The Treasury by the Number$

Vermont State Treasurer's Office
Presentation to the General Assembly
November 2016

Agenda

- Retirement Operations and Pension Obligations

- Capital Financing and Debt Management

- What's next?
  - Legislative Initiatives

Treasury Functions

- Unclaimed Property
- Retirement Operations
- Treasury Operations/Banking
- Investments/Pensions
- Debt Management/Bond Issuance

Retirement Operations and Pension Obligations

Retirement Customers

- Serves 51,211 active, retired, inactive, and vested members
- $299.5 million in pension benefits paid in FY 2016
- $58.9 million in healthcare premium payments made in FY2016

Annual Required Contribution

- Method by which UAL is eventually paid off (assuming it is funded)

- Annual Required Contribution (ARC):
  - A measure of needed plan funding
  - The actuarially determined pension fund contribution in a single year

- The ARC has two parts:

1. The Normal Cost
   - The normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year

   - The employer normal cost equals the total normal cost of the plan reduced by employee contributions

2. Amortization, which is the annual amount needed to eliminate the unfunded liability over the plan's amortization period

Upward Budget Pressures on Funding of the ARC

- Historical
  - Great Recession Impact
  - Lack of Funding of the ARC in past years, especially the teachers' system
- Demographic/Experience and Economic Assumptions vs. Actual
- Experience Study
  - Interest Rate Assumption
  - Mortality
  - Other
- Retirement Incentive
- Teacher Retirements/Education Workforce Changes

FY 2016 VSERS Valuation Results

- Incorporates an FY 2018 ARC recommendation of **$52,065,397**
  - Normal $14,037,814
  - Accrued Liability Amortization $38,027,583
- Increase from prior year of **$3.6 million**
- Normal Cost: 2.88% of projected payroll
- Recent experience study incorporated upward pressures due to the changes in interest rate and new mortality assumptions.

FY 2016 VSTRS Valuation Results

- Incorporates an FY 2018 ARC recommendation of **$88,409,437**
  - Normal $ 8,346,261
  - Accrued Liability Amortization $80,063,176
- Increase from prior year of **$5.7 million**
- Normal Cost: 1.33% of projected payroll
- Recent experience study incorporated upward pressures due to the changes in interest rate and new mortality assumptions
- Increasing amortization payments have greater impact on VSTRS
- Increase in retirements, local workforce changes
- Overall, the number of active teachers continues to decline

Funding History

	Year ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)
VSERS	2016	$ 1,707,268	$ 2,289,452	$ 582,184	74.6%
	2015	1,636,268	2,178,827	542,559	75.1%
	2014	1,566,076	2,010,090	444,014	77.9%
	2013	1,469,170	1,914,300	445,130	76.8%
	2012	1,400,779	1,802,604	401,825	77.7%
	2011	1,348,763	1,695,301	346,538	79.6%
	2010	1,265,404	1,559,324	293,920	81.2%
	2009	1,217,638	1,544,144	326,506	78.9%
	2008	1,377,101	1,464,202	87,101	94.1%
	2007	1,318,687	1,307,643	(11,044)	100.8%
	2006	1,223,323	1,232,367	9,044	99.3%
	2005	1,148,908	1,174,796	25,888	97.8%
	2004	1,081,359	1,107,634	26,275	97.6%
	2003	1,025,469	1,052,004	26,535	97.5%
	2002	990,450	1,017,129	26,679	97.4%
	2001	954,821	1,026,993	72,172	93.0%
	2000	895,151	967,064	71,913	92.6%
	1999	804,970	876,412	71,442	91.8%
	1998	733,716	804,501	70,785	91.2%
	1997	639,128	753,883	114,755	84.8%

note: amounts in thousands.

	Year ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)
VSTRS	2016	$ 1,716,296	$ 2,942,024	$ 1,225,728	58.3%
	2015	1,662,346	2,837,375	1,175,029	58.6%
	2014	1,610,286	2,687,049	1,076,764	59.9%
	2013	1,552,924	2,566,834	1,013,910	60.5%
	2012	1,517,410	2,462,913	945,503	61.6%
	2011	1,486,698	2,331,806	845,108	63.8%
	2010	1,410,368	2,122,191	711,823	66.5%
	2009	1,374,079	2,101,838	727,759	65.4%
	2008	1,605,462	1,984,967	379,505	80.9%
	2007	1,541,860	1,816,650	274,790	84.9%
	2006	1,427,393	1,686,502	259,109	84.6%
	2005	1,354,006	1,492,150	138,144	90.7%
	2004	1,284,833	1,424,661	139,828	90.2%
	2003	1,218,001	1,358,822	140,821	89.6%
	2002	1,169,294	1,307,202	137,908	89.5%
	2001	1,116,846	1,254,341	137,495	89.0%
	2000	1,037,466	1,174,087	136,621	88.4%
	1999	931,056	1,065,754	134,698	87.4%
	1998	821,977	955,694	133,717	86.0%
	1997	717,396	849,179	131,783	84.5%

note: amounts in thousands.
note: VSTRS funding method was changed from Entry Age Normal with Frozen Initial Liability to Entry Age Normal effective with the 2006 actuarial valuation.

A History of Underfunding the ARC led to the Current Underfunding of Teachers Plan, Further Negatively Impacted by Great Recession

Year	Total VSTRS Payroll	Recommended Contribution For Budget Based on Actuarial Projection	Actual Contribution	$ Difference: Act vs. Rec. (Uses Budget Beginning 1996)	Percentage of Request
1979	96,725,620	7,806,825	4,825,155	2,981,670	61.8%
1980	104,521,888	8,944,090	8,471,960	472,130	94.7%
1981	112,811,389	9,862,861	8,830,900	1,031,961	89.5%
1982	126,748,398	10,200,209	7,822,760	2,377,449	76.7%
1983	139,085,342	10,721,814	10,929,355	(207,541)	101.9%
1984	153,329,729	12,341,069	11,592,100	748,969	93.9%
1985	169,219,652	13,475,181	12,567,866	907,315	93.3%
1986	187,834,677	14,668,095	14,461,148	206,947	98.6%
1987	206,728,650	15,925,452	16,239,416	(313,964)	102.0%
1988	230,430,153	16,294,346	17,186,259	(891,913)	105.5%
1989	261,596,990	18,072,172	19,000,000	(927,828)	105.1%
1990	273,951,188	21,320,155	19,561,000	1,759,155	91.7%
1991	298,104,184	25,013,437	15,000,000	10,013,437	**60.0%**
1992	312,346,750	28,595,220	14,618,992	13,976,228	**51.1%**
1993	324,536,824	28,819,875	19,890,048	8,929,827	**69.0%**
1994	335,155,405	25,805,408	20,580,000	5,225,408	**79.8%**
1995	346,975,007	27,451,926	18,080,000	9,371,926	**65.9%**
1996	355,894,809	29,884,559	11,480,000	18,404,559	**38.4%**
1997	364,695,370	30,954,237	18,080,000	12,874,237	**58.4%**
1998	357,899,112	33,519,949	18,106,581	15,413,368	**54.0%**
1999	372,298,852	27,232,542	18,080,000	9,152,542	**66.4%**
2000	387,998,959	23,573,184	18,586,240	4,986,944	**78.8%**
2001	403,258,305	20,882,521	19,143,827	1,738,694	91.7%
2002	418,904,021	21,965,322	20,446,282	1,519,040	93.1%
2003	437,238,543	23,197,088	20,446,282	2,750,806	**88.1%**
2004	453,517,153	29,608,892	24,446,282	5,162,610	**82.6%**
2005	486,857,658	43,592,332	24,446,282	19,146,050	**56.1%**
2006	499,044,327	49,923,599	24,985,506	24,938,093	**50.0%**
2007	515,572,694	38,200,000	38,496,410	(296,410)	100.8%
2008	535,807,012	40,749,097	40,955,566	(206,469)	100.5%
2009	561,588,013	37,077,050	37,349,818	(272,768)	100.7%
2010	562,149,916	41,503,002	41,920,603	(417,601)	101.0%
2011	547,748,405	48,233,006	50,268,131	(2,035,125)	104.2%
2012	561,179,272	51,241,932	56,152,011	(4,910,079)	109.6%
2013	563,623,421	60,182,755	65,086,320	(4,903,565)	108.1%
2014	567,073,601	68,352,825	72,668,412	(4,315,587)	106.3%
2015	576,393,699	72,857,863	72,908,805	(50,942)	100.1%

History of Disciplined Incremental Steps to Reduce Pension and Retiree Health Care Costs To Taxpayer

- 2005 Teacher Study made changes to the state's actuarial methods and put full funding of ARC on track. Legislature has consistently adopted a budget with full funding of the ARC since 2007.
- 2008 Committee restructured state system (VSERS)Group F benefits, lengthening age of retirement, effective in FY 2009, in concert with health care changes.
- 2009 Pension and Health Care Study completed providing basis for negotiated savings over the next few years for both state (VSERS) and teachers (VSTRS) system.
- 2010 VSTRS: Lengthen age for normal retirement, contribution increases, and other changes , effective in FY2011, resulting in $**15 million in annual pension savings to taxpayer. In addition to pension costs, additional health care savings accrued.**
- 2011 VSERS: Employee contribution rate increases beginning FY2012, **$5 million in savings per year.**
- **2011-2012 VSTRS:** Secured **one-time revenues in excess of $5 million for VSERS and VSTRS** under the Federal Early Retirement Reinsurance Program.
- 2012- 2015: Incremental increases in employee and employer contributions to municipal system, demonstrating <u>shared responsibility</u> by all parties. Put the municipal system on a stronger financial track.
- 2014 VSTRS: additional contribution increases for new and non-vested members, effective FY 2015, **$1 million initial annual savings, increasing each year.**
- 2014: VSTRS: Statute change permitting the charging of pension costs to federal grants, effective FY 2016, estimated $**3 to $4 million savings per year.**

History of Disciplined Incremental Steps to Reduce Pension and Retiree Health Care Costs To Taxpayer (cont.)

- **2015: Created Retired Teachers' health and Medical Benefits Fund starting FY2015**
  - Since the 1980s, health care premiums for teachers paid out of a sub-trust of teachers pension fund; by 2014 costing over $20 million per year in interest costs to taxpayer
  - Collaborative solution: Successfully convened over a dozen stakeholders, including employee group, to address the problem including combined pension/health care changes. In addition to pension and health care changes previously stated, a new health care assessment for LEAs, linking local employment decisions to the benefit costs.
  - **Projected to save taxpayers $480 million** in unfunded liability interest costs through FY2038.

- 2016: Changes to the amortization financing schedule for the State and Teacher systems. **Will result in saving the taxpayer $165 million** in interest from present to 2038. See next page for explanation.

- 2016: Increased employee contributions will result in **$1.2 million in annual savings, with savings growing larger in future years.**

At the same time creating additional Transparency and Accountability

- 2013: Pension forfeiture statute, applicable to all three systems (state, teacher and municipal).

- 2015: VSERS Disability retirement reform permitting wage verification of disability pensioners.

Collaborative Approach Key to Success

- All benefit changes made though collaborative efforts involving Administration, Treasurer’s Office, General Assembly and Employee Groups.

- No court litigation/disruptions in planned implementations.

2016 Amortization Change Explained

- While the State has a date set in statute, 2038, to pay down the unfunded liability, the payment schedule was established with increases in 5% increments each year

- This has the effect of increasing interest costs associated with the payment of these liabilities

- Leveling out the payment schedule would:
  - increase ARC payments in the short-term but have the effect of saving the taxpayers millions of dollars over the long-term
  - more rapid reduction of the unfunded liability

- Changes to amortization schedule phased-in to cushion budgetary impact

- Adopted by the Legislature in 2016

- Treasurer’s Office proposed and the Legislature adopted phasing in a payment schedule with increases at 3% increments each year, closer to the projected long-term rate of inflation. **Interest savings through 2038 estimated at $165 million**.

Capital Financing and Debt Management

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.

Overall Debt Strategy….

- State has substantially reduced outstanding debt since 1990s, *but*
  - Need to manage recent trend vs. recent national trend of reductions in bond issuance

- Uncomplicated debt profile, almost entirely general obligation debt
  - Transportation Infrastructure Bonds

- 100% fixed rate

- Level principal produces rapid amortization (reducing debt by quick installment payments)

- Capital Appropriation Changes adopted by the General Assembly have improved the process:
  - Two year recommendations
  - Use of bond premium
  - Review and use of residual dollars from prior capital projects

Capital Debt Affordability Advisory Committee

- The CDAAC was created by State statute in 1989
- Annually reviews affordability of Vermont's net tax-supported debt
- Recommends annual debt issuance to Governor and General Assembly
- Recommendation is advisory; in practice, Governor and General Assembly have always adopted
- Reviews amount and condition of bonds, notes and other obligations the State has a contingent liability or moral obligation

Vermont's Credit Ratings History

(Highest Credit Ratings in the Northeast)

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+	9/18/12

Outlook revised to stable from positive on November 7, 2014

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 record of adopting the Capital Debt Affordability Advisory Committee's (CDAAC) biennium recommendation of $132.5 million net tax-supported debt

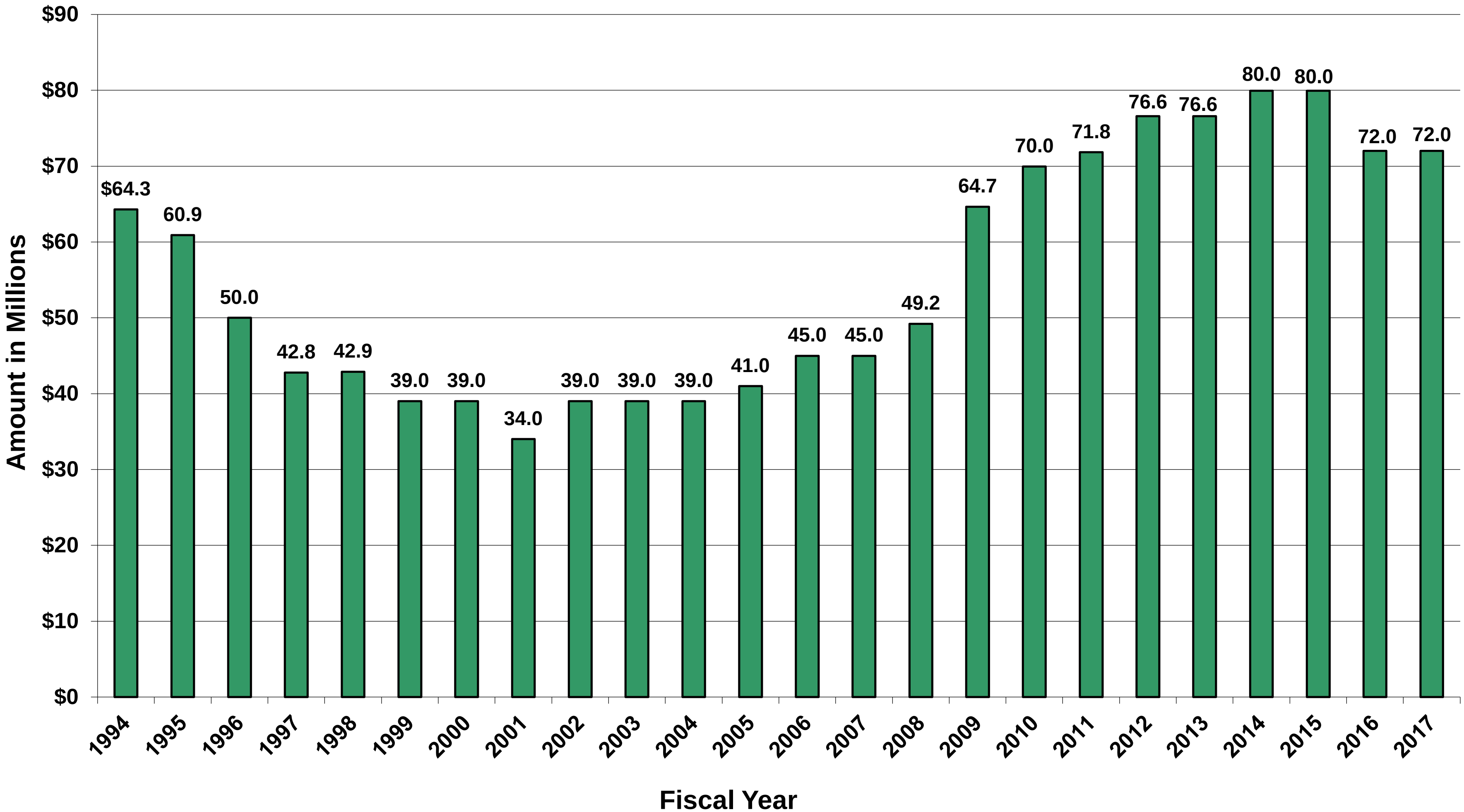
- **Teachers' Healthcare:** Continue to fund retired state teachers' healthcare costs from the annual budget, not from pension funds

CDAAC Recommendation

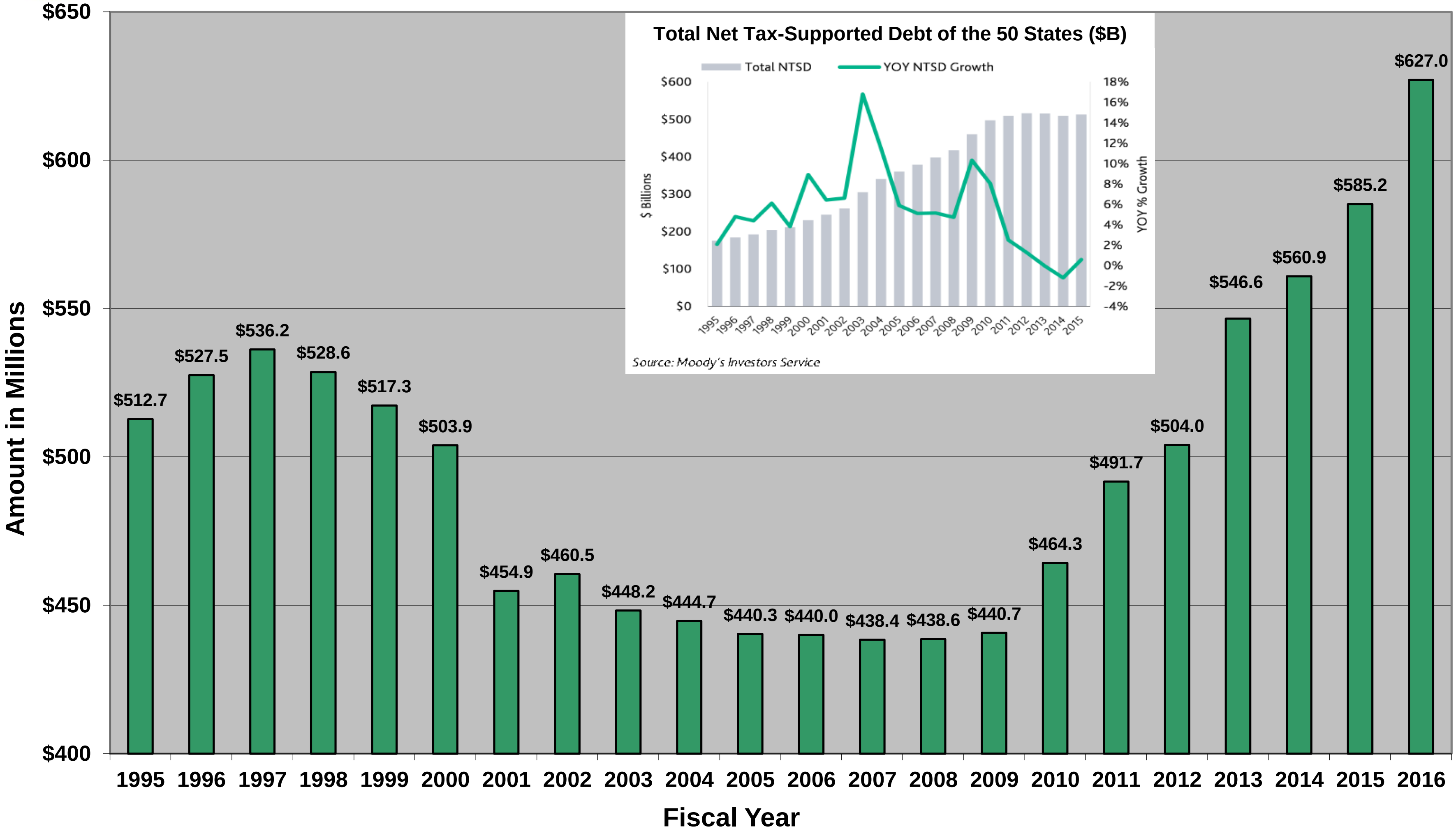
- This is the first year of the 2018-2019 biennium and the Committee recommended a 2-year debt authorization of $132,460,000

- This represents a reduction of 8.01% from the previous recommendation of $144,000,000

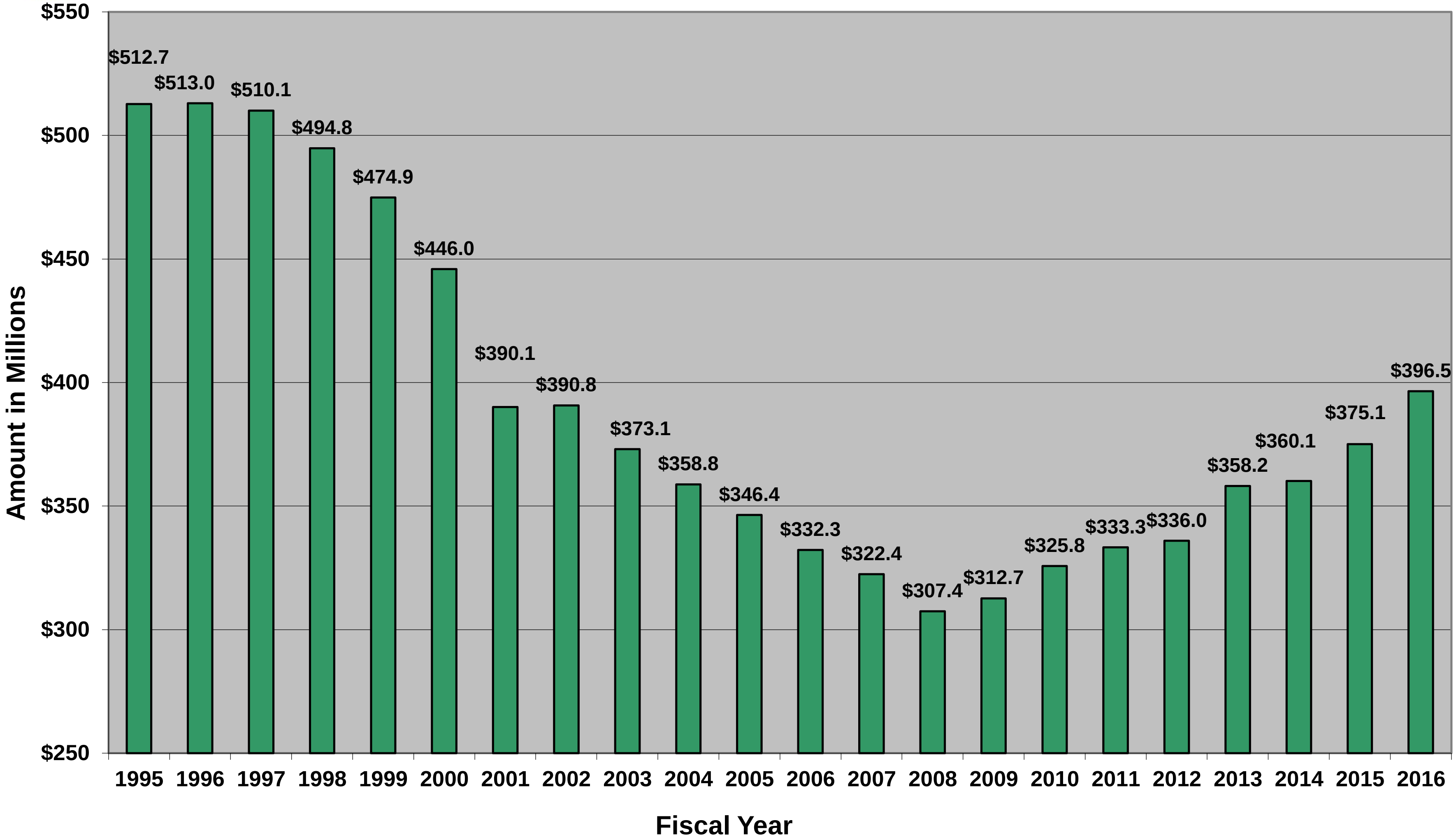
State of Vermont
General Obligation (G.O.) Debt Authorizations, FY1994-FY2017 ($ millions)



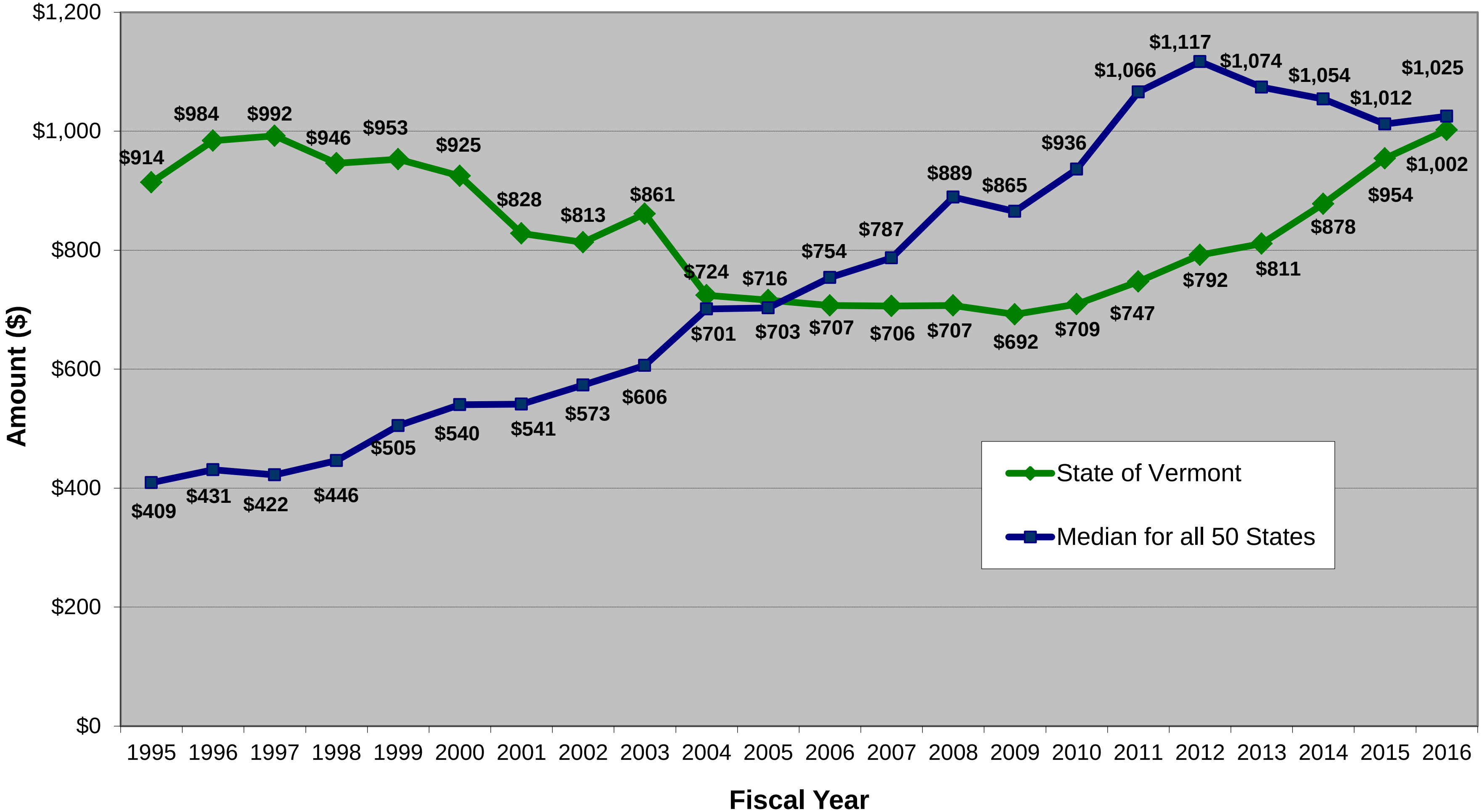
State of Vermont
G.O. Debt Outstanding, FY1995-FY2016 vs. National Trend



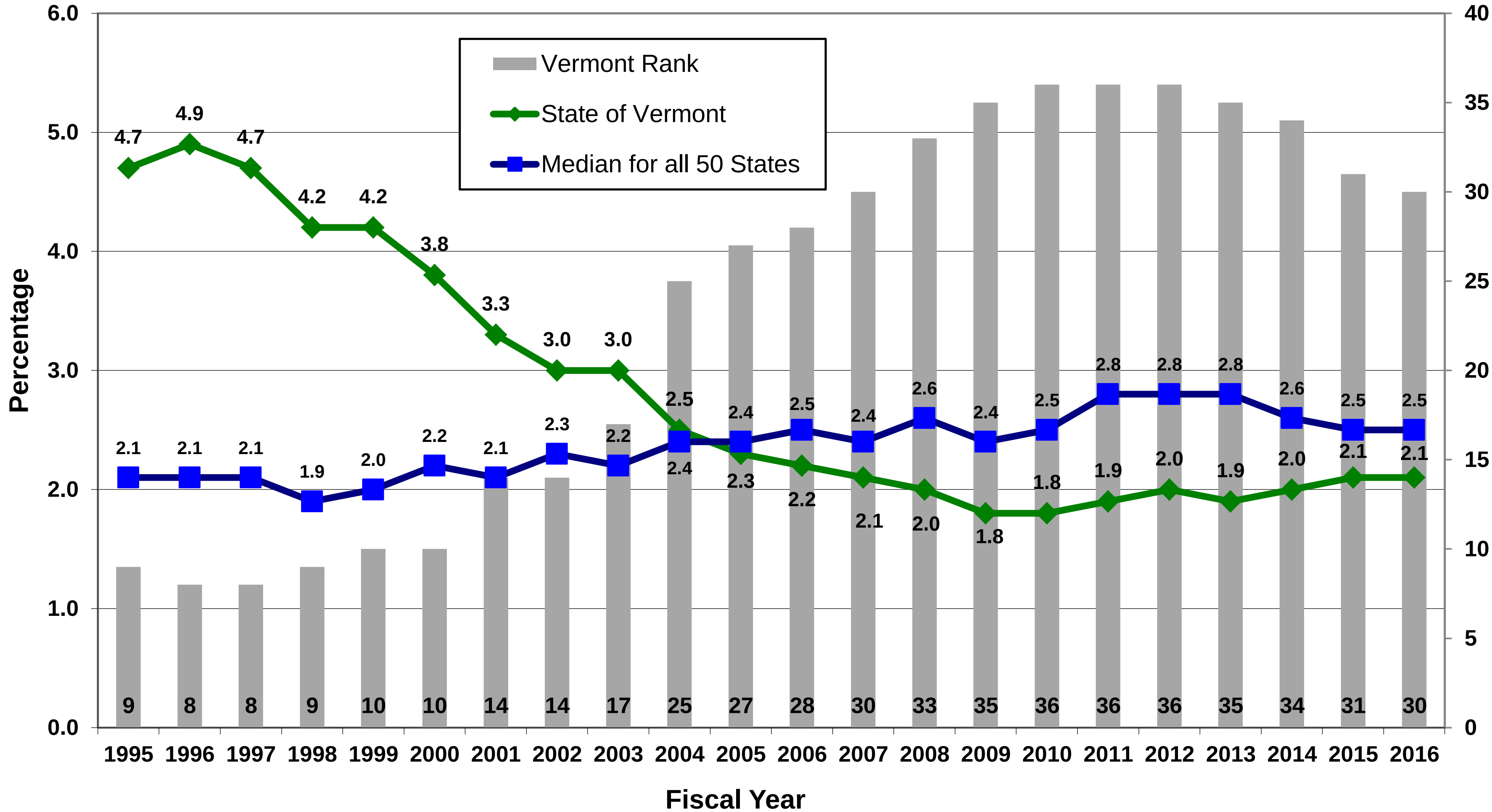
State of Vermont
G.O. Debt Outstanding, FY1995-FY2016
Adjusted for Inflation (Using 1995 Dollars)



State of Vermont
Net Tax Supported Debt Per Capita



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



Legislative Initiatives

2017 Legislative Initiatives

- **Public Retirement Study Committee, pursuant to Act 157 of 2016**
  – 104,000 Vermonters lack employer sponsored retirement plan
  – General Assembly established Committee
  – Report and Recommendation expected in January 2017
- **Clean Water Funding Report, pursuant to Act 64 of 2015**
  – Report and options expected in January 2017
- **Unclaimed Property Act (potential new bill)**
  – National Unclaimed Property Act revised July 2016
  – Review and update Vermont Act
- **ABLE Implementation, pursuant to Act 157 of 2016**
  – Launch of disability Savings Program in the first quarter of 2017
- **Miscellaneous Retirement Bill**
  – (Annual Retirement Operations Bill)
- **Financial Literacy Commission**
  – Report and recommendation will be released in January 2017

Please contact the Treasurer’s Office:

Treasurers.Office@Vermont.Gov

802-828-1451