

State of Vermont Capital Debt Affordability Advisory Committee – 2018 Report

“tread water” annual pension cost, debt service and the annual OPEB payment divided by own source revenue.

The new methodology provides an updated explanation of how Moody’s assigns ratings to US states and territories. The report provides market participants with insight into the factors Moody’s considers being most important to their state ratings and the understanding of the qualitative and quantitative considerations, including financial information and metrics. The report also introduces an updated state and territory methodology scorecard. The scorecard’s purpose is to provide a reference tool that can be used to approximate credit profiles for US states and territories.

The methodology includes “key factors” and “sub-factors,” as referred to by Moody’s, to produce a preliminary scorecard-indicated outcome. The preliminary outcome may be adjusted up or down in half-notch increments, based on six notching adjustments. The combination of the 10 factors, as seen below, results in the scorecard-indicated outcome:

Rating Factors	Factor Weighting	Rating Sub-Factors	Sub-Factor Weighting
Economy	25%	Per Capita Income Relative to US Average	12.5%
		Nominal Gross Domestic Product	12.5%
Governance	20%	Governance/Constitutional Framework	20%
Finances	30%	Structural Balance	10%
		Fixed Costs/State Own-Source Revenue	10%
		Liquidity and Fund Balance	10%
Debt and Pensions	25%	(Moody’s-adjusted Net Pension Liability + Net Tax-Supported Debt)/State GDP	25%
Total	100%	Total	100%

Preliminary Score (Before Notching Factors)	
Notching Factors	
Growth Trend	(notching adjustment)
Economic or Revenue Concentration or Volatility	(notching adjustment)
Pension or OPEB Characteristics Not Reflected in Current Metrics	(notching adjustment)
Willingness to Assume Responsibility for Distressed Local Governments	(notching adjustment)
Impaired Market Access	(notching adjustment)
Financial Stability	(notching adjustment)
Scorecard-Indicated Outcome	

For the debt and pensions sub-factor, Moody’s previously calculated two ratios with a 10% weighting factor for each ratios:

- Net Tax-Supported Debt / Total Governmental Fund Revenues, and
- 3-Year Average of the Adjusted Net Pension Liability / Total Governmental Fund Revenues

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The debt and liability profile is the fifth of the five major factors in S&P's assessment of the indicative credit level. 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. The new updated, methodology focuses on the revised governmental pension reporting and disclosure standards.

In terms of debt, the CDAAC reports since 2011 have incorporated certain new pieces of information, such as debt as a percent of state domestic product and relative rapidity of debt retirement (See the table "Dash Board Operating Revenues"). Provided 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	1,069	2
Debt as a % of Personal Income	Below 2%	2% - 4%	2.1%	2
Debt Service as a % of Spending	Below 2%	2%- 6%	2.1%	2
Debt as a % of Gross State Product	Below 2%	2% - 4%	2.1%	2
Debt Amortization (10 year)	80% - 100%	60%-80%	68%	2

¹ As calculated and reported by S&P.

Moody's US States Rating Methodology

On April 12, 2018, Moody's Investors Services released the final version of its "US States and Territories Rating Methodology" to replace its "US States Rating Methodology," last revised in April 2013.

At a high level, the primary revisions to the methodology were the inclusion of U.S. territories in the new criteria and the proposed adjustment of the weights for three of the four factors, with the Economy factor increasing from 20% to 25%, the Debt and Pensions factor increasing from 20% to 25% and the Governance factor decreasing from 30% to 20%. The Finance factor remained the same at 30% of the total score.

Previously, the Finance factor had three components: (i) revenue diversity, volatility and growth, (ii) structural balance and reserves, and (iii) liquidity. Under the new criteria, the two sub-factors, structural balance and reserves and liquidity remain, but the revenue diversity, volatility and growth subfactor was replaced by a Fixed Cost Ratio. The Fixed Cost Ratio is calculated to be the sum of Moody's

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

Triple-A Rated States	Moody's Adjusted Net Pension Liability (ANPL)			
	As % of PI	As % of State GDP	Per Capita (\$)	As % of Revenues
Delaware	13.5	8.7	6,629	106
Florida	2.6	2.6	1210	52
Georgia	5.8	4.7	2,516	104
Indiana	7.2	5.9	3,188	110
Iowa	3.7	2.8	1,691	49
Maryland	17.4	15.9	10,371	263
Minnesota	6.2	5.2	3,273	68
Missouri	5.3	4.7	2,334	104
North Carolina	2.3	1.9	1007	36
South Carolina	14.2	13.2	5,747	207
South Dakota	6.6	5.6	3,194	116
Tennessee	3.4	2.9	1,484	52
Texas	10.6	8.3	4,955	196
Utah	3.2	2.5	1,350	47
Virginia	4.4	4.0	2,378	75
MEAN¹	7.1	5.9	3,422	105.7
MEDIAN¹	5.8	4.7	2,516	104.0
VERMONT	16.1	15.9	8,215	141
VERMONT's 50 STATE RANK	10	8	9	18

Source: Moody's *Adjusted Net Pension Liabilities Spike in Advance of Moderate Declines*, August 26, 2018.

¹ Calculated by Public Resources Advisory Group. These calculations exclude all Vermont numbers and include only states rated triple-A by two or more of the rating agencies, year ended June 30th, 2017.

² Vermont numbers include the combined defined benefits plans of the Vermont State Employees' Retirement System and the Vermont State Teachers' Retirement System.

³ 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.

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

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