



### Rating Agencies' Methodologies for Rating U.S. States

October 10, 2024

# Agenda

- Introductions
- Presentation Objectives
- Types of Ratings
- Impact of Ratings
- Rating Agency Methodologies and Applications to Vermont



# **Presentation Participants**

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# Learning Objectives:

- Recognize types of debt issued by State and Local Governments
- Identify the process and benefits of bond credit ratings from Rating Agencies
- Describe methodology used and main factors considered by Rating Agencies when issuing credit ratings on State debt
- Discuss the process of debt issuance and credit ratings for State of Vermont



# **Summary of Types of Municipal Debt**

### General Obligations (GOs):

- Backed by "Full Faith and Credit" of Issuer and tax receipts
- Usually Tax-Exempt leading to lower borrowing cost
- Generally funds Capital Projects, infrastructure, equipment and facilities
- Vermont issues 20-year GOs to fund projects in the Capital Bill

### **Revenue Bonds:**

- Backed by dedicated revenue stream (utilities systems revenue)
- Usually Tax Exempt
- Specific Initiative Funding
- Vermont has issued Transportation Infrastructure Bonds (TIBs) funded by motor pool assessments

### **Municipal Project Issuance:**

- Funded by eventual proceeds of specific project
- Sometimes Tax Exempt
- Industrial Facility Development, Enterprise Zones, Utility Plants,

### **Revenue Anticipation Notes:**

 Usually short-term notes backed by taxes or fees

# State Supported or Authorized Agencies (Appropriation Bonds):

- Commitment to pay through appropriation
- Fund Specific Mandated areas
- Usually Tax exempt
- Housing Authorities, Municipal Support, Mass Transit
- Vermont- Property Transfer Tax (Housing) Bonds



# **Other Debt Obligations of the State**

# Other governmental agencies may issue debt using the "moral obligation" of the State

- -The State is morally, but not legally, obligated to pay the debt of the issuer
- In Vermont, some debt issued by quasi-government issuers carries the moral obligation
  - Vermont Bond Bank, Vermont Economic Development Authority (VEDA), Vermont Housing Finance Agency (VHFA), Vermont Student Assistance Corporation (VSAC)
  - Others have authority : University of Vermont, Vermont Telecom Authority

**Generally**, debt using the moral obligation is rated a notch or two below the State's general obligation rating (using the State Rating as an "Anchor")

- The rating of the State directly affects the borrowing costs for the entity issuing with the moral obligation as credit enhancement



# **Benefits/Impacts of Bond Credit Ratings**

Rating Agencies issue bond credit ratings to help investors determine the level of risk associated with debt issued by an entity (State or local government, government agency, corporation)

A bond credit rating is an assessment of an entity's creditworthiness (ability to pay principal and interest on the debt)

State and local governments seek credit rating from rating agencies in advance of issuing debt

Rating Agency will assign a credit rating to a particular debt issue and to all outstanding debt issued under the same credit pledge (ex: Vermont – General Obligation Bonds)

- Credit ratings affect investment decisions made by borrowers
- Highly rated issuers benefit from lower borrowing costs.
- Institutional investors are often restricted from owning unrated debt or lower rated debt
- A downgrade or upgrade in a credit rating can impact an entity's ability to access capital markets and affect the price of bonds, loans, and other borrowings.
- Credit Ratings also affect borrowing costs for other governmental agencies within the State that use the "moral obligation"

There are three primary Rating Agencies: Moody's, Standard and Poor's and Fitch.

There are boutique Rating Agencies that are utilized: Kroll Bond rating Agency, Dun & Bradstreet, and Egan Jones.

• The State of Vermont is rated by the primary rating agencies which will be the focus of the following presentation



# Sector Overview (States and Territories)

- Generally, States have high credit ratings since they have broad powers to control their financial positions and service their debt. Territories tend to have significantly lower ratings since they have narrower powers, smaller and less diversified economies.
- Revenue sources include personal and corporate income taxes, sales and other special taxes, user fees, federal aid and grants and property taxes

States

- Sovereign powers allow them to raise or lower tax rates and implement new taxes and fees, but have limited discretion over amount of federal revenue received
- Discretion over much of the budgetary spending
- Ability to push some costs down to lower levels of government
- Territories
  - Have taxing power and exemption from most forms of federal taxation
  - Small size and volatility of economies constrains ability to raise revenue
  - Some are responsible for service provided by both state and local governments, so lack ability to push costs down to lower levels of government



### **Introduction to Credit Ratings**

- Each of the rating agencies generally look at several key indicators when assessing ratings:
  - Economy, which typically includes assessments of state demographics, income and wealth assessment, GDP and growth prospects;
  - Financial Performance, which typically assesses a state's ability to generate revenues and manage expenditures;
  - Governance assessments reflect qualitative assessments of a state's policies and constitutional authorities, and
  - Long-Term Liabilities, including debt, leases, pension and OPEBs.
- Each agency publishes analytical methodologies that provide guidance as to how their different criteria are used to evaluate State creditworthiness

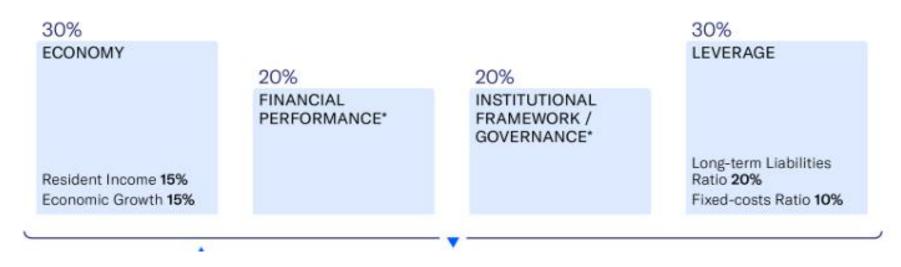
S&P	Moody's	Fitch	KBRA	Meaning
AAA	Aaa	AAA	AAA	Prime
AA+	Aa1	AA+	AA+	
AA	Aa2	AA	AA	High Grade
AA-	Aa3	AA-	AA-	
A+	A1	A+	A+	
А	A2	А	А	Upper Medium Grade
A-	A3	A-	A-	
BBB+	Baa1	BBB+	BBB+	
BBB	Baa2	BBB	BBB	Lower Grade
BBB-	Baa3	BBB-	BBB-	
BB+	Ba1	BB+	BB+	
BB	Ba2	BB	BB	Non-Investment Grade
BB-	Ba3	BB-	BB-	(Speculative)
B+	B1	B+	B+	
В	B2	В	В	Highly Speculative
B-	B3	B-	B-	
CCC+	Caa1	CCC+	CCC+	Substantial Risk
CCC	Caa2	CCC	CCC	Extremely Speculative

- Long-term Liabilities have become a particular focus for agencies over the last ten years, often aggregating debt, pensions and other long-term liabilities together for their analysis.
- Investment Grade ratings range from Aaa/AAA to Baa3/BBB-.
- The Outlook on a rating can be either Negative, Stable, or Positive. If Negative or Positive, the likelihood of a medium-term change in the rating is higher than if the rating is Stable.



### Moody's Methodology

- Latest update to Moody's methodology for rating U.S. States and Territories was in July 2024
- Applies to U.S. States and Territories and is quantitative in nature
- Rating Factors:



Preliminary Outcome



### Moody's Factors: Economy (30%)

- State's economy is critical to ability to generate tax revenue, which supports government's budgetary goals and allows it to pay debt, pension, other obligations. Higher per capita income indicates residents' ability to pay taxes and is associated with economic strength. Growing economies are capable of producing more tax revenue.
- Sub-factor 1: Resident Income (15%)
  - Per Capita Income (PCI) Adjusted for Regional Price Parity (RPP) / US PCI\*

-Provides indication of State's ability to raise own-source *revenue (total revenue – federal revenue)*-RPP adjusts for regional cost of living differences and provides better comparability across the U.S.
-Nominal GDP (gross domestic product) is used if PCI is unavailable

#### Sub-factor 2: Economic Growth (15%)

- Difference between Five-Year Annual Compound Growth Rate (CAGR) in Real Gross Domestic Product and Five-Year CAGR in US Real GDP

-Indicator of state's ability to continue generating revenue necessary for programs and services
-States with solid growth are more likely to attract additional taxpayers (residents and businesses), and better able to meet budgetary goals, meet debt burden and build reserves



<sup>\*-</sup>Source for RPP and PCI is the US Bureau of Economic Analysis

### **Moody's Factors: Financial Performance (20%)**

- Fund balance and liquid reserves represent resources available to fund budget in event of revenue shortfalls and excess spending
- Liquid reserves provide time to manage cash flows and address deficits
- States have discretion over inflows and outflows (enact new or increase/decrease taxes, cut spending). Size of budget is a policy decision
- Some states may spend more than they collect in revenue, creating structural imbalance and can pose risk to credit profile
  - Depleting liquid reserves
  - Converting deficits into long-term liabilities
    - Underfunding pensions
    - Deferring payments to vendors
    - Underinvesting in infrastructure

#### **Insightful Analytics:**

- Compare fund balance to State's own-source revenue for relative strength of resources
- Consider proportion of revenue from economically sensitive/volatile sources (taxes on oil production, gaming) for resiliency
- Consider liquidity strength, unrestricted cash
- Assess structural balance (track record and forward looking)
- Consider pension contributions



# Moody's Factors: Institutional Framework/Governance (20%)

- Indicates whether State will balance budget, take on affordable liabilities, maintain adequate liquidity
- Track record indicates likely future performance, including in stressed situations
- Stable or decreasing debt levels relative to the economy allow greater flexibility to withstand economic shocks

### • Factors:

- -Consider track record and planning
  - Multi-year projections
  - Established policies and practices
  - Consensus revenue forecasts
  - Conservative budgetary assumptions?
  - Debt and liability management (underfunding pensions or increasing other liabilities?)



### Moody's Factors: Leverage (30%)

- Indicates State's capacity to invest in capital assets and pay annual fixed costs, including debt service, while providing core services
- Long-term liabilities affect budgetary flexibility
  - Debt
  - Unfunded pension liabilities
  - Unfunded other post-employment benefit (OPEB) liabilities
  - Other long-term liabilities

#### Sub-factor 1: Long-term Liabilities Ratio

(Total Net Tax-Supported Debt + Adjusted Net Pension Liabilities + Adjusted Net OPEB Liabilities + Other Long-Term Liabilities) / Own-Source Revenue

#### Sub-factor 2: Fixed Costs Ratio

Adjusted Fixed Costs / Own-Source Revenue

Adjusted fixed costs = Implied debt service + pension tread water indicator + OPEB contributions Implied debt service – cost to amortize long-term liabilities (except pensions and OPEB) over 20 years with level payments.

Tread water indicator-pension contribution necessary to prevent unfunded pension liabilities from growing



### **Moody's Notching factors**

- Scorecard adjustments can be adjusted in half-notch or whole-notch increments
- Notching factors can result in a total of up to two downward notches to preliminary outcome
- Factors
  - Very limited or Concentrated Economy large exposure to one industry (tourism) or revenue source (oil and gas excise taxes)
  - Other Considerations
    - Financial controls and quality of financial reporting
    - Quality and experience of management
    - Environmental, social and governance considerations
      - Environmental exposed to extreme weather events due to climate change (floods, hurricanes)
      - Social adverse trends in demographics, labor and income, housing affordability
      - Governance flexibility to raise revenues, debt management, fiscal planning, disclosure
    - Liquidity
    - Likelihood of providing/receiving extraordinary or ongoing support
    - Unusual risk or benefit posed by long-term liabilities
    - Financial controls
    - Event risk



### **Moody's Scorecard**

#### US states and territories scorecard

For general information about how we use the scorecard and for a discussion of scorecard mechanics, please see the "Using the scorecard to arrive at a scorecard-indicated outcome" section. The scorecard does not include or address every factor that a rating committee may consider in assigning ratings in this sector. Please see the "Other considerations" and "Limitations" sections.

#### Exhibit 2

#### US states and territories scorecard

	Weight	Aaa	Aa	А	Baa	Ba	В	Саа	Са
Factor: Economy (30%)									
Resident Income (RPP-Adjusted Per Capita Income / US Per Capita Income) <sup>[1]</sup>	15%	≥ 100%	85% - 100%	70% - 85%	60% - 70%	50% - 60%	40% - 50%	30% - 40%	< 30%
Economic Growth (Difference Between Five Year Compound Annual Growth in Real GDP and Five-Year CAGR in Real US GDP) <sup>[2]</sup>	15%	≥ 0%	(1)% - 0%	(2)% - (1)%	(3)% - (2)%	(4)% - (3)%	(5)% - (4)%	(6)% - (5)%	< (6)%
Factor: Financial Performance (20%)									
Financial Performance	20%	Fund balance approximates or exceeds 15% of own-source revenue and liquidity is very strong; revenue and expenditures are expected to remain in structural balance.	Fund balance approximates or exceeds 10% of own- source revenue and liquidity is strong, or fund balance is below 10% of own-source revenue and liquidity is very strong; revenue and expenditures face a modest structural imbalance, with an expected return to balance.	Fund balance approximates or exceeds 5% of own- source revenue and liquidity is adequate, or fund balance is below 5% of own-source revenue and liquidity is strong; revenue and expenditures face a noteworthy structural imbalance, with an expected return to balance.	Fund balance approximates or exceeds 0% of own- source revenue and liquidity is somewhat weak, or fund balance is below 0% of own-source revenue and liquidity is adequate; revenue and expenditures face a significant structural imbalance, with a potential return to balance.	fund balance is below minus 5% of own-source revenue	Fund balance is between minus 5% and minus 10% of own-source revenue and liquidity is very weak, or fund balance is below minus 10% of own- source revenue and liquidity is weak; revenue and expenditures face significant structural imbalance that undermines the delivery of core government services.	Heightened likelihood of default due to fund balance that is below minus 10% of own-source revenue, extremely weak liquidity or overwhelming structural imbalance of revenue and expenditures.	Heightened likelihood of default with significant impairment to creditors due to fund balance that is below minus 10% of own- source revenue, extremely weak liquidity or overwhelming structural imbalance of revenue and expenditures.



### **Moody's Scorecard**

	Weight	Aaa	Aa	А	Baa	Ba	В	Caa	Са
Factor: Institutional Framework / Gover	nance (209	%)							
Institutional Framework / Governance	20%	Extremely strong fiscal planning and operational management, with financial projections that are routinely conservative; and consistent long-term planning and in- year monitoring; and extremely conservative debt and liability management; strong revenue- generating flexibility and strong expenditure flexibility.	and operational management, with financial projections that are typically conservative; and consistent long-term planning and in-year monitoring; and conservative debt and liability management; strong revenue-generating flexibility and	Adequate fiscal planning and operational management, with financial projections that are somewhat conservative; somewhat inconsistent long- term planning and in-year monitoring; somewhat conservative debt and liability management; moderate revenue- generating flexibility and moderate expenditure flexibility.	Moderately weak fiscal planning and operational management, with somewhat optimistic financial projections; inconsistent long- term planning and in- year monitoring; some debt and liability management weaknesses; moderate revenue- generating flexibility and weak expenditure flexibility, or moderate expenditure flexibility and weak revenue-generating flexibility.	projections; long- term planning or monitoring is rarely used; weak debt and liability	Very weak fiscal planning and operational management, with extremely optimistic financial projections; or no long-term planning or monitoring; or very weak debt and liability management; or very weak revenue- generating flexibility and very weak expenditure flexibility.	Extremely weak fiscal planning or operational management heightens likelihood of default; or has not demonstrated ability or willingness to generate any revenue increases.	Extremely weak or essentially non- existent planning or operational management heightens likelihood of default with significant impairment for creditors; or revenue-raising ability is fundamentally constrained, with little prospect of improvement.
Factor: Leverage (30%) Long-term Liabilities Ratio									
((Debt + ANPL + Adjusted Net OPEB + Other Long-term Liabilities) / Own- Source Revenue) <sup>[3]</sup>	20%	≤ 100%	100% - 200%	200% - 350%	350% - 500%	500% - 700%	700% - 900%	900% - 1,100%	> 1,100%
Fixed-costs Ratio (Adjusted Fixed Costs / Own-Source Revenue) <sup>[4]</sup>	10%	≤ 10%	10% - 15%	15% - 20%	20% - 25%	25% - 35%	35% - 45%	45% - 55%	> 55%
Preliminary outcome									
Notching factor									
Very Limited or Concentrated Economy									
0 to -2									
Scorecard-indicated outcome									

[1] For the linear scoring scale, the Aaa endpoint value is 120%. A value of 120% or better equates to a numeric score of 0.5. The Ca endpoint value is 20%. A value of 20% or worse equates to a numeric score of 24.5.
 [2] For the linear scoring scale, the Aaa endpoint value is 2%. A value of 2% or better equates to a numeric score of 0.5. The Ca endpoint value is (7)%. A value of (7)% or worse equates to a numeric score of 24.5.
 [3] For the linear scoring scale, the Aaa endpoint value is 0%. A value of 0% or better equates to a numeric score of 0.5. The Ca endpoint value is 1,300%. A value of 1,300% or worse equates to a numeric score of 24.5.
 [4] For the linear scoring scale, the Aaa endpoint value is 0%. A value of 0% or better equates to a numeric score of 0.5. The Ca endpoint value is 65%. A value of 1,300% or worse equates to a numeric score of 24.5.
 [5] For the linear scoring scale, the Aaa endpoint value is 0%. A value of 0% or better equates to a numeric score of 0.5. The Ca endpoint value is 65%. A value of 65% or worse equates to a numeric score of 24.5.
 [6] For the linear scoring scale, the Aaa endpoint value is 0%. A value of 0% or better equates to a numeric score of 0.5. The Ca endpoint value is 65%. A value of 65% or worse equates to a numeric score of 24.5.
 [7] For the linear scoring scale, the Aaa endpoint value is 0%. A value of 0% or better equates to a numeric score of 0.5. The Ca endpoint value is 65%. A value of 65% or worse equates to a numeric score of 24.5.



### **Moody's Scorecard for Vermont**

- The State was downgraded by Moody's in October 2018 due to low growth prospects from an aging population and the State's leverage, measure by debt and unfunded post-employment obligations relative to GDP.
- In the State's most recent report in May 2024, Moody's noted that relative to State revenue, the State's leverage continues to be higher than most states.

State of Vermont Moody's Scorecard			Numeric	Rating	Weighted
Based on most recent Moody's Report (5/31/2024)	Weight	Measure	Score	Score	Score
Economy (30%)					
Resident Income	15%	95.9%	4.32	Aa	0.65
(RPP-Adjusted Per Cap Income /US Per Cap Income)					
Economic Growth	15%	-0.7%	5.60	Aa	0.84
(5-Yr CAGR State GDP vs 5-Yr CAGR in Real US GDP)					
Financial Performance (20%) <sup>1</sup>	20%			Aaa	
Structural Balance	6.7%	Aa		Aa	
Fund Balance	6.7%	31.8%		Aaa	0.70
Liquidity	6.7%	Strong		Aa	
Institutional Framework / Governance (20%)					
Institutional Framework / Governance	20%	Very Strong	2.00	Aaa	0.40
Leverage (30%)					
Long-Term Liabilities Ratio	20%	175.0%	5.75	Aa	1.15
(NTSD + ANPL + Adjusted Net OPEB + Other Long-term					
Liabilities) / Own Source Revenues					
Fixed-Cost Ratio	10%	9.0%	3.20	Aaa	0.32
(Adjusted Fixed Costs / Own-Source Revenue)					
Weighted Aggregate Numeric Score (Before Notching)					4.06
Conversion to Preliminary Score (Before Notching) <sup>2</sup>					2.06
Scorecard-Indicated Outcome (Before Notching)					Aa1
Notching (Negative = Notch Up, Score Down,					0.00
Conversion to Preliminary Score (After Notching)					2.06
Scorecard-Indicated Outcome (After Notching) <sup>2</sup>					Aa1
Notching Factors		N	lo Adjustmer	its	
Actual Rating Assigned					Aa2

<sup>1</sup>The Financial Performance factor does not include specific weights for subfactors but a blended score of the three subfactors based on the analyst's qualitative assessment. We have assumed the score based on Moody's most recent rating report for the State.

<sup>2</sup>Preliminary score of 2.5 to less than 1.5 is Aa1, from 3.5 to less than 2.5 is Aa2, from 4.5 to less than 3.5 is Aa3.



## **Fitch Ratings**

- Methodology begins with recognition that the sector is strong
   Mostly rated AAA to A- indicating high credit quality
- Four Key Drivers:
  - –Revenue Framework
  - -Expenditure Framework
  - -Long-term Liability Burden
  - -Operating Performance

Additional risk considerations may also negatively affect rating (management and economic characteristics that are not normal)



#### 1. Revenue Framework

- Growth Prospects for Revenues
  - Historical performance of revenues in comparison to growth in national GDP and inflation
  - Analytical focus on revenues that fund government operations
  - Intended to consider economic growth, rather than volatility

### - Legal Ability to Raise Revenues

- There is no legal limitation for many state governments, so no metric would be used
- If there is a practical limit; consider the maximum revenue increase permitted in relation to national GDP

### 2. Expenditure Framework

#### - Pace of Spending Growth

- Focuses on sustainability and flexibility of government spending
- Considers trends in spending compared to expected growth in revenues
- Considers the ability of the government's revenue base to support it's spending

#### - Flexibility of Main Expenditure items

- Carrying Cost: Debt service + Pension ADC + OPEB actual payment / governmental expenditures (most recent year)
- Workforce evaluation indicates government issuers' ability to control labor costs



• 3. Long-Term Liability Burden

#### --- Metrics to Support Assessment

- Direct debt + Fitch adjusted net pension liability as a percentage of personal income and of GDP
- Liabilities as a percentage of resident personal income
  - -Primary metric for analysis
  - —Indicates the burden on the economic base
- Believe that debt and net pension liabilities are equivalent obligations

Note: Fitch considers credit implications of OPEB in evaluation expenditure framework and operating performance but does not include it as part of long-term liability burden (Factors in computing OPEB liability are more uncertain).

#### -Debt Considerations

 Evaluation includes current debt levels, and additional capital needs, deferred maintenance and expectations of capacity to support debt

#### -Pension Considerations

- Only considers defined benefit plans
- Considers current liability and expected trajectory
- Also considers actuarial assumptions and investments
- Estimates net pension liability using 6% investment return assumption for comparability



- 4. Operating Performance
  - -Financial Resilience through Downturns
  - -Budget Management at Times of Economic Recovery
    - Underfunding or deferring liabilities made in downturn
  - -Liquidity
    - Review historical patterns to identify potential points of liquidity pressure
  - -Effect of Outside Parties on Operating Performance
  - -Scenario Analysis Addresses Rating Tolerance
  - -Revenue Sensitivity Analysis
  - -Scenario Analysis
  - -State and Territory Scenarios
  - -Management
  - -Economic Considerations



### **Key Rating Drivers**

Revenue Framework	aaa	aa	а	bbb	bb
Growth Prospects for Revenues without Revenue- Raising Measures	Strong Growth in line with or above U.S. economic performance (GDP)	Solid Growth below U.S. economic performance but above inflation level	Slow Growth approximately in line with inflation level	Stagnant Growth below inflation level 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 Unlimited legal ability, or maximum revenue increase at least 300% of scenario revenue decline		Satisfactory Maximum revenue increase at least 100% of scenario revenue decline	Moderate Maximum revenue increase at least 50% of scenario revenue decline	Limited Maximum revenue increase less than 50% of scenario revenue decline
Asymmetric Rating Driver Consideration	The requirement for perio	dic re-authorization of exis	ting revenue streams is a r	negative consideration.	
Expenditure Framework					
Natural Pace of Spending Growth Relative to Expected Revenue Growth (Based on Current Spending Profile)	Slower to equal	Marginally above	Above	Well above	Very high
Flexibility of Main Expenditure Items (Ability to Cut Spending through 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.
Asymmetric Rating Driver Considerations		ng pressures, including out ive consideration in the ex			abilities and contingent



Long-Term Liability Burden					
Combined Burden of Debt and Net 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 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
Asymmetric Rating Driver Considerations	maturity debt; or an excep	tionally large OPEB liabilit	ty without the ability or wi	ivatives exposure; short-te llingness to make changes t g-term liability burden asse	o benefits. An
Operating Performance					
Financial Resilience through Downturns (Based on Interpretation of Scenario Analysis)	Superior 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 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
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 issuer
Asymmetric Rating Driver Considerations	becomes a concern if the g	overnment-wide days cas government) having a neg	h on hand metric has or is ative effect on operations	or market access concerns expected to fall below 60 d ; or evidence of an exceptio ative process.	ays); the risk of an outside
Asymmetric Additional Risk Considerations	factors that may affect the	e rating conclusion. These a the final rating levels. For l	additional risk factors worl U.S. state governments an	g assigned also considers c k asymmetrically, where on d territories, these risk facto	ly below-standard



### **Fitch Scorecard for Vermont**

• The State's current rating from Fitch is 'AA+'. The State's economy and current demographic situation is tied to the "Revenues Framework" factor, which is not easily changed through direct actions of State policy makers.

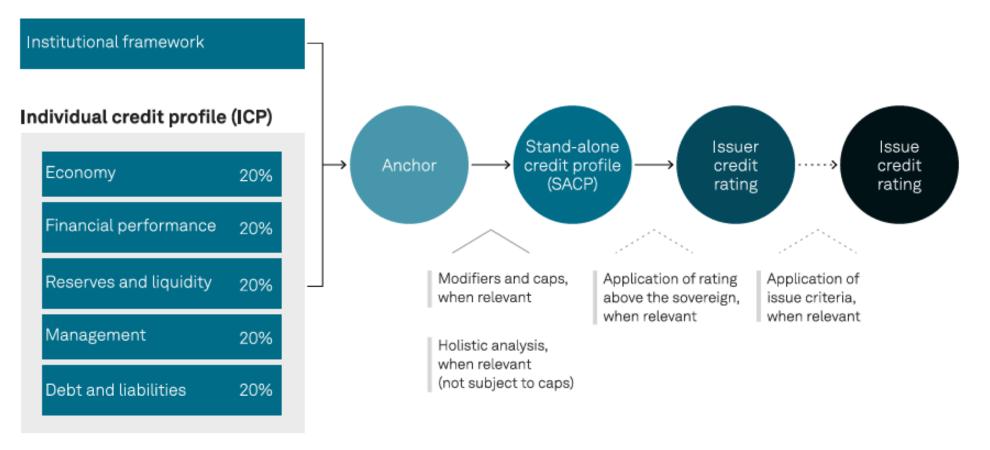
Revenues Without Revenue-Raising Measures	Strong Growth in line with or above the level of U.S. economic performance		Slow Growth in line with the level of	Stagnant	Negative
Revenues Without Revenue-Raising Measures	Growth in line with or above the level of U.S. economic performance	Growth below U.S. economic		0	0
	level of U.S. economic performance		Growth in line with the level of		
	performance	performance but above the level of			Declining revenue trajectory
	1		inflation	inflation or flat performance	
Independent Legal Ability	*** )	inflation			
	High	Substantial	Satisfactory	Moderate	Limited
to Deine On mating December 14/4th ant Determed Ammend	Minimum revenue increase at	Maximum revenue increase at least	Maximum revenue increase at	Maximum revenue increase at	Maximum revenue increase less
to Raise Operating Revenues Without External Approval	least 300% of the scenario	200% of the scenario revenue	least 100% of the scenario	least 50% of the scenario	than 50% of the scenario
(in Relation to Normal Cyclical Revenue Decline)	revenue decline	decline	decline	revenue decline	revenue decline
Expenditure Framework (aaa)					
Natural Pace of Spending Growth Relative to Expected	Slower to equal	In line with to marginally above	Above	Well above	Very high
Revenue Growth	-				
Flexibility of Main Expenditure Items (Ability to Cut	Ample	Solid	Adequate; legal or practical	Limited; cuts likely to	Constrained; adequate delivery
Spending Throughout the Economic Cycle)	-		limits to budget management	meaningfully, but not critically,	of core services may be
			may result in manageable cuts	reduce core services at times	compromised at times of
			to core services at times of	of economic downturn	economic downturn
			economic downturn		
Long-Tern Liability Burden (aa)					
	Low	Moderate	Elevated but still in the	High	Very High
Combined Burden of Debt and Unfunded Pension	Liabilities less than 10% of	Liabilities less than 20% of personal	0	Liabilities less than 60% of	Liabilities 60% or more of
Liabilities in Relation to Resource Base	personal income	income		personal income	personal income
			personal income		
Operating Performance (aaa)					
Financial Resilience Through Downturns (Based on	Exceptionally strong gap-closing	Very strong gap-closing capacity;	Strong gap-closing capacity;		Limited gap-closing capacity;
	capacity; expected to manage	expected to manage through		financial operations could	financial operations could
		economic downturns while	more challenged in a downturn		become distressed in a downturn
	while maintaining a high level of	maintaining an adequate level of	than is the case for higher	downturn, but expected to	and might not recover.
	fundamental financial flexibility.	fundamental financial flexibility.	rating levels but expected to	recover financial flexibility	
			recover financial flexibility.		
	Rapid rebuilding of financial	Consistent efforts in support of	Some deferral of required		Deferral of required spending/
			spending/ nonrecurring	spending/ nonrecurring	nonrecurring support of
	material deferral of required	no material deferral of required	support of operations.	support of operations.	operations that risks becoming
		spending/nonrecurring support of			untenable given tools available
	of operations.	operations.			to the issuer.
Overall Additional Considerations	In addition to the key rating drive	er assessments discussed above, the fi	nal rating assigned also consider	s certain additional risk factors t	hat may affect the rating
	conclusion. These additional risk	factors work asymmetrically, where	only below-standard features are	factored into the final rating lev	els. For U.S. state and local
	governments, these risk factors a	re management and economic charact	eristics that are significantly out	tside the U.S. norm.	



### **S&P Methodology**

• S&P revised methodology published on September 9, 2024

#### Framework for rating U.S. governments





### **S&P Methodology**

#### Determining the anchor

					Ind	lividual c	redit pro	ofile				
		1	1,5	2	2.5	3	3.5	4	4.5	5	5.5	6
work	1	aaa	aaa	aa+	aa	aa-	a+	а	a-	bbb	bb+	bb-
Institutional framework assessment	2	aaa	aa+	aa	aa-	a+	а	a-	bbb+	bbb-	bb	b+
itutional fram assessment	3	aa+	aa	aa-	a+	а	a-	bbb	bbb-	bb+	bb-	b
tituti asse	4	aa-	a+	а	a-	bbb+	bbb	bb+	bb	bb-	b	b-
sul-	5	а	a-	bbb+	bbb	bbb-	bb+	bb-	b+	b	b-	b-
	6	bbb+	bbb	bbb-	bb+	bb	bb-	b+	b	b-	b-	b-

If the ICP is not a whole number or a midpoint between two whole numbers, the anchor would fall within ranges outlined in table 1. For instance, if a government is operating in an IF of '2', with an ICP of '2.2', the table outcome would be between 'aa' and 'aa-'. In these cases, we determine the anchor by considering:

- The position within the range (that is, whether the ICP is at the high or low end of the range); and
- The expected future performance of one or several of the five ICP credit factors; or
- Any credit characteristics that may be over or understated in our analysis; or
- A peer comparison.



### **S&P Credit Factors**

#### • Institutional Framework

- Predictability (25%) ability of government to forecast revenues and expenditures
- Revenue/expenditure balance and system support (50%) ability to finance its services, and federal support
- Transparency and accountability (25%) comparability of government's relevant financial information

#### • Individual Credit Profile

- Economy 20%
  - GSP per capita % of U.S.(50%)
  - State PCPI % of U.S. (50%
- Financial Performance 20%
  - State budgetary performance over economic cycles
- Reserves and Liquidity- 20%
  - Budget-based reserves
- Management 20%
  - Budgeting practices (30%)
  - Long-term planning (35%)
  - Policies (30%)
- Debt and Liabilities 20%
  - Current cost for debt service and liabilities (50%
  - Net direct debt per capita (25%)
  - Net pension liabilities per capita (25%)



### **S&P – Institutional Framework**

Institutional framework: Predictability	subfactor assessment
---	----------------------

1	2	3	4	5-6
State does not have voter initiatives	State has some voter initiative activity, but this has not historically negatively affected operations or limited flexibility	State has an active voter initiative process that has affected revenues and/or expenditures, resulting in diminished flexibility	Voter initiative process is highly active and has substantially impaired operations of governments	The system is very volatile, with ongoing large-scale transformations, making revenues and expenditures highly unpredictable
The disbursement pattern and rules/framework governing shared revenues and own-source revenues are stable and predictable	Some history or expectation of changes to the disbursement pattern or the rules/framework governing own-source revenues and/or shared revenues, but there is sufficient time for planning and adjustment	Frequent or severe changes to the disbursement pattern or the rules/framework governing own-source revenues and/or shared revenues, but there is sufficient time for planning and adjustment	Frequent or severe changes to the disbursement pattern or the rules/framework governing own-source revenues and/or shared revenues to the detriment of governments	Frequent and severe changes to the rules/framework governing own-source revenues and/or shared revenues to the substantial detriment of governments

#### Institutional framework: Transparency and accountability subfactor assessment

1	2	3	4	5-6
Timely, annual generally accepted accounting principles compliant audited financial statements	Annual audited accrual or modified accrual financial statements	Biennial audited accrual or modified accrual financial statements	Cash-basis reports provide the sole source of financial information in most years	



### **S&P – Institutional Framework**

1	2	3	4	5-6
Revenue structure allows for revenue to match expenditures leading to sustained or increased operating flexibility	Revenue structure allows for revenue to match expenditures	Revenue structure is constrained and expenditures outpace revenue growth in some years	Revenue structure is constrained and expenditures outpace revenue growth in most years	Revenue structure is not sufficient to cover essential services and infrastructure needs
Ability to raise own-source operating revenue without voter approval, and in the case of states, there is no extraordinary legislative threshold for approval	Some flexibility to raise own-source operating revenues without voter approval; limitations (such as property tax caps) restrict flexibility, but still allow for most governments to raise such revenues	No ability to raise own- source operating revenue without voter approval	No ability to raise own- source operating revenue, even with voter approval	No ability to raise own- source revenue for any purpose, including debt service, even with voter approval
Strong flexibility to reduce expenditures and no significant unfunded or partially funded mandates exist	Less flexibility to reduce expenditures, or intermittent unfunded expenditure mandates exist; however, governments are able to maintain balanced operations	Intermittent unfunded expenditure mandates exist that lead to imbalanced operations in some years	Significant, ongoing unfunded or partially unfunded expenditure mandates that pressure the average government's budget	Significant, ongoing unfunded expenditure mandates that overwhelm the average government's budget
Demonstrated track record of robust systemwide support from higher-level government to balance revenues and expenditures in exceptional situations that is formalized or established in statute	Systemwide support from higher-level government in exceptional situations is established in statute but there is a limited track record; or there is a demonstrated track record of systemwide support from higher-level government in exceptional situations, but it is not formalized or established in statute	Higher-level government provides some monitoring or support in exceptional situations, but there is no established framework for support	No evidence of higher-level government monitoring, no evidence of support in exceptional situations, and has an ability to file for bankruptcy without higher- level government approval	Risk of negative intervention from the higher-level government

#### Institutional framework: Revenue/expenditure balance and system support subfactor assessment



### S&P - Economy

### Economy: Initial assessment

Government type	Metric	Assessment					
		1	2	3	4	5	6
States	Real GSP per capita as a % of U.S. real GDP per capita	>110	110-95	95-85	85-75	75-65	<65
States	State nominal per capita personal income (PCPI) as a % of the U.S. nominal PCPI	>100	100-90	90-80	80-75	75-70	<70



### **S&P – Financial Performance**

#### Financial performance: Initial assessment

Government type	Metric	Assessment				
		1	2	3	4	
States	State budgetary performance over economic cycles	Surplus performance achieved during economic expansion and budget balance during economic decline will be less than 50% reliant on one-time measures	Balanced operating results achieved during economic expansion and budget balance during economic decline may be more than 50% reliant on one-time measures	Balanced operating results may be achieved during economic expansion and budget balance during economic decline may be more than 75% reliant on one-time measures	Limited focus on structural budget balance, regular deficits carried through into future fiscal years	



### **S&P - Reserves**

Reserves and liquidity: Initial assessment for states

Government type	Metric	Assessment			
		1	2	3	4
States	Budget-based reserves	There is a formal budget-based reserve target relative to annual revenue or spending that is above 8%. In addition, there is a demonstrated track record of restoring the reserve following depletion	There is a formal budget-based reserve target relative to annual revenue or spending that is between 4% and 8%. In addition, there is a demonstrated track record of restoring the reserve following depletion	There is a formal budget-based reserve target relative to annual revenue or spending that is between 1% and 4%. In addition, there is a demonstrated track record of restoring the reserve following depletion	There is no formal budget reserve target, or reserves are funded at less than 1% over time, or there is no process for accumulating reserves. No additional reserve funds are identified or available



### S&P - Management

Management: Long-term planning subfactor assessment

1	2	3	4	
Robust culture of long-term planning	Some long-term planning	Informal long-term planning	No long-term planning	
Multiyear financial and capital plans are based on realistic assumptions that support long- term structural balance and strategic decision-making	One multiyear financial or capital plan exists and is based on historical trends that help to inform financial decision-making	Multiyear financial or capital plan may exist but assumptions are optimistic	No multiyear planning exists. Budgeting is done annually with no long-term strategy to identify shortfalls	
Plans are regularly updated and both demonstrate clear funding for projects	Plans are regularly updated but funding is only partially identified	Plans are not regularly updated and capital funding is not identified	Planning is done when needed	

#### Management: Policies subfactor assessment

1	2	3	4	
Robust, well-defined policies with thorough reporting	Basic policies with regular reporting	Informal policies exist with little or no reporting	No policies or policies not followed	
Investment, debt management, and reserve and liquidity policies exist, are well defined, and reflect the operating environment of the government. Strong reporting and monitoring mechanisms exist and are functioning	Investment, debt management, and reserve and liquidity policies exist; however, they are basic or informal, but are widely communicated and followed with some regular reporting	Some policies exist, formally or informally, and are generally adhered to; however, there is limited reporting or link to the operating environment of the government	Absence of basic policies or clear evidence that policies are not followed	



### **S&P – Debt and Liabilities**

#### Debt and liabilities: Initial assessment

Government type	Metric	Assessment					
		1	2	3	4	5	6
States	Current cost for debt service and liabilities % of revenues	<3	3-6	6-9	9-12	12-15	>15
States	Net direct debt per capita	<500	500-1,500	1,500-2,500	2,500-3,500	3,500-4,500	>4,500
States	Net pension liabilities per capita	<500	500-1,500	1,500-2,500	2,500-3,500	3,500-4,500	>4,500



### S&P Scorecard for Vermont (Prior Methodology)

- Following the onset of the COVID-19 pandemic, S&P revised the State's outlook to negative citing the expectation that the State would have a much slower economic recovery than other states. **The outlook was revised back to "Stable" in August 2022.**
- The State has an aggregate composite score of 1.8, which reflects an overall indicative rating of "AA+."
- As demonstrated in the table, the State has its weakest indicative ratings for the "**Economy**" and "**Debt and Liability Profile**" factors according to S&P's May 2024 report.
  - The State has been making incremental progress on the Debt and Liability Profile score and has lowered that score from 2.9 to 2.6 over the past three years, reversing a trend from prior years which saw that score weakening (raising higher).
- Although Vermont has maintained its "AA+" rating from S&P for quite some time, the State's indicative rating is at the threshold between an AA+ and AA rating. If the State's indicative rating falls to AA, this could put pressure on the State's existing rating.
- The State scores strongly in the Financial Management category, as well as fairly strong in Government framework and Budgetary performance.

S&P Category	Score
1. Government Framework	1.6
1.1. Fiscal Policy Framework	
1.1.a. Balanced Budget Requirement	
1.1.b. Revenue Structure	
1.1.c. Disbursement Autonomy	
1.1.d. Voter Initiatives	
1.1.e. Legal Framework for Debt	
1.2. System Support	
1.3. Intergovernmental Funding	
2. Financial Management	1.0
2.1. Financial Management Assessment	210
2.2. Budget Management	
2.2. Budget Management	
3. Economy	2.4
3.1. Demographic Profile	
3.1.a. Population Growth Trends	
3.1.b. Age Dependency Ratio	
3.2. Economic Structure	
3.2.a. Unemployment	
3.2.b. Employment Composition/Diver	sity of Base
3.3.c. Gross State Product per Capita	Sity of Base
3.3.d. GSP Growth	
3.3. Wealth and Income Indicators	
3.3.a. Per Capita Personal Income Rank	•
3.4. Economic Development	
5.1. Leonomie Development	
4. Budgetary Performance	1.4
4.1. Budget Reserves	
4.2. Liquidity	
4.3. Tax/Revenue Structure	
4.3.a. Revenue Diversity	
4.3.b. Revenue Adjustment History	
4.4. Revenue Forecasting	
4.5. Service Levels	
4.6. Structural Performance	
5. Debt and Liability Profile	2.6
	2.0
Overall Composite Score	1.8
Anchor Rating	AA+
Score Range for Current Anchor Rating	1.6-1.8
Overiding Factors:	N/A
Scorecard Rating	AA+
Current Rating	AA+



# **State Comparisons**

• Vermont maintains very strong credit ratings of Aa1 from Moody's, AA+ from S&P and AA+ from Fitch.





# Vermont's Credit Strengths and Rating Agency Concerns

	Moody's: Aa1 (Stable) May 31, 2024 Analysts: Matthew Butler, Nicholas Samuels	S&P: AA+ (Stable) May 30, 2024 Analysts: Kevin Archer, Scott Nees	Fitch: AA+ (Stable) June 4, 2024 Analysts: Michael D'Arcy, Eric Kim		
engths	Liquidity is very healthy	<ul> <li>Strong budgetary performance</li> <li>Historically high cash balances and reserve balances that continue to be fully funded</li> <li>Robust financial management and governance framework</li> <li>Well-defined debt affordability and capital planning processes</li> </ul>	<ul> <li>Ample expenditure flexibility with a low burden of carrying costs for liabilities and broad expense-cutting ability</li> <li>Strong recent revenue performance</li> <li>Taken steps to fiscal flexibility and added to reserves.</li> <li>Taken steps to address OPEB liabilities</li> </ul>		
Stre	10	<ul> <li>Factors that could lead to an upgrade:</li> <li>Clear evidence that the State's economic and demographic trajectory is on a path aligns with what is seen among 'AAA' rated peers, while also making inroads in paying down its sizable retirement liabilities</li> </ul>	<ul> <li>Factors that could lead to an upgrade:</li> <li>Material and sustained improvement in demographic profile</li> <li>Increased economic diversification that supports stronger revenue growth</li> <li>Sustained reduction in long-term liability burden to below 10% of personal income</li> </ul>		
Rating Agency Concerns	<ul> <li>Economic growth lags that of the US and an aging population may be a drag on future growth.</li> <li>Relative to state revenue, leverage (combined debt and unfunded pensions) is higher than most states.</li> </ul>	<ul> <li>Trailing the nation in jobs recovery</li> <li>Significant pension and OPEB liabilities remain sizable relative to those of state peers</li> </ul>	<ul> <li>Anticipated limited growth in revenues given the State's modest economic growth prospects;</li> <li>Spending growth will likely be slightly ahead of revenue growth</li> <li>Net pension and OPEB liabilities are significant</li> </ul>		
	<ul> <li>Substantial growth in debt or unfunded post-employment liabilities</li> </ul>	<ul> <li>Factors that could lead to a downgrade:</li> <li>If economy and demographics significantly underperform relative to those of similarly rated peers, particularly if slow revenue growth were to strain the State's ability to sustain structural balance in outyear budgets</li> </ul>	<ul> <li>Factors that could lead to a downgrade:</li> <li>Inability to prudently manage the long- term liability burden in context of modest growth expectations</li> <li>Reduction in gap-closing capacity caused by softening budgetary discipline or weaker revenue growth that leads to recurring structural imbalances and substantial draws on fiscal reserves</li> </ul>		



## Moody's Ratings – State of Maine Upgraded

As % of revenue

160%

140%

120%

100%

80%

60%

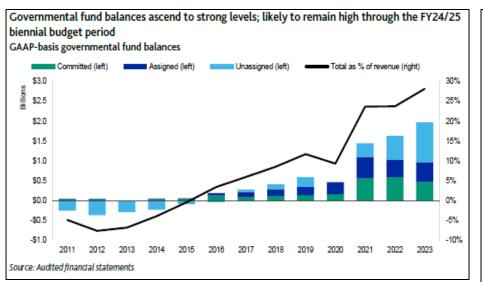
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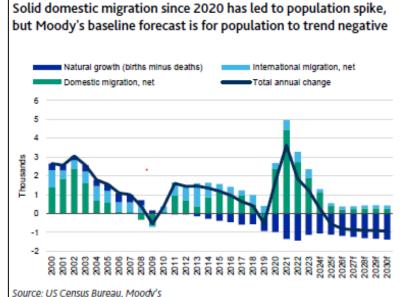
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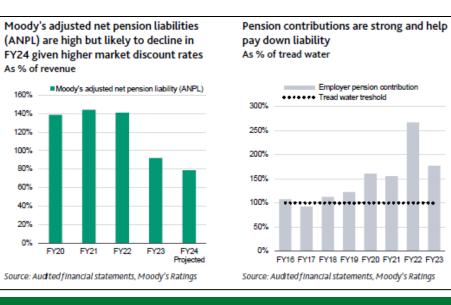
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FY20

- Moody's upgraded Maine on May 17, 2024 due to:
  - A surge in domestic in-migration from 2020 to 2023, especially among relatively young workers, has led Maine's real GDP growth and unemployment rates to outperform the nation
  - Strong financial reserves after several years of budget surpluses
  - Moderated leverage because of solid pension contribution practices
  - Limited growth in liabilities compared to revenue growth
  - Relatively conservative forecasting and budgeting practices
  - Strong fund balances at least through end of FY 2025







- Same basic concept as a home mortgage:
  - A loan for a large purchase, that is paid back over time
  - In fact, one common form of bonds is a pool of mortgages packaged as a single bond
- Vermont's bonds also have fixed interest rates like a typical mortgage
- Some ways Vermont's bonds differ from a mortgage:
  - Usually repaid over 20 years (vs. 15 or 30 years)
  - Payments made every 6 months for interest, and a portion of the principal matures every year
  - Each bond issue is actually a package of individual bonds maturing between 1 and 20 years
  - Level principal payments (vs. level principal plus interest payments), so earlier payments are larger than later payments
  - Can only be refinanced (called) after about 10 years (vs. any time)
  - Vermont guarantees repayment from General Fund (vs. home pledged as collateral that can be foreclosed upon)
  - Large number of lenders (i.e., bond purchasers) such as investment banks, mutual funds, and even Vermont citizens (vs. a single local bank or credit union)



## Vermont Debt Strategy

- Vermont has conscientiously and consistently maintained excellent bond ratings, to achieve the lowest possible borrowing costs for Vermont's citizens and taxpayers
- The State has substantially reduced outstanding debt since the 1990s, however there is a need to continue in light of national trend of reductions in bond issuance
- Straightforward debt profile, almost entirely General Obligation (G.O.) debt
  - Transportation Infrastructure Bonds (TIBS) backed by motor fuel assessment issued 2010-2013, fully redeemed in June 2022
- 100% fixed rate bonds
- Level principal produces rapid amortization
- Capital Appropriation changes adopted by the General Assembly have improved the process:
  - Two-year recommendations
  - Use of bond premium used for projects reduces amount of issuance



## **Debt Management and Affordability Process**

Capital Debt Affordability Advisory Committee (CDAAC) established by State statute (Act No. 258 of 1989)

- Provides Governor and Legislature with estimate of "net taxsupported debt that prudently may be authorized for the next fiscal year"
- Has provided a biennial recommendation since 2012
- Capital Bill has reflected recommended estimate every year since

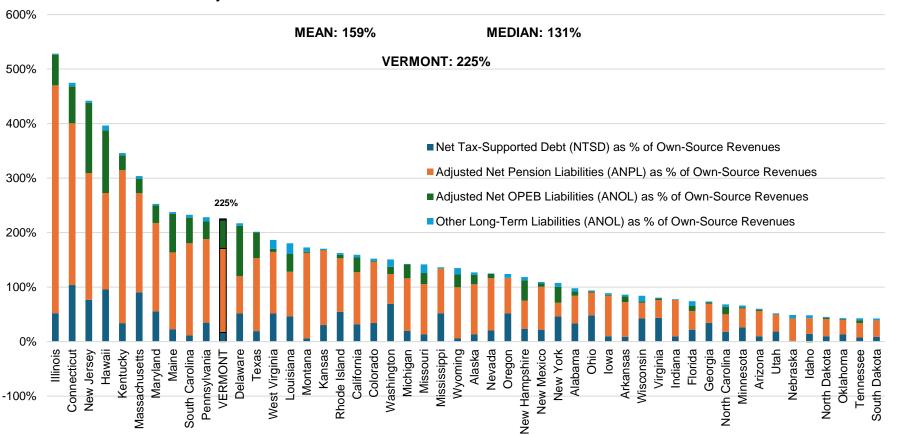
Vermont benchmarks against states with at least two triple-A ratings (17 as of 2024 report)

- Debt per capita and debt as a percent of personal income compare favorably
- Track other key affordability metrics, especially debt service as percent of revenues
- Now Incorporating peers' pension funded ratios, ADEC contributions, and reserve levels
- Considering infrastructure needs as well



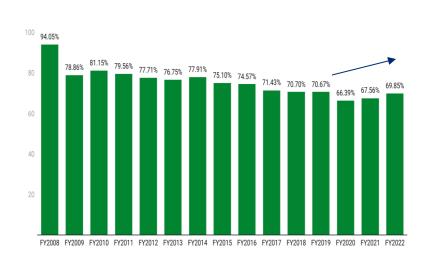
### **Moody's Scorecard Considerations**

- Moody's "US States Rating Methodology" includes a "Leverage" factor with a weight of 30% and adjusted OPEB liabilities and other long-term liabilities along with debt and pensions.
- Vermont is currently ranked 11th 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.



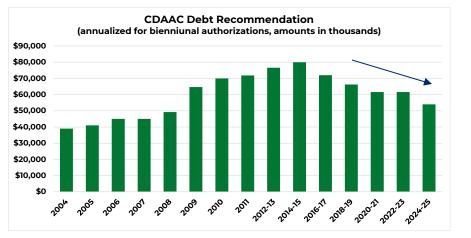
#### Moody's 50 States' Liabilities as a Percent of Own-Source Revenue

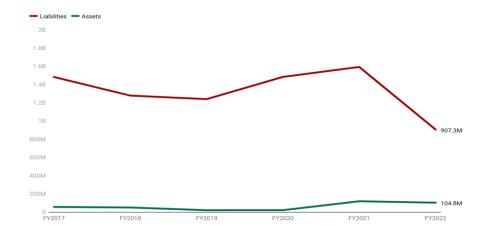
### **Pension, OPEB and Debt Management**



120

Funding ratios are improving following pension reform and decrease in assumed rate of return







### **Official Statement for 2024 Bond Issuance**

#### New Issue – Book Entry Only

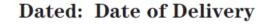
Ratings: Moody's: Aa1 Fitch: AA+ S&P: AA+ (See "RATINGS" herein)

In the opinion of Locke Lord LLP, Bond Counsel, based upon an analysis of existing law and assuming, among other matters, compliance with certain covenants, interest on the Bonds is excluded from gross income for federal income tax purposes under the Internal Revenue Code of 1986, as amended (the "Code"). Interest on the Bonds will not be included in computing the alternative minimum taxable income of individuals. However, interest on the Bonds will be included in the "adjusted financial statement income" of certain corporations that are subject to the alternative minimum tax under Section 55 of the Code. Under existing law, interest on the Bonds is exempt from State of Vermont personal income taxes and State of Vermont corporate income taxes. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the Bonds. See "TAX EXEMPTION" herein.



\$70,790,000 STATE OF VERMONT General Obligation Bonds 2024 Series A \$36,860,000 STATE OF VERMONT General Obligation Refunding Bonds 2024 SERIES B

Due: As shown on the inside cover hereof





#### \$70,790,000 STATE OF VERMONT General Obligation Bonds 2024 Series A

Due February 15	Principal <u>Amount</u>	Interest <u>Rate</u>	Yield	CUSIP <sup>†</sup> 924258	Due February 15	Principal <u>Amount</u>	Interest <u>Rate</u>	Yield	CUSIP <sup>†</sup> 924258
2025	\$3,540,000	5.00%	3.24%	6W1	2035	\$3,540,000	5.00%	2.92%*	7G5
2026	3,540,000	5.00	3.13	6X9	2036	3,540,000	5.00	$2.95^{*}$	7H3
2027	3,540,000	5.00	3.03	6Y7	2037	3,540,000	5.00	3.00*	7 <b>J</b> 9
2028	3,540,000	5.00	2.96	6Z4	2038	3,540,000	5.00	3.09*	7K6
2029	3,540,000	5.00	2.92	7A8	2039	3,540,000	5.00	3.15*	7L4
2030	3,540,000	5.00	2.91	7B6	2040	3,540,000	5.00	3.25*	7M2
2031	3,540,000	5.00	2.91	7C4	2041	3,540,000	4.00	3.67*	7N0
2032	3,540,000	5.00	2.91	7D2	2042	3,540,000	4.00	3.74*	7P5
2033	3,540,000	5.00	2.90	7E0	2043	3,535,000	4.00	3.81*	7Q3
2034	3,540,000	5.00	$2.90^{*}$	7F7	2044	3,535,000	4.00	3.88*	7R1

#### \$36,860,000 STATE OF VERMONT General Obligation Refunding Bonds 2024 Series B

Due <u>August 15</u>	Principal <u>Amount</u>	Interest <u>Rate</u>	Yield	CUSIP <sup>†</sup> 924258	Due August 15	Principal <u>Amount</u>	Interest <u>Rate</u>	Yield	CUSIP <sup>†</sup> 924258
2025	\$7,890,000	5.00%	3.16%	789	2030	\$3,390,000	5.00%	2.92%	7X8
2026	3,445,000	5.00	3.11	7T7	2031	3,380,000	5.00	2.91	7Y6
2027	3,430,000	5.00	2.99	7U4	2032	3,360,000	5.00	2.90	7Z3
2028	3,420,000	5.00	2.97	7V2	2033	3,345,000	5.00	2.90	8A7
2029	1,870,000	5.00	2.94	7W0	2034	3,330,000	5.00	2.90	8B5



	2024 Series A	2024 Series B		Financing			
Sources:	(New Money)	(Refunding)	Total	Overview			
Par Amount	\$ 70,560,000.00	\$ 85,965,000.00	\$156,525,000.00				
Premium	7,121,904.00 6,583,835.60 13,705,739.		13,705,739.60	2024 Series A (New Money) (Competitive)			
	\$ 77,681,904.00	\$ 92,548,835.60	\$170,230,739.60	Purpose Reimburse and/or fund current and prior-year Capital Bill projects.			
				Amount Approximately \$77.5 million of projects			
	2023 Series A	2023 Series B	Tatal				
Uses:	(New Money)	(Refunding)	Total	2024 Series B (Refunding) (Competitive)			
Project Fund	\$77,469,955.31	\$-	\$77,469,955.31	Refinance 2012 and 2013 Series G.O. Bonds			
Cash Deposit	-	1.49	1.49	callable on 8/15/2023, and 2014 Series G.O.			
SLGS Purchases	-	92,289,271.00	92,289,271.00	Purpose Bonds callable 8/15/2024, with a redemption date			
Underwriter's Discount	211,680.00	257,895.00	469,575.00	of 9/17/2024, i.e., 89 days from closing (amount			
Additional Proceeds	268.69	1,668.11	1,936.80	finalized upon pricing)			
	\$ 77 681 904 00	\$ 92 548 835 60	\$170 230 739 60	Amount Approximately \$92.3 million of refunded bonds			

\$170,230,739.60

Savings Approximately \$3.2 million, 3.5% pf refunded par

Note: Issuance costs paid separately from State's operating budget.

\$ 77,681,904.00 \$ 92,548,835.60

\* Preliminary, subject to change.



## **Contact Information**

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George Steelman, Financial Director II <u>George.Steelman@vermont.gov</u>

Debt Management and Bonds <u>https://www.vermonttreasurer.gov/content/debt</u> Vermont Ratings Reports and Rating Agency Methodologies <u>https://www.vermonttreasurer.gov/content/debt/state-bond-ratings-report</u>

