	6/30/2022	7.00%	$3,142,020	4.48%	90.4%
South Carolina	Aaa	5	6/30/2022	7.00%	$14,727,048	4.48%	56.3%
South Dakota	Aaa	1	6/30/2022	6.50%	($1,898)	4.48%	20.1%
Tennessee	Aaa	2	6/30/2022	6.75%	$830,484	4.48%	71.1%
Texas	Aaa	7	8/31/2022	7.00%	$45,960,232	4.48%	49.6%
Utah	Aaa	8	12/31/2022	6.85%	$642,236	5.02%	23.9%
Vermont	Aa1	2	6/30/2022	7.00%	$3,037,960	4.48%	100.0%
Virginia	Aaa	4	6/30/2022	6.75%	$3,430,433	4.48%	54.1%
Washington	Aaa	11	6/30/2022	7.00%	($3,953,488)	4.48%	42.8%
West Virginia	Aa2	5	6/30/2022	7.25%	$2,418,087	4.48%	93.4%
Wisconsin	Aa1	1	12/31/2022	6.80%	$724,974	5.02%	13.7%
Wyoming	NR	5	12/31/2022	6.80%	$570,607	5.02%	17.4%

Fiscal 2022 data because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Exhibit 16
Moody's state adjusted net pension liability (ANPL) rankings ($ thousands)
Ranking based on fiscal 2023 ANPL

FY 2023 rank	State	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024 (estimate)
1	Illinois*	$229,886,900	$262,979,819	$306,051,104	$291,886,567	$225,478,153	NA
2	California*	$214,491,523	$250,074,033	$317,795,247	$266,380,091	$202,586,762	NA
3	New Jersey	$112,546,910	$130,184,705	$154,507,238	$141,113,164	$115,935,182	$109,136,988
4	Texas	$131,402,045	$155,795,706	$175,815,294	$141,536,018	$107,243,217	$93,118,631
5	Massachusetts	$77,151,349	$88,288,538	$115,468,688	$98,366,741	$75,738,197	$65,793,498
6	Pennsylvania	$78,996,495	$80,784,192	$98,478,123	$89,242,310	$69,303,274	$65,822,487
7	Connecticut	$63,348,693	$73,888,395	$90,195,556	$82,822,211	$66,713,150	$59,352,716
8	Kentucky	$41,328,094	$47,582,835	$55,331,067	$54,626,034	$44,181,821	$40,184,555
9	Maryland	$53,509,910	$55,659,687	$69,126,445	$56,704,110	$40,650,262	$38,189,057
10	New York	$38,812,223	$31,966,831	$53,050,021	$37,273,839	$30,316,660	$24,454,716
11	Michigan	$39,654,044	$46,672,055	$50,521,844	$43,062,523	$28,547,274	$21,820,715
12	South Carolina	$27,954,094	$30,726,294	$37,378,714	$34,708,084	$26,425,975	$24,368,907
13	Colorado	$25,168,742	$19,326,540	$17,156,155	$20,044,001	$19,703,634	$20,181,064
14	Florida	$21,972,968	$25,635,594	$31,524,843	$23,294,810	$17,275,185	$15,829,045
15	Kansas	$16,308,038	$18,546,343	$21,971,761	$19,902,595	$15,329,006	$13,734,419
16	Indiana	$17,771,050	$19,139,496	$20,558,874	$17,735,622	$13,858,865	$8,882,270
17	Hawaii	$13,558,845	$15,885,146	$19,556,196	$18,327,731	$13,122,256	$12,407,104
18	Missouri	$12,938,750	$14,409,936	$16,732,154	$16,405,560	$13,008,918	$12,678,740
19	Georgia	$21,986,315	$12,146,215	$14,555,816	$12,560,357	$12,870,266	$10,817,947
20	Ohio	$16,229,714	$16,961,569	$20,237,901	$16,592,819	$12,660,336	$12,775,351
21	Washington	$19,184,264	$25,679,735	$30,692,064	$20,208,882	$12,044,177	$8,792,673
22	Louisiana	$12,812,243	$14,186,684	$17,200,918	$14,483,434	$11,983,323	$9,847,696
23	Oregon	$10,618,750	$12,645,980	$16,781,969	$15,177,878	$11,006,601	$10,477,120
24	Minnesota	$12,273,462	$12,209,808	$14,510,699	$12,376,124	$9,707,263	$8,459,960
25	North Carolina	$9,145,550	$11,338,044	$14,916,536	$13,272,473	$9,497,734	$8,434,087
26	Virginia	$16,679,109	$11,918,366	$15,208,771	$13,211,827	$9,019,725	$8,352,929
27	New Mexico	$7,890,987	$9,707,828	$11,833,788	$11,857,488	$8,698,365	$8,418,809
28	Alaska	$10,964,439	$12,006,368	$14,629,857	$9,790,419	$8,555,189	$7,826,097
29	Nevada*	$6,989,253	$8,280,931	$10,276,437	$9,874,680	$7,942,675	NA
30	West Virginia	$9,541,291	$10,328,407	$13,160,240	$10,266,428	$7,908,084	$6,615,666
31	Mississippi*	$7,124,379	$8,273,567	$10,149,456	$9,156,846	$7,519,453	NA
32	Alabama	$7,638,354	$8,648,742	$9,657,665	$9,134,181	$7,183,130	$6,777,482
33	Arizona	$11,552,068	$9,845,661	$12,302,252	$10,547,954	$6,757,368	$6,156,624
34	Maine	$7,192,450	$7,162,546	$8,997,607	$9,883,747	$6,583,357	$5,633,567
35	Arkansas	$6,821,936	$7,620,552	$9,475,470	$7,819,332	$5,988,560	$4,041,856
36	Montana	$6,741,063	$7,042,203	$8,977,148	$7,823,394	$5,891,183	$5,357,279
37	Vermont	$4,563,037	$5,721,521	$7,707,309	$7,381,323	$5,710,101	$5,209,420
38	Delaware	$5,361,945	$6,794,336	$8,345,176	$5,650,036	$5,377,249	$4,760,152
39	Rhode Island	$6,491,384	$6,975,338	$7,184,929	$6,081,791	$5,192,980	$4,594,048
40	Tennessee	$5,944,833	$7,308,026	$9,359,859	$7,329,235	$5,092,812	$4,282,315
41	Wisconsin	$9,874,769	$6,056,870	$7,853,511	$7,495,795	$3,795,135	$3,809,666
42	Oklahoma	$8,158,141	$4,437,543	$6,676,706	$4,105,954	$2,954,755	$2,651,509
43	Utah	$4,119,495	$5,026,392	$5,683,881	$4,807,068	$2,733,415	$3,146,958
44	Nebraska	$2,636,775	$3,183,413	$4,085,341	$3,167,424	$2,471,056	$1,360,213
45	Iowa	$4,552,905	$4,256,261	$5,120,150	$9,904,419	$2,181,226	$2,046,208
46	Idaho	$2,237,549	$2,302,990	$3,211,385	$2,181,089	$2,013,134	$1,724,805
47	New Hampshire	$1,984,320	$2,215,991	$2,871,708	$2,434,245	$1,922,323	$1,670,924
48	North Dakota	$1,681,686	$1,376,909	$2,065,554	$1,637,395	$1,376,455	$1,248,275
49	Wyoming	$1,403,893	$1,580,937	$1,885,302	$1,600,082	$1,037,892	$1,018,703
50	South Dakota	$1,713,172	$1,254,296	$1,600,990	$1,672,745	$869,704	$669,385
	TOTAL	$1,478,910,201	$1,632,040,175	$1,978,435,721	$1,732,918,875	$1,329,962,814	NA
	MEAN	$29,578,204	$32,640,803	$39,568,714	$34,658,377	$26,599,256	NA
	MEDIAN	$11,258,253	$11,962,367	$14,592,837	$12,468,241	$9,258,730	NA

Some historical ANPL figures have been updated and may not match prior published reports. Beginning with fiscal 2020, the liability is aligned with states' governmental activities reported in audited financial statements.

*Fiscal 2023 figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.

Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), Moody's Ratings

Exhibit 17
Fiscal 2023 state adjusted net pension liability (ANPL) metrics
Ranking based on ANPL as a % of own-source revenue

FY 2023 rank	State	ANPL as a % of own-source revenue	ANPL per capita	ANPL as a % of personal income	ANPL as a % of state GDP
1	Illinois*	317.6%	$17,967	24.9%	20.5%
2	Connecticut	252.4%	$18,443	20.5%	19.3%
3	Kentucky	216.7%	$9,761	17.6%	15.8%
4	New Jersey	191.6%	$12,478	15.2%	14.4%
5	Massachusetts	135.4%	$10,818	11.9%	10.3%
6	Montana	129.4%	$5,200	8.0%	8.0%
7	South Carolina	124.0%	$4,918	8.6%	8.1%
8	Maryland	117.7%	$6,577	8.7%	7.9%
9	Vermont	114.9%	$8,819	13.2%	13.1%
10	Pennsylvania	113.5%	$5,347	7.8%	7.1%
11	Hawaii	105.0%	$9,144	13.8%	11.9%
12	Colorado	96.8%	$3,352	4.2%	3.7%
13	Kansas	95.9%	$5,213	7.9%	6.7%
14	Texas	95.1%	$3,516	5.3%	4.2%
15	Maine	91.9%	$4,717	7.2%	7.1%
16	California*	88.1%	$5,199	6.4%	5.2%
17	Rhode Island	86.7%	$4,738	7.0%	6.7%
18	West Virginia	78.0%	$4,468	8.5%	7.7%
19	Alaska	77.2%	$11,665	16.3%	12.6%
20	Nevada*	71.7%	$2,487	3.8%	3.2%
21	Missouri	69.0%	$2,100	3.4%	3.0%
22	Mississippi*	66.9%	$2,558	5.2%	5.0%
23	Michigan	62.7%	$2,844	4.7%	4.2%
24	Louisiana	61.0%	$2,620	4.5%	3.8%
25	Delaware	60.8%	$5,211	7.8%	5.5%
26	Indiana	48.4%	$2,020	3.3%	2.8%
27	Arkansas	46.8%	$1,952	3.4%	3.4%
28	Oregon	42.8%	$2,600	3.8%	3.5%
29	New Hampshire	39.9%	$1,371	1.7%	1.7%
30	New Mexico	38.2%	$4,114	7.4%	6.4%
31	Alabama	36.7%	$1,406	2.6%	2.4%
32	Georgia	34.2%	$1,167	1.9%	1.5%
33	Washington	29.9%	$1,542	1.9%	1.5%
34	Ohio	29.0%	$1,074	1.7%	1.4%
35	Nebraska	29.0%	$1,249	1.8%	1.4%
36	Arizona	25.9%	$909	1.5%	1.3%
37	Minnesota	25.4%	$1,692	2.3%	2.0%
38	Idaho	24.0%	$1,025	1.7%	1.7%
39	Florida	23.2%	$764	1.1%	1.1%
40	North Carolina	22.3%	$877	1.4%	1.2%
41	Virginia	22.1%	$1,035	1.4%	1.3%
42	Wyoming	21.9%	$1,777	2.2%	2.0%
43	New York	18.5%	$1,549	1.9%	1.4%
44	Oklahoma	18.3%	$729	1.2%	1.2%
45	North Dakota	17.4%	$1,756	2.4%	1.8%
46	Tennessee	17.1%	$715	1.1%	1.0%
47	Utah	17.0%	$800	1.2%	1.0%
48	Iowa	15.7%	$680	1.1%	0.9%
49	Wisconsin	15.0%	$642	1.0%	0.9%
50	South Dakota	14.3%	$946	1.3%	1.2%
	TOTAL	80.1%	$3,979	5.7%	4.9%
	MEAN	71.9%	$4,091	5.9%	5.2%
	MEDIAN	54.6%	$2,522	3.8%	3.4%

*Fiscal 2023 figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada), US Census Bureau, US Bureau of Economic Analysis and Moody's Ratings

Exhibit 18
Fiscal 2023 state pension assets
Ranking based on pension asset shock indicator

FY 2023 rank	State	Pension assets ($000)	Pension assets as a % of own-source revenue	Pension asset shock indicator	Assets / benefits for largest plan	NICF for largest plan
1	Illinois*	$111,799,841	157.5%	3.2%	8.3	-1.0%
2	Nevada*	$9,757,520	88.1%	0.8%	17.7	-1.7%
3	California*	$258,884,064	112.6%	0.6%	17.4	-0.9%
4	Montana	$6,668,857	146.5%	0.4%	11.8	-4.2%
5	Maine	$13,746,003	192.0%	0.3%	14.4	-2.6%
6	West Virginia	$14,228,071	140.4%	0.3%	10.0	-3.8%
7	Maryland	$54,832,720	158.8%	0.2%	13.4	-2.2%
8	Connecticut	$40,264,938	152.4%	0.2%	9.1	2.0%
9	Kentucky	$26,626,838	130.6%	0.1%	9.4	-4.0%
10	Massachusetts	$68,126,351	121.8%	0.1%	9.4	-1.0%
11	Mississippi*	$6,364,156	56.6%	0.0%	10.8	-4.1%
12	Delaware	$10,056,462	113.8%	0.0%	13.6	-2.6%
13	Washington	$45,503,222	113.1%	0.0%	28.5	-0.7%
14	Texas	$125,041,683	110.9%	0.0%	13.6	-2.1%
15	Pennsylvania	$65,447,068	107.2%	0.0%	9.2	-1.7%
16	Kansas	$16,707,122	104.5%	0.0%	11.1	-1.0%
17	Colorado	$19,275,197	94.7%	0.0%	10.6	-2.9%
18	Alaska	$10,067,961	90.8%	0.0%	10.5	-4.4%
19	South Carolina	$19,953,129	93.6%	0.0%	9.2	-0.8%
20	Vermont	$4,586,620	92.3%	0.0%	9.6	0.4%
21	Hawaii	$11,090,111	88.7%	0.0%	11.9	-1.2%
22	Rhode Island	$4,824,112	80.6%	0.0%	8.2	-3.0%
23	Oregon	$19,799,015	77.0%	0.0%	14.6	-3.8%
24	Louisiana	$12,458,012	63.4%	0.0%	8.2	-0.9%
25	Arkansas	$8,197,159	64.1%	0.0%	14.2	-2.5%
26	Nebraska	$5,300,179	62.1%	0.0%	17.9	-2.1%
27	Wisconsin	$16,198,325	64.0%	0.0%	20.2	-3.4%
28	Michigan	$38,663,534	84.9%	0.0%	10.6	-0.5%
29	New Jersey	$34,669,325	57.3%	0.0%	5.0	0.8%
30	Missouri	$10,107,955	53.6%	0.0%	8.2	1.6%
31	Utah	$7,849,056	48.9%	0.0%	20.1	-2.1%
32	Ohio	$19,629,134	45.0%	0.0%	14.4	-3.4%
33	New Mexico	$8,869,701	39.0%	0.0%	11.0	-4.0%
34	Iowa	$5,797,717	41.7%	0.0%	15.2	-2.8%
35	Tennessee	$13,169,163	44.2%	0.0%	16.1	-1.7%
36	Georgia	$15,845,782	42.1%	0.0%	9.2	-4.2%
37	New York	$100,659,534	61.6%	0.0%	17.4	-4.0%
38	South Dakota	$2,836,986	46.5%	0.0%	19.1	-3.1%
39	Minnesota	$16,295,592	42.6%	0.0%	15.4	-3.5%
40	Arizona	$9,876,059	37.9%	0.0%	11.7	-2.0%
41	New Hampshire	$1,969,345	40.9%	0.0%	10.6	-0.9%
42	Idaho	$3,942,559	47.1%	0.0%	15.4	-2.1%
43	North Carolina	$18,616,701	43.7%	0.0%	13.9	-2.0%
44	Oklahoma	$6,391,059	39.6%	0.0%	14.1	-3.4%
45	Virginia	$15,494,532	38.0%	0.0%	13.6	-2.9%
46	Wyoming	$1,749,978	36.9%	0.0%	13.5	-3.6%
47	Florida	$27,475,292	36.9%	0.0%	14.0	-4.0%
48	Alabama	$5,649,040	28.9%	0.0%	7.3	-6.0%
49	Indiana	$10,423,934	36.4%	0.0%	4.3	59.9%
50	North Dakota	$1,483,261	18.7%	0.0%	12.9	-2.3%
	TOTAL	$1,383,269,976	83.3%	NA	NA	NA
	MEAN	$27,665,400	77.8%	0.1%	12.7	-1.1%
	MEDIAN	$13,457,583	63.7%	0.0%	12.4	-2.3%

See Exhibit 3 for definitions.
*Metrics based on fiscal 2022 because the state did not have fiscal 2023 audited financial statements available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Exhibit 19
Allocation of pension plan liabilities by state

Alabama	Employees' Retirement System (State)	96.7%
	Teachers' Retirement System	1.8%
	Judicial Retirement Fund	100.0%
Alaska	National Guard/Naval Militia Retirement System	100.0%
	Judicial Retirement System	100.0%
	Public Employees' Retirement System	58.6%
	Teachers' Retirement System	57.4%
Arizona	Corrections Officer Retirement Plan	100.0%
	Elected Officials' Retirement Plan	34.5%
	Arizona State Retirement System	12.3%
	Public Safety Personnel Retirement System (Agent) - Other Entities	100.0%
	Public Safety Personnel Retirement System - Risk Pool	42.9%
	Correction Officers Retirement System - Dept. of Corrections	100.0%
	Public Safety Personnel Retirement System - Dept. of Public Safety	100.0%
Arkansas	Judicial Retirement System	100.0%
	State Highway Employees Retirement System	100.0%
	State Police Retirement System	100.0%
	Public Employees Retirement System	61.8%
California	Judges' Retirement Fund	100.0%
	Judges' Retirement Fund II	100.0%
	Legislators' Retirement Fund	100.0%
	California Public Employees' Retirement System - Peace Officers and Firefighters Plan	100.0%
	California Public Employees' Retirement System-Highway Patrol	100.0%
	California Public Employees' Retirement System-Industrial	100.0%
	California Public Employees' Retirement System-Miscellaneous	70.6%
	California Public Employees' Retirement System-Safety	100.0%
	California State Teachers' Retirement System	33.5%
Colorado	Judicial Division Trust Fund	94.7%
	State Division Trust Fund	63.3%
	Denver Public Schools Division Trust Fund	41.6%
	School Division Trust Fund	22.6%
Connecticut	Judicial Retirement System	100.0%
	State Employees' Retirement System	99.1%
	Teachers' Retirement System	100.0%
Delaware	Closed State Police Pension Plan	100.0%
	Judiciary Pension Plans (Closed and Revised)	100.0%
	New State Police Pension Plan	100.0%
	Special Fund	100.0%
	State Employees'	86.2%
Florida	National Guard Supplemental Retirement Benefit Plan	100.0%
	Florida Retirement System	15.2%
	Health Insurance Subsidy	12.9%
Georgia	Peace Officers' Annuity and Benefit Fund	100.0%
	Employees' Retirement System	83.5%
	Firefighters' Pension Fund	100.0%
	Judicial Retirement System	100.0%
	Public School Employees Retirement System	100.0%
	Teachers Retirement System	0.5%
	Legislative Retirement Fund	100.0%
	Magistrates Retirement Fund	100.0%
	Military Pension Fund	100.0%
	Judges of the Probate Courts Retirement Fund	100.0%
	Sheriffs' Retirement Fund	100.0%
	Superior Court Clerks' Retirement Fund	100.0%
Hawaii	Employees' Retirement System	50.7%
Idaho	Judges' Retirement Fund	100.0%
	Public Employee Retirement System of Idaho	19.8%

Exhibit 20
Allocation of pension plan liabilities by state (continued)

Illinois	General Assembly Retirement System	100.0%
	Judges' Retirement System	100.0%
	State Employees' Retirement System	96.8%
	State Universities Retirement System	100.0%
	Teachers' Retirement System	98.8%
Indiana	Judges' Retirement System	100.0%
	Legislators' Retirement System	100.0%
	Prosecuting Attorneys' Retirement System	100.0%
	State Police Retirement Fund	100.0%
	State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Officers' Retirement Plan	100.0%
	State Teachers' Retirement Fund Pre-1996	100.0%
	Public Employees Retirement System	25.9%
	State Police Supplemental Trust	100.0%
	State Teachers' Retirement Fund	0.3%
Iowa	Judicial Retirement System	100.0%
	Peace Officers' Retirement, Accident and Disability System	100.0%
	Iowa Public Employees Retirement System	12.1%
Kansas	Police and Fire Retirement System	7.4%
	Public Employees Retirement System - School and State	97.8%
	Retirement System for Judges	100.0%
Kentucky	Judicial Retirement Plan	100.0%
	Legislators' Retirement Plan	100.0%
	State Police Retirement System	100.0%
	Kentucky Employees' Retirement System (Hazardous)	97.7%
	Kentucky Employees' Retirement System (Non-Hazardous)	77.5%
	Teachers' Retirement System	98.1%
Louisiana	State Police Retirement System	100.0%
	District Attorneys' Retirement System	47.2%
	Louisiana Clerks of Court Retirement and Relief Fund	7.9%
	Louisiana State Employees' Retirement System	76.1%
	Registrars of Voters Employees' Retirement System	75.0%
	Louisiana School Employees' Retirement System	0.2%
	Teachers' Retirement System of Louisiana	4.0%
Maine	Legislative Pension Plan	100.0%
	Judicial Pension Plan	100.0%
	State Employees and Teachers Plan	93.7%
Maryland	Transit Administration Pension Plan	100.0%
	State Retirement and Pension System	84.5%
Massachusetts	Boston Retirement System (State)	100.0%
	State Employees' Retirement System	89.7%
	Teachers' Retirement System	100.0%
Michigan	Military Retirement Provisions	100.0%
	State Employees' Retirement System	97.4%
	State Police Retirement System	100.0%
	Legislative Retirement System	100.0%
	Judges' Retirement System	100.0%
	Public School Employees' Retirement System	40.3%
Minnesota	Legislators Retirement Fund	100.0%
	State Patrol Retirement Fund	100.0%
	Correctional Employees Retirement Fund	99.9%
	General Employees Retirement Fund	3.0%
	St Paul Teachers' Retirement Fund	28.8%
	State Employees Retirement Fund	66.3%
	Teachers Retirement Association of Minnesota	6.3%
	Public Employees Police and Fire Fund	4.5%
	Judicial Retirement Fund	100.0%
Mississippi	Highway Safety Patrol Retirement System	100.0%
	Supplemental Legislative Retirement Plan	100.0%
	Public Employees' Retirement System	16.7%

Exhibit 21

Allocation of pension plan liabilities by state (continued)

Missouri	Judicial Plan	100.0%
	Department of Transportation and Highway Patrol Employees' Retirement System	100.0%
	Missouri State Employees' Plan	83.1%
Montana	Highway Patrol Officers' Retirement System	100.0%
	Judges' Retirement System	100.0%
	Game Wardens' and Peace Officers' Retirement System	94.9%
	Firefighters' Unified Retirement System	70.1%
	Montana Teachers' Retirement System	36.0%
	Public Employees' Retirement System-Defined Benefit Retirement Plan	53.8%
	Municipal Police Officers' Retirement System	67.0%
	Sheriffs Retirement System	4.9%
	Volunteer Firefighters' Compensation Act	100.0%
Nebraska	Omaha School Employees' Retirement System	11.1%
	Service Annuity Plan	100.0%
	Judges Retirement System	100.0%
	State Employees' Retirement Plan	100.0%
	State Patrol Retirement System	100.0%
	School Employees' Retirement System	17.3%
Nevada	Legislators' Retirement System	100.0%
	Judicial Retirement System	89.6%
	Public Employees' Retirement System	16.4%
New Hampshire	Judicial Retirement Plan	100.0%
	New Hampshire Retirement System	17.7%
New Jersey	New Jersey Public Employees' Retirement System - State	92.9%
	New Jersey Police and Firefighters' Retirement System - State	100.0%
	New Jersey Consolidated Police and Firemen's Pension Fund	100.0%
	New Jersey State Police Retirement System	100.0%
	New Jersey Judicial Retirement System	100.0%
	New Jersey Prison Officers' Pension Fund	100.0%
	Teachers' Pension and Annuity Fund	100.0%
New Mexico	Judicial Retirement Fund	100.0%
	Magistrate Retirement Fund	100.0%
	Volunteer Firefighters Retirement Fund	100.0%
	Educational Employees' Retirement System	0.3%
	Public Employees Retirement Fund	52.6%
New York	New York State and Local Employees' Retirement System	39.8%
	New York State and Local Police and Fire Retirement System	19.9%
North Carolina	Consolidated Judicial Retirement System	100.0%
	Firefighters' and Rescue Squad Workers' Pension Fund	100.0%
	Legislative Retirement System	100.0%
	Law Enforcement Officer Special Separation Allowance	100.0%
	North Carolina National Guard Pension Fund	100.0%
	Teachers' and State Employees' Retirement System	21.9%
North Dakota	Retirement Plan for the Employees of Job Service North Dakota	100.0%
	The North Dakota Highway Patrolmen's Retirement System	100.0%
	North Dakota Public Employees Retirement System - Main System	37.5%
	North Dakota Teachers Fund for Retirement	0.4%
Ohio	State Highway Patrol Retirement System	100.0%
	Public Employees' Retirement System - Combined Benefit Plan	20.1%
	Public Employees' Retirement System - Traditional Plan	19.8%
	State Teachers' Retirement System	0.4%
Oklahoma	Oklahoma Law Enforcement Retirement System	98.5%
	Uniform Retirement System for Justices and Judges	100.0%
	Wildlife Conservation Retirement Plan	100.0%
	Oklahoma Police Pension and Retirement Plan	0.4%
	Oklahoma Public Employees Retirement System	40.1%
	Teachers' Retirement System of Oklahoma	4.4%
Oregon	Oregon Public Employees Retirement System	23.6%
Pennsylvania	State Employees' Retirement System	88.6%

Exhibit 22
Allocation of pension plan liabilities by state (continued)

State	Plan	%
Pennsylvania	Public School Employees' Retirement System	50.6%
Rhode Island	Judicial Non-Contributory Retirement Plan	100.0%
	Judicial Retirement Benefits Trust	100.0%
	Judicial Retirement Fund	100.0%
	State Police Non Contributory Retirement Plan	100.0%
	State Police Retirement Benefits Trust	100.0%
	Employees' Retirement System - State	90.4%
	Employees' Retirement System - Teachers	42.5%
South Carolina	General Assembly Retirement System	100.0%
	Judges' and Solicitors' Retirement System	100.0%
	National Guard Supplemental Retirement Plan	100.0%
	Police Officers' Retirement System	25.9%
	South Carolina Retirement System	56.3%
South Dakota	South Dakota Retirement System	20.1%
Tennessee	TCRS-Closed State and Higher Education Employee Pension Plan	71.1%
	TCRS-State and Higher Education Employee Retirement Plan	66.3%
Texas	Texas Employees Retirement System	100.0%
	Law Enforcement and Custodial Officer Supplemental Retirement Plan	100.0%
	Judicial Retirement System of Texas Plan One	100.0%
	Judicial Retirement System of Texas Plan Two	100.0%
	Teacher Retirement System	49.6%
	Texas Emergency Services Retirement System Plan	26.0%
	Supplemental Retirement Plan (SRP) and the Retirement Benefit Plan (RBP)	100.0%
Utah	Contributory Retirement System - State and School	38.1%
	Non-Contributory Retirement System - State and School	23.9%
	Public Safety Retirement System - State	96.5%
	Judges Retirement System	100.0%
	Governors and Legislators Retirement Plan	100.0%
	Firefighters Retirement System - Other Division A	3.3%
	Tier 2 Public Employees Retirement System	7.8%
	Tier 2 Public Safety and Firefighter Contributory Retirement System	20.1%
Vermont	State Retirement System	98.7%
	State Teachers' Retirement System	100.0%
Virginia	Judicial Retirement System	100.0%
	State Police Officers Retirement System	100.0%
	Virginia Law Officers Retirement System	86.5%
	Virginia Retirement System - State	54.1%
Washington	Judges' Retirement Fund	100.0%
	Judicial Retirement System	100.0%
	State Patrol Retirement System 1/2	100.0%
	Law Enforcement Officers and fire fighters retirement system 1	87.1%
	Law Enforcement Officers and fire fighters retirement system 2	40.1%
	Higher Education Retirement Plan	86.7%
	Public Employees' Retirement System Plan 1	36.6%
	Public Employees' Retirement System Plan 2/3	42.8%
	Public Safety Employees' Retirement System 2	65.5%
	Teachers' Retirement System Plan 1	1.1%
	Teachers' Retirement System Plan 2/3	1.1%
West Virginia	West Virginia Judges Retirement System	100.0%
	West Virginia Police Retirement System	100.0%
	State Police Death, Disability, and Retirement System	100.0%
	Public Employees Retirement System	56.2%
	Teachers' Retirement System	93.4%
Wisconsin	Wisconsin Retirement System	13.7%
Wyoming	Air Guard Firefighters Pension Plan	100.0%
	Judicial Pension Plan	100.0%
	State Patrol, Game & Fish Warden & Criminal Investigator Pension Plan	38.4%
	Public Employee Pension Plan	17.4%
	Law Enforcement Pension Plan	20.8%

Metrics for California, Illinois, Mississippi and Nevada based on fiscal 2022 because the state did not have fiscal 2023 audited financial statements available as of the publication of this report.
Sources: State audited financial statements, draft financial statements, actuarial reports and Moody's Ratings

Exhibit 23
Fiscal 2023 state adjusted net OPEB liability (ANOL) metrics
Ranking based on ANOL as a % of own-source revenue

FY 2023 rank	State	Reported net OPEB liability ($ thousands)	Adjusted net OPEB liability ($ thousands)	ANOL as a % of own-source revenue	ANOL per capita	ANOL as a % of personal income	ANOL as a % of state GDP
1	New Jersey	$74,932,328	$64,312,677	106.3%	$6,922	8.4%	8.0%
2	Delaware	$7,357,481	$6,257,544	70.8%	$6,064	9.1%	6.4%
3	Hawaii	$4,571,221	$7,662,107	61.3%	$5,339	8.1%	6.9%
4	Connecticut	$16,901,786	$15,250,610	57.7%	$4,216	4.7%	4.4%
5	Illinois*	$46,502,507	$39,383,175	55.5%	$3,138	4.3%	3.6%
6	Maine	$2,353,982	$3,296,078	46.0%	$2,362	3.6%	3.5%
7	Vermont	$1,502,997	$2,086,468	42.0%	$3,223	4.8%	4.8%
8	California*	$77,369,354	$77,422,425	33.7%	$1,987	2.4%	2.0%
9	Texas	$39,255,177	$34,557,007	30.6%	$1,133	1.7%	1.3%
10	Maryland	$11,869,362	$9,708,284	28.1%	$1,571	2.1%	1.9%
11	New Hampshire	$1,544,413	$1,348,141	28.0%	$962	1.2%	1.2%
12	New York	$52,616,000	$45,070,818	27.6%	$2,303	2.8%	2.1%
13	Pennsylvania	$16,833,603	$15,893,793	26.0%	$1,226	1.8%	1.6%
14	Louisiana	$4,781,816	$4,506,373	22.9%	$985	1.7%	1.4%
15	Massachusetts	$11,914,264	$11,584,436	20.7%	$1,655	1.8%	1.6%
16	Kentucky	$2,357,436	$3,470,345	17.0%	$767	1.4%	1.2%
17	Missouri	$2,619,561	$2,678,959	14.2%	$432	0.7%	0.6%
18	Michigan	$5,229,797	$6,289,607	13.8%	$627	1.0%	0.9%
19	South Carolina	$2,910,751	$2,534,146	11.9%	$472	0.8%	0.8%
20	North Carolina	$4,672,223	$3,974,734	9.3%	$367	0.6%	0.5%
21	Arkansas	$1,419,579	$1,186,564	9.3%	$387	0.7%	0.7%
22	Washington	$3,612,506	$3,095,354	7.7%	$396	0.5%	0.4%
23	Nevada*	$893,567	$817,009	7.4%	$256	0.4%	0.3%
24	Wyoming	$416,439	$343,700	7.3%	$588	0.7%	0.7%
25	Florida	$5,292,352	$4,927,906	6.6%	$218	0.3%	0.3%
26	Alabama	$918,197	$1,238,953	6.3%	$243	0.4%	0.4%
27	Rhode Island	$241,500	$282,165	4.7%	$257	0.4%	0.4%
28	Tennessee	$1,116,063	$1,141,845	3.8%	$160	0.3%	0.2%
29	West Virginia	$71,754	$329,687	3.3%	$186	0.4%	0.3%
30	Alaska	($1,713,155)	$336,855	3.0%	$459	0.6%	0.5%
31	New Mexico	$543,772	$672,602	3.0%	$318	0.6%	0.5%
32	Virginia	$767,398	$1,076,979	2.6%	$124	0.2%	0.1%
33	Georgia	$51,314	$817,618	2.2%	$74	0.1%	0.1%
34	Wisconsin	$514,683	$485,504	1.9%	$82	0.1%	0.1%
35	Arizona	$457,078	$465,470	1.8%	$63	0.1%	0.1%
36	Minnesota	$638,578	$597,596	1.6%	$104	0.1%	0.1%
37	Iowa	$198,920	$183,471	1.3%	$57	0.1%	0.1%
38	Mississippi*	$141,983	$131,909	1.2%	$45	0.1%	0.1%
39	Colorado	$170,741	$234,104	1.2%	$40	0.0%	0.0%
40	Ohio	$354,346	$384,200	0.9%	$33	0.1%	0.0%
41	Oklahoma	$72,388	$141,169	0.9%	$35	0.1%	0.1%
42	North Dakota	$45,887	$57,235	0.7%	$73	0.1%	0.1%
43	Montana	$29,742	$22,879	0.5%	$20	0.0%	0.0%
44	Indiana	$59,229	$95,422	0.3%	$14	0.0%	0.0%
45	Nebraska	$26,656	$24,982	0.3%	$13	0.0%	0.0%
46	Kansas	$40,874	$39,464	0.2%	$13	0.0%	0.0%
47	South Dakota	NA	$0	0.0%	$0	0.0%	0.0%
48	Oregon	($48,369)	($20,144)	-0.1%	($5)	0.0%	0.0%
49	Utah	($16,568)	($34,188)	-0.2%	($10)	0.0%	0.0%
50	Idaho	($60,814)	($59,541)	-0.7%	($30)	-0.1%	0.0%
	TOTAL	$404,352,700	$376,304,497	22.7%	$1,126	1.6%	1.4%
	MEAN	$8,252,096	$7,526,090	16.0%	$999	1.4%	1.2%
	MEDIAN	$918,197	$1,109,412	6.5%	$288	0.5%	0.4%

*Reflects fiscal 2022 OPEB data based on 2022 audited financial statements and fiscal 2023 revenue estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
ANOL stands for adjusted net OPEB liability.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Appendix III: Fixed costs

Exhibit 24
Fiscal 2023 fixed costs as % of own-source revenue
Ranking based on fixed costs (tread water) as a % of own-source revenue

State	Implied debt service	OPEB contribution	Implied other long-term liabilities carrying cost	Pension contribution	Pension tread water	Pension contributions as a % of pension tread water	Tread water shortfall as a % of own-source revenue	Total fixed costs (contribution)	Total fixed costs (tread water)
Connecticut	7.7%	3.3%	0.5%	18.3%	12.4%	148.0%	-5.9%	29.7%	23.8%
Illinois*	3.7%	1.7%	0.1%	15.2%	15.9%	95.6%	0.7%	20.7%	21.4%
New Jersey	5.4%	3.5%	0.3%	10.9%	10.3%	105.1%	-0.5%	20.0%	19.5%
Hawaii	5.5%	5.7%	0.5%	6.4%	6.4%	100.7%	0.0%	18.2%	18.1%
Kentucky	2.3%	1.2%	0.3%	11.0%	10.8%	102.4%	-0.3%	14.8%	14.5%
Massachusetts	6.1%	1.1%	0.3%	6.8%	6.1%	112.3%	-0.7%	14.4%	13.6%
Maryland	3.9%	2.1%	0.2%	6.1%	5.4%	113.4%	-0.7%	12.3%	11.6%
Delaware	3.4%	3.6%	0.3%	4.8%	2.8%	170.8%	-2.0%	12.1%	10.1%
Maine	1.6%	4.2%	0.2%	6.1%	3.4%	176.6%	-2.6%	12.0%	9.4%
Rhode Island	4.0%	0.7%	0.2%	6.0%	4.3%	140.1%	-1.7%	10.9%	9.2%
Vermont	1.1%	2.4%	0.2%	6.1%	5.3%	115.1%	-0.8%	9.8%	9.0%
Pennsylvania	2.3%	1.0%	0.5%	7.4%	5.1%	144.2%	-2.3%	11.2%	8.9%
Louisiana	3.3%	1.1%	1.3%	5.4%	2.5%	212.5%	-2.8%	11.0%	8.2%
West Virginia	3.2%	0.7%	1.0%	5.2%	2.6%	196.3%	-2.5%	10.1%	7.6%
South Carolina	0.8%	0.6%	0.4%	6.5%	5.2%	125.5%	-1.3%	8.2%	6.9%
Michigan	1.3%	1.3%	0.3%	6.2%	3.7%	168.5%	-2.5%	9.2%	6.6%
Texas	1.3%	1.1%	0.1%	3.5%	4.1%	85.0%	0.6%	5.9%	6.5%
Missouri	0.9%	0.5%	1.0%	6.2%	3.6%	171.6%	-2.6%	8.6%	6.0%
Kansas	1.9%	0.0%	0.1%	6.1%	3.9%	156.4%	-2.2%	8.2%	6.0%
Oregon	3.2%	0.0%	0.5%	2.2%	2.2%	100.8%	0.0%	6.0%	5.9%
California*	2.9%	1.5%	0.5%	1.7%	1.1%	161.6%	-0.6%	6.6%	5.9%
Washington	4.4%	0.2%	0.9%	2.0%	0.3%	585.6%	-1.7%	7.5%	5.9%
New York	3.0%	1.5%	0.4%	0.9%	0.9%	106.3%	-0.1%	5.9%	5.8%
Mississippi*	3.6%	0.1%	0.1%	2.0%	2.0%	99.0%	0.0%	5.8%	5.8%
Montana	0.5%	0.0%	0.6%	4.6%	4.5%	102.0%	-0.1%	5.6%	5.5%
Colorado	2.1%	0.1%	0.2%	4.9%	2.8%	174.3%	-2.1%	7.3%	5.2%
Alabama	2.1%	0.3%	0.4%	1.5%	2.0%	78.0%	0.4%	4.3%	4.7%
New Hampshire	1.5%	0.8%	0.4%	2.6%	1.8%	141.0%	-0.8%	5.3%	4.6%
Georgia	2.3%	0.4%	0.1%	2.3%	1.6%	145.3%	-0.7%	5.1%	4.4%
Virginia	3.0%	0.3%	0.1%	1.4%	1.0%	145.2%	-0.4%	4.8%	4.3%
Wisconsin	3.1%	0.1%	0.7%	0.6%	0.3%	214.3%	-0.3%	4.6%	4.2%
Alaska	0.9%	0.1%	0.3%	3.3%	2.9%	116.3%	-0.5%	4.7%	4.2%
Ohio	3.1%	0.0%	0.1%	1.1%	0.6%	197.5%	-0.5%	4.3%	3.8%
Indiana	0.6%	0.1%	0.1%	15.5%	2.6%	607.4%	-13.0%	16.3%	3.3%
North Carolina	1.2%	0.7%	0.3%	1.8%	1.1%	166.6%	-0.7%	4.0%	3.3%
Nevada*	1.4%	0.3%	0.1%	1.7%	1.5%	113.4%	-0.2%	3.4%	3.2%
Florida	1.4%	0.2%	0.6%	1.1%	1.1%	105.1%	-0.1%	3.2%	3.2%
Arkansas	0.6%	0.5%	0.2%	1.9%	1.8%	107.2%	-0.1%	3.2%	3.1%
Minnesota	1.8%	0.1%	0.1%	0.9%	1.0%	92.5%	0.1%	3.0%	3.0%
Tennessee	0.5%	1.4%	0.2%	2.0%	0.7%	307.3%	-1.4%	4.2%	2.8%
New Mexico	1.0%	0.1%	0.1%	1.1%	1.5%	75.6%	0.4%	2.4%	2.7%
Idaho	1.0%	0.0%	0.3%	1.3%	1.4%	94.4%	0.1%	2.5%	2.6%
Utah	1.2%	0.0%	0.1%	1.6%	0.6%	258.3%	-1.0%	3.0%	2.0%
North Dakota	0.5%	0.1%	0.1%	0.5%	1.4%	35.2%	0.9%	1.1%	1.9%
Oklahoma	0.9%	0.1%	0.1%	1.3%	0.8%	164.8%	-0.5%	2.5%	1.9%
Iowa	0.6%	0.1%	0.2%	1.0%	0.8%	117.6%	-0.1%	1.9%	1.8%
Arizona	0.7%	0.1%	0.1%	1.5%	0.8%	192.7%	-0.7%	2.4%	1.7%
Nebraska	0.1%	0.0%	0.4%	1.6%	0.8%	190.5%	-0.7%	2.1%	1.3%
Wyoming	0.2%	0.1%	0.3%	0.8%	0.7%	110.2%	-0.1%	1.3%	1.3%
South Dakota	0.6%	0.0%	0.2%	0.5%	0.4%	128.2%	-0.1%	1.3%	1.2%
TOTAL	2.6%	1.1%	0.3%	4.2%	3.3%	127.0%	0.9%	8.2%	7.3%
MEAN	2.2%	0.9%	0.3%	4.2%	3.1%	157.5%	-1.1%	7.7%	6.6%
MEDIAN	1.7%	0.3%	0.3%	2.3%	2.0%	134.2%	-0.6%	5.8%	5.4%

*Fiscal 2023 fixed costs based on fiscal 2022 OPEB contribution, pension tread water, implied debt service and other long-term liabilities carrying costs and fiscal 2023 revenue estimated by Moody's because its fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Appendix IV: Total long-term liabilities

Exhibit 25
Fiscal 2023 state other long-term liabilities metrics
Ranking based on other long-term liabilities as a % of own-source revenue

FY 2023 rank	State	Other Long-Term Liabilities ($ thousands)	Other Long-Term Liabilities as a % of Revenue	Other long-term liabilities per capita	Other long-term liabilities as a % of personal income	Other long-term liabilities as a % of state GDP
1	Louisiana	$3,128,846	15.9%	$684	1.2%	1.0%
2	West Virginia	$1,512,796	14.9%	$855	1.6%	1.5%
3	Missouri	$2,811,834	14.9%	$454	0.7%	0.7%
4	Wisconsin	$2,869,850	11.3%	$486	0.7%	0.7%
5	Washington	$3,896,278	9.7%	$499	0.6%	0.5%
6	Florida	$7,138,214	9.6%	$316	0.5%	0.4%
7	Montana	$347,648	7.6%	$307	0.5%	0.5%
8	Oregon	$1,939,240	7.5%	$458	0.7%	0.6%
9	Pennsylvania	$4,442,522	7.3%	$343	0.5%	0.5%
10	California*	$15,859,969	6.9%	$407	0.5%	0.4%
11	Connecticut	$1,812,929	6.9%	$501	0.6%	0.5%
12	New York	$9,706,000	5.9%	$496	0.6%	0.4%
13	Nebraska	$498,214	5.8%	$252	0.4%	0.3%
14	South Carolina	$1,233,836	5.8%	$230	0.4%	0.4%
15	New Hampshire	$256,633	5.3%	$183	0.2%	0.2%
16	Alaska	$562,408	5.1%	$767	1.1%	0.8%
17	Delaware	$444,997	5.0%	$431	0.6%	0.5%
18	Hawaii	$623,375	5.0%	$434	0.7%	0.6%
19	Alabama	$951,283	4.9%	$186	0.3%	0.3%
20	Kentucky	$969,036	4.8%	$214	0.4%	0.3%
21	North Carolina	$1,949,285	4.6%	$180	0.3%	0.2%
22	Massachusetts	$2,523,183	4.5%	$360	0.4%	0.3%
23	Michigan	$1,953,900	4.3%	$195	0.3%	0.3%
24	Wyoming	$199,002	4.2%	$341	0.4%	0.4%
25	Colorado	$852,281	4.2%	$145	0.2%	0.2%
26	New Jersey	$2,376,790	3.9%	$256	0.3%	0.3%
27	Tennessee	$1,157,009	3.9%	$162	0.3%	0.2%
28	Minnesota	$1,342,549	3.5%	$234	0.3%	0.3%
29	Rhode Island	$203,238	3.4%	$185	0.3%	0.3%
30	Vermont	$167,631	3.4%	$259	0.4%	0.4%
31	Arkansas	$430,281	3.4%	$140	0.2%	0.2%
32	South Dakota	$194,244	3.2%	$211	0.3%	0.3%
33	Idaho	$256,372	3.1%	$130	0.2%	0.2%
34	Iowa	$392,038	2.8%	$122	0.2%	0.2%
35	Maine	$180,865	2.5%	$130	0.2%	0.2%
36	Maryland	$859,335	2.5%	$139	0.2%	0.2%
37	Utah	$331,915	2.1%	$97	0.2%	0.1%
38	Kansas	$325,690	2.0%	$111	0.2%	0.1%
39	Oklahoma	$326,746	2.0%	$81	0.1%	0.1%
40	Ohio	$866,249	2.0%	$73	0.1%	0.1%
41	New Mexico	$437,813	1.9%	$207	0.4%	0.3%
42	Arizona	$483,354	1.9%	$65	0.1%	0.1%
43	Texas	$1,866,113	1.7%	$61	0.1%	0.1%
44	Mississippi*	$181,619	1.6%	$62	0.1%	0.1%
45	Illinois*	$1,056,210	1.5%	$84	0.1%	0.1%
46	Nevada*	$120,280	1.1%	$38	0.1%	0.0%
47	Georgia	$402,088	1.1%	$36	0.1%	0.0%
48	Indiana	$263,861	0.9%	$38	0.1%	0.1%
49	Virginia	$347,958	0.9%	$40	0.1%	0.0%
50	North Dakota	$64,677	0.8%	$83	0.1%	0.1%
	TOTAL	$83,118,484	5.0%	$249	0.4%	0.3%
	MEAN	$1,662,370	4.8%	$255	0.4%	0.3%
	MEDIAN	$737,828	4.1%	$201	0.3%	0.3%

Fiscal 2023 figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Exhibit 26
Fiscal 2023 total long-term liabilities as a % of own-source revenue
Ranking based on total long-term liabilities as a % of own-source revenue

FY 2023 rank	State	Net tax-supported debt	Adjusted net pension liability	Adjusted net OPEB liability	Other long-term liabilities	Total long-term liabilities
1	Illinois*	50.7%	317.6%	55.5%	1.5%	425.2%
2	Connecticut	107.8%	252.4%	57.7%	6.9%	424.8%
3	New Jersey	72.9%	191.6%	106.3%	3.9%	374.8%
4	Kentucky	32.0%	216.7%	17.0%	4.8%	270.5%
5	Hawaii	78.9%	105.0%	61.3%	5.0%	250.1%
6	Massachusetts	86.7%	135.4%	20.7%	4.5%	247.4%
7	Maryland	52.8%	117.7%	28.1%	2.5%	201.2%
8	Delaware	52.8%	60.8%	70.8%	5.0%	189.5%
9	Pennsylvania	32.3%	113.5%	26.0%	7.3%	179.1%
10	Vermont	14.3%	114.9%	42.0%	3.4%	174.7%
11	California*	42.6%	88.1%	33.7%	6.9%	171.2%
12	Maine	24.2%	91.9%	46.0%	2.5%	164.7%
13	South Carolina	10.6%	124.0%	11.9%	5.8%	152.3%
14	Rhode Island	56.6%	86.7%	4.7%	3.4%	151.5%
15	Texas	17.7%	95.1%	30.6%	1.7%	145.1%
16	Louisiana	45.1%	61.0%	22.9%	15.9%	144.9%
17	Montana	4.1%	129.4%	0.5%	7.6%	141.7%
18	West Virginia	44.4%	78.0%	3.3%	14.9%	140.6%
19	Colorado	29.3%	96.8%	1.2%	4.2%	131.5%
20	Kansas	24.9%	95.9%	0.2%	2.0%	123.1%
21	Mississippi*	49.6%	66.9%	1.2%	1.6%	119.2%
22	Washington	68.0%	29.9%	7.7%	9.7%	115.4%
23	Missouri	13.0%	69.0%	14.2%	14.9%	111.1%
24	Michigan	22.5%	62.7%	13.8%	4.3%	103.3%
25	Oregon	50.9%	42.8%	-0.1%	7.5%	101.2%
26	Nevada*	19.7%	71.7%	7.4%	1.1%	99.9%
27	Alaska	12.4%	77.2%	3.0%	5.1%	97.7%
28	New Hampshire	22.0%	39.9%	28.0%	5.3%	95.3%
29	New York	41.3%	18.5%	27.6%	5.9%	93.4%
30	Alabama	29.4%	36.7%	6.3%	4.9%	77.3%
31	Ohio	42.1%	29.0%	0.9%	2.0%	74.0%
32	Wisconsin	43.9%	15.0%	1.9%	11.3%	72.2%
33	Georgia	32.3%	34.2%	2.2%	1.1%	69.7%
34	Virginia	43.6%	22.1%	2.6%	0.9%	69.2%
35	Arkansas	7.0%	46.8%	9.3%	3.4%	66.5%
36	Florida	21.6%	23.2%	6.6%	9.6%	61.0%
37	New Mexico	15.7%	38.2%	3.0%	1.9%	58.8%
38	Indiana	8.5%	48.4%	0.3%	0.9%	58.1%
39	Minnesota	23.1%	25.4%	1.6%	3.5%	53.6%
40	North Carolina	16.1%	22.3%	9.3%	4.6%	52.3%
41	Idaho	18.4%	24.0%	-0.7%	3.1%	44.8%
42	Arizona	8.5%	25.9%	1.8%	1.9%	38.1%
43	Wyoming	4.2%	21.9%	7.3%	4.2%	37.5%
44	Nebraska	1.0%	29.0%	0.3%	5.8%	36.1%
45	Utah	14.8%	17.0%	-0.2%	2.1%	33.6%
46	Oklahoma	11.8%	18.3%	0.9%	2.0%	33.0%
47	Tennessee	6.5%	17.1%	3.8%	3.9%	31.3%
48	North Dakota	11.2%	17.4%	0.7%	0.8%	30.1%
49	Iowa	9.4%	15.7%	1.3%	2.8%	29.2%
50	South Dakota	8.4%	14.3%	0.0%	3.2%	25.9%
	TOTAL	37.0%	80.1%	22.7%	5.0%	144.7%
	MEAN	19.2%	26.1%	5.0%	3.7%	54.0%
	MEDIAN	16.1%	25.9%	2.6%	3.5%	61.0%

*Fiscal 2023 debt, ANPL and revenue figures are estimated by Moody's because the state's fiscal 2023 financial statements were not available as of the publication of this report. Other long-term liabilities and OPEB data are based on fiscal 2022 state audited reporting.
Sources: State audited financial statements and unaudited draft statements (for Arizona and Nevada) and Moody's Ratings

Endnotes

1 Fiscal 2023 total and median leverage and fixed costs data throughout this report is preliminary, because some states have not published fiscal 2023 audited financial statements. For California, Illinois and Mississippi, fiscal 2023 debt, ANPL and revenue figures are estimated by Moody's based on available unaudited disclosure because the state's fiscal 2023 financial statements were not available as of the publication of this report; other long-term liabilities, OPEB and pension tread water data are based on fiscal 2022 state audited reporting. For Arizona and Nevada, fiscal 2023 data are based on draft 2023 financial statements.

2 The estimate for aggregate state ANPL in fiscal 2024 includes fiscal 2023 ANPL estimates for California, Illinois, Mississippi and Nevada as its 2023 audited financial statements were not available as of the publication of this report.

3 The Arizona State Retirement System's annual comprehensive financial report (ACFR) does not provide a breakdown of all plan members. To approximate the percentage of plan members related to school districts, we used the share of school district employees from the top-10 participating employers, excluding the state.

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APPENDIX C

2024 Fitch Ratings
Credit Report

State of Vermont

The State of Vermont's 'AA+' Long-Term Issuer Default Rating (IDR) and GO bond rating reflect a track record of disciplined financial management and cautious revenue forecasting that, when coupled with the state's healthy fiscal reserves and ample expenditure-cutting capacity, position Vermont well to absorb budgetary challenges associated with future economic downturns. Vermont's 'AA+' rating also reflects a moderate long-term liability (LTL) burden consisting of direct debt and net pension liabilities (NPLs) supported by the state's economic resource base. Fitch expects Vermont's liability burden to remain stable for the near term.

The 'AA–' rating on the Vermont Municipal Bond Bank's (VMBB) 1988 General Resolution bonds reflects a direct linkage to the state's IDR, as the rating is based on the credit enhancement provided to bonds issued by the VMBB from Vermont's moral obligation pledge. The state has pledged to replenish any draws made on the VMBB's reserve fund within one fiscal year. The two-notch rating distinction between the IDR and the VMBB rating factors in the broad state purposes served by VMBB financings, as well as the state's direct involvement with the bank as evidenced by the makeup of VMBB's board of directors, which includes the state treasurer and several gubernatorial appointees, along with a related state aid intercept mechanism.

Key Rating Drivers

Revenue Framework — 'aa'

Fitch anticipates Vermont's state-source revenues, including statewide income and consumption taxes, will grow at a modest pace in line with U.S. inflation, consistent with our long-term expectations for Vermont's economy. The state has complete legal control over its revenues, including the ability to broaden the tax base, levy new taxes and raise or modify tax rates.

Expenditure Framework — 'aaa'

The state maintains ample expenditure flexibility with a low burden of fixed carrying costs for long-term liabilities and the broad expense-cutting ability common to most U.S. states. Vermont has been particularly focused on addressing healthcare spending, including Medicaid, which is a key expense driver. Fitch expects Vermont's major spending items to grow in line with, or slightly faster than, the state's natural pace of revenue expansion.

Long-Term Liability Burden — 'aa'

Vermont's long-term liability burden is above the U.S. state median but remains moderate compared to the state's economic resource base. Vermont's elected leaders maintain close oversight and management of debt issuance and have engaged in multiple efforts to improve the sustainability of retirement liabilities over time.

Operating Performance — 'aaa'

Fitch anticipates Vermont will utilize its broad gap-closing capacity to manage through economic downturns while maintaining a high level of fundamental financial flexibility. The state took steps during the pre-pandemic expansion to improve fiscal flexibility and has added to its statutory reserves and governmentwide cash since 2020. In Fitch's view, Vermont possesses ample fiscal reserves.

Rating Sensitivities

Factors that could, individually or collectively, lead to negative rating action/downgrade

- Expansion of the long-term liability burden to levels approaching, or above, 20% of personal income would pressure the rating.

- A reduction in gap-closing capacity due to weaker budgetary discipline or stagnant revenue growth leading to recurring structural imbalances and draws on fiscal reserves down to 5% of revenue statutory limits.

Factors that could, individually or collectively, lead to positive rating action/upgrade

- Stronger revenue growth prospects spurred by greater economic diversification and sustained improvements in the state's demographic profile and population growth could support a higher revenue framework assessment and potentially an upgrade of the rating.

- A sustained reduction in the long-term liability burden metric to below 10% of statewide personal income would result in a higher LTL assessment and could lead to a rating upgrade.

Economic Resource Base

Vermont's small and modestly growing economy has above average reliance on the health and education sectors, as well as manufacturing and tourism, and remains exposed to the fortunes of several large employers. The state's population is older and significantly more rural than those of most other states with 65% of residents residing in small towns and/or rural areas. Population growth prior to the pandemic was limited.

As with other New England states, high educational attainment levels provide the potential for future economic gains, but Vermont has not yet realized that potential. Gradual growth in knowledge-based industries, including high tech, aerospace and biomedical sciences, could allow for eventual acceleration in the state's growth rate.

IDR Current Developments

Vermont Economic Update

Vermont's nonfarm payrolls contracted by 21% between February and April 2020, a more severe decline than the nation's 15% fall in employment during that period. Vermont's payroll recovery has been slower than the national average with March 2024 employment still trailing its pre-pandemic level by 1%, compared to 3.8% national growth in payroll employment since April 2020. This makes Vermont's payroll recovery the fourth weakest among U.S. states, after Hawaii, Louisiana and Maryland. Vermont's spring 2024 household survey of employed residents suggests a jobs

recovery that places state employment 1% above February 2020 levels. This in turn suggests that federal data may be slightly undercounting Vermont's payroll growth.

A decline in labor force participation was a factor in Vermont's slow employment recovery from the pandemic, reflecting its smaller population and older labor force. Vermont's labor force was declining prior to 2020 and shrank further during the pandemic. Conversely, its population realized short-term benefits due to pandemic in-migration. Vermont added 6,000 new residents between 2020 and 2022, as per the U.S. Census Bureau. State officials attest that many newcomers originated as remote workers yet many have opted to remain in the state. Vermont's labor force recently exceeded pre-pandemic levels (1Q24).

Vermont's seasonally adjusted unemployment rate was 2.2% for March 2024, well below the nation's 3.8% rate. Fitch also considers the employment-to-population ratio (EPOP) when evaluating state labor markets, as EPOP helps Fitch to gauge what proportion of a labor force is actively employed. Vermont's EPOP indicates an improved labor market. Vermont's EPOP of 64% in March 2024 was well above the 60.3% national level but remains below the 64.6% EPOP reported for February 2020, most likely resulting from labor force departures by older workers.

Vermont's Revenue Performance Has Remained Solidly Above Forecast

Vermont's state-source revenues have consistently outperformed forecasts since fiscal 2021. Vermont recorded a $237 million surplus across its three major operating funds in fiscal 2022. Fiscal 2023 revenues then grew by about $251 million over the initial forecast, expanding to $2.22 billion, or by 1.6% yoy. Collections beat forecasts across all three major operating funds with general fund collections rising $226 million (14.3%) above forecast. Education fund revenues rose 7.4% yoy with property taxes netted out, and transportation fund revenues expanded 2.5% yoy net of federal reimbursements. Vermont achieved a $438 million surplus across all major funds set against $4.3 billion in spending in fiscal 2023, suggesting a strong underlying economy despite a weak labor market recovery.

Fiscal 2024 collections YTD have also outpaced initial forecasts by significant margins. The fiscal 2024 budget assumed a $158 million (7.2%) decline in general fund revenues from the prior year, to just over $2.0 billion, from $2.2 billion in fiscal 2023, with smaller declines forecast for the other two main funds. However, for fiscal 2024 YTD, collections through March 31 were running at $11 million, or 0.7%, above prior-year levels, indicating an 8%, or approximately $170 million, positive swing in collections compared to the initial budget. Education fund revenues are running about $28 million (4.4%) ahead of prior-year actuals, while transportation fund revenues are tracking closely to last years. Most major revenues are performing above forecast, suggesting an operating surplus for fiscal 2024.

Fiscal Reserves Are at Statutory Maximums; Liquidity is Exceptional

The state has not drawn on its operating reserves to support operations for several years. Each major operating fund maintains its own budget stabilization reserve (BSR) sized at 5% of prior-year appropriations. For the general fund, the BSR is projected to total $104.9 million at June 30, 2024. The education and transportation funds' BSRs will total another $61.2 million. A separate general fund "rainy day" reserve will continue to hold $80.4 million (or 3.7% of spending) as of the same date.

The state keeps substantial resources on deposit in its general and education funds that include $35 million of unallocated moneys in the education fund and $97 million (4.5% of spending) in the human services caseload reserve as a buffer against higher Medicaid costs. Total general fund reserves are projected to equal $311 million (14.3% of spending) at fiscal YE25. Governmentwide cash approximated $2.0 billion as of Jan. 1, 2024, compared to an all-funds budget of $8.6 billion, or more than eight times its pre-pandemic level; cash averaged around $300 million annually in the 2010–2019 decade.

Fiscal 2024 Budget Boosted Social and Nonrecurring Infrastructure Spending

Vermont's fiscal 2024 budget was built around a projected sharp revenue deceleration, with general fund revenues forecast to decline by 7.2% yoy (later revised to a 5.5% decline) due to the exhaustion of federal stimulus, higher inflation, a return of consumer spending to pre-pandemic patterns and continued phasing in of state tax cuts adopted in 2022. As a result, the fiscal 2024 all-funds budget represented a 2.3% drop in spending compared to the prior year, inclusive of supplemental spending. The spending decline reflected the depletion of federal stimulus moneys after the inclusion of $565 million in American Rescue Plan Act (ARPA) moneys in the fiscal 2023 budget.

The general fund portion of the fiscal 2024 budget boosted spending by $279 million (or 13.2%) yoy, mainly due to $186 million of accumulated surpluses used to fund nonrecurring spending, largely on capital needs. The general fund budget included $78 million of new recurring spending to boost affordable housing and childcare. Housing spending incorporated a major residential energy efficiency initiative.

Fiscal 2025 Adopted Budget Reverts to Pre-Pandemic Growth Patterns; Less One-Time Spending

Vermont's adopted fiscal 2025 budget assumes essentially stagnant revenues yoy with minimal (less than 1%) growth in recurring revenue and a $340 million (12.9%) decline in total general fund sources. The latter number factors in the prior use of $337 million of carryover funds expended in fiscal 2024 that are not available for fiscal 2025. Base appropriations will rise by 3% yoy. Nonrecurring spending in the fiscal 2025 budget is much lower than in fiscal 2024, totaling $74 million, compared to $281 million the year prior, following the state's spending down of prior-year surpluses. Modest growth in the 2% range is forecast for the transportation fund. Base appropriations are expanding by similar amounts. The governor has not yet signed the education fund budget and may veto the bill.

With less one-time funding available for nonrecurring projects in fiscal 2025, the state will use its available resources to provide enhanced grant funding primarily for essential housing needs ($40 million of one-time spending) and pay increases for state employees ($30.6 million). The all-funds budget, which totals $8.6 billion, also includes state matches for Federal Emergency Management Agency (FEMA) grants to reimburse damages sustained by Vermont during the July 2023 flood events, along with matching funds for federal infrastructure and clean energy grants.

The fiscal 2025 budget includes full actuarial contributions for state pension systems, consistent with prior years. Fiscal 2025 actuarial contributions will rise by 4.5% from prior-year levels due to weak investment performance in the plans' 2022 fiscal years, which reflected market corrections that occurred in the wake of the start of the war in Ukraine. Fitch expects contribution levels to fall in fiscal 2026 as better 2023 returns are factored into plan funded levels. Fitch anticipates future contribution increases will be in line with to slightly above annual budgetary growth.

State non-property tax revenues allocated to the education fund are forecast to expand by 5% in fiscal 2025. The Vermont General Assembly's education funding bill (H. 887) would raise statewide property tax rates by 12.5% to fund education spending in fiscal 2025 and establish a commission to discuss controlling future education costs. The governor has indicated he will veto the bill in its current form, as he believes the size of the property tax increase is inadvisable and recommends a lower increase in education spending, aligned more closely with the consensus forecast. The general assembly will return to session on June 17 to address the education bill and other legislation.

Credit Profile

Revenue Framework

Revenues used for state operations consist primarily of individual and corporate income taxes, sales and use taxes and a meals and rooms tax meant to shift a portion of the tax burden onto visitors. Vermont levies a statewide property tax to fund K–12 education, a relatively unusual feature for a state government, which accounts for the largest share of state revenues. Since Vermont essentially passes property taxes on to local school districts, Fitch discounts the importance of this revenue stream in its revenue framework assessment.

Fitch anticipates slow growth in state-source revenues, in line with our medium-term expectations for U.S. inflation due to the state's modest near-term economic and population growth prospects. Tax revenue growth, adjusted for policy changes, has lagged the pace of U.S. GDP on a real basis over the past decade while exceeding inflation. Recent above-inflation revenue growth is partly due to the effects of federal stimulus measures on state tax collections, and partly the result of policy-driven growth in the statewide property tax, which is largely a passthrough to local school districts. Fitch anticipates that Vermont's pace of revenue growth will remain in line with U.S. inflation over the longer term, reflecting constraints on its economy related to a stagnant state labor force and aging population.

Vermont has no legal limitations on its ability to raise revenues through base broadenings, rate increases or the assessment of new taxes or fees.

Vermont's population growth trajectory will partly determine its pace of revenue expansion in the coming decade. The state's population grew by 3.4% between 2010 and 2022, compared to the nation's 7.9% growth rate for the same period. This was an improvement from Vermont's growth rate in the decade to 2010, which was 2.8%. Faster population growth spurred by greater in-migration or other causes would likely improve revenue growth prospects. Statistical evidence of in-migration since 2020, if sustained, could support such a trend.

The state has identified Vermont's relatively low housing affordability and lack of housing density, particularly in its urban areas, as an impediment to faster economic growth. To increase the stock of new and renovated housing, Vermont amended Act 250, its housing regulatory framework, during its 2023 legislative session. The amendments make it easier for developers to renovate older homes to convert them into multifamily housing, remove restrictions on the heights of new buildings, reform approval processes and ease the requirements for constructing apartments and other multifamily housing options in the state.

Expenditure Framework

Education is the largest expenditure area backed by state-source revenues, driven by a unique funding system under which the state covers the full operating costs for locally administered K–12 schools primarily by way of a local property tax collected by the state. The statewide sales and use tax also provides a portion of school funding. Health and human services, mainly consisting of Medicaid, is the second-largest expenditure area.

Fitch expects Vermont's pace of spending growth, absent policy actions, to be slightly ahead of revenue growth, driven primarily by Medicaid spending. This will require the state to make frequent budgetary adjustments to ensure ongoing structural balance.

The fiscal challenge of Medicaid is common to all U.S. states, and the nature of the program, as well as federal government rules, limits the states' options in managing the pace of spending growth. Federal action to revise Medicaid's programmatic and financial structure does not appear to be a near-term priority of the current federal administration or congressional leadership. As with all federal initiatives, Medicaid remains subject to regulatory changes that could affect various aspects of the program.

Medicaid 'All-Payer' Model

Vermont has addressed rising healthcare costs by shifting its Medicaid program toward outcome-based care under an "all-payer" system, in contrast to the traditional fee-for-service model, starting in 2017. Under the terms of agreements with the federal government allowing for the transition, Vermont shifted its Medicare and Medicaid programs to an outcome-based accountable care organization model with the goal of gaining participation from private insurers and providers.

Vermont's Medicaid spending growth slowed considerably between 2017 and 2019 (pre-pandemic). However, Medicaid enrollment also declined sharply during this period (by 21%), which likewise translated to deceleration in Medicaid spending. During the pandemic, the pace of Medicaid spending increased moderately. The state's Agency for Health Services noted that pandemic-driven enrollment growth was partially offset by a decline in utilization resulting from the pandemic's limiting effect on public interactions.

Vermont's Medicaid spending (combined state and federal) declined during the first year of the pandemic before resuming upward growth. Fiscal 2022 spending grew by 11%, as the largest share of pandemic-related spending (supported by increased federal transfers) occurred during that time. Fiscal 2023 expenditures then rose by 9.3% yoy. The state budgeted for 4.2% Medicaid spending growth in fiscal 2024. State officials expect fiscal 2025 Medicaid spending to decline slightly (–1%), primarily due to lower enrollments.

Vermont's fixed cost burden is low (6.4% of governmental expenditures in fiscal 2023). Fitch anticipates fixed costs will remain stable given the state's commitment since the mid-2010s to make contributions above actuarial levels to its pension systems. The state has regularly contributed amounts in excess of the actuarially determined contribution (ADC) in an effort to manage and reduce NPLs. Overall, the state retains ample flexibility to adjust its main spending items given its control over program design and service delivery.

State Policies Trigger Annual Pension Contributions Over the ADC

Policy actions in recent years attest to active state management of its pensions' funded status. Over the long term, this could have beneficial effects on funding progress assuming the plans achieve their rate of return assumptions. The ADCs for both main plans, the Vermont State Employer Retirement System (VSERS) and Vermont State Teachers Retirement System (VSTRS), have been based on closed amortization periods ending in 2038, with actual contributions consistently higher than the ADC and targeting a percentage increase over the prior year.

Updated experience studies and lowering plan discount rates to 7.0%, from 7.5% as of the 2020 valuation combined, increased the ADCs by 44% in fiscal 2022, with actual contributions remaining ahead of this level. From Fitch's perspective, the $100 million increase was not a material concern in the context of the state's fiscal 2022 governmental funds expenditures of $7.8 billion.

In 2022, Vermont achieved a consensus on legal changes necessary to maintain annual state contributions above the ADC, raise employee contributions and narrow cost-of-living assumptions in an effort to reduce projected growth in the liability. Act 114 of 2022 included a one-time extra state contribution of $200 million, raised employee contributions, reduced the COLA formula ceiling for certain members and increased end-of-year surplus provisions to use 50% of any general fund surplus to make supplemental contributions equally to VSERS and VSTRS (after statutorily required funding of the state's budget reserves).

Long-Term Liability Burden

On a combined basis, Vermont's debt and NPLs as of Fitch's "2023 State Liability Report (Post-Pandemic Asset Surge Lowers Pension Burdens)," dated Nov. 15, 2023, totaled 11% of 2022 personal income compared with the U.S. states median of 4.0%. Based on updated information provided in the state's fiscal 2023 audited financial statements, this number remains consistent as a percentage of 2022 personal income. The ratio includes Vermont Housing Finance Agency (VHFA) bonds paid from the state's real property transfer tax.

Debt levels remain modest at approximately 1.7% of personal income and are closely monitored through the state's Capital Debt Affordability Advisory Committee (CDAAC). The governor and the Vermont Legislature consistently stay within CDAAC's recommendations for annual bond issuance. In 2022, Vermont used $20 million of its fiscal 2022 surplus to redeem the state's remaining outstanding transportation infrastructure bonds (TIBs).

Vermont's NPLs are more significant than its bonded debt, with Fitch-adjusted NPLs representing 9.5% of personal income. Pension liability calculations include essentially 100% of the liability in VSERS and VSTRS, for which the state makes full actuarial contributions.

State Addressing OPEB Liabilities

Vermont's other post-employment benefits (OPEB) liabilities have historically been quite significant, with the reported net OPEB liability equaling 7.2% of the state's personal income as recently as fiscal 2020. Prior to the passage of Act 114 of 2022, the state had taken modest steps toward prefunding OPEB liabilities and made some progress in reducing them through collective bargaining actions. Positively, Act 114 included provisions to commence the actuarial prefunding of Vermont's OPEB, which began in fiscal 2023.

The state now contributes the full ADC for its OPEB. Assets held in the OPEB accounts are invested using the same asset allocation and discount rate assumptions (7%) as for VSERS and VSTRS. The adoption of an identical amortization schedule as the pension plans and a $25 million rise in the VSTRS plan's cash position reduced the net OPEB liability to 3.9% of personal income by fiscal YE23.

Operating Performance

Vermont's superior gap-closing capacity derives from institutional and statutory mechanisms and a demonstrated ability to manage through economic downturns. Official revenue forecasts are updated at a minimum of twice a year through the E-Board, a consensus process involving the administration and legislature. In 2020, Vermont implemented more frequent revenue forecasts.

The governor can implement a spending reduction plan unilaterally if a revenue forecast reduces revenues by less than 1% from the prior forecast, or with approval of the legislature's Joint Fiscal Committee (a bipartisan and bicameral committee of legislative leaders) in the event of larger revenue shortfalls. The state has been able to engage key stakeholders, including labor, to implement expenditure reductions during economic downturns. The state has typically focused on spending cuts, such as negotiated salary or programmatic cuts, rather than on revenue increases.

Vermont's multiple reserves also support robust resilience. These include BSRs funded at 5% of prior-year appropriations in each of its three primary operating funds and separate, fund-specific reserves or unreserved balances. The various general fund reserves totaled $285 million at fiscal YE23, equaling 13.5% of budgeted fiscal 2023 general fund appropriations, net of the statewide property tax. State officials anticipate combined reserves will remain at similar levels as of fiscal YE24 (June 30, 2024).

Prudent Management Prepares State for Downturns

The state's budgeting practices tend to be conservative in forecasting and proactive through the fiscal year, with most fiscal years ending with at least a modest general fund surplus despite the lack of a statutory or constitutional balanced budget requirement. In the years prior to the pandemic, the state took steps to build in added fiscal resilience by creating additional reserves, including the general fund balance reserve, a human services caseload reserve (primarily for Medicaid) and the 27/53 reserve (established to address extra costs in years with a 27th biweekly payroll or a 53rd week of Medicaid disbursements).

Fitch regards Vermont's establishment of new funds focused on pay-as-you-go capital and IT upgrades, funded with accumulated surpluses, as a positive development. Base funding of $80 million provided in the state's fiscal 2024 budget will reduce long-term spending pressure in capital and IT by securing an immediate source of funds to address long-term capital needs.

Peer Analysis

Vermont's peer group includes other U.S. states in the 10th decile of states as ranked by GSP (gross state product). These include Maine (AA/Positive), Montana (AA+/Stable), Rhode Island (AA/Positive) and South Dakota (AAA/Stable). Vermont has the lowest 10-year revenue growth CAGR in this peer group and the slowest revenue growth prospects save for Rhode Island. Its carrying costs are firmly in the middle of the group, although its LTL burden is the highest at roughly 11% of personal income, slightly greater than Rhode Island's LTL burden of approximately 9.6% of personal income. Vermont's financial operations and budgetary performance have consistently been the strongest in this group with the exception of South Dakota.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, due to either their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs into the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Vermont, State of (VT)
Scenario Analysis
Ver 42

State Revenues and Expenditures in an Unaddressed Stress ($000)

Net Change in Fund Balance as % of State Revenues in an Unaddressed Stress ($000)
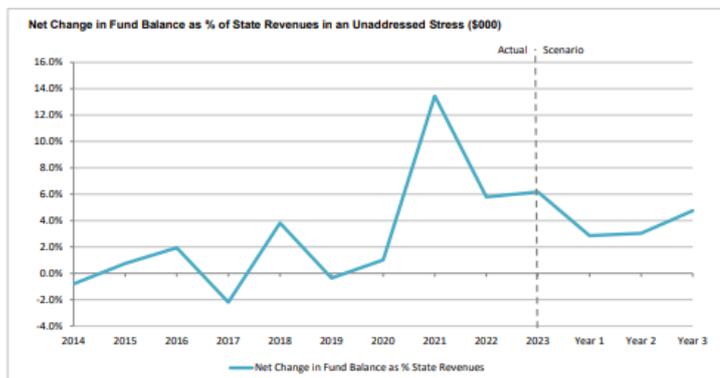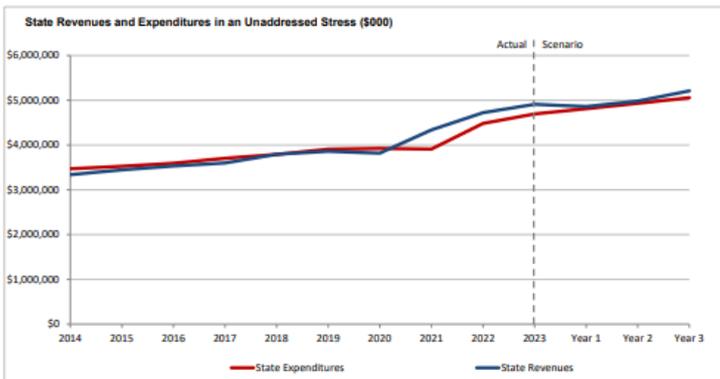
Analyst Interpretation of Scenario Results

The Fitch Analytical Stress Test (FAST) scenario analysis tool relates historical tax revenue volatility to GDP to support the assessment of operating performance under Fitch's criteria. FAST is not a forecast, but represents Fitch's estimate of possible revenue behavior in a downturn based on historical revenue performance. Hence, actual revenue declines will vary from FAST results. FAST does provide a relative sense of the risk exposure of a particular state compared to other states.

Vermont has robust financial resilience that should allow it to absorb the budgetary effects of ongoing economic uncertainty. Fitch's standard FAST scenario of a 1% decline in U.S. GDP in year 1 results in a 1% decline in Vermont's revenue compared to an approximately 3% median decline for U.S. states. Vermont appears to be less vulnerable to cyclical revenue declines tied to economic downturns than most other states.

Scenario Parameters:											Year 1	Year 2	Year 3
GDP Assumption (% Change)											(1.0%)	0.5%	2.0%
Expenditure Assumption (% Change)											2.5%	2.5%	2.5%
Revenue Output (% Change)				Minimum Y1 Stress:	-1%		Case Used:	**Moderate**			(1.0%)	2.5%	4.6%

Revenues, Expenditures, and Net Change in Fund Balance	Actuals										Scenario Output		
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Year 1	Year 2	Year 3
Expenditures													
Total Expenditures	5,408,365	5,611,911	5,614,127	5,695,460	5,787,926	5,912,667	6,198,921	7,514,404	7,825,558	8,165,321	8,369,454	8,578,690	8,793,157
% Change in Total Expenditures	4.9%	3.8%	0.0%	1.4%	1.6%	2.2%	4.8%	21.2%	4.1%	4.3%	2.5%	2.5%	2.5%
State Expenditures	3,470,157	3,524,751	3,592,491	3,703,795	3,791,118	3,906,257	3,925,660	3,909,419	4,482,425	4,694,875	4,812,247	4,932,553	5,055,867
% Change in State Expenditures	5.4%	1.6%	1.9%	3.1%	2.4%	3.0%	0.5%	(0.4%)	14.7%	4.7%	2.5%	2.5%	2.5%
Revenues													
Total Revenues	5,276,849	5,532,771	5,554,187	5,589,659	5,790,446	5,868,514	6,091,766	7,942,720	8,065,472	8,379,963	8,417,629	8,627,197	8,946,567
% Change in Total Revenues	3.7%	4.8%	0.4%	0.6%	3.6%	1.3%	3.8%	30.4%	1.5%	3.9%	0.4%	2.5%	3.7%
Federal Revenues	1,938,208	2,087,160	2,021,636	1,991,665	1,996,808	2,006,409	2,273,261	3,604,985	3,343,133	3,470,446	3,557,207	3,646,137	3,737,290
% Change in Federal Revenues	3.9%	7.7%	(3.1%)	(1.5%)	0.3%	0.5%	13.3%	58.6%	(7.3%)	3.8%	2.5%	2.5%	2.5%
State Revenues	3,338,641	3,445,611	3,532,550	3,597,994	3,793,638	3,862,104	3,818,505	4,337,736	4,722,338	4,909,517	4,860,422	4,981,060	5,209,276
% Change in State Revenues	3.6%	3.2%	2.5%	1.9%	5.4%	1.8%	(1.1%)	13.6%	8.9%	4.0%	(1.0%)	2.5%	4.6%
Excess of Revenues Over Expenditures	(131,516)	(79,140)	(59,941)	(105,801)	2,519	(44,153)	(107,154)	428,316	239,913	214,642	48,175	48,506	153,409
Total Other Financing Sources	104,926	104,723	128,397	26,941	142,304	30,416	145,866	154,995	33,450	88,076	90,561	102,589	93,934
Net Change in Fund Balance	(26,590)	25,583	68,456	(78,859)	144,823	(13,737)	38,712	583,311	273,363	302,718	138,735	151,096	247,343
% Total Expenditures	(0.5%)	0.5%	1.2%	(1.4%)	2.5%	(0.2%)	0.6%	7.8%	3.5%	3.7%	1.7%	1.8%	2.8%
% State Expenditures	(0.8%)	0.7%	1.9%	(2.1%)	3.8%	(0.4%)	1.0%	14.9%	6.1%	6.4%	2.9%	3.1%	4.9%
% Total Revenues	(0.5%)	0.5%	1.2%	(1.4%)	2.5%	(0.2%)	0.6%	7.3%	3.4%	3.6%	1.6%	1.8%	2.8%
% State Revenues	(0.8%)	0.7%	1.9%	(2.2%)	3.8%	(0.4%)	1.0%	13.4%	5.8%	6.2%	2.9%	3.0%	4.7%

Notes: Scenario analysis represents an unaddressed stress on issuer finances. Fitch's scenario analysis assumes the GDP and expenditure growth sequence shown in the 'Scenario Parameters' section. For further details, please see Fitch's US Tax-Supported Rating Criteria.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

APPENDIX D

2025 Moody's Investors Service Credit Report

MOODY'S RATINGS

CREDIT OPINION
1 August 2025

✓ Send Your Feedback

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Vermont (State of)
Update to credit analysis

Summary

The State of Vermont's (Aa1 stable) strong credit quality remains supported by stable and healthy finances, and strong governance. Despite economic expansion that lags most states, Vermont's revenue continues to grow and the state maintains solid fund balances and liquidity. The state's prudent fiscal management has contributed to rising reserves and the state has implemented legislation in recent years aimed at reducing long-term pension and other post employment benefits liabilities.

Vermont has the smallest US state economy, as measured by gross domestic product, and the second smallest population. Growth in employment and GDP has lagged that of the nation for several years, and the state's slowly growing population is likely a contributing factor. Population growth accelerated a bit over the past several years and Vermont's 10-year change in population is stronger than many of its peers. Vermont has one of the highest median ages in the US and slow growth in prime working age residents may remain a drag on long-term economic expansion. That said, Vermont maintains other healthy economic indicators, such as high educational attainment and low unemployment.

Vermont's leverage ratio exceeds state medians, and the state's long-term liabilities consist mostly of unfunded pension and OPEB liabilities. As a US state, Vermont has broad flexibility to adjust its finances in response to operating challenges and, in recent years, enacted pension and OPEB legislation that should have ongoing positive impacts on those long-term liabilities.

Exhibit 1
Overview of Vermont's debt and bond ratings

Type of debt	Principal outstanding ($m)	Moody's rating
General obligation	$550	Aa1
Special tax - property transfer tax	$26	Aa2
Appropriation - mental health services	$12	A1
Other	$120	N/A

Principal estimated as of June 30, 2025.
Source: Vermont's audited financial statements and Moody's Ratings

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

Credit challenges

»   The state's economic growth lags that of the US and many state peers, and an aging population may be a drag on future growth

»   Relative to state revenue, 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. The stable outlook also applies to the Vermont State Aid Intercept Program.

Factors that could lead to an upgrade

»   Economic growth that more closely tracks or exceeds that of the nation

»   Moderated leverage, especially unfunded pension and retiree healthcare liabilities, relative to state revenue

Factors that could lead to a downgrade

»   Increase in leverage ratio to above 300% of revenue, a significant slowdown in economic or revenue growth, or a departure from strong fiscal management practices

»   Specific to appropriation rating – state actions that reduce the likelihood and predictability of payments to mental health providers

»   Specific to property transfer tax rating – substantially narrowed coverage of debt service by pledged property transfer tax revenue

Key indicators

Exhibit 2

	2020	2021	2022	2023	2024	State Medians (2024)
Economy						
Nominal GDP ($billions)	34.4	37.4	41.0	43.5	45.7	331.0
Real GDP, annual growth	-3.3%	4.6%	3.1%	1.4%	2.3%	2.4%
RPP-adjusted per capita income as % of US	96.3%	95.6%	95.2%	99.6%	99.6%	97.8%
Nonfarm employment, annual growth	-9.3%	2.7%	3.3%	1.9%	0.5%	1.2%
Financial performance						
Available balance as % of own-source revenue	14.3%	24.5%	29.3%	31.8%	28.5%	42.3%
Net unrestricted cash as % of own-source revenue	48.1%	38.2%	57.2%	57.0%	50.3%	71.6%
Leverage						
Total long-term liabilities as % of own-source revenue	227.5%	251.0%	225.2%	174.7%	161.6%	90.9%
Adjusted fixed costs as % of own-source revenue	8.2%	10.4%	7.9%	9.0%	8.7%	5.3%

Source: Audited financial statements, Moody's Ratings, US Bureau of Economic Analysis and US Bureau of Labor Statistic

Profile

The State of Vermont is located in the northeast US. Its population of just under 650,000 is the second lowest in the country. It has the smallest economy among US states, as measured by a gross domestic product of approximately $47 billion as of the first quarter of 2025.

Detailed credit considerations

Economy

Vermont's economy has long grown at a slower pace than the US (see Exhibits 3 & 4), largely due to its aging and slowly growing population, and this trend is likely to continue. Vermont is one of a few states whose nonfarm employment remains below its pre-pandemic peak: the state's employment stands at 99% of this level, compared to 106% nationwide. Vermont's population growth rate over the last ten years falls within the bottom half of states, though above several peers (see Exhibit 5). Though the state is losing prime working age residents, it similarly is faring better than several states on this measure (see Exhibit 6). Vermont stands out, however, as having the third highest median age among states: 44.

Exhibit 3
Annual real GDP relative to 2010
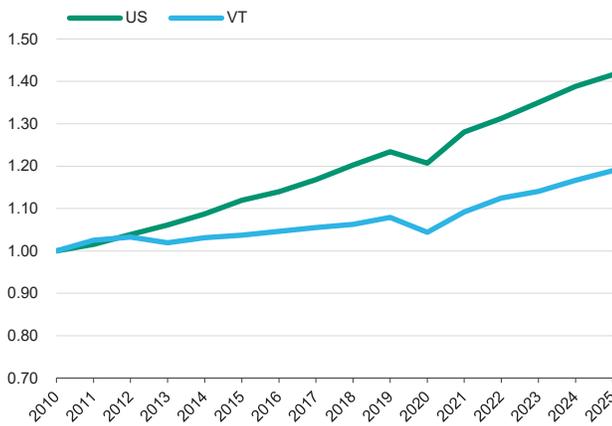
2025 projected.
Source: US Bureau of Economic Analysis

Exhibit 4
Annual nonfarm employment relative to 2010
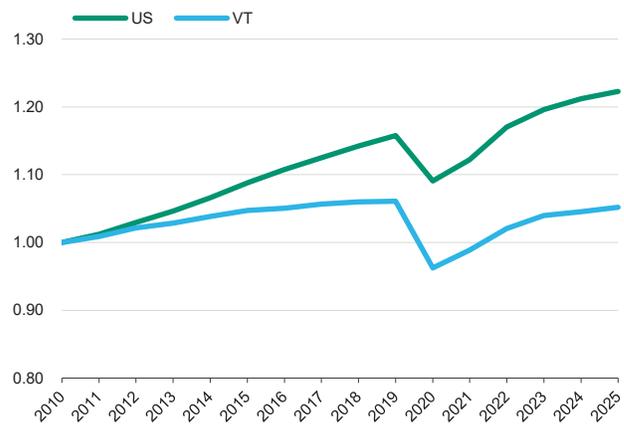
2025 projected.
Source: US Bureau of Labor Statistics

Exhibit 5
10-year population growth across US states
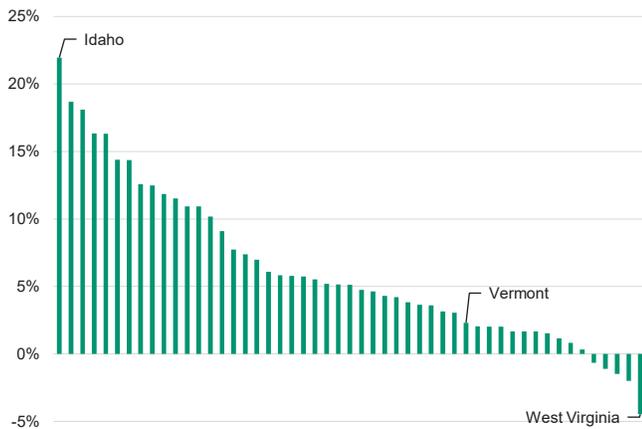
Source: US Census Bureau

Exhibit 6
10-year working age population growth across US states
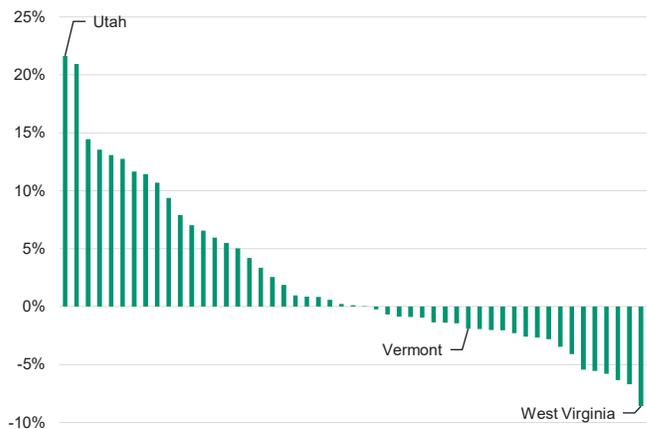
Source: US Census Bureau

Bolstered by its natural beauty and outdoor recreation, Vermont ranks third in the nation on the share of GDP generated by tourism. It is second only to Hawaii on economic activity linked specifically to outdoor recreation. An indicator of health in the state's tourism industry is its collection of meals and room taxes, which have grown by an average of nearly 5% per year over the past decade.

Vermont's primary physical climate risk is intense rainfall and flooding. The state, in partnership with the federal government, demonstrated its capacity to manage such events effectively, as seen in the swift response to significant flood damages in July 2023.

Financial performance

Despite below average economic growth, state revenue performance remains solid and we expect state finances to remain healthy. Available fund balance, on a GAAP basis, steadily rose through fiscal 2023 (see Exhibit 2). GAAP-basis fund balance declined a bit in fiscal 2024, though this was largely driven by the use of excess reserves to fund capital projects. The portion of fund balance made up of statutory budget reserves increased in fiscal 2024 and the state reports further improvement in fiscal 2025 (see Exhibit 7).

The state holds statutory reserves in each of its three main operating funds - general, transportation and education funds. The adopted fiscal 2026 budget assumes further growth in this aggregate reserve balance, which also accounts for the creation of a new $60 million contingency reserve to offset potential losses in federal revenue.

Vermont relies most heavily on personal income and sales taxes (see Exhibit 8). The state 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.

Exhibit 7
Trend in budget reserves, by primary state operating fund
fiscal year ending in June 30
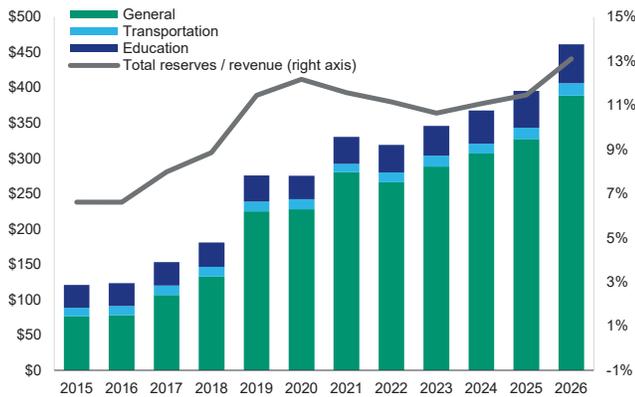
2025 estimated; 2026 budgeted.
Sources: Vermont's audited financial statements and budget documents, and Moody's Ratings

Exhibit 8
Composition of state revenue across primary operating funds
fiscal 2025 estimate
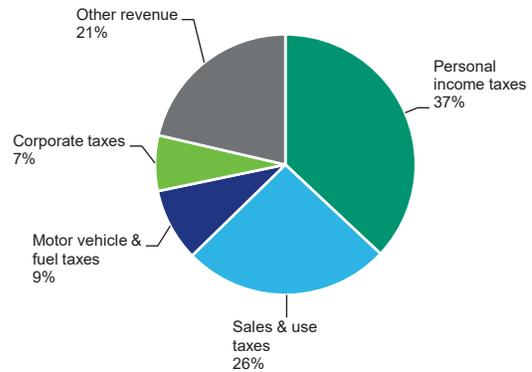
Excludes education property taxes.
Sources: Vermont's monthly revenue reports and Moody's Ratings

Liquidity

Across government activities, Vermont's cash balances also remain healthy (see Exhibit 2 above). Monthly cash reports released by the state indicate further improvement in overall liquidity in fiscal 2025.

Leverage

Vermont's debt burden will remain moderate, but the state will continue to carry a heavy post-employment liability burden. Vermont's debt primarily consists of general obligation bonds (see Exhibit 9). Vermont's post-employment liability burden, measured by the combination of our adjusted net pension liability and adjusted net OPEB liability, is the principal component of its leverage (see Exhibit 10). Vermont's pension and OPEB burdens incorporate all liabilities associated with statewide school districts because state financial statements account for all primary and secondary education financial activities. Though Vermont's total long-term liability burden exceeds the state median, it remains far below that of the most highly leveraged states.

Exhibit 9
Composition of Vermont's debt
fiscal 2024
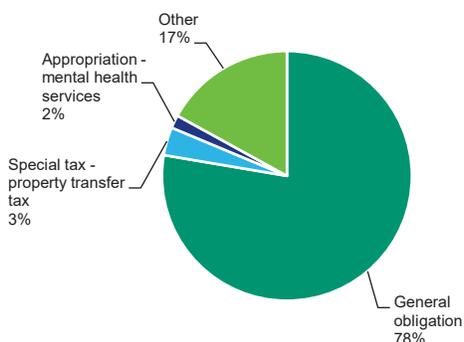
Sources: Vermont's audited financial statements and Moody's Ratings

Exhibit 10
Composition of Vermont's total long-term liabilities
fiscal 2024
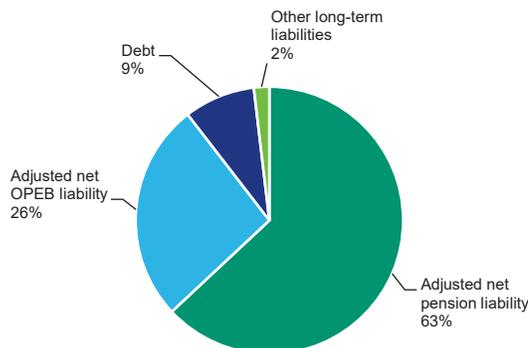
Sources: Vermont's audited financial statements and Moody's Ratings

The state backs the obligations of the Vermont Bond Bank (VBB; Aa2 stable) with its moral obligation pledge to replenish a debt service reserve fund, subject to appropriation, if there is a draw on the reserve that reduces its balance below a required minimum balance. The VBB issues bonds secured by loan repayments of a large pool of municipal borrowers throughout the state. The VBB has close to $690 million of bonds outstanding.

A large majority of loans owed to the VBB are supported by the state's authority to intercept funds pursuant to the Vermont State Aid Intercept Program (Aa2 stable) should the municipal obligor of that loan default on its payment to the VBB. We do not include the VBB obligations in our debt and liability metrics for Vermont. This is consistent with not incorporating local government debt supported by an intercept program in other states' debt and liability metrics.

Legal security
Exhibit 1 above details the different types of bonds outstanding that we consider to be direct 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 bonds	Full faith and credit obligation of the state backed by the state's authority to levy taxes without limitation as to rate or amount.
Property transfer tax bonds	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.
Mental health services bonds	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 Financing Agency.
Vermont State Aid Intercept Program	The legal security for the state aid intercept program is a state law, Act 77, that requires the treasurer to intercept funds payable to an issuer that has defaulted on a loan payment to the Vermont Municipal Bond Bank.

Sources: State of Vermont and Moody's Ratings

Pensions and OPEB
Across both of its retirement plans (the Vermont State Retirement System and State Teachers' Retirement System), Vermont's pension contribution was $344 million in fiscal 2024. This contribution exceeded the $261 million we calculate as the state's aggregate pension

"tread water" indicator, the contribution necessary to forestall growth in reported net pension liabilities assuming realization of actuarial assumptions. In recent years, Vermont's pension contributions have approximated or exceeded this level. The "tread water" indicator is the pension-related component of the fixed cost burden reported in Exhibit 2 above.

In May 2022, the Vermont legislature enacted numerous changes to pension and OPEB benefits and funding. The act included making large, lump sum contributions to its retirement plans in fiscal 2022; and since 2023 active employees are gradually increasing their own contributions. The state began making payments on top of actuarially determined employer contributions for both of the state's retirement systems in fiscal 2024. Further, the legislation implements a host of benefit formula changes and extends the amount of time that many retirees must wait to begin receiving pension cost-of-living adjustments. The 2022 legislation also committed the state to greater prefunding of other post-employment benefits, which over time will also lower the state's net OPEB liabilities. For more details on this legislation, please see this report.

ESG considerations

Vermont (State of)'s ESG credit impact score is CIS-1

Exhibit 12
ESG credit impact score
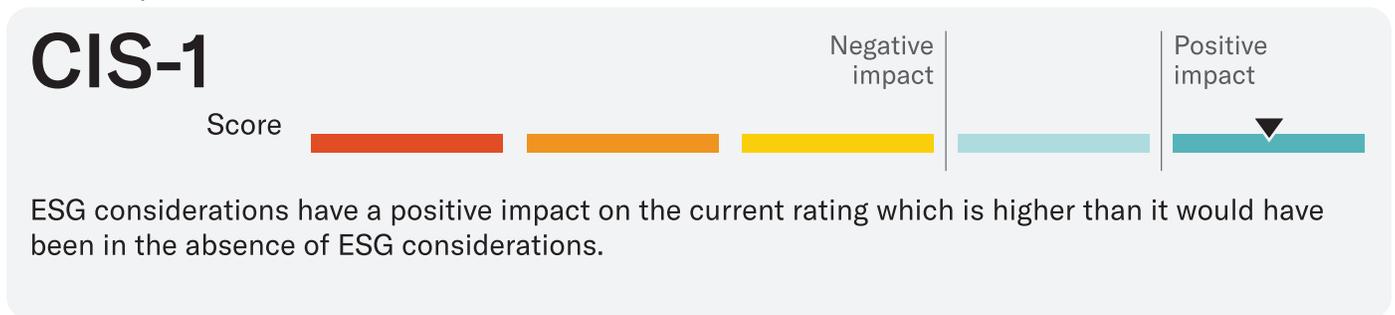
Source: Moody's Ratings

Vermont's ESG Credit Impact Score is positive (**CIS-1**), reflecting neutral to low exposures to environmental and social risks and a positive governance profile.

Exhibit 13
ESG issuer profile scores

Source: Moody's Ratings

Environmental

Among US states, Vermont's environmental risks are low. Vermont local governments are primarily exposed to extreme rainfall risk and increased rainfall could result in more frequent local or regional flooding. We expect the state and its local governments have the resources and capacity to address flood events.

Social

Vermont, like several other states, is likely to continue to see declines in its prime working age population (residents aged 25-54). This could be a drag on long-term economic and revenue growth. The state benefits from high education attainment and resident income. Support for health services by the federal government, mainly through Medicaid grants, represents a vulnerability for all states

and Vermont is no exception. Approximately 24% of Vermont residents are enrolled in Medicaid, which is slightly higher than the US average.

Governance

Vermont's governance is strong. The state has a history of enacting balanced budgets and maintaining solid reserves, and it closely monitors fiscal performance to aid budget management. 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.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Rating methodology and scorecard factors

The US States and Territories Rating Methodology includes a scorecard, which summarizes the 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 14
Vermont (State of)

	Measure	Weight	Score
Economy			
Resident Income (PCI Adjusted for RPP / US PCI)	99.6%	15%	Aa
Economic Growth (5-year CAGR real GDP - 5-year CAGR US real GDP)	-0.8%	15%	Aa
Financial performance			
Financial performance	Aaa	20%	Aaa
Governance/Institutional Framework			
Governance/Institutional Framework	Aaa	20%	Aaa
Leverage			
Long-term liabilities ratio (adjusted long-term liabilities / own-source re	161.6%	20%	Aa
Fixed-costs ratio (adjusted fixed costs / own-source revenue)	8.7%	10%	Aaa
Notching factors			
Very limited and concentrated economy	NA		
Scorecard-Indicated Outcome			Aa1
Assigned rating			Aa1

Source: Audited financial statements, Moody's Ratings and US Bureau of Economic Analysis

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

APPENDIX E

2024 S&P Global
Credit Report

S&P Global
Ratings

RatingsDirect®

Vermont; General Obligation; School State Program

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Vermont; General Obligation; School State Program

Credit Profile		
US$86.04 mil GO rfdg bnds (Competitive) ser 2024B due 08/15/2034		
Long Term Rating	AA+/Stable	New
US$70.61 mil GO bnds (Competitive) ser 2024A due 02/15/2044		
Long Term Rating	AA+/Stable	New
Vermont GO		
Long Term Rating	AA+/Stable	Affirmed
Vermont Bond Bank, Vermont		
Vermont		
Vermont Mun Bnd Bank (Vermont) SCHSTPR		
Long Term Rating	AA/Stable	Affirmed

Credit Highlights

- S&P Global Ratings assigned its 'AA+' long-term rating to the State of Vermont's $70.6 million series 2024A general obligation (GO) bonds and $86.0 million series 2024B GO refunding bonds.

- At the same time, S&P Global Ratings affirmed its 'AA+' rating on the state's GO debt outstanding and its 'AA' rating on the Vermont Municipal Bond Bank's Vermont State College System bonds, which are supported by a state aid intercept mechanism.

- The outlook is stable.

Security

The 2024A and B bonds are secured by Vermont's full faith and credit GO pledge. Officials will use 2024A proceeds to fund or reimburse capital bill projects, while 2024B proceeds will go toward refunding a portion of the state's series 2012, 2013, and 2014 GO bonds outstanding for estimated interest savings.

Credit overview

At the beginning of fiscal 2025, Vermont finds itself in a strong financial position as it continues to emerge from the pandemic, with coffers that have been bolstered by various rounds of federal fiscal stimulus and a budget that over the past four years has seen some of the largest surpluses in the state's history. At the same time, the state saw an uptick in domestic in-migration of high-income earners in 2020 and 2021, as the wider acceptance of remote work alongside Vermont's largely rural location, with access to ample outdoor recreation, continues to draw out-of-staters.

Whether the state can capitalize on this recent momentum to promote stronger long-term demographic and economic growth remains to be seen, in our view. Both of these factors have historically underperformed relative to the U.S. But Vermont is devoting significant policy attention and investment to targeting these legacy issues--for example, through housing policy reform and the use of federal stimulus dollars to target areas such as housing, broadband, and

workforce development. As we have stated in the past, Vermont's economic performance relative to that of higher-rated peers is a key upside rating constraint, and we expect it will remain so until the state can establish a clear trend of stronger growth.

The impact of the July 2023 floods on the state's economy, infrastructure, and private property caused over $1 billion in statewide damages, with about half to state-owned infrastructure. As with similar natural disasters including the flooding wrought in Vermont by Tropical Storm Irene in 2011, we expected that the availability of Federal Emergency Management Agency (FEMA) disaster relief funds and private insurance would aid in recovery, and it did, with approximately $611 million in FEMA-eligible damages and an expected federal share of $550 million representing 90% of eligible costs, and another $48 million in insurance payments received by the state. While the state capital and state offices were flooded, Vermont officials indicate that the damage on other public infrastructure was more limited than in 2011 largely because of measures taken after Tropical Storm Irene to fortify infrastructure and enhance flood resiliency.

The fiscal 2025 budget anticipates weaker revenue performance than in 2024, as the broader macroeconomic slowdown is forecast to push unemployment up and weigh on personal income and corporate earnings through the next fiscal year. The state has generally forecast revenues conservatively and structures its base budget around conservative revenue estimates, which provides some inherent cushion should revenues decline more than currently expected. Vermont also regularly updates its revenue forecast during the year and typically makes midyear adjustments to accommodate changes in the forecast. We therefore expect that operations will remain balanced through the next year even as economic growth slows, which S&P Global Economics is also forecasting in its latest outlook (see "Economic Outlook U.S. Q2 2024: Heading For An Encore," published March 26, 2024, on RatingsDirect). We expect that key priorities in the next fiscal year will largely revolve around the state's ongoing recovery from the July floods along with the expansive investment of federal dollars from various federal stimulus bills received in the past few years.

Vermont's tax-supported debt liabilities are modest relative to those of state peers and are projected to decline over the next decade, particularly as the state created and seeded a designated pay-as-you-go capital fund in 2023 to reduce reliance on bonded debt. Its pension and other postemployment benefits (OPEB) liabilities remain elevated compared with those of peers, even after the passage of pension reform two years ago. We believe that the changes introduced in the pension reform legislation--which included reduced benefits, higher contributions, and prefunding OPEB--place the state's retirement liabilities on a more stable long-term footing, but that it will take some time before the liabilities are paid down to levels that better align with those of most other states.

The 'AA+' rating reflects our view of Vermont's:

- Economy, which is experiencing a slower jobs recovery than the rest of the nation, although with historically low unemployment and some signs coming out of the pandemic that the state could be in the early stages of a path toward stronger demographic and economic performance than in years past, albeit with significant uncertainty around the sustainability of pandemic-era trends;
- Strong budgetary performance, with the past three fiscal years ending with some of the largest budget surpluses in the state's history, most recently driven by higher-than-forecast corporate income tax receipts and investment

income in fiscal 2023;

- Historically high cash balances that have ballooned to more than $2 billion compared with a typical pre-pandemic average of $200 million-$500 million, with reserve balances that continue to be fully funded at the statutory maximums;

- Robust financial management and governance framework because the state has substantial autonomy to raise revenues without limits, regularly monitors and adjusts its budget during the year, and uses a consensus revenue forecast that is updated twice annually to track revenue performance;

- Well-defined debt affordability and capital-planning processes that we believe have limited leverage and contribute to a modest tax-supported debt burden with rapid principal amortization; and

- Significant pension and OPEB liabilities that remain sizable relative to those of state peers, although retirement reforms passed in 2022 will moderate these liabilities over time.

Based on the analytic factors we evaluate for states, on a four-point scale in which '1.0' is the strongest, we have assigned a composite score of '1.8' for Vermont, which is associated with a 'AA+' indicative credit level.

Environmental, social, and governance

Vermont is susceptible to flooding, so events comparable to the July 2023 floods could become more frequent as warmer temperatures contribute to more regular extreme precipitation events. Following Tropical Storm Irene in 2011, the state implemented a range of measures designed to fortify infrastructure and enhance flood resiliency; consequently, based on the state's preliminary assessment, the amount of infrastructure damage last July was considerably less than in 2011. Physical climate risks remain neutral within our analysis because Vermont has not seen significant long-term economic or revenue disruption related to flooding, and we expect that it will continue to take active measures to reduce future risk as it recovers from the recent flood and updates its hazard mitigation plan later this year.

Our view of the state's risk management for pension governance has improved following the passage of pension reform legislation in 2022, which we believe places Vermont's pension and OPEB on a more sustainable long-term cost trajectory. Social capital risks are elevated relative to those of state peers because despite the significant policy attention and funding the state is directing toward addressing its long-term demographic challenges, we have yet to see an unequivocal, sustained trend in favor of stronger population growth and stronger economic output than was typical in the decade preceding the pandemic.

Outlook

The stable outlook reflects our expectation that Vermont will continue to realize structurally balanced operations with fully funded reserves and robust cash balances in the coming few years, despite the likelihood of a near-term economic slowdown. Recent pension reform, the state's historically high cash levels and large structural budget surplus, and the availability of substantial federal funds that Vermont plans to deploy strategically to target legacy economic and demographic vulnerabilities, together have created positive momentum that we believe will limit downside credit pressure through the two-year rating outlook horizon.

Downside scenario

Downside rating pressure would most likely emerge outside the two-year outlook period if, despite the state's efforts, Vermont's economy and demographics significantly underperform relative to those of similarly rated peers, particularly if slow revenue growth or elevated fixed costs were to strain the state's ability to sustain structural balance in outyear budgets.

Upside scenario

We could raise the rating with clear evidence that the state's economic and demographic trajectory is on a path of accelerating long-term growth that aligns with what we typically see among 'AAA' rated peers, and if the state also makes inroads in paying down its still-sizable retirement liabilities.

Credit Opinion

Economy

Vermont is trailing the national level in jobs recovery, with year-over-year job growth of 0.2% by the second quarter of 2025, ranking 32nd in the U.S., according to S&P Global Market Intelligence. As with other New England states, Vermont's comparatively weak labor force growth will weigh on long-term economic growth, underscoring the state's need to attract and retain qualified workers to achieve stronger economic performance.

The good news is that unemployment is also quite low. The March 2024 release from the Bureau of Labor Statistics has Vermont tied for the lowest unemployment rate in the country at only 2.0%. S&P Global Market Intelligence forecasts Vermont underperforming the U.S. over the next year, with state gross state product (GSP) estimated to grow by 0.7% compared to 1.6% for the nation, and with the baseline forecast showing the state unemployment rate rising to 2.6% by the middle of next year. The state's employment diversity by sector is generally in line with that of the U.S. with no material concentration and/or unusual cyclicality. Per capita personal income improved relative to the U.S. level in 2023 to 97%, up from 95% in 2021.

We continue to expect that long-term lackluster demographic trends will remain a key constraint on economic growth, although, as noted, Vermont is positioning itself to capitalize on the now-widespread acceptance of remote work to attract new residents and leverage private sector investment for in-state job creation. The state's 10-year annual population growth rate through 2023 was less than half the U.S. rate (0.23% compared to 0.56%) and its median age of 43.2 is considerably higher than the U.S. median of 39.0. Net in-migration in 2020 and 2021 accelerated, in particular among prime working-aged individuals (25-54) with adjusted gross incomes of greater than $100,000. However, this was followed by growth of just 92 residents in 2022 (0.01%) and 400 in 2023 (0.06%), and S&P Global Market Intelligence currently forecasts a return to flat growth trends through 2027.

Vermont will use a significant share of its remaining American Rescue Plan Act allocation for investments in areas such as housing, broadband, and workforce development, and will similarly leverage funds from the Infrastructure Investment and Jobs Act to upgrade its broadband and transportation infrastructure. State officials indicate that Vermont's housing shortage has been a major impediment to attracting new residents and note that the state has seen

a historic run-up in home prices over the past few years. Last year the legislature passed housing regulatory reform via Act 47 that, among other things, eliminates single-family zoning, allows for greater density in designated areas, and allows for the construction of accessory dwelling units. In general, we expect that the policy attention and the significant investment designed to address long-standing vulnerabilities (such as the lack of housing) have the potential to meaningfully alter the state's demographic trajectory, especially given the prevalence of remote work. But we also expect that it might take some time for these investments to result in a clear, sustainable record of stronger growth, and we also note that in the near term slower economic growth with rising unemployment could stymie progress.

The state's economy is driven by tourism, higher education, electronics, consumer goods manufacturing, and agriculture (including dairy farming). Economic growth has historically been slower than that of the U.S. but has basically aligned with the U.S. since 2020. Real GSP has grown by less than half the national growth rate over the past 10 years and, before 2020, fell below the U.S. GDP growth rate in every year going back to 2011. Growth in 2020 and 2021 was comparable to that of the U.S., and Vermont's 2022 real GSP exceeded national growth at 2.8%, compared with 2.1% GDP for the U.S. but slowed to 1.3% in 2023 compared to 2.5% for the U.S. Additionally, the state's GSP per capita still lags the national level considerably at 82% of the U.S. GDP.

Vermont has a highly educated workforce, with 52% of the population holding an associate's, bachelor's, or advanced degree, compared with 44% nationally. The largest employers include the University of Vermont Medical Center, the University of Vermont, Global Foundries (which produces semiconductors), and several regional medical centers. The state saw the largest percentage increase of any state in venture capital investment during the pandemic, although it lags in other areas such as research and development spending. Vermont is also a high tax state, which the Tax Foundation ranks as the 10th worst in terms of its business tax climate.

On a four-point scale, with '1.0' being the strongest, we have assigned a '2.4' to Vermont's economy.

Budgetary Performance

The January 2024 consensus revenue forecast update shows fiscal 2024 revenue for the general, education, and transportation funds closing at 1.1% ($33.8 million), higher than the July forecast of $3.14 billion, with general fund revenues 1.4% above target and the education fund up 1.3%. The general fund's fiscal 2024 year-to-date results have experienced some softening in corporate income tax receipts, which fell by 9.0% ($14 million), but this was more than offset by personal income taxes coming in at 2.2% ($15 million) above target and other revenues (primarily interest income) 17.3% higher ($20 million), for a total increase of 2.3% above target. Vermont received record-setting corporate income taxes in 2023 in part due to a shift to market-based taxation that expanded the base of taxable activity following legislation passed in 2019, alongside the high inflation environment of the past fiscal year, which conferred stronger pricing power to businesses. The state's interest income has far outpaced historical averages because Vermont's cash balances have swelled since 2021 due to high interest rates and the influx of federal funds that the state has deposited to interest-bearing accounts. All told, fiscal 2024 ended with a large unallocated general fund surplus of $44.2 million (2.2% of base appropriations), with surplus results likewise reported in the transportation and education funds and budget stabilization reserve accounts funded at statutory maximum levels.

Looking to fiscal 2025, general revenues are forecast to decline by 2.2% to $2.25 billion and base appropriations--including for the Act 76 child care bill passed in the 2023 legislative session--will increase by 3.3% to $2.19 billion. The state's economic forecast anticipates a slow growth trend (1.1%-1.2%) through 2025, although not a recession. Vermont also plans to use $74 million of its 2024 carry-forward balance on one-time appropriations in 2025, as it has done in the past few fiscal years, and expects to fully fund its reserve accounts. In general, we expect the state will continue to realize structurally balanced operations, as the economic assumptions underlying its revenue forecast more or less align with those in S&P Global Market Intelligence's macroeconomic forecast, and we note the state's record of making regular midyear budget updates via budget adjustment acts to sustain structural budgetary balance, which we expect will continue.

The operating budget (which we define as the combined general and education funds) has a diverse revenue mix, with the largest sources including personal income taxes (32% of combined revenues), a statewide education tax (a property tax, 30%), and sales and use taxes (14%). Additionally, the state legislature and governor are considering various proposals to potentially reform education funding by reducing the education tax for taxpayer relief, defer education payments to schools, or raising new sources of revenue for education expenses. Our forward-looking analysis will focus on the state's ability to continue funding its education budget, and any proposal that would result in expenditures outpacing revenues could worsen our view of the state's budgetary performance. The state has fully funded its budget stabilization reserve accounts in the general, education, and transportation funds since the Great Recession, which provides some flexibility to offset fund deficits should they emerge. Vermont pools its cash across major funds and has seen its cash levels increase considerably since 2021, to an average monthly balance of about $2.3 billion in 2023 and $2.1 billion year to date in 2024 compared with a typical balance of several hundred million in the years leading up to the pandemic. Given that much of the increase has come from federal stimulus dollars that will be spent over the next several years, we expect that cash balances will normalize eventually but will likely remain exceptionally strong in the interim.

On a four-point scale, with '1.0' being the strongest, we have assigned a '1.4' to Vermont's budgetary performance.

Debt And Retirement Liabilities

Debt

Vermont's debt liabilities are low to moderate relative to those of state peers and are projected to decline over the next decade. The state's pension and OPEB liabilities, however, remain elevated even following the passage of pension reform legislation in 2022, and we expect will remain significantly higher than those of similarly rated peers for some time.

We calculate direct debt at $1,190 per capita, 1.8% of personal income, and 1.7% of GSP, when including the new-money portion of the 2024 issuance. Debt service carrying charges were 2.1% of general government spending in fiscal 2023 and we expect will be around 2.0% on a forward-looking basis as debt amortizes. The state's debt portfolio consists entirely of fixed-rate GO debt--it has no variable-rate debt, interest rate swaps, or direct placement debt.

In fiscal 2023, a joint initiative of the treasurer and governor led to the creation of a new fund designated for pay-as-you-go capital financing (the cash fund), with the express goal of reducing future reliance on bonded debt. The

cash fund was initially seeded with $25 million and received additional transfers totaling $45.8 million at the close of fiscal 2023, and the fiscal 2024 budget transfer of $17.7 million. The cash fund will be supported through an ongoing funding mechanism based on general fund transfers calculated as 4% of prior-year appropriations, less debt service. With this new source of capital financing in place, we expect that the state's tax-supported debt burden will likely lessen over time.

Pensions and OPEB

The 2022 pension reform legislation included several measures to shore up the state's retirement accounts and place pension and OPEB costs on a more sustainable trajectory. These measures included raising state contributions above actuarially determined levels and creating a long-term funding mechanism for higher contributions, raising employee contributions, and lowering cost-of-living adjustments, as well as changing employee eligibility, prefunding OPEB, and providing a one-time state contribution of $200 million to the pension funds. With the changes, we believe that retirement liabilities are less of a source of credit pressure than they were before pension reform but are still sizable relative to those of state peers.

The state provides pension benefits through two defined-benefit pension plans: the Vermont State Employees' Retirement System (VSERS) and the Vermont State Teachers' Retirement System (VSTRS). As of June 30, 2023, VSTRS was 57% funded, with a net pension liability of $1.9 billion, and VSERS was 68% funded, with a $1.1 billion liability. The three-year average pension funded ratio is 63%, with net pension liabilities totaling $4,659 per capita and 7.0% of personal income, placing Vermont in the bottom fifth of all states in terms of the size of its pension liabilities.

The $200 million one-time contribution in fiscal 2022 allowed total plan contributions to exceed our minimum funding progress calculation, but we expect contributions will continue to fall short of minimum funding progress in a typical year for some time. In particular, the level percentage of payroll amortization method used for both plans results in lower up-front employer contributions that rise progressively along with assumed payroll growth, and the plans' 7% investment rate of return assumption results in lower employer contributions in favor of investment returns than would an assumption that more closely aligns with our 6% guideline. State contributions have exceeded the actuarially determined contribution (ADC) for the past decade, and the ongoing payment of the ADC plus additional contributions pursuant to the reforms will result in gradual funding improvement over time. However, as noted, the plans rely on a funding structure that, while improved, still results in meaningful cost deferrals that increase outyear risk.

The 2022 pension reform legislation created prefunding schedules for both VSERS and VSTRS, which contributed to a significant decline in the calculated liability for the most recent plan valuations because the state is now permitted to discount liabilities by the 7% expected long-term rate of return for both plans. As of June 30, 2023, the net OPEB liability for VSERS was $891.7 million (previously $1.5 billion in 2021) and for VSTRS it was $779.5 million (previously $1.3 billion in 2021), and the plans were 13.4% and 8.5% funded, respectively. As with the favorable changes to Vermont's pension liabilities, we believe the improvements represent meaningful gains, but note that the per capita OPEB liability of $2,350 is still large and well above what is typical among other states. (For more information, see "Market Swings Could Signal Contribution Volatility For U.S. State Pensions And OPEBs," published Aug. 3, 2022.)

On a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a '2.6' to Vermont's debt and liability profile.

Government Framework

Although Vermont is the only state without a constitutional or statutory balanced budget requirement, this has not had a significant effect historically, as in practice the state has demonstrated a commitment to structurally balanced budgets regardless. Vermont has significant revenue autonomy and can generally levy taxes and alter taxing structures (including modifying tax rates and bases) without constitutional constraint or having to meet an extraordinary legislative threshold. The state has significant legal authority to alter disbursements and assistance to local governments but could face practical limits in exercising this ability due to a comparatively high level of essential service provision and support for local governments. Vermont is not a voter-initiative state. While there are no express statutory provisions giving priority to bondholders over other claimants to state resources, Vermont has no limits on its ability to impose taxes to pay debt service on GO debt and can pay debt service without a budget.

On a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a '1.6' to Vermont's government framework.

Financial Management

Vermont uses a consensus revenue forecast that is based on recommendations from the state's two economists (representing the legislature and the administration) and is required to be approved each January and July by the state's Emergency Board (the E-Board), which includes the governor and chairpersons from each of the legislature's finance-related committees. The state monitors and reports revenues and spending monthly, while the E-Board meets at least twice a year to adopt the updated consensus forecast and make budgetary adjustments. The E-Board can hold interim meetings to evaluate the budget and has done so in the past during periods of heightened economic uncertainty, such as during the Great Recession and the pandemic.

The Capital Debt Affordability Advisory Committee oversees the state's long-term capital planning and debt levels. It publishes an annual report each September with recommendations on future bonding limits to enable the administration to complete its annual capital budgeting proposal as part of its long-term capital planning process. Although the committee's recommendation is nonbinding, the state has never authorized GO debt in excess of its recommendations. The state treasurer's office oversees Vermont's state investment portfolio in accordance with statutory limits on allowable investments, and it publishes monthly reports detailing investment holdings and unrestricted cash balances.

The three major operating funds--the general, transportation, and education funds--have budget stabilization reserve accounts that have been funded at the statutory maximums each year since the Great Recession. The general and transportation stabilization reserve maximums are calculated as 5% of prior-year appropriations, and the education fund reserve is calculated as 5% of nonproperty tax revenues. In 2013, the state created a second general fund reserve called the general fund balance reserve, and it has various other reserve accounts that are restricted for specific purposes.

Vermont has a strong and largely formalized budget management framework with a history of effective budget tracking and adjustment to maintain structural balance. In addition to the monitoring and reporting mechanisms

already mentioned, the state can and does adjust its budget in response to variances through a variety of mechanisms that include administrative action at the departmental level, through the E-Board, or through the legislature via a budget adjustment act.

On a four-point scale, with '1.0' being the strongest score, we have assigned a '1.0' to Vermont's financial management.

Related Research

Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of May 30, 2024)			
Vermont GO			
Long Term Rating		AA+/Stable	Affirmed
Vermont GO			
Long Term Rating		AA+/Stable	Affirmed
Vermont GO			
Long Term Rating		AA+/Stable	Affirmed

APPENDIX F

Proposed Updates to CDAAC Statute

Title 32: Taxation and Finance

Chapter 13: Debts and Claims

Subchapter 8: MANAGEMENT OF STATE DEBT

§ 1000. Affordable amount of general obligation bond authorization

When the General Assembly authorizes the issuance of new long-term general obligation bonds, it shall consider the maximum amount of such bonds recommended as prudent for the fiscal year concerned by the Capital Debt Affordability Advisory Committee created for this purpose by this subchapter. This requirement shall apply to the authorizations of all State tax supported general obligation bonds, which are secured by the State General and Transportation Funds. (Added 1989, No. 258 (Adj. Sess.), § 1.)

§ 1001. Capital Debt Affordability Advisory Committee

(a) Committee established. A Capital Debt Affordability Advisory Committee is hereby created with the duties and composition provided by this section.

(b) Committee duties.

(1) The Committee shall review annually the size and affordability of the net State tax-supported indebtedness and submit to the Governor and to the General Assembly an estimate of the maximum amount of new long-term net State tax-supported debt that prudently may be authorized for the next fiscal year. The estimate of the Committee shall be advisory and in no way bind the Governor or the General Assembly.

(2) The Committee shall conduct ongoing reviews of the amount and condition of bonds, notes, and other obligations of instrumentalities of the State for which the State has a contingent or limited liability or for which the General Assembly is permitted to replenish reserve funds, and, when deemed appropriate, recommend limits on the occurrence of such additional obligations to the Governor and to the General Assembly.

(3) The Committee shall conduct ongoing reviews of the amount and condition of the Transportation Infrastructure Bond Fund established in 19 V.S.A. § 11f and of bonds and notes issued against the Fund for which the State has a contingent or limited liability.

(c) Committee estimate of a prudent amount of net State tax-supported debt; affordability considerations. On or before September 30 of each year, the Committee shall submit to the Governor and the General Assembly the Committee's estimate of net State tax-supported debt that prudently may be authorized for the next fiscal year, together with a report explaining the basis for the estimate. The Committee's estimate shall not take into consideration the balance remaining at the end of each fiscal year in the subaccounts of

the Cash Fund for Capital and Essential Investments, established pursuant to section 1001b of this title. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subsection. In developing its annual estimate, and in preparing its annual report, the Committee shall consider:

(1) The amount of net State tax-supported indebtedness that during the next fiscal year and annually for the following nine fiscal years:

(A) will be outstanding; and

(B) has been authorized but not yet issued.

(2) A projected schedule of affordable net State tax-supported bond authorizations for the next fiscal year and annually for the following nine fiscal years. The assessment of the affordability of the projected authorizations shall be based on all of the remaining considerations specified in this section.

(3) Projected debt service requirements during the next fiscal year, and annually for the following nine fiscal years, based upon:

(A) existing outstanding debt;

(B) previously authorized but unissued debt; and

(C) projected bond authorizations.

(4) The criteria that recognized bond rating agencies use to judge the quality of issues of State bonds, including:

(A) existing and projected total debt service on net tax-supported debt as a percentage of combined General and Transportation Fund revenues, excluding surpluses in these revenues that may occur in an individual fiscal year;

(B) existing and projected total net tax-supported debt outstanding as a percentage of total State personal income;

(C) existing and projected pension and other postemployment benefit liability metrics; and

(D) other metrics adopted by recognized bond rating agencies.at the Committee's discretion, including long-term liabilities not covered in subdivisions (A)–(C) of this subdivision (4).

(5) The principal amounts currently outstanding, and balances for the next fiscal year, and annually for the following nine fiscal years, of existing:

(A) obligations of instrumentalities of the State for which the State has a contingent or limited liability;

(B) any other long-term debt of instrumentalities of the State not secured by the full faith and credit of the State, or for which the General Assembly is permitted to replenish reserve funds; and

(C) to the maximum extent obtainable, all long-term debt of municipal governments in Vermont that is secured by general tax or user fee revenues.

(6) The impact of capital spending upon the economic conditions and outlook for the State.

(7) The cost-benefit of various levels of debt financing, types of debt, and maturity schedules.

(8) Any projections of capital needs authorized or prepared by the Agency of Transportation, the Joint Fiscal Office, or other agencies or departments.

(9) Any other factor that is relevant to:

(A) the ability of the State to meet its projected debt service requirements for the next five fiscal years; or

(B) the interest rate to be borne by, the credit rating on, or other factors affecting the marketability of State bonds.

(10) The effect of authorizations of new State debt on each of the considerations of this section.

(11) ~~The capital asset depreciation ratio reflecting unfunded capital maintenance costs.~~ <u>Measures reflecting the remaining useful life of state infrastructure and the potential for future capital maintenance and replacement costs.</u>

(d) Committee composition.

(1) Committee membership shall consist of:

(A) As ex officio members:

(i) the State Treasurer;

(ii) the Secretary of Administration; and

(iii) a representative of the Vermont Municipal Bond Bank chosen by the directors of the Bank.

(B) Two individuals with experience in accounting or finance, who are not officials or employees of State government appointed by the Governor for six-year terms.

(C) The Auditor of Accounts who shall be a nonvoting ex officio member.
(D) One person who is not an official or employee of State government with experience in accounting or finance appointed by the State Treasurer for a six-year term.

(E) The Legislative Economist or other designee of the Joint Fiscal Office, who shall be a nonvoting ex officio member.

(2) The State Treasurer shall be the Chair of the Committee.

(e) Other attendants of committee meetings. Staff of the Legislative Counsel and the Joint Fiscal Committee shall be invited to attend Committee meetings for the purpose of fostering a mutual understanding between the Executive and Legislative Branches on the appropriate statistics to be used in committee reviews, debt affordability considerations, and recommendations.

(f) Information. All public entities whose liabilities are to be considered by the Committee shall annually provide the State Treasurer with the information the Committee deems necessary for it to carry out the requirements of this subchapter. (Added 1989, No. 258 (Adj. Sess.), § 1; amended 2007, No. 121 (Adj. Sess.), § 28; 2007, No. 200 (Adj. Sess.), § 25, eff. June 9, 2008; 2009, No. 50, § 31; 2013, No. 142 (Adj. Sess.), § 65; 2019, No. 42, § 26a, eff. May 30, 2019; 2021, No. 105 (Adj. Sess.), § 478, eff. July 1, 2022; 2023, No. 78, § C.107, eff. June 20, 2023.)

§ 1001a. Reports

(a) The Capital Debt Affordability Advisory Committee shall prepare and submit consistent with 2 V.S.A. § 20(a) a report on:

(1) general obligation debt, pursuant to subsection 1001(c) of this title; and

(2) how many, if any, Transportation Infrastructure Bonds have been issued and under what conditions.

(b) The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the reports to be made under this section. (Added 2003, No. 122 (Adj. Sess.), § 294h; amended 2009, No. 50, § 32, eff. June 1, 2009; 2013, No. 142 (Adj. Sess.), § 66; 2017, No. 84, § 28, eff. June 16, 2017.)