

State of Vermont Debt Management Update

**Office of the State Treasurer
January 2015**



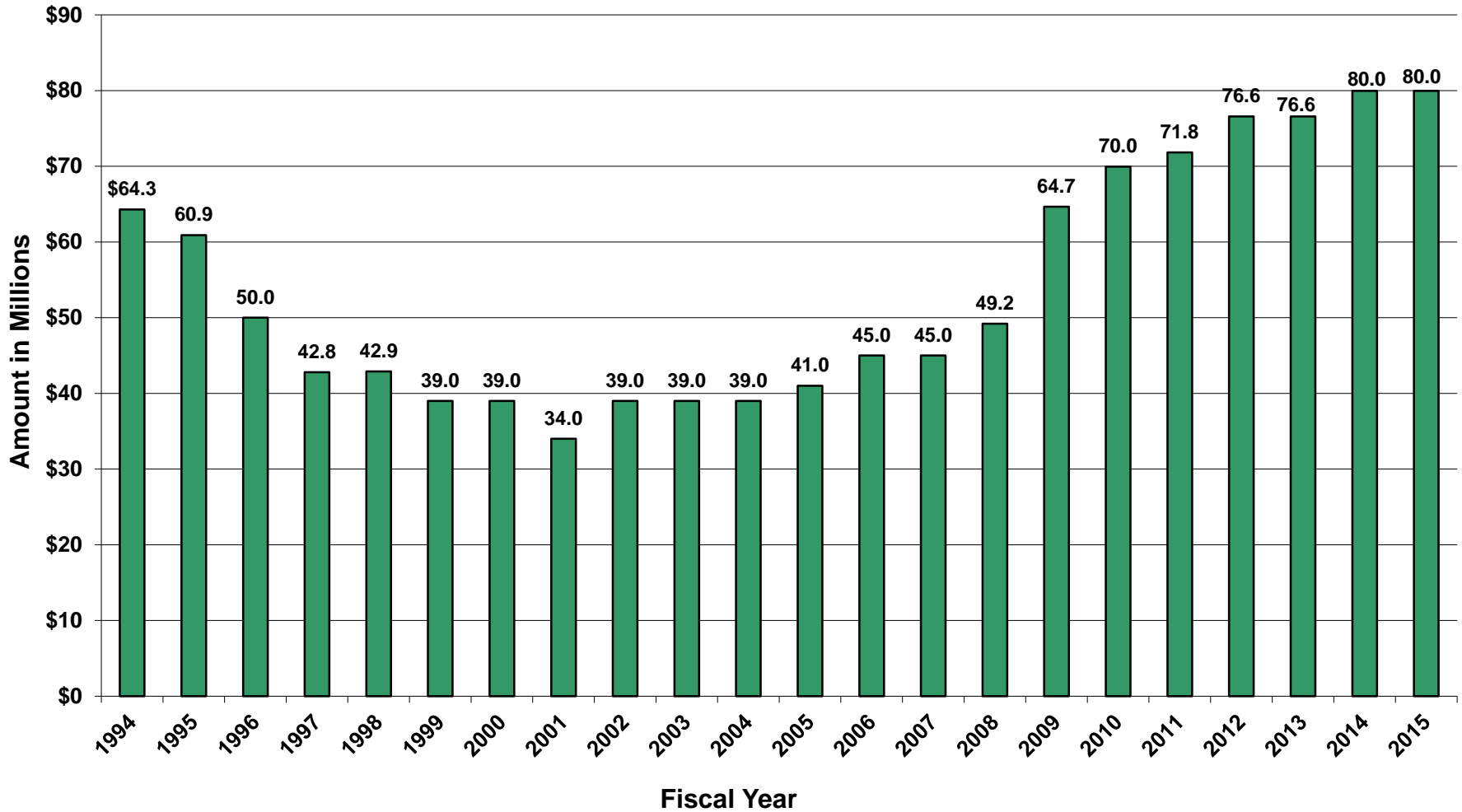
Executive Summary

- In its December 2014 final report, the Capital Debt Affordability Advisory Committee (CDAAC) recommended that net tax-supported (i.e., General Obligation) debt for the FY2016-17 biennium not exceed **\$144 million**.
- On December 9, the State's G.O. bond sale produced **\$11.559 million** of bond premium, freeing up an identical amount of the prior biennium's bond authorization to be used in the current biennium.
- If the General Assembly adopts CDAAC's recommendation, then the total bond authorization for the FY2016-17 Capital Bill would be **\$155.559 million**, a \$4.3 million or 2.7% reduction from FY2014-15.
- The Treasurer's Office and CDAAC believe this recommendation is consistent with Vermont's long-term goals of adequately financing capital needs while maintaining strong ratings and low borrowing costs.

Vermont's Debt Profile and Critical Debt Ratios



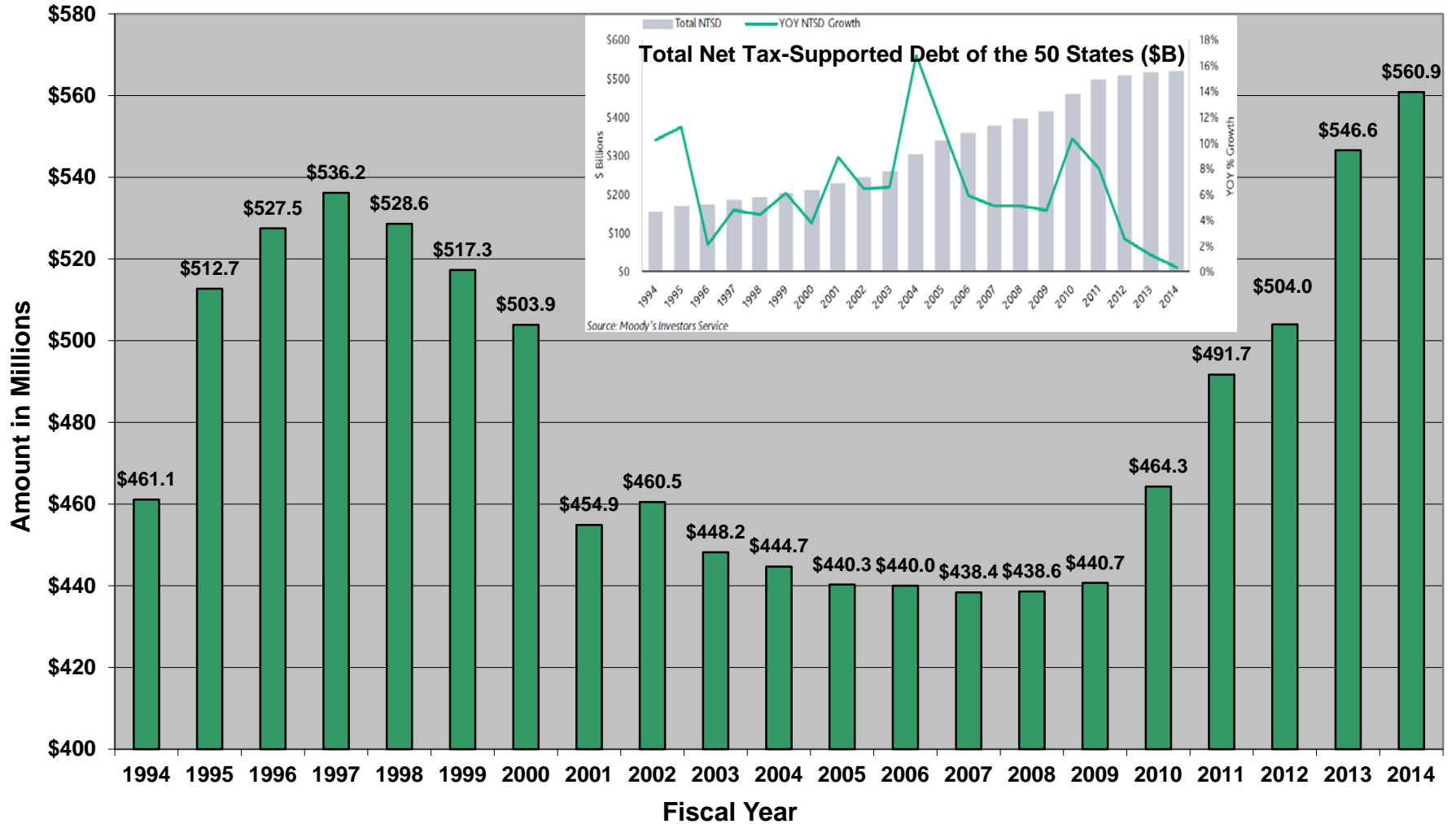
State of Vermont Annual Long-Term Debt Authorizations, FY1993-FY2015 (\$ millions)



Note: FY2014-2015 indicates CDAAC 2-year recommended net tax-supported debt authorization of \$159.9 million.

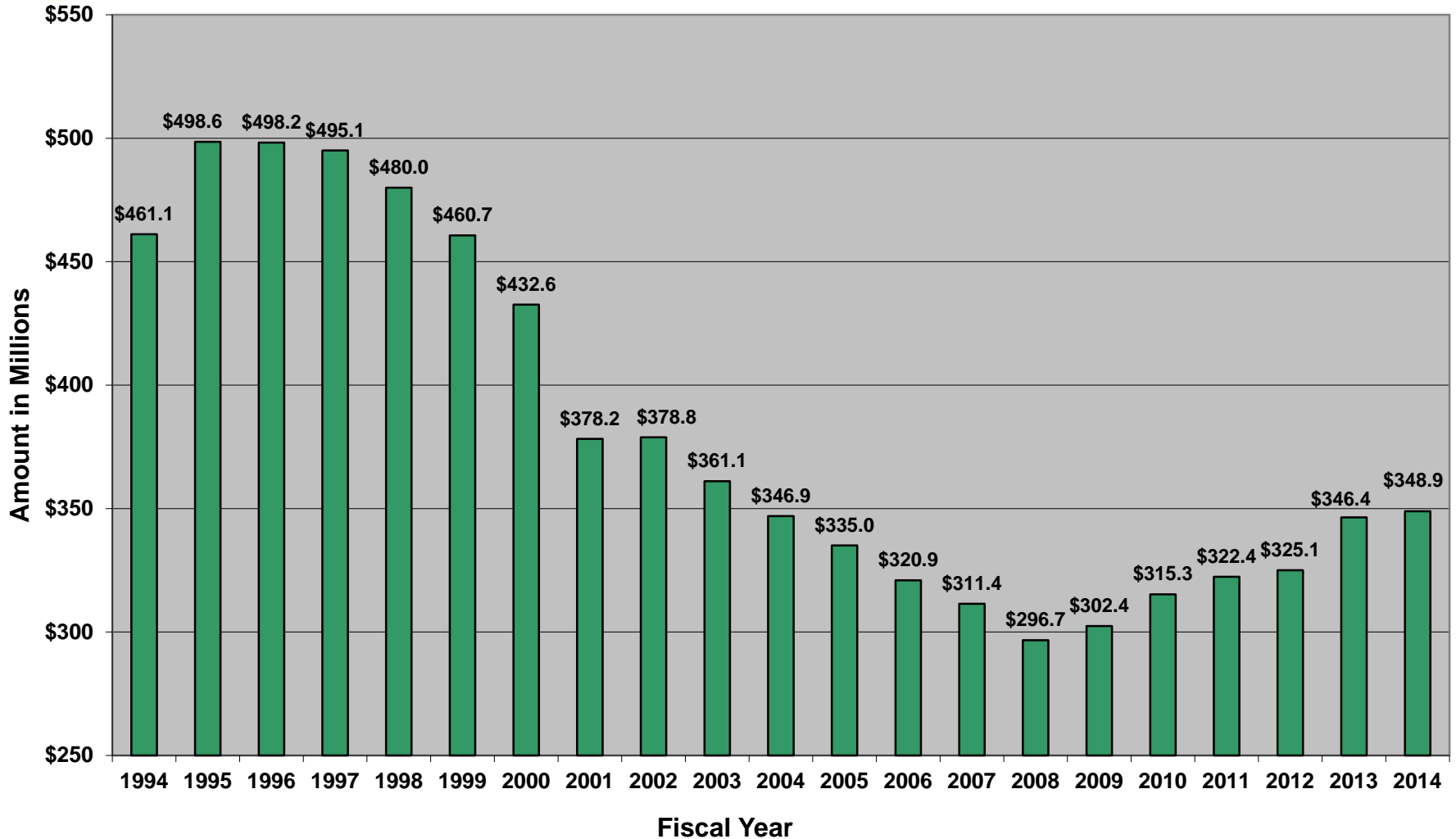


State of Vermont General Obligation Debt Outstanding, FY1994-FY2014 vs. National Trend





State of Vermont General Obligation Debt Outstanding, FY1994-FY2014 vs. National Trend Adjusted for Inflation (Using 1994 Dollars)



* Source: U.S. Bureau of Labor Statistics, CPI for All Urban Consumers, Not Seasonally Adjusted, June 1994 = 100

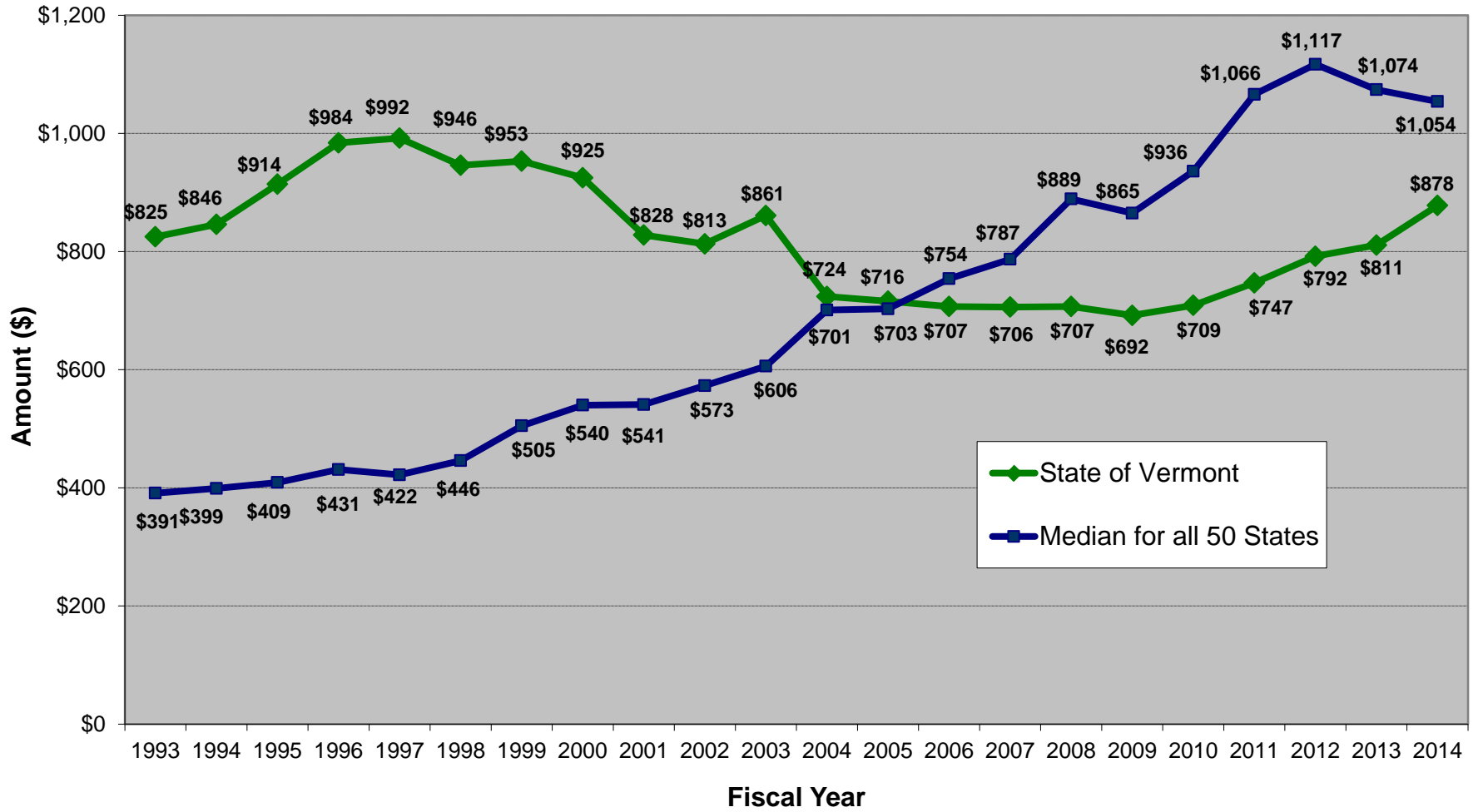
Critical Debt Ratios: A Primer

(All numbers for FY2014)

- **Debt Per Capita (DPC):**
= Total General Obligation Bonds / Vermont's Population
= \$560.9 million / 627,600 = \$894
- **Debt as a Percent of Personal Income (DPI):**
= Total G.O. Bonds / Vermont's Nominal Dollar Personal Income
= \$560.9 million / \$27.93 billion = 2.0%
- **Debt Service as a Percent of Revenues (DSPR):**
= G.O. Principal and Interest / (General + Transportation Fund Revenues)
= \$74.819 million / \$1.575 billion = 4.7%

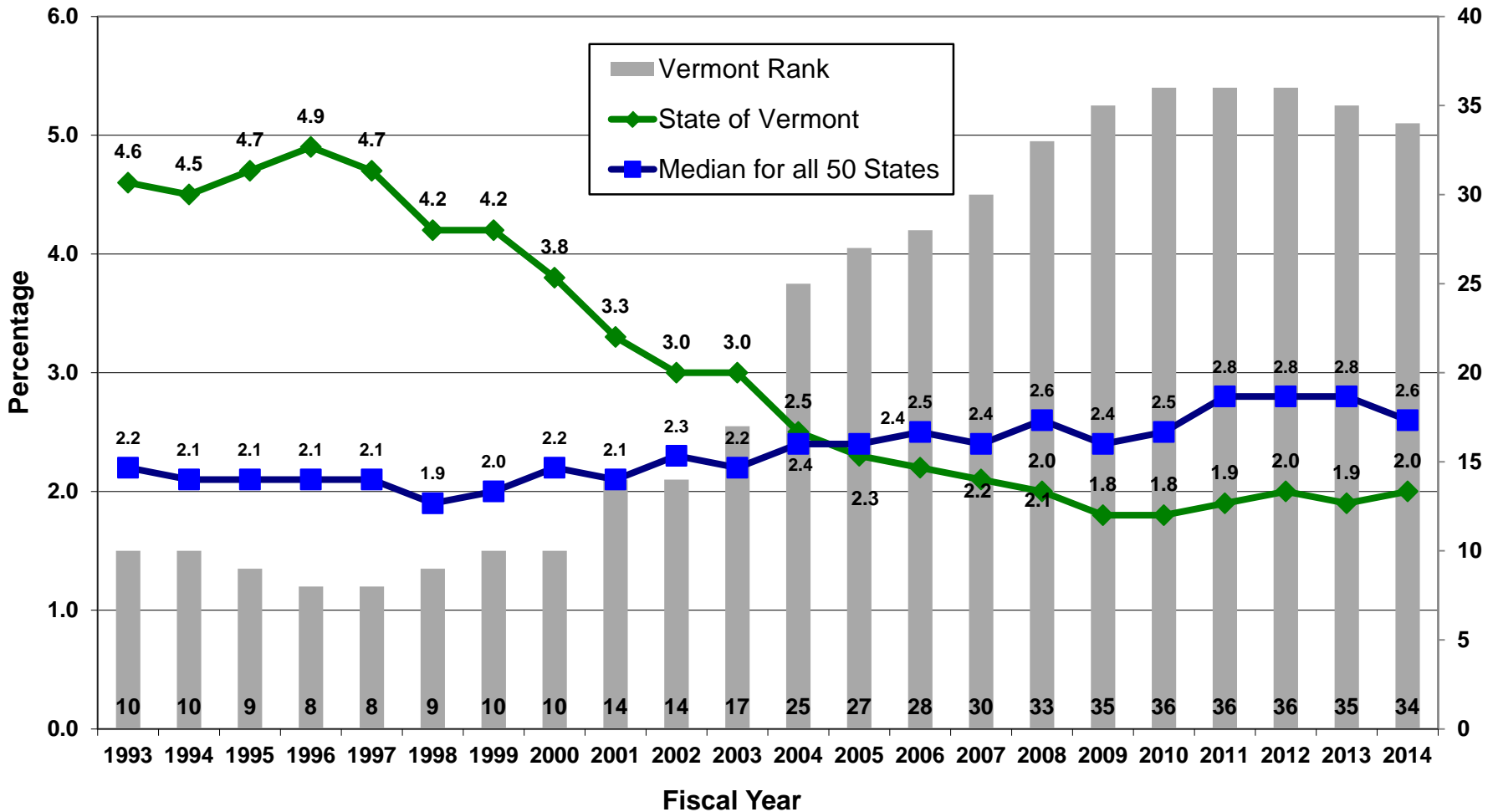


State of Vermont Net Tax Supported Debt Per Capita



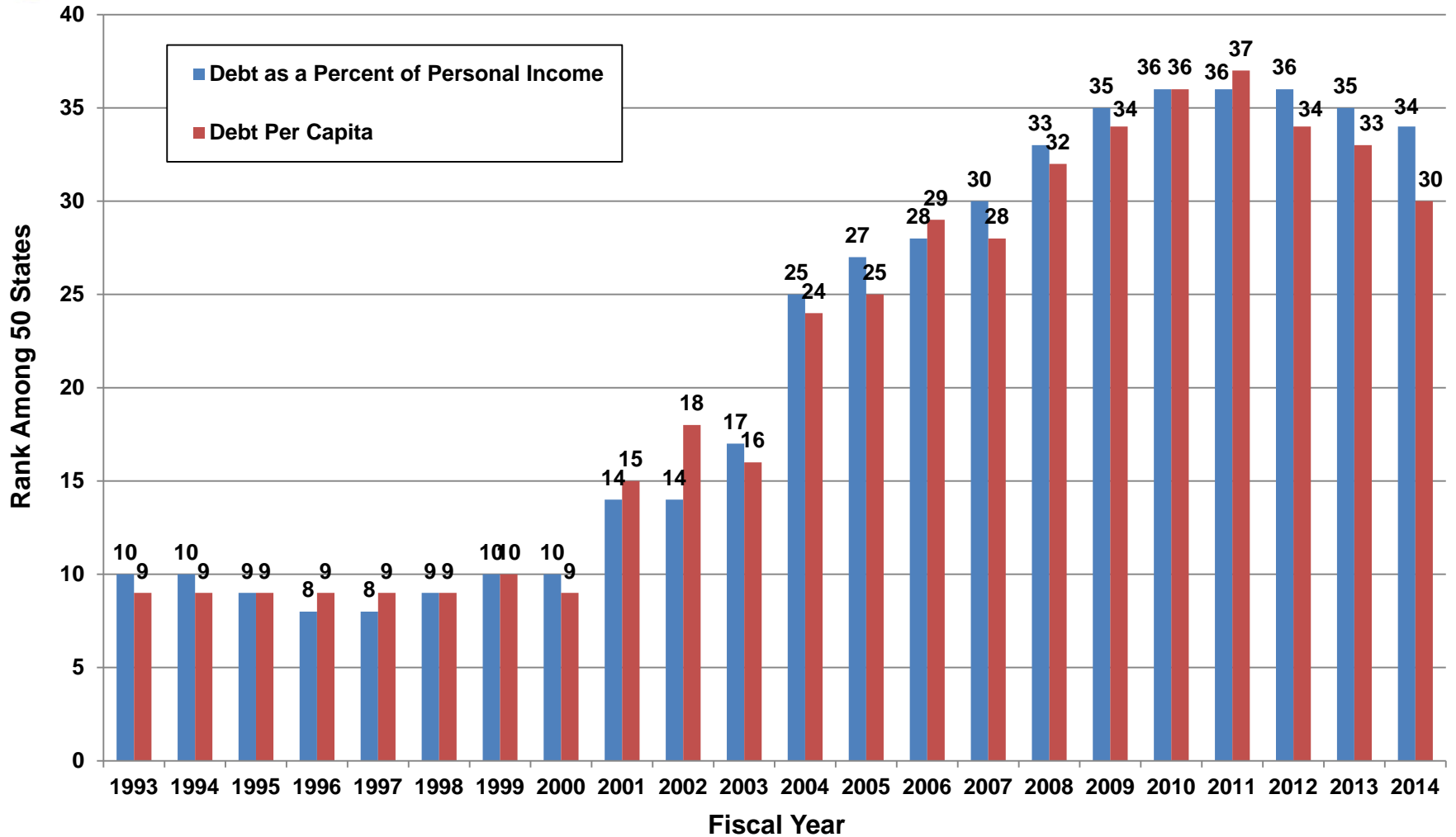


State of Vermont Net Tax Supported Debt as a Percent of Personal Income





State of Vermont Historical State Debt Rankings



10-Year Debt Projection

- \$144 million biennium recommendation for FY2016-17 is based upon assumed issuance of \$72 million per year for 10 years from FY2016-25
- Added to existing \$560.85 million of bonds, plus \$105.505 million of authorized but unissued bonds, less maturities of existing bonds results in projected outstanding bonds of \$761.275 million by 2025, and increase of 36% or 3.1% per year.

EXISTING AND PROJECTED NET TAX-SUPPORTED G.O. BONDS OUTSTANDING (\$000)												
Current FY Debt	2015 Issue \$105.505M	2016 Issue 72.000M	2017 Issue 72.000M	2018 Issue 72.000M	2019 Issue 72.000M	2020 Issue 72.000M	2021 Issue 72.000M	2022 Issue 72.000M	2023 Issue 72.000M	2024 Issue 72.000M	2025 Issue 72.000M	Total Est. Debt
2014 560,850	0	0	0	0	0	0	0	0	0	0	0	560,850
2015 512,610	105,505	0	0	0	0	0	0	0	0	0	0	618,115
2016 467,550	100,225	72,000	0	0	0	0	0	0	0	0	0	639,775
2017 425,735	94,945	68,400	72,000	0	0	0	0	0	0	0	0	661,080
2018 386,595	89,665	64,800	68,400	72,000	0	0	0	0	0	0	0	681,460
2019 348,355	84,385	61,200	64,800	68,400	72,000	0	0	0	0	0	0	699,140
2020 311,910	79,105	57,600	61,200	64,800	68,400	72,000	0	0	0	0	0	715,015
2021 275,400	73,825	54,000	57,600	61,200	64,800	68,400	72,000	0	0	0	0	727,225
2022 241,610	68,545	50,400	54,000	57,600	61,200	64,800	68,400	72,000	0	0	0	738,555
2023 209,610	63,265	46,800	50,400	54,000	57,600	61,200	64,800	68,400	72,000	0	0	748,075
2024 180,075	57,985	43,200	46,800	50,400	54,000	57,600	61,200	64,800	68,400	72,000	0	756,460
2025 150,570	52,705	39,600	43,200	46,800	50,400	54,000	57,600	61,200	64,800	68,400	72,000	761,275

10-Year Economic Projections

Population (Thousands)

<u>Year</u>	<u>2013</u>	<u>2014</u>	<u>Change</u>
2014	630.009		n.a.
2015	632.146	627.621	-4.525
2016	634.368	628.346	-6.022
2017	636.737	629.289	-7.448
2018	639.301	630.398	-8.904
2019	641.987	631.598	-10.389
2020	644.826	632.913	-11.913
2021	647.529	634.225	-13.304
2022	650.196	635.618	-14.578
2023	652.982	637.182	-15.800
2024	656.050	638.707	-17.343
2025	n.a.	640.222	n.a.

Nominal Dollar Personal Income (Millions of \$'s)

<u>Year</u>	<u>2013</u>	<u>2014</u>	<u>Change</u>
2014	27,931.574		n.a.
2015	29,100.980	31,135.507	2,034.527
2016	30,175.746	32,816.825	2,641.079
2017	30,903.760	34,392.032	3,488.272
2018	31,590.648	35,905.282	4,314.634
2019	32,425.594	37,377.398	4,951.804
2020	33,363.219	38,947.249	5,584.030
2021	34,348.910	40,621.980	6,273.070
2022	35,345.977	42,449.970	7,103.993
2023	36,374.875	44,360.218	7,985.343
2024	37,396.426	46,312.068	8,915.642
2025	n.a.	48,303.487	n.a.

General Fund and Transportation Fund Revenue (Millions of \$'s)

<u>Year</u>	<u>2013</u>	<u>2014</u>	<u>Change</u>
2014	1,575.125		n.a.
2015	1,658.885	1,628.356	-30.529
2016	1,719.740	1,675.665	-44.074
2017	1,769.848	1,728.204	-41.644
2018	1,817.585	1,784.738	-32.846
2019	1,868.268	1,840.144	-28.123
2020	1,920.081	1,898.843	-21.238
2021	1,974.458	1,961.994	-12.464
2022	2,030.757	2,026.086	-4.672
2023	2,088.177	2,094.446	6.269
2024	2,147.229	2,161.132	13.903
2025	n.a.	2,229.849	n.a.

General Fund and Transportation Fund Revenue as Percent of Nominal Personal Income

<u>Year</u>	<u>2013</u>	<u>2014</u>	<u>Change</u>
2014	5.6%	n.a.	n.a.
2015	5.7%	5.2%	-0.5%
2016	5.7%	5.1%	-0.6%
2017	5.7%	5.0%	-0.7%
2018	5.8%	5.0%	-0.8%
2019	5.8%	4.9%	-0.8%
2020	5.8%	4.9%	-0.9%
2021	5.7%	4.8%	-0.9%
2022	5.7%	4.8%	-1.0%
2023	5.7%	4.7%	-1.0%
2024	5.7%	4.7%	-1.1%
2025	n.a.	4.6%	n.a.

**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⁾									
2002	813	573	18	3.0	2.3	14	6.5	n.a.	n.a.
2003	861	606	16	3.0	2.2	17	6.7	n.a.	n.a.
2004	724	701	24	2.5	2.4	25	6.0	n.a.	n.a.
2005	716	703	25	2.3	2.4	27	5.4	n.a.	n.a.
2006	707	754	29	2.2	2.5	28	5.1	n.a.	n.a.
2007	706	787	28	2.1	2.4	30	5.1	n.a.	n.a.
2008	707	889	32	2.0	2.6	33	5.0	n.a.	n.a.
2009	692	865	34	1.8	2.5	35	5.5	n.a.	n.a.
2010	709	936	36	1.8	2.5	36	5.7	n.a.	n.a.
2011	747	1066	37	1.9	2.8	36	5.1	n.a.	n.a.
2012	792	1117	34	2.0	2.8	36	4.9	n.a.	n.a.
2013	811	1074	33	1.9	2.8	35	4.6	n.a.	n.a.
2014	878	1054	30	2.0	2.6	34	4.7	n.a.	n.a.
Current ⁽²⁾	894	n.a.	n.a.	1.9	n.a.	n.a.	4.7	n.a.	n.a.
Projected (FYE 6/30) ⁽³⁾		State Guideline ⁽⁶⁾			State Guideline ⁽⁷⁾			State Guideline	
2015	985	943		2.0	2.5		4.3	6.0	
2016	1,018	974		1.9	2.5		4.4	6.0	
2017	1,051	1,005		1.9	2.5		4.5	6.0	
2018	1,081	1,037		1.9	2.5		4.5	6.0	
2019	1,107	1,070		1.9	2.5		4.6	6.0	
2020	1,130	1,105		1.8	2.5		4.7	6.0	
2021	1,147	1,140		1.8	2.5		4.9	6.0	
2022	1,162	1,177		1.7	2.5		4.8	6.0	
2023	1,174	1,215		1.7	2.5		4.9	6.0	
2024	1,184	1,254		1.6	2.5		4.8	6.0	
2025	1,189	1,294		1.6	2.5		4.9	6.0	
5-Year Average of Moody's Mean for Triple-A States			1,004	2.4			n.a.		
5-Year Average of Moody's Median for Triple-A States			914	2.5			n.a.		

Vermont's Credit Ratings

Credit Rating Priorities for Legislature

- **Pension Funding:** Continue 100% funding of the annual required contributions (“ARCs”) of the Vermont State Employees’ and State Teachers’ Retirement Systems pension funds.
- **Reserves:** Continue to maintain the 5% budget stabilization reserves, and build the newly-created General Fund Balance Reserve (or “rainy day reserve”) to a target level of 3% of the general fund incrementally and over time.
- **Debt Recommendation:** Continue unbroken 25-year record of adopting the Capital Debt Affordability Advisory Committee’s (CDAAC) biennium recommendation of \$144 million net tax-supported debt.
- **Teachers’ Healthcare:** Continue to fund retired state teachers’ healthcare costs from the annual budget , not from pension funds.

Vermont's Credit Ratings History

MOODY'S INVESTORS SERVICE

RATING ACTION	DATE
Aaa	1971
Aa	9/20/72
Aa2*	10/20/97
Aa1	9/29/99
AAA	2/05/07

* In 1997, Moody's began refining ratings with numerical modifiers. The shift to the "Aa2" rating was part of this process.

FITCH RATINGS

RATING ACTION	DATE
AA	8/18/92
AA+	10/25/99
AAA*	4/5/10

* Resulted from Fitch's "recalibration" of public sector credit ratings.

STANDARD & POOR'S

RATING ACTION	DATE
AAA	10/2/63
Rating withdrawn	3/23/71
AA	2/28/73
Rating withdrawn	10/16/73
AA	4/25/86
AA-	6/10/91
AA	10/14/98
AA+	9/11/00
AA+ with Positive Outlook	9/18/12
AA+ with Stable Outlook	11/7/14

New England Bond Ratings

as of December 31, 2014

State	Moody's	S&P	Fitch
Vermont	Aaa	AA+*	AAA
Connecticut	Aa3	AA	AA
Maine	Aa2	AA	N/A
Massachusetts	Aa1	AA+	AA+
New Hampshire	Aa1	AA	AA+
Rhode Island	Aa2	AA	AA

* Outlook revised to stable from positive on November 7, 2014.

Moody's State Rating Criteria

- “US States Rating Methodology” – Completed Revised in May 2013
- General Observations
 - States as a Class are Highly-Rated
 - Ratings are a Forward-Looking Opinion of Financial Strength
 - Aaa and Aa Standards are Distinguished by an Emphasis on Management
 - Few States Rated Below Aa Category
- Traditional categories now assigned percentage weights as follows:

Broad Rating Factors	Factor Weighting	Rating Sub-Factors	Sub-Factor Weighting
Economy	20%	Income	10%
		Industrial Diversity	5%
		Employment Volatility	5%
Governance	30%	Financial Best Practices	15%
		Financial Flexibility/Constitutional Constraints	15%
Finances	30%	Revenues	10%
		Balances and Reserves	10%
		Liquidity	10%
Debt	20%	Bonded Debt	10%
		Adjusted Net Pension Liabilities	10%
Total	100%	Total	100%

Moody's State Rating Criteria

- Each rating category is assigned a score of 1-4, 6 or 9 as follows:

Rating Category	Aaa	Aa1	Aa2	Aa3	A	Baa And Below
	1	2	3	4	6	9

- Then an overall rating is assigned based upon a weighted score:

Indicated Rating	Overall Weighted Score
Aaa	1 to 1.7
Aa1	1.7 to 2.7
Aa2	2.7 to 3.7
Aa3	3.7 to 4.7
A1	4.7 to 5.7
A2	5.7 to 6.7
A3	6.7 to 7.7
Baa1	7.7 to 8.7
Baa2	8.7 to 9.7

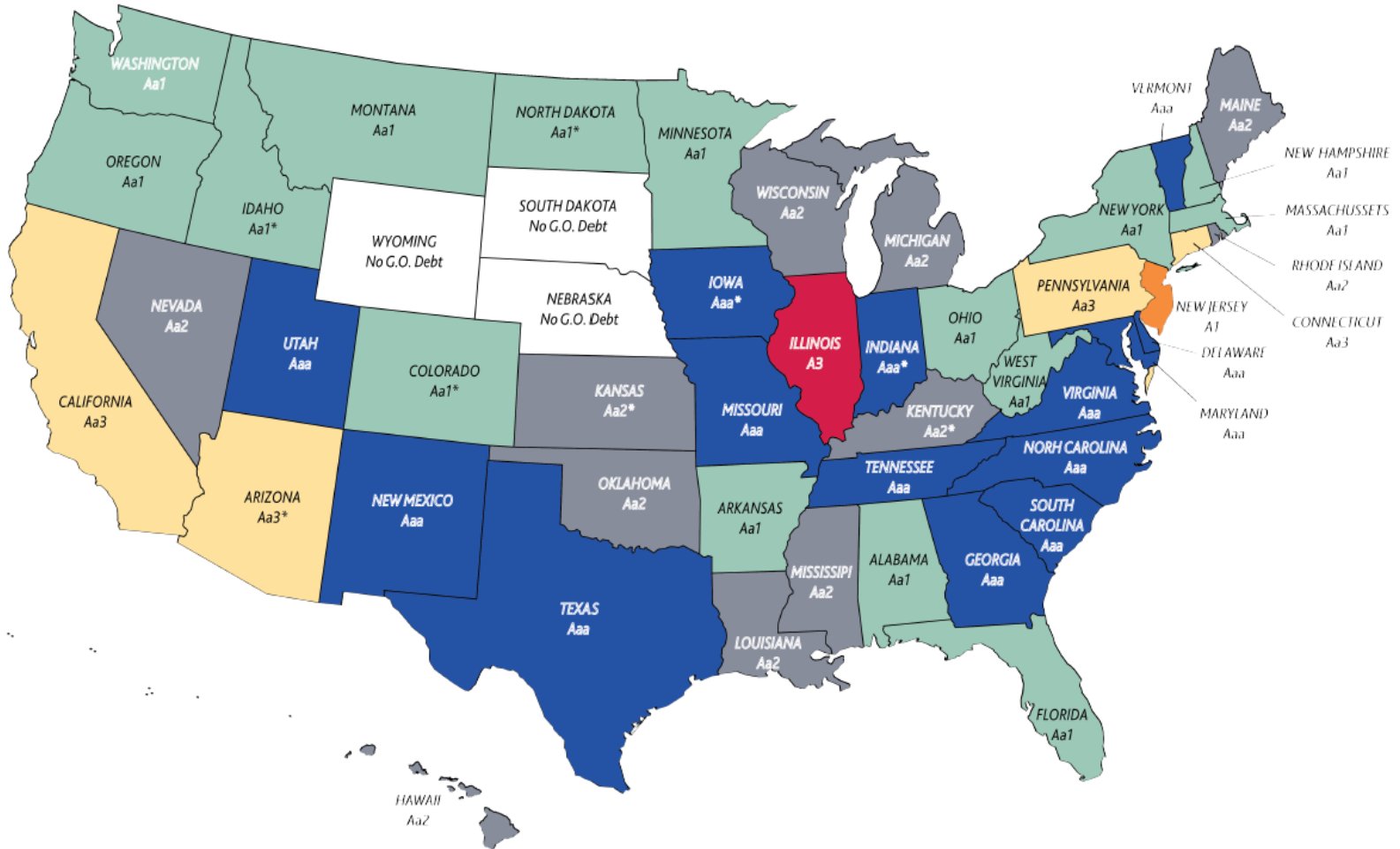
Moody's State Ratings Table

State General Obligation Bonds by rating category

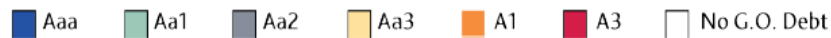
Aaa (15 States)	Aa1 (15 States)	Aa2 (11 States)
Alaska	Alabama	Hawaii
Delaware	Arkansas	Kansas*
Georgia	Colorado*	Kentucky*
Indiana*	Florida	Louisiana
Iowa*	Idaho*	Maine
Maryland	Massachusetts	Michigan
Missouri	Minnesota	Mississippi
New Mexico	Montana	Nevada
North Carolina	New Hampshire	Oklahoma
South Carolina	New York	Rhode Island
Tennessee	North Dakota*	Wisconsin
Texas	Ohio	
Utah	Oregon	
Vermont	Washington	
Virginia	West Virginia	
Aa3 (4 States)	A1 (1 State)	A3 (1 State)
Arizona*	New Jersey	Illinois
California		
Connecticut		
Pennsylvania		

* Issuer Rating; no general obligation debt

Moody's State Ratings Map



* Issuer rating; no general obligation debt



Moody's Rating Highlights for Vermont

Credit Strengths

- History of strong financial management and fiscal policies indicated by conservative budgeting practices.
- History of prompt action to reduce spending following revenue weakening.
- Maintenance of budget reserve levels at statutory limit.
- Steady progress in reducing previously high debt ratios and maintaining an affordable debt profile.

Credit Challenges

- Potential service pressures due to a population that is aging at a relatively rapid pace.
- Decline in job growth.

Source: Moody's Investors Service, Rating, November 6, 2014.

Moody's Rating Highlights for Vermont

What Could Make the Rating Go Down?

- A break from the states history of conservative fiscal management.
- Emergence of ongoing structurally imbalanced budgets.
- Depletion of budget reserves without swift replenishment.
- Liquidity strain resulting in multiyear cash flow borrowing.

Source: Moody's Investors Service, Rating, November 6, 2014.

Fitch State Rating Criteria

- “U.S. State Tax-Supported Rating Criteria” – August 16, 2010
- Rated Security
 - Legal Pledge
 - Lien Status
 - Indenture Requirements and Relevant Statutes
 - Bank Bond Ratings
- Debt and Other Long-Term Liabilities
 - Debt Ratios and Trends
 - Debt Structure
 - Future Capital and Debt Needs
 - Pension and Other Post-Employment Benefit (OPEB) Funding
 - Indirect Risks and Contingent Liabilities
- Economy
 - Major Economic Drivers
 - Employment
 - Income and Wealth
 - Other Demographic Factors

Fitch State Rating Criteria

- Economy (continued)
 - Tax Burden
- Finances
 - Revenue Analysis
 - Expenditure Analysis
 - Operating Margin Trends
 - Fund Balance and Reserve Levels
 - Liquidity
- Management and Administration
 - Institutionalized Policies and Budgeting Practices
 - Financial Reporting and Accounting
 - Political, Taxpayer and Labor Environment
 - Revenue and Spending Limitations

Fitch Ratings Highlights

KEY RATING DRIVERS:

- **CONSERVATIVE FINANCIAL MANAGEMENT:** Vermont's revenue stream is diverse and revenue estimates are updated twice a year. The state takes timely action to maintain balance and reserves have been maintained at statutory maximum levels despite periods of declining revenue.
- **RELATIVELY NARROW ECONOMY:** Vermont's economy has diversified but remains narrow with above-average exposure to the cyclical manufacturing sector. While statewide educational attainment and unemployment levels compare favorably to the nation, median resident age levels are well above the national average.
- **RATING SENSITIVITIES:** The rating is sensitive to shifts in Vermont's fundamental credit characteristics, particularly its moderate long-term liability profile and fiscal discipline.

Standard & Poor's State Rating Criteria

- Scores based upon S&P's scale of '1' (strongest) to '4' (weakest)
- Five (5) major factors given equal weight in determining composite score
- Scores correspond to following "indicative credit level:"
 - 1.0 to 1.5 AAA
 - 1.6 to 1.8 AA+
 - 1.9 to 2.0 AA
- Vermont's Composite Score (AA+) 1.7 (down from 1.6)
 - Government Framework 1.6
 - Financial and Budget Management 1.0
 - Economy 1.8 (down from 1.6)
 - Budgetary Performance 1.4
 - Debt and Liability (Pensions) Profile 2.6 (down from 2.4)

Source: S&P Ratings, November 7, 2014.

Standard & Poor's Rating Highlights

Rationale

“The outlook revision reflects Vermont's slower-than-average economic recovery, which continues to pressure the budget, in our view.

The ratings reflect our opinion of the state's:

- Diversifying economic base that is characterized by above-average income levels and low unemployment rates but a slower-than-average pace of growth by most measures recently;
- Strong financial and budget management policies that have contributed to consistent reserve and liquidity levels over time;
- Well-defined debt affordability and capital planning processes, in our view, that have limited leverage and contributed to a modest tax-supported debt burden with rapid amortization of tax-supported debt; and
- Significant pension and other postemployment benefits (OPEB), which remain sizable relative to those of state peers despite some recent reform efforts.

Transportation Infrastructure Bonds

Transportation Infrastructure Bonds

- Created by Act 50 of 2009
- Permitted purposes (32 V.S.A. §972):
 - Rehabilitation, reconstruction or replacement of state bridges & culverts
 - Rehabilitation, reconstruction or replacement of municipal bridges & culverts
 - Rehabilitation, reconstruction or replacement of state roads, railroads, airports and necessary buildings which, after such work, have an estimated remaining useful life of 30 years or more
- Most recent bond sale paid for \$10.4 million of projects, including:
 - 3 Interstate Bridge Replacement Projects: \$4.1 million
(Brattleboro, Milton, Windsor)
 - 8 State Bridge Replacement & Rehab Projects: \$3.3 million
(Bristol, Cambridge, Bennington, Brighton, Hancock, Jamaica x2, Plymouth)
 - 6 Roadway Projects: \$3.0 million
(Brandon x2, Hartford, Montpelier, Morristown, Rutland City)

Transportation Infrastructure Bonds

- Revenue bonds, supported entirely by transportation infrastructure bond (TIB) fund (NOT the State's full faith and credit)
- TIB fund supported motor fuel transportation infrastructure assessments
 - 2% of sales price of motor fuel, approximately \$1.8 million/month
 - \$0.03 per gallon of diesel fuel, approximately \$130,000/month
 - Appropriations from transportation fund under certain conditions
- Credit rating depends primarily upon ratio of annual TIB revenues divided by principal and interest payments on bonds (debt service coverage ratio)
 - Desired ratio is 3.0 times coverage
- Ratings based upon projected ratio are AA+, Aa2, AA (S&P, Moody's, Fitch)
- Borrowing cost slightly higher than for State's general obligation bonds , but still very competitive
- Have funded \$33.685 million of projects through August 2013, leveraged additional \$171.306 million of Federal matching funds (over 5 to 1 ratio)
- Most recent feasibility study projects bonding capacity adequate to finance \$57 million of additional projects through FY2018

Appendix: Bond Premium

What is Bond Premium?

- **Bond Premium:** the amount by which the purchase price of a bond is greater than its par value.
- **Par Value:** A price of \$100.000 per \$100 par (or “principal” or “face”) amount of bonds. Three decimal places is the market convention for pricing municipal bonds.

Example 1: For \$5,000 par amount of a muni bond with a price of \$101.625, the bond premium is

$$(\$101.625 - \$100) / \$100 * \$5,000 =$$

$$\$1.625 / \$100 * \$5,000 =$$

$$0.01625 * \$5,000 = \mathbf{\$81.25}$$

Why Does a Bond Have Premium?

- **Bond premium** arises when the **market yield** of a bond is less than its stated **coupon** or **rate**.
- **Market yield:** the annual interest rate, expressed as a percentage of par, that investors are willing to receive for owning a bond. Market yields change constantly based upon numerous factors including investor demand, perceived changes to tax policy, economic outlook, etc.
- **Coupon or Rate:** The fixed annual interest rate on a bond, expressed as a percentage of par, that the issuer (e.g., Vermont) sets at the time the bonds are sold. The coupon does not change.

Example 2: If Coupon > Market Yield, Bond Premium > \$0

If Coupon = Market Yield, Bond Premium = \$0

If Coupon < Market Yield, Bond Premium < \$0 (discount)

Premiums from the 2014 Series A Bonds

State of Vermont, General Obligation Bonds
2014A- Citizen Bonds- Negotiated

Maturity Date	Amount	Rate	Yield	Price	Yield to Maturity	Call Date	Call Price	Premium (-Discount)	
08/15/2015	355,000	0.140%	0.140%	100.000					
08/15/2015	530,000	2.000%	0.140%	101.269				6,725.70	
08/15/2016	770,000	0.350%	0.350%	100.000					
08/15/2016	1,150,000	3.000%	0.350%	104.443				51,094.50	
08/15/2017	985,000	0.600%	0.580%	100.053				522.05	
08/15/2017	1,265,000	3.000%	0.580%	106.433				81,377.45	
08/15/2018	400,000	3.000%	0.850%	107.779				31,116.00	
08/15/2018	650,000	4.000%	0.850%	111.397				74,080.50	
08/15/2019	950,000	2.000%	1.140%	103.910				37,145.00	
08/15/2019	830,000	3.000%	1.140%	108.458				70,201.40	
08/15/2019	780,000	5.000%	1.140%	117.553				136,913.40	
08/15/2020	420,000	1.450%	1.450%	100.000					
08/15/2020	1,585,000	5.000%	1.450%	119.297				305,857.45	
08/15/2021	2,245,000	3.000%	1.750%	107.850				176,232.50	
08/15/2021	435,000	5.000%	1.750%	120.412				88,792.20	
08/15/2022	425,000	4.000%	1.990%	114.252				60,571.00	
08/15/2022	325,000	5.000%	1.990%	121.344				69,368.00	
08/15/2023	955,000	2.000%	2.140%	98.894				-10,562.30	
08/15/2023	395,000	5.000%	2.140%	122.550				89,072.50	
08/15/2024	1,675,000	2.250%	2.250%	100.000					
08/15/2024	1,240,000	5.000%	2.250%	123.805				295,182.00	
08/15/2025	20,000	5.000%	2.360%	122.730	C	2.555%	08/15/2024	100.000	4,546.00
08/15/2026	225,000	5.000%	2.460%	121.763	C	2.802%	08/15/2024	100.000	48,966.75
08/15/2027	125,000	5.000%	2.530%	121.092	C	2.989%	08/15/2024	100.000	26,365.00
08/15/2028	40,000	5.000%	2.600%	120.425	C	3.151%	08/15/2024	100.000	8,170.00
08/15/2029	1,535,000	3.000%	3.000%	100.000					
	20,310,000							1,651,737.10	

Premiums from the 2014 Series B Bonds

State of Vermont, General Obligation Bonds
2014B: New Money- Competitive

Maturity Date	Amount	Rate	Yield	Price	Yield to Maturity	Call Date	Call Price	Premium (-Discount)
08/15/2015	2,795,000	5.000%	0.170%	103.296				92,123.20
08/15/2016	1,760,000	5.000%	0.340%	107.814				137,526.40
08/15/2017	1,430,000	5.000%	0.580%	111.750				168,025.00
08/15/2018	2,630,000	5.000%	0.850%	115.016				394,920.80
08/15/2019	1,120,000	5.000%	1.140%	117.553				196,593.60
08/15/2020	1,675,000	5.000%	1.450%	119.297				323,224.75
08/15/2021	1,000,000	5.000%	1.740%	120.482				204,820.00
08/15/2022	2,930,000	5.000%	1.980%	121.423				627,693.90
08/15/2023	2,330,000	5.000%	2.120%	122.728				529,562.40
08/15/2024	765,000	5.000%	2.220%	124.099				184,357.35
08/15/2025	3,660,000	5.000%	2.350%	122.827 C	2.546%	08/15/2024	100.000	835,468.20
08/15/2026	3,450,000	5.000%	2.430%	122.052 C	2.777%	08/15/2024	100.000	760,794.00
08/15/2027	3,550,000	5.000%	2.520%	121.187 C	2.981%	08/15/2024	100.000	752,138.50
08/15/2028	3,635,000	5.000%	2.540%	120.996 C	3.105%	08/15/2024	100.000	763,204.60
08/15/2029	2,140,000	5.000%	2.570%	120.710 C	3.219%	08/15/2024	100.000	443,194.00
08/15/2030	3,675,000	5.000%	2.620%	120.235 C	3.332%	08/15/2024	100.000	743,636.25
08/15/2031	3,675,000	5.000%	2.670%	119.762 C	3.434%	08/15/2024	100.000	726,253.50
08/15/2032	3,675,000	5.000%	2.770%	118.822 C	3.557%	08/15/2024	100.000	691,708.50
08/15/2033	3,675,000	5.000%	2.820%	118.356 C	3.637%	08/15/2024	100.000	674,583.00
08/15/2034	3,675,000	5.000%	2.870%	117.892 C	3.711%	08/15/2024	100.000	657,531.00
	53,245,000							9,907,358.95

Sources and Uses of Funds from 2014 Bonds

State of Vermont, General Obligation Bonds
 Final Numbers dated November 19, 2014

Sources:	2014A- Citizen Bonds- Negotiated	2014B: New Money- Competitive	2014C: Refunding Bonds- Competitive	Total
Bond Proceeds:				
Par Amount	20,310,000.00	53,245,000.00	36,205,000.00	109,760,000.00
Net Premium/OID	1,651,737.10	9,907,358.95	3,977,501.35	15,536,597.40
	21,961,737.10	63,152,358.95	40,182,501.35	125,296,597.40
Other Sources of Funds:				
Transfer from General Fund	90,774.77			90,774.77
	22,052,511.87	63,152,358.95	40,182,501.35	125,387,372.17
Uses:	2014A- Citizen Bonds- Negotiated	2014B: New Money- Competitive	2014C: Refunding Bonds- Competitive	Total
Project Fund Deposits:				
Project Fund	21,961,737.10	63,036,071.87		84,997,808.97
Refunding Escrow Deposits:				
Cash Deposit			0.32	0.32
SLGS Purchases			39,934,791.00	39,934,791.00
			39,934,791.32	39,934,791.32
Delivery Date Expenses:				
Underwriter's Discount	90,774.77	116,287.08	144,693.28	351,755.13
Cost of Issuance			103,016.75	103,016.75
	90,774.77	116,287.08	247,710.03	454,771.88
	22,052,511.87	63,152,358.95	40,182,501.35	125,387,372.17

Projects Financed by 2014 Bonds

Act 51 of 2013 (as amended by Act 178 of 2014)

Section 2	State Buildings – Various Projects	\$49,467,548
Section 3	Administration – Vermont Center for Geographic Information	100,000
Section 4	Human Services – Various Projects	6,981,000
Section 5	Judiciary	2,628,000
Section 6	Commerce and Community Development	288,000
Section 7	Grant Programs	1,075,000
Section 8	Education	10,354,690
Section 9	University of Vermont – Major Maintenance	1,400,000
Section 10	Vermont State Colleges – Major Maintenance	1,400,000
Section 11	Natural Resources	6,242,929
Section 12	Military	550,000
Section 13	Public Safety – Various Projects	3,486,000
Section 14	Agriculture, Food and Markets	200,000
Section 15	Vermont Public Television	200,000
Section 16	Vermont Rural Fire Protection	100,000
Section 17	Vermont Veterans’ Home	435,000
Section 18	Vermont Interactive Technologies	88,000

Act 40 of 2011

Section 2	State Buildings – Various Projects	<u>1,642</u>
		\$84,997,809

Additional Debt Capacity from Premium

State of Vermont

General Obligation Bonds, 2014 Series A and B

Calculation of Unused Bond Authorization (a.k.a. "Bond Premium")

Par Amount of 2014 Series A Bonds:	\$20,310,000.00 (A)
Par Amount of 2014 Series B Bonds:	53,245,000.00 (B)
Bond Proceeds Used for Projects:	84,997,808.97 (C)
Bond Proceeds Used for Issuance Costs:	116,287.08 (D)
Bonds Authorized But Not Needed:*	<u><u>\$11,559,096.05</u></u> (E = C + D - A - B)

*This is the amount of general obligation bonds authorized by Act 51 and Act 178 that was not sold, and will not need to be sold, because net bond premium was used instead to finance capital projects. This amount may be re-allocated to projects in the fiscal year 2016-2017 Capital Bill, in addition to the amount of total net tax-supported debt recommended by the Capital Debt Affordability Advisory Committee in its 2014 Final Report, and still adhere to the Report's recommendations.

Appendix:
Capital Debt Affordability
Advisory Committee

Vermont's Current Debt Management Approach

- Bond issuance is substantially lower than in the 1990s. Reduced debt issuance and continued improvement in the State's economy and financial condition have lowered State debt ratios.
- Uncomplicated debt management with nearly exclusive use of general obligation debt (excluding Transportation Infrastructure Bonds).
- Vermont has taken advantage of refunding opportunities, lowering debt service costs.
- Low debt burden with rapid amortization.

History of Vermont's Debt Policies

- In the early 1970s, Vermont lost its Triple-A bond rating, largely because of a significant accumulation of bonded indebtedness. There were three principal causes for the increase in outstanding debt... interstate highway construction, extensive school construction and renovation, and sewage treatment plant construction.
- In 1975, Vermont enacted in statute the so-called “90 percent rule” as a policy device to reduce its large amount of accumulated tax supported debt.
 - New general obligation debt authorization was restricted to 90 percent of the debt being retired in the same fiscal year.
 - The ratio of debt as a percent of personal income, a key benchmark for rating analysts, was reduced from about 11% in the mid-1970s to about 3% in 1989.
 - The 90 percent rule policy was not sustainable and policymakers recognized it would eventually lead to unrealistically small amounts of allowable new debt.
- In 1990 the “90 percent rule” was repealed and the Capital Debt Affordability Advisory Committee was created to provide a new framework for determining the appropriate level of new debt issuance for the State.
- CDAAC Progress: In 1996, Vermont’s debt as percentage of personal income was twice the national median and we ranked 9th highest in the country. In 2012, the State is under the national median for that ratio and ranked 36th highest in the country; Vermont’s debt per capita ranked 34th highest in the country.
- Debt guidelines strengthened in 2004. State now benchmarks against triple-A rated states.
- In February of 2007, Vermont rejoined the ranks of Triple-A rated states when Moody’s raised its rating for the State from Aa1 to Aaa; in April 2010, Fitch “recalibrated” Vermont’s rating from AA+ to AAA; and in September 2012 S&P improved its outlook on Vermont’s AA+ rating from stable to positive although returned it to stable in November 2012.

Capital Debt Affordability Advisory Committee

Duties as Established by Statute

- Review annually the size and affordability of the state tax- supported general obligation debt
- Submit to the Governor and to the General Assembly an estimate of the maximum amount of new long-term general obligation debt that prudently may be authorized for the next fiscal year
- The estimate is advisory. In practice, the CDAAC recommendation has been adopted by the Governor and Legislature
- 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

Factors Considered by the Committee In Developing Its Recommendation

- Level of outstanding net tax-supported debt bonds over a ten-year period
- Authorized but unissued debt
- Affordable state net tax-supported debt bond authorizations over a ten-year period
- Projected debt service requirements based upon the above
- Criteria that rating agencies use to judge the quality of issues of state bonds, including:
 - Existing and projected total debt service on net tax-supported debt as a percentage of revenues
 - Existing and projected total net tax-supported debt outstanding as a percentage of total state personal income

Factors Considered by the Committee In Developing Its Recommendation

- Outstanding debt 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 and to the maximum extent obtainable, all long-term debt of municipal governments in Vermont which is secured by general tax or user fee revenues.
- The economic conditions and outlook for the State.
- 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.