

STATE OF VERMONT
OFFICE OF THE STATE TREASURER



2017 ANNUAL REPORT

January 15, 2018

**TO: Members of the General Assembly
Honorable Phil Scott, Governor
Citizens of Vermont**

I am pleased to submit my seventh annual report as your State Treasurer. As you read this report, you will find useful information on the many Treasury related activities and initiatives.

This has been a year of change, at both the national and state level. It is also a year of new challenges -- funding our clean water goals, initiatives to improve retirement security for all Vermonters, energy financing, economic development, and addressing our pension, health care, and long-term debt obligations. As a state, we have been most successful when we work together. In these challenging times, we need to continue to partner in collaboration with all our citizens, advocacy groups, government officials, the Administration, and the General Assembly. My Office looks forward to working with you to find successful solutions to these challenges and providing the best value to the taxpayers.

Throughout this report, you will find narratives outlining our various accomplishments, but also our challenges and proposed next steps. In summary, I would like to focus on several themes outlined below. I think you will find a Treasurer's Office that takes care of its core responsibilities, but also adds to Vermont's future prosperity through a variety of collaborative initiatives:

Commitment to Our Core Responsibilities

The Treasurer's Office serves as the State's banker and chief investment officer. We are responsible for the State's banking, cash management, and financial transaction services, with approximately \$5.8 billion in annual disbursements. We administer three legislatively authorized public retirement systems (State employees, teacher, and municipal) with 52,642 active, vested, inactive, and retired members. In fiscal year 2017, we paid \$316.5 million to 18,690 retirees and \$62.7 million in health care premium payments on behalf of retirees. We administer investment policies and strategic oversight for \$4 billion in assets for the three defined benefit plans, (State employees, teacher, and municipal) as staff support to the Vermont Pension Investment Committee, as well as additional assets in defined contribution, optional retirement plans, various trusts, and operating funds. We act as the steward for approximately \$80 million in unclaimed financial property and actively work to return those funds to the rightful owner. We provide financial literacy resources and programs for Vermonters of all ages. In all of these responsibilities, we work for excellence and the exercise of financial prudence over all the resources within our purview. We strive to provide these services at the best value to the citizens of Vermont and have implemented many cost savings initiatives outlined below.

Delivering Cost Effective Services

Last year we reported that we were undertaking a comprehensive review of our various supplemental retirement programs (deferred compensation, defined contribution plans, the 403(b)-teacher involvement program, SDIA, and others) to consolidate our third-party administration, with the expectation of a reduction in fees. I am pleased to report that this effort was successful, and we have entered into a contract with Prudential to provide these services with a savings to participants estimated at \$3.2 million over the next five years, or 51%. At the same time, we were able to offer enhanced retirement planning options and greater transparency for the customer. The actual transfer of services is scheduled for February 2018.

In a period of rising health care costs, we were pleased to negotiate a new contract for health care services with the Vermont Educational Health Initiative (VEHI) that reduced costs for the State by \$500,000 in 2018, with a corresponding savings for teachers of \$110,000. We continue to evaluate ways to reduce retiree health care costs while at the same time providing these needed services.

As noted later in this report, Vermont implemented a program, VermontABLE, to assist individuals with disabilities by making federal tax-advantaged savings accounts available to cover qualified expenses. As of November 30, 2017, VermontABLE members held an average account balance of approximately \$3,800, which is approximately \$1,800 over the previous benefit cliff level for individual on means-tested programs. Total Vermont participant assets under management as of that date were \$352,000. As of December 31st, 116 Vermonters are enrolled in the program.

We have recently taken many public outreach steps and expect continued growth of the program. Given Vermont's small population, operating such a program on its own would likely involve extensive participant fees, eroding the success of the program. As an alternative to reduce costs, the Treasurer sought and obtained legislation to partner with other states. In November 2016, the Treasurer's Office announced a partnership with the Ohio Treasurer's Office. On February 22, 2017, the VermontABLE program was launched for Vermonters. The partnership with Ohio also includes Kentucky, Missouri, Georgia, and, more recently, New Hampshire. As of September 30th, the partnership represented 35% of total ABLE assets across all states and 30% of all active accounts across all states. The partnership represents the largest share of ABLE accounts and assets across the country. By pooling assets, we have reduced administrative costs and investment fees for participants and can offer this program at no ongoing cost to the state.

This past year we partnered with Governor Scott and Department of Financial Regulation (DFR) Commissioner Pieciak to launch a State Financial Literacy Working Group to evaluate how the State delivers personal finance resources to Vermonters and whether existing programs can be expanded or improved to create more efficient systems. Through collaboration we can expand services with greater cost-efficiency.

The Treasurer's Office also reached an agreement with People's United Bank, N.A. to provide core banking services. Year over year savings are expected to accrue to the benefit of the State of Vermont.

Working to Improve the Financial Security for all Vermonters

As Treasurer, I will continue to work to improve Vermonter's financial well-being and dignity in retirement. On the public pension front, we continue to advocate for continued policies for full actuarial funding and utilize periodic valuations with reasonable assumptions to assure that the pension systems are achieving the dual goals of retirement security for retirees and assuring that it is also affordable for current and future retirees and other taxpayers.

Defined benefit (DB) plans are an important part of the solution. Research shows that retirement savings invested through DB systems provide the best value for taxpayers. Dollar for dollar, DB plans perform better than other alternatives. DB plans are also generators of economic activity. When retired workers have adequate and reliable income, they buy products and services in our local communities. Research compiled by the National Institute on Retirement Security (NIRS) in 2016 found that, based on FY 2014 data, for each dollar Vermont spent on pension benefits, \$1.29 in economic activity was generated, or \$386.5 million total. This economic ripple effect adds to the vibrancy of Vermont's cities and towns.

The Treasurer's Office has worked with governors and lawmakers to make prudent decisions to address historic underfunding that occurred in the 1990s and early 2000s, primarily in the Teachers' System, as well as investment losses experienced during the Great Recession. Employee groups have been important partners in our work by stepping up to the plate and agreeing to contribution increases and other changes. Over the past few years we have worked with the Administration and General Assembly and revised the amortization schedule to accelerate funding and save the taxpayers \$165 million in interest. On the issue of retiree health care (other post-employment benefits or OPEB), we worked with our legislative partners to develop a funding mechanism for teacher retiree health care that is on target with current and projected savings of \$480 million by 2038. That funding plan will create an opportunity to begin prefunding our retiree health care in 2023. Prefunding is ultimately in the best interest of the taxpayer and the Treasurer's office will continue to advocate for full funding of the OPEB. Prefunding our OPEB liabilities would result in a reduction of the liabilities by 43%. Since 2010, the Treasurer's office has implemented, in collaboration with the General Assembly and the Administration, changes that have saved millions on an annual basis and are on target to save a projected \$1.3 billion by 2038. These are outlined on pages 23 of this report.

We need to continue our disciplined approach. Due to revisions in interest rate and mortality assumptions, as well as workforce decisions at the state and local level (retirement incentive program, LEA reorganization), we saw some big jumps in pension liabilities this year. These were even greater for OPEB where little or no prefunding is currently taking place and national health care trend rates impact the analysis. This is not, however, the time to look for quick fixes. Historical underfunding to satisfy short-term budgetary stresses prior to 2007 are still impacting today's liabilities. We are paying \$25 million more each year just to address that underfunding. Workforce decisions and various retirement incentives to re-

duce operating budgets have also had a negative impact on pension liabilities. Any solutions must be viable in the long-term, be fair to the taxpayer and not erode retirement security for our workforce. We look forward to engaging and working with the Administration and the General Assembly on these important issues.

Public Retirement Study Committee

Retirement security should extend to every Vermonter. I chaired a committee formed to investigate retirement security in Vermont. We found that retirement savings for members of the public in Vermont are insufficient. An AARP study found that about 45 percent of Vermont's private sector employees—roughly 104,000—work for an employer that does not offer a retirement plan.

In 2017 the Committee recommended to the General Assembly enabling legislation to create a "Multiple Employer Plan" or MEP, at no cost to the taxpayer. The proposed plan will provide a range of retirement options for Vermonters who work for employers with 50 or fewer employees and where the employer does not currently offer retirement plans. This will create economies of scale that will reduce fees, provide assurance that the investment options to employees have reasonable fees and are among best in class, and provide greater access to retirement plans for all Vermont workers, public, and private. With the full support of the Governor and the General Assembly, enabling legislation was enacted in May 2017.

Since enactment, the Treasurer's Office and the Committee have put together a workplan to meet the goal of full implementation by January 2019. I am pleased to report that we are on schedule. Highlights of the "Green Mountain Secure Retirement Plan" proposal and a detailed timeline draft and workplan for the intended implementation of the Green Mountain Secure Retirement Plan are available on the Treasurer's Office's website.

Financial Literacy Commission

Financial literacy is an important component of all our efforts toward financial security. I co-chaired the Financial Literacy Commission with John Pelletier, Champlain College Director of the Center for Financial Literacy. Our second annual report is being filed under a separate cover. Financial literacy- the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being- is a win-win proposition. As Vermont citizens increase their understanding and practice of sound money management skills, the financial well-being of both the individual and the State will improve.

Consumer Protection

Vermont has been a leader in unclaimed property, reuniting citizens with their rightful property. We have implemented new technologies to reach more and more Vermonters. In FY 2017, a record number of Vermonters (15,491) had property returned to them totaling \$5.1 million. For FY 2018, we are already significantly ahead of last year's pace.

This year we will be proposing comprehensive changes to the State's unclaimed property statutes. The national act, on which Vermont's act is largely based had not been changed since 1996. As a past president of the National Association of Unclaimed Property Administrators, I served as one of two state advisors to a national effort by the Uniform Law Commission to revise the Unclaimed Property Act. In July 2016, a Revised Uniform Unclaimed Property Act (RUUPA) was adopted, bringing the law current with changes in the banking and finance industry as well as making other significant changes. The Treasurer's Office will be working with the General Assembly to bring Vermont's unclaimed property law current with this act while preserving some of the unique consumer protections provisions already enacted in Vermont.

Fiscal Discipline and Bond Rating

Vermont has the highest bond rating in the Northeast. We are rated triple-A by two rating agencies, the highest rating available, and AA+ by the third agency, the second highest rating available to states and municipalities. These ratings were reaffirmed in August 2017.

A bond rating is analogous to your personal credit rating. Vermont's high bond rating enables us to borrow funds

for critical infrastructure at low rates that save taxpayers millions of dollars. It also lowers the cost of financing for affordable housing, higher education loans, economic development, and capital projects in our local communities by providing a credit support to the agencies that provide these services. Given that our bond rating has an impact on every city, town, and citizen of Vermont, it is important that we maintain our financial health and take steps to improve it.

There are many challenges, however, that must be addressed to continue to receive these ratings that involve not just the Treasurer's Office but the Administration, General Assembly, and all of our partners. While Vermont's debt ratios still rank favorably among triple-A rated states, we were in the minority of states that increased their debt levels last year. The Treasurer and the Capital Debt Affordability Advisory Committee have recommended reductions in bond authorization levels of over 18% over the past four years, and the Governor and Administration, have adhered to these recommendations. We need to continue to reduce our reliance on debt.

The rating agencies have noted our above-average net pension liability but have also, especially in the case of Moody's Investors Service have also stated that "Vermont is aggressively funding its net pension liability, and has adopted several measures (such as lowering the assumed rate of return) to assure it remains on track to full funding." Again, continued fiscal discipline is needed. Other stresses noted by the rating agencies include an aging population and workforce and slower than expected revenue growth. These issues need to be addressed in this legislative session.

Local Investment:

Pursuant to Act 199 of 2014, Act 51 of 2015, and Act 157 of 2016, the Local Investment Advisory Committee (LIAC), chaired by the State Treasurer is mission-driven to increase the economic development activity in Vermont and create jobs by committing up to 10 percent of the Treasurer's Office average available cash balance to local investments. The State Treasurer oversees commitment of funds for local investment purposes. To date, over \$33 million has been obligated to projects. Since last January, pursuant to Act 178 of 2014, the Department of Buildings and General Services (BGS), the Agency of the Administration, and the Treasurer's Office have partnered to commit \$1,106,459 in new energy efficiency projects in State buildings in Burlington, Springfield, and Derby.

The Vermont Economic Development Authority (VEDA) continues to use the \$10 million loan it received from the Treasurer's Office through LIAC to assist in making direct energy loans. Energy efficiency loans continue to be made by NeighborWorks of Western Vermont with 156 loans and \$1.9 million of outstanding dollars. In addition, \$1.5 million in LIAC loans have assisted in NeighborWorks' community rehabilitation efforts through down payment assistance, landlord rehabilitation, and landlord energy loans. Loans have also been made to assist energy improvements and housing (\$2.8 million to VHFA and \$1.3 million to Champlain Housing Trust), to lower the cost of student loans (\$4 million loan with VSAC), and \$1 million to the Vermont Community Loan Fund (for childcare programs, as well as food, farm and forest investments).

The Treasurer's Office Bank in Vermont program makes investments in local banks and banks with branches in Vermont through certificates of deposit. Since its inception in 2004 and through June 2017, we have awarded just over \$818 million in certificates of deposits to local banks of varying maturities through the Bank in Vermont program. We have over \$158 million invested in the Vermont Manager Program (as of 6/30/2017) for our pension funds. More information on these efforts can be found in the investment section of this report and on our website. We will continue to look for opportunities to invest locally while preserving responsible and disciplined practices on behalf of our citizens.

Integrating Environmental Social and Governance (ESG) Issues into Investments

The Treasurer's Office believes, as a fiduciary, that our responsibility is to invest State and pension funds on behalf of our taxpayers and beneficiaries. Within that context, however, we believe that environmental, social, and governance (ESG) issues are among core factors when assessing the risks and opportunities of an asset and should be fully integrated into the investment process by VPIC and its managers. To that end, the Vermont Pension Investment Committee voted to amend its ESG policies. We are active shareholders and, in the past year, voted our proxies in support of a wide range of ESG efforts and have co-filed shareholder resolutions to promote the disclosure of environmental impacts by companies, development of sustainable environmental and energy practices, and improved corporate governance. These and many other initiatives are outlined in the Investment Section of this report. I want to thank our many partners for this collaborative ef-

fort in moving forward on these important issues in a manner consistent with our fiduciary responsibility.

Clean Water Report

Pursuant to Act 64 of 2015, the Treasurer's Office submitted a report on January 15, 2017 on funding and financing of clean water in Vermont. While this report was submitted by the Treasurer's Office it was completed through a collaborative effort with many state agencies, authorities, nonprofits, and citizens.

The report is available on the Treasurer's Office webpage and recommends a set of long-term funding options. The Treasurer's Office also recommended a two-year interim plan using available and one-time bonding capacity that provided a bridge to a long-term solution. The primary elements of the two-year plan were supported by the Administration and the General Assembly and adopted in FY 2017, permitting significant dollars to be devoted to clean water initiatives, without increasing taxes and fees.

Previous DEC reports, as well as the 2017 Treasurer's report, state that a usage fee tied to stormwater, impervious surface, land use, and the amount of pollution generated, should be developed, to the extent that existing revenues are unavailable. The most recent report of the "Working Group on Water Quality Funding" also acknowledged that members of the working group had significant discussion centered around a fee based on the amount of runoff as a long-term funding method. The Treasurer's 2017 report also strongly encourages continued efforts to identify reallocations within the existing appropriations or resources. It should be clear that in looking at existing resources, they must be predictable, reliable, and built into the base budget. To date, such resources have not been identified at levels sufficient to meet the funding needs over either a five-year or twenty-year period. The Administration and the General Assembly needs to accelerate a more detailed plan of next steps, with appropriate benchmarks, prior to the expiration of the two-year interim financing period. There is an urgency to the issue. Delay will only increase the cost of cleanup, create regulatory and legal challenges, and most importantly further degrade our clean water assets that are important for our health and safety and for Vermont's future economic prosperity. I would encourage a collaborative effort by the Administration, General Assembly, and stakeholders to work towards a long-term solution this legislative session. The Treasurer's Office remains committed to this effort and is available to assist.

Conclusion

I want to thank the Treasurer's Office staff for all the hard work they have done to successfully attain a record of excellence and accomplishment for all Vermonters. I am proud to say I have the best staff in the State and one of the best Treasury staffs in the country.

Vermont gets things done because we work together to identify challenges and develop solutions. This is a particularly challenging year that will require all our joint efforts to be successful. The Treasurer's Office stands ready to work with the Administration and the General Assembly for the prosperity and financial well-being of every Vermonter.

I am privileged to serve as Vermont's State Treasurer and look forward to working with you on behalf of all Vermonters in the year ahead.

Sincerely,



Beth Pearce
State Treasurer



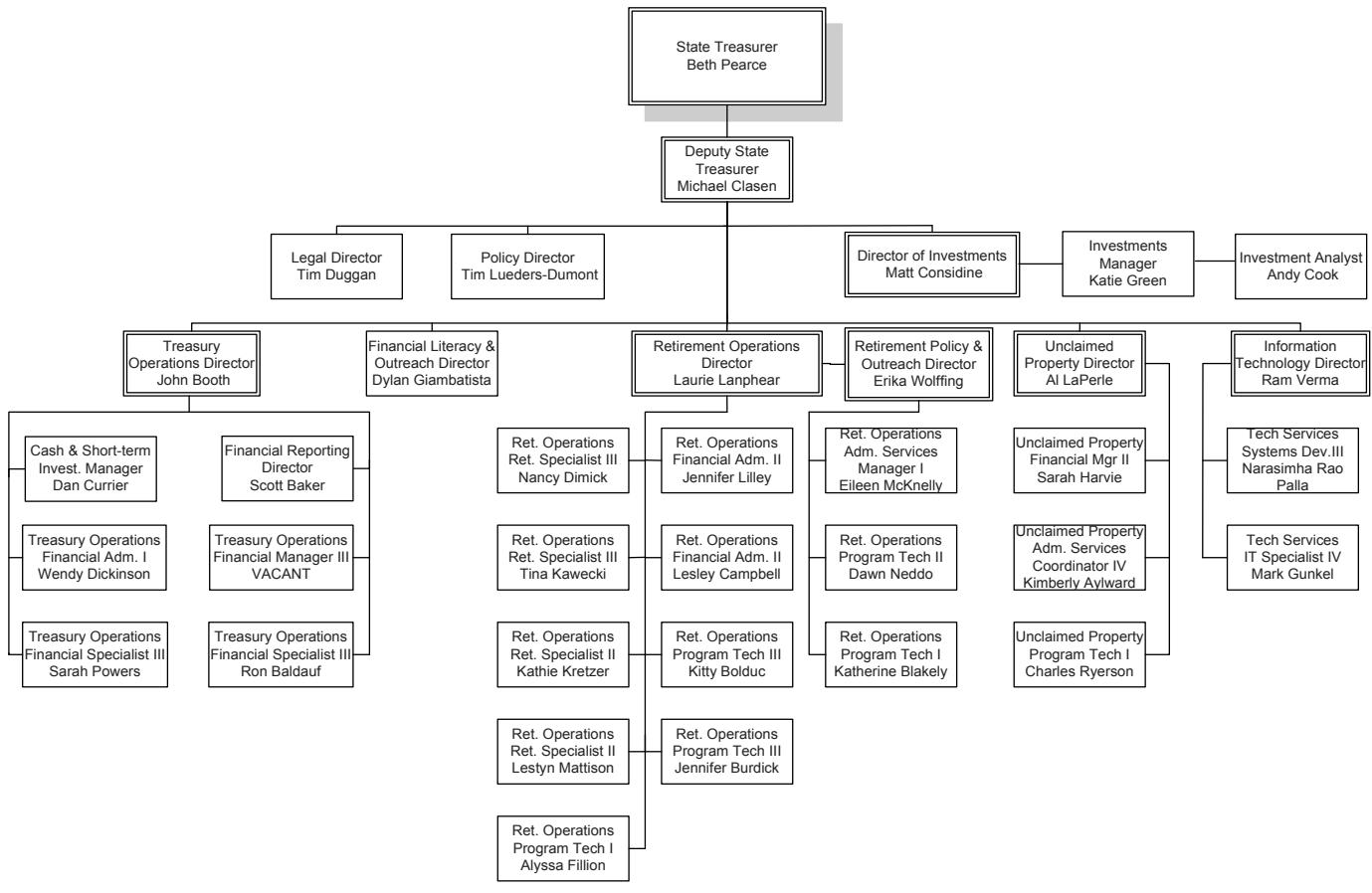
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Our Commitment to Vermonters

The State Treasurer's Office manages money that belongs to all citizens of Vermont. The Treasurer and staff are committed to doing this efficiently, responsibly, and professionally. The Treasurer's office operates as a business, serving the needs of Vermonters while working to save the taxpayers money and earn the highest possible investment returns in its funds within acceptable risk parameters.

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Vermont State Treasurer's Office



The State Treasurer's Office is comprised of a team of 36 professionals. The organizational chart and staff listing above are effective as of January 1, 2018.

Specific administrative and service duties as prescribed by State statutes include:

- **Investment of State funds;**
- **Issuing all State bonds authorized by the General Assembly;**
- **Serving as the central bank for State agencies;**
- **Management of the State's cash balances, processing of checks, and the reconciliation of payroll and vendor checks;**
- **Safeguarding and return of unclaimed or abandoned financial property, which is held in trust by the State until the rightful owner can be located; and**
- **Administration of the State, Teachers' and Municipal defined benefit plans, the deferred compensation plan, and the defined contribution plans for State employees and participating municipalities.**

Vermont Retirement Systems

Three statutorily defined benefit retirement plans administered by the Treasurer's Office comprise the backbone of the Vermont Retirement System. These plans serve members of the Vermont State Employees' Retirement System (VSERS), Vermont State Teachers' Retirement System (VSTRS), and the Vermont Municipal Employees' Retirement System (VMERS). Each system is overseen by a Board of Trustees. By statute, the State Treasurer serves as a member of all three boards.

The Work of the Board of Trustees

The Boards of Trustees are responsible for the administration of the system and benefit management. The boards delegate the day-to-day administration of the plans to the retirement division staff, utilizing the governing statutes as guidelines. If questions arise, or if a member or retiree does not agree with a benefit decision made by staff, they may appeal to their system's board for re-consideration. The Attorney General's office provides legal counsel to the boards when necessary. Each Board of Trustees acts as a fiduciary of the funds held on behalf of its members and retirees. Each board designates an actuary to make an annual valuation of the assets and liabilities of the funds of the system, the results of which are used to request the necessary employer contribution for the coming year to achieve and preserve the financial integrity of the funds.

Each Board of Trustees generally meets between ten and twelve times a year, and is required to keep a record of their proceedings, which are open to the public. Minutes from each meeting are posted on the Treasurer's Office's website.

Overview of the Three Retirement Systems

The Retirement Division serves the needs of the approximately 52,642 active, vested and retired members of VSERS, VSTRS, and VMERS. The largest expenditure for all three defined benefit plans is the retirement benefit paid in the form of a monthly allowance. The three systems paid out just under \$316.5 million in monthly benefit allowances in fiscal year 2017. VSERS and VSTRS also offer health insurance to their retired members and pick up a portion of the premium based on the member's number of years of service at the time of retirement. The health care expenses for the two retirement systems totaled \$62.7 million. VMERS does not offer a health insurance plan, but instead established a health retirement savings plan in fiscal year 2008. All three

Retirement Division Activity - FY 2017

Activity	2017	2016	2015	2014	2013	2012	2011	2010
Benefit Estimates	7,177	7,934	8,318	6,196	6,334	6,028	7,019	7,231
Individual Counseling	908	919	1,132	824	751	889	1,054	1,077
Retirement	967	1,054	1,118	1,081	1,082	1,068	1,008	1,023
Withdrawals	1,257	1,267	1,382	1,198	1,257	1,393	1,312	1,386
Deaths	349	335	463	329	377	349	376	291
Seminars	32	37	31	33	42	26	45	64
Seminar Attendance	776	809	872	752	1,243	783	1,000	1,496

These numbers are for fiscal year, not calendar year

systems offer retiree dental plan, the cost of which is 100% paid for by the retirees.

There are 14 members of the Retirement Division, which is a ratio of one staff for every 3,760 customers. During the course of the year, staff pay benefits and also provide an array of services, such as calculation of benefits. In a defined benefit system, there is a promise to provide members with a monthly retirement allowance, providing they serve a minimum number of years of service in the system. The benefit is generally defined through a statutory formula that takes into account the member's age, average final compensation and years of service. Benefits are guaranteed to be paid for the remainder of the member's life after retirement, and may be passed along to another individual after the member's death, with a corresponding reduction in benefit, under certain options that may be elected at retirement. In order to fulfill the promise of paying members future retirement benefits, each system has developed a funding plan.

The primary objective of funding is to equitably allocate costs between generations of taxpayers and provide retirement security to members and retirees who have the assurance their current and future benefits will be paid. The funds come from three sources: employee contributions, employer contributions, and investment income interest. Interest earned on investments from the retirement fund is the largest source of funds used to pay benefits. As more members approach retirement, employee life span lengthens, and health care expenses rise, it is anticipated that significant increases in benefit payouts will occur. These assumptions have been factored into the actuarially developed funding plan.

All three boards select an independent actuary to review and develop a funding plan. After a 2017 RFP process, Segal Consulting Inc. was selected to determine the amount of funding that must be set aside each year for current and future benefits. Segal Consulting uses several factors that impact the funding needs of the system, based on the direction adopted by the boards. Each Board determines the actuarial method that will be used, and the assumptions relating to demographic, economic and actual experience of the system. The interest rate assumption is set jointly by the respective board of trustees and the Vermont Pension Investment Committee (VPIC), based on advice by the actuary and the VPIC investment consultant.

For VSERS and VSTRS, Segal Consulting makes a recommendation to the retirement boards in October of each year as to the amount that the state must contribute to keep the system on a funding plan. The

Funding Valuations

The Treasurer's office worked with the actuary to complete both the GASB 67 and funding valuations of the pension system. The funding valuations results are below.

VSTRS	2016	2017
Actuarial Accrued Liability	\$ 2,942,024,080	\$ 3,282,045,614
Actuarial Value of Assets	\$ 1,716,296,235	\$ 1,779,592,227
Unfunded Liability	\$ 1,225,727,845	\$ 1,502,453,387
Funding Percentage	58.34%	54.22%

VSERS	2016	2017
Actuarial Accrued Liability	\$ 2,289,451,540	\$ 2,511,372,455
Actuarial Value of Assets	\$ 1,707,267,941	\$ 1,793,794,733
Unfunded Liability	\$ 582,183,599	\$ 717,577,722
Funding Percentage	74.57%	71.43%

VMERS	2016	2017
Actuarial Accrued Liability	\$ 672,238,343	\$ 754,876,508
Actuarial Value of Assets	\$ 581,611,235	\$ 634,690,493
Unfunded Liability	\$ 90,627,108	\$ 120,186,015
Funding Percentage	86.52%	84.08%

recommendation is adopted by the Boards in the form of a recommendation to the Governor and the General Assembly for the amount that must be appropriated for the upcoming fiscal year. The State's contributions to each system are based on percentage rates of each member's annual earnable compensation. In the case of VSERS, this is further adjusted for state expenses to operate the system, excluding investment expenses. The various state cost centers/funds are assessed an employer contribution based on the payroll associated with the cost center/fund. VSERS funding requirements are then calculated as a percentage of the state payroll and are remitted to the pension fund as an employer contribution with each bi-weekly payroll. As actual payroll for the year may vary from estimated totals and from pay period to pay period, reconciliation is completed by the State during the course of each year to assure that the entire recommended amount is paid to the system. In the case of VSTRS, an appropriation is made from the general fund. Beginning in fiscal year 2016, the general fund appropriation was offset by expected employer contributions from local educational entities for teachers paid for by federal grants.

For VMERS, Segal Consulting makes a recommendation to the Board as to the amount each employer should contribute to keep the funding of the four group plans on track. Employers in each participating municipality are required to contribute at the rate established by the Board, pursuant to the actuarial recommendation. Since 2012, the development of both employer and employee rate recommendations has been done through a collaborative process involving employee groups and employee representatives.

GASB Changes to Accounting

The Governmental Accounting Standards Board (GASB) is the source of generally accepted accounting principles (GAAP) used by state and local governments:

- GASB 67: Accounting for the plan, effective for fiscal years beginning after June 15, 2013; and
- GASB 68: Employer Reporting, effective for fiscal years beginning after June 15, 2014.

GASB 67 and 68 essentially divorced funding and accounting. In prior standards, the focus was on whether the government was making its actuarially determined annually required contributions to adequately fund the plan. Under the new standard, the focus is on the size and growth of the net pension liability (NPL). However, since GASB 68 is based on the fair market value of assets, this will lead to more volatility in the NPL and funded ratio as reported for accounting purposes. Therefore, GASB recommends that governments review and develop separate funding valuations – the State of Vermont has done this. The new statements also require the use of one actuarial method, rather than the six previously available. The new requirement is to use a method with few differences from those currently used by the State and Teachers' Systems. As a result, the primary difference for these systems is the market value of assets. The Municipal System uses a different actuarial method, which has caused significant differences in the funding position. The Municipal System is in the process of reviewing its actuarial methods and assumptions.

This fiscal year, the State implemented GASB 74 which provides similar treatment of other post employment benefits (OPEB), primarily health care. GASB 75, modeled similarly to GASB 68, will be replaced in FY 2018.

GASB 74 and GASB 75 statements apply to postemployment benefits other than pensions (OPEB), the most common being health and life insurance benefits for retirees. These standards will change the way plans and employers report OPEB liabilities. The intent of the standards is to improve the usefulness of the reporting information and increase transparency. As with the pension standards issued earlier, it is important to remember that the standards focus on accounting for the costs and obligations of OPEB and avoid establishing guidance on funding.

Like GASB 68, GASB 75 will require the State to place a net OPEB liability on its government wide finan-

FY2016/FY2017 GASB 67 Results

FY 2016	(Dollar Amount in Thousands)		
	VSERS	VSTRS	VMERS
Total Pension Liability	2,271,588	2,930,423	675,711
Plan Fiduciary Net Position	(1,609,650)	(1,620,900)	(547,015)
Net Pension Liability	661,938	1,309,523	128,696
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	70.86%	55.31%	80.95%
FY 2017	(Dollar Amount in Thousands)		
	VSERS	VSTRS	VMERS
Total Pension Liability	2,428,779	3,220,961	740,666
Plan Fiduciary Net Position	(1,748,442)	(1,738,557)	(619,510)
Net Pension Liability	680,337	1,482,404	121,156
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	71.99%	53.98%	83.64%

cial statements beginning in FY 2018. Unlike pensions, where full funding of the actuarially required contribution is currently taking place, we are currently not prefunding the OPEB, which will create additional liabilities on the state's financial statements beginning in FY 2018. It is important to note that these liabilities, like GASB 67, will not create any additional financial impacts on the general fund.

Nonetheless, it is important that the State develop funding plans to pay for these liabilities. While we have been successful at some changes to lower the cost of health care premiums, the simple fact is nothing can replace the value of prefunding and compound interest. On pages 19 and 20 of this report, you will see charts on the impact of prefunding these liabilities. Interest from setting aside dollars now will result in lowering these long-term liabilities in the future by over a billion dollars or 43%. In the case of VSTRS, we have made substantial changes to the funding of health care including the development of a long-term plan that can create some initial prefunding by 2023. It is important that we maintain discipline in moving forward with the VSTRS funding plan but also explore additional steps to manage both the funding and liabilities sides of the equation for both the state and teachers' system. Prefunding is ultimately in the best interest of the taxpayer and the Treasurer's Office will continue to advocate for full funding of the OPEB.

Actuarial Results

For the pension valuations, we expected, and in fact, did have a substantial increase in liabilities and a cor-

responding increase in the annual required contribution (ARC), now called the Actuarially Determined Employer Contribution (ADEC) by GASB. The reasons for the increases for the state and teachers' systems include the following: 1) a revision to the assumed investment rate of return, 2) changes to mortality projections, and 3) some changes in actuarial methodology.

With respect to the teachers' system, retirement experience, including the extent of turnover among participants and earlier than anticipated retirements, has also resulted in increased pension liabilities. Workforce changes at the local level as reorganization and/or consolidation has taken place have created additional pension liabilities. As State policy makers continue to make decisions that affect both the state workforce and the transition of education service delivery, the impacts to pension liabilities must be taken into consideration.

Both the state and teachers' system OPEB valuations incorporated very large increases in the liabilities. Again, the investment return and mortality assumptions were significant contributors. Also, since prefunding is not in place, these liabilities will continue to grow. The most significant increases, however, were attributable to health care trend rates, driven by post-Medicare drug trends. These national health care trends are the biggest threat to state and local budgets and to businesses. Health care for retirees is not immune from this trend, nor is it the biggest contributor. That, however, does not eliminate the need to address retiree health care costs, and as noted on page 23, we have already made changes to modestly reduce liabilities, including benefit changes to state employees and teachers. That said, prefunding these expenses is critical.

As a final note, retiree health plans have shown substantial year-to-year swings in accounting liabilities. Actuarial Standard of Practice No. 6 (ASOP), Measuring Retiree Group Benefits, identifies three key elements: plan provisions; the population covered; and the current and projected claim cost. There is significant movement in year-to year claim costs and both systems have made changes toward a tiered health care model. The latter has reduced costs, but the national trend rates have had a much greater negative impact.

Over the years the Treasurer's Office, Administration and the General Assembly have taken many steps to reduce liabilities and contain costs. These have already generated savings and are outlined on page 23. Based on conservative estimates through the year 2038, the year the state is scheduled to fully pay down the pension liabilities, these initiatives will have generated at least \$1.3 billion dollars in savings for taxpayers. We will continue to look for ways to reduce costs while protecting retirements security. But, there are no quick fixes and the bottom line is that we should remember that in assessing our options, we should get the best value for both employees and other taxpayers.

Healthcare, Dental and Life Insurance Coverage After Retirement

VSERS, VSTRS, and VMERS members are offered various types of insurance protections after retirement.

Vermont State Employees' Retirement System (VSERS)

Employees retiring directly from active State service for any reason may carry coverage in effect at that time into retirement for themselves and their covered dependents. As of June 30, 2017, 4,860 retirees were enrolled in the medical plan in the single, spouse, and family plan options. The retirees contributed \$9.0 million in premiums for the fiscal year ending June 30, 2017. The State's fiscal year 2017 contributions to this trust fund totaled \$32.9 million. The trust fund then paid premium payments of \$33.3 million (calculated on a pay-as-you-go basis) to the State's medical insurance fund. At June 30, 2017, the trust fund had total net assets of \$22.5 million being held in trust for post-employment benefits other than pension benefits.

For employees hired on or before July 1, 2008, currently only 20 percent of the cost of the premium is paid by the retiree during their lifetime. Based on legislation enacted during fiscal year 2008, the majority of state employees hired after July 1, 2008 will receive a tiered retiree health care reimbursement – a pro-rated percentage

of paid premium based on years of service at retirement. Once retirees become eligible for Medicare coverage (at age 65) it is mandatory that they enroll in both Medicare Part A and B, making Medicare the primary insurer.

Retiring employees are eligible for a \$10,000 life insurance policy with no further premiums due providing they have life insurance coverage at the time of retirement and have a minimum of 20 years of state service. Retirees are also eligible to enroll in a dental plan for themselves and eligible dependents at the time of retirement with the full amount of the premium withheld from their monthly retirement allowance.

Vermont State Teachers' Retirement System

VSTRS retirees participate in multi-employer health coverage plans operated by the Vermont Education Health Initiative (VEHI), which is managed jointly by the Vermont School Boards Insurance Trust and the Vermont National Education Association. As of June 30, 2017, 6,331 retirees were enrolled in the single, spouse, and family medical plan options. For fiscal year 2017, the Retired Teachers' Health and Medical Benefits Fund (RTHMB) received non-employer contributions of \$23.8 million. The State Treasurer is authorized to use inter-fund borrowings of up to \$28.5 million to finance any funding shortfalls, and it is the General Assembly's intent to repay any such borrowings by the end of fiscal year 2023. At June 30, 2017, the balance on the loan, after excluding short-term receivables and ongoing financial accruals, was \$26.7 million. The RTHMB paid \$26.7 million in premiums to VEHI on a pay-as-you-go basis during fiscal year 2017. The retirees contributed \$18.7 million in premiums. VEHI partners with Blue Cross Blue Shield to provide health insurance to retired and active teachers. The system pays 80 percent of the retiree's premium only, for members with a minimum of 10 years of service as of June 30, 2010. Payment is based on the cost of the "standard plan" as defined by statute. The retiree pays the full cost of the premium for all covered dependents.

The actual valuation reflects plan changes in health care coverage effective July 1, 2010 for future retirements only. Eligibility criteria and premium sharing levels were revised for active employees who did not attain 10 years of service as of June 30, 2010. Future retirees will have the ability to access health care for themselves and their spouses with a tiered subsidy applied based on the total number of years of service at retirement. Once a retiree or covered dependent becomes eligible for Medicare coverage at age 65, it is mandatory that they enroll in both Medicare Part A and Part B. Medicare becomes the primary insurer and the VSTRS medical plans become the secondary insurer. The premium for all plans is reduced in accordance with the decrease in liability once Medicare becomes the primary insurer. VSTRS retirees also have access to dental coverage for themselves and their eligible dependents with the full premium from their monthly retirement benefit.

Vermont Municipal Employees' Retirement System (VMERS)

VMERS retirees have access to dental coverage after retirement under the same rules as VSERS and VSTRS retirees. All costs are paid by retirees.

Supplemental Retirement Plans

The State of Vermont currently offers its members access to a number of supplemental retirement plans. These plans are optional and provide members the ability to save toward their retirement needs outside of the traditional pension plans.

Defined Contribution Plan

In lieu of participating in a defined benefit plan, exempt State employees and some municipal employees

may opt to participate in a defined contribution plan. In a defined contribution plan, what is “defined” is the percentage of contribution that will be made by both the employee and employer each pay period. These contributions are then allocated to investment funds as designated by the participant. The investment line-up of available investment fund options is selected by the State Treasurer (State DC Plan) or the VMERS Board of Trustees (Municipal DC Plan). The only guarantee offered in this plan is the percentage of contributions that will be made. The defined contribution plans for state and municipal employees were administered by Fidelity in fiscal year 2017. As of February 1, 2018, the new third-party administrator for these plans will be Prudential.

State Defined Contribution Plan

Established in 1999, the State’s defined contribution plan had 611 participants and net assets of \$63.82 million as of June 30, 2017. Under the defined contribution plan, which is modeled after private sector 401(k) plans, employees contribute 2.85 percent of their annual salary to their individual accounts. The State makes a fixed contribution of 7 percent to each employee’s account. Employees are responsible for making all investment decisions. Fund line-ups are negotiated by the Treasurer’s Office and included in the contract with the plan administrator, Fidelity Investments. At retirement or termination, employees receive the amount of contributions in their accounts, plus investment earnings. The defined contribution plan provides portability for an increasingly mobile workforce. The plan offers eleven mutual funds in equity, balanced, and fixed income asset classes, and age-based “life-cycle” funds that re-balance a multi-asset class portfolio of mutual funds appropriate to the age of the plan participant. There is also a stable value fund for participants who are risk-adverse.

Municipal Defined Contribution Plan

The Vermont Municipal Employees’ Retirement System was given statutory authority in 1999 to approve a defined contribution plan for its members. The board implemented a defined contribution plan on July 1, 2000. As of June 30, 2017, there were 88 municipalities offering the DC plan, with 496 participants and net assets of \$22.29 million. The VMERS defined contribution plan must be offered first by a municipality, then becomes an option in lieu of participating in a defined benefit plan for the employee. The VMERS Board of Trustees selects the funds that are available, which closely mirror those offered in the VSERS defined contribution plan.

Deferred Compensation 457 and 403(b) Plans

The deferred compensation program has been available as a savings option to State employees, State agency employees, and some municipal and school district employees since 1979. Since the deferred compensation plan qualifies as a section 457(b) plan under the Internal Revenue Code, the portion of salary that is deferred is not taxed at the time of deferral. The slate of investment options is selected by the VSERS Board of Trustees, who are responsible for oversight of the plan. The program is currently administered by Empower Retirement. As of June 30, 2017, there were 7,234 participants in the 457(b) program. Total assets in the plan were valued at \$453 million. During fiscal year 2017, participating employees made contributions in the amount of \$22.69 million to the plan.

A 403(b) investment program for public school districts was implemented on January 1, 2009. There are currently 30 supervisory unions that have adopted the program. As of June 30, 2017, 2,542 school employees were participating in the program and assets had grown to \$94.05 million. Participating employees made contributions in the amount of \$12.2 million to the plan during fiscal year 2017. The program allows school employees to deduct money from their wages on a tax-deferred basis that may be invested in a variety of mutual funds during the employee’s working years. The 403(b) contributions reduce taxable wages during employment and the money

accumulates tax-free until the funds are withdrawn after retirement. At that time, all of the money is taxable as regular income to the participant. Oversight for this program rests with the VSTRS Board of Trustees, and it is also currently administered by Empower Retirement.

Supplemental Retirement Plans Moving to Prudential

Over the summer of 2017, the Office of the State Treasurer, with the Retirement Boards, concluded a competitive bidding process and selected Prudential Retirement to administer the seven preexisting optional plan offerings available to VSERS, VSTRS, and VMERS members. The VSERS, VSTRS and VMERS defined benefit plans are not impacted by this change and will continue to be administered by the Vermont Retirement Division and overseen by the Retirement Boards.

This change will bring all seven supplemental plans under one third-party administrator, resulting in a reduction in administrative fees, saving plan participants an estimated \$3.2 million over the next 5 years. The scope of service includes administration of: State 457 Deferred Compensation Plan; State Defined Contribution Plan; Municipal Employees 457 Deferred Compensation Plan; Municipal Defined Contribution Plan; Municipal Retiree Health Savings Plan; Teachers 403(b) Plan; and, Single Deposit Investment Account Plan.

A primary goal of this process was to bring greater transparency to fees that are assessed, as well as to take advantage of lower-cost share classes that have recently become available. Along with this change will be the availability of a single website through which participants may access plan information. Plan participants will benefit from enhanced services. Additionally, plan participants will be able to access a number of account management options and improved financial literacy planning tools.

RETIREMENT DIVISION OPERATIONS

Vermont State Employees' Retirement System (VSERS)			
Active Members	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>% Change</u>
Vested	5,367	5,285	1.55%
Not Vested	3,253	3,151	3.24%
Total Active members	8,620	8,436	2.18%
Average Age	46.0	46.2	-0.37%
Average Service	11.1	11.3	-1.51%
Average Compensation	\$ 58,533	\$ 55,864	4.78%
Retired Members and Beneficiaries			
Number	6,727	6,542	2.83%
Annual Retirement Allowances	\$ 125,628,636	\$ 119,422,979	5.20%
Inactive Members	1,098	1,012	8.50%
Terminated Vested Members	742	728	1.92%
Vermont State Teachers' Retirement System (VSTRS)			
Active Members	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>% Change</u>
Vested	7,508	7,435	0.98%
Not Vested	2,520	2,484	1.45%
Total Active members	10,028	9,919	1.10%
Average Age	45.8	45.9	-0.24%
Average Service	12.6	12.7	-0.55%
Average Compensation	\$ 60,566	\$ 59,119	2.45%
Retired Members and Beneficiaries			
Number	9,021	8,763	2.94%
Annual Retirement Allowances	\$ 179,082,528	\$ 168,768,818	6.11%
Inactive Members	2,381	2,454	-2.97%
Terminated Vested Members	763	747	2.14%
Vermont Municipal Employees' Retirement System (VMERS)			
Active Members	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>% Change</u>
Vested	4,113	4,073	0.98%
Not Vested	3,189	2,893	10.23%
Total Active members	7,302	6,966	4.82%
Average Age	48.4	48.5	-0.29%
Average Service	8.8	9.0	-1.79%
Average Compensation	\$ 37,635	\$ 36,855	2.12%
Retired Members and Beneficiaries			
Number	2,942	2,734	7.61%
Annual Retirement Allowances	\$ 26,963,964	\$ 23,509,470	14.69%
Inactive Members	2,221	2,099	5.81%
Terminated Vested Members	797	811	-1.73%

Funding Progress of the Retirement Systems (Amounts in Thousands)

VSERS

Year ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2017	\$ 1,793,795	\$ 2,511,373	\$ 717,578	71.4%	\$ 504,553	142.2%
2016	1,707,268	2,289,452	582,184	74.6%	471,268	123.5%
2015	1,636,268	2,178,827	542,559	75.1%	462,057	117.4%
2014	1,566,076	2,010,090	444,014	77.9%	437,676	101.4%
2013	1,469,170	1,914,300	445,130	76.8%	416,766	106.8%
2012	1,400,779	1,802,604	401,825	77.7%	385,526	104.2%
2011	1,348,763	1,695,301	346,538	79.6%	398,264	87.0%
2010	1,265,404	1,559,324	293,920	81.2%	393,829	74.6%
2009	1,217,638	1,544,144	326,506	78.9%	404,516	80.7%
2008	1,377,101	1,464,202	87,101	94.1%	404,593	21.5%
2007	1,318,687	1,307,643	(11,044)	100.8%	386,917	-2.9%
2006	1,223,323	1,232,367	9,044	99.3%	369,310	2.4%
2005	1,148,908	1,174,796	25,888	97.8%	349,258	7.4%
2004	1,081,359	1,107,634	26,275	97.6%	336,615	7.8%
2003	1,025,469	1,052,004	26,535	97.5%	319,855	8.3%
2002	990,450	1,017,129	26,679	97.4%	300,994	8.9%
2001	954,821	1,026,993	72,172	93.0%	278,507	25.9%
2000	895,151	967,064	71,913	92.6%	266,519	27.0%
1999	804,970	876,412	71,442	91.8%	238,281	30.0%
1998	733,716	804,501	70,785	91.2%	235,956	30.0%
1997	639,128	753,883	114,755	84.8%	227,000	50.6%

VSTRS

2017	\$ 1,779,592	\$ 3,282,045	\$ 1,502,453	54.2%	\$ 607,355	247.4%
2016	1,716,296	2,942,024	1,225,728	58.3%	586,397	209.0%
2015	1,662,346	2,837,375	1,175,029	58.6%	557,708	210.7%
2014	1,610,286	2,687,049	1,076,764	59.9%	567,074	189.9%
2013	1,552,924	2,566,834	1,013,910	60.5%	563,623	179.9%
2012	1,517,410	2,462,913	945,503	61.6%	561,179	168.5%
2011	1,486,698	2,331,806	845,108	63.8%	547,748	154.3%
2010	1,410,368	2,122,191	711,823	66.5%	562,150	126.6%
2009	1,374,079	2,101,838	727,759	65.4%	561,588	129.6%
2008	1,605,462	1,984,967	379,505	80.9%	535,807	70.8%
2007	1,541,860	1,816,650	274,790	84.9%	515,573	53.3%
2006	1,427,393	1,686,502	259,109	84.6%	499,044	51.9%
2005	1,354,006	1,492,150	138,144	90.7%	468,858	29.5%
2004	1,284,833	1,424,661	139,828	90.2%	453,517	30.8%
2003	1,218,001	1,358,822	140,821	89.6%	437,239	32.2%
2002	1,169,294	1,307,202	137,908	89.5%	418,904	32.9%
2001	1,116,846	1,254,341	137,495	89.0%	403,258	34.1%
2000	1,037,466	1,174,087	136,621	88.4%	387,999	35.2%
1999	931,056	1,065,754	134,698	87.4%	372,299	36.2%
1998	821,977	955,694	133,717	86.0%	357,899	37.4%
1997	717,396	849,179	131,783	84.5%	364,695	36.1%

VMERS

2017	\$ 634,690	\$ 754,877	\$ 120,187	84.1%	\$ 274,814	43.7%
2016	581,611	744,960	163,349	78.1%	256,730	63.6%
2015	543,768	699,293	155,525	77.8%	249,811	62.3%
2014	500,558	580,972	80,414	86.2%	230,969	34.8%
2013	446,236	528,426	82,190	84.4%	220,372	37.3%
2012	417,443	488,572	71,129	85.4%	215,075	33.1%
2011	402,550	436,229	33,679	92.3%	205,589	16.4%
2010	376,153	409,022	32,869	92.0%	202,405	16.2%
2009	331,407	366,973	35,566	90.3%	191,521	18.6%
2008	348,740	343,685	(5,055)	101.5%	175,894	-2.9%
2007	325,774	309,853	(15,921)	105.1%	162,321	-9.8%
2006	288,347	276,552	(11,795)	104.3%	148,815	-7.9%
2005	259,076	248,140	(10,936)	104.4%	146,190	-7.5%
2004	232,890	225,092	(7,798)	103.5%	135,351	-5.8%
2003	222,854	218,533	(4,321)	102.0%	126,216	-3.4%
2002	193,278	176,109	(17,169)	109.7%	106,986	-16.0%
2001	177,928	158,786	(19,142)	112.1%	101,873	-18.8%
2000	161,900	138,697	(23,203)	116.7%	87,147	-26.6%
1999	137,454	114,481	(22,973)	120.1%	70,808	-32.4%
1998	113,678	102,005	(11,673)	111.4%	87,328	-13.4%
1997	96,196	85,686	(10,510)	112.3%	70,800	-14.8%

Other Post-Employment Benefits Funding Analysis

VSERS - Other Post-Employment Benefits Funding Analysis		<u>Pay-As-You-Go Basis</u>	<u>Pre-Funding Basis</u>
Assumed Discount Rate - June 30, 2017		4.00%	7.95%
Actuarial Accrued Liability as of June 30, 2017			
- Current Retirees, beneficiaries, and dependents	\$ 684,918,190	\$ 458,808,941	
- Current Active members	\$ 772,696,724	\$ 359,065,745	
- TOTAL	\$ 1,457,614,914	\$ 817,874,686	
Health Care Fund Assets	\$ 22,501,872	\$ 22,501,872	
Unfunded Actuarial Accrued Liability	\$ 1,435,113,042	\$ 795,372,814	
Funded Ratio	1.54%	2.75%	
Normal Cost for the 2018 fiscal year	\$ 41,599,043	\$ 14,930,324	
Amortization of Unfunded Actuarial Liability for FY 2018	\$ 51,254,906	\$ 45,718,104	
Total Actuarially Determined Contribution (ADC)	\$ 92,853,949	\$ 60,648,428	
Projected Payroll	\$ 514,602,609	\$ 514,602,609	
ADC as a % of pay	18.04%	11.79%	
Assumed Discount Rate - June 30, 2018	3.58%	7.50%	
Actuarial Accrued Liability as of June 30, 2018			
- Current Retirees, beneficiaries, and dependents	\$ 707,178,861	\$ 474,236,101	
- Current Active members	\$ 926,015,290	\$ 430,684,101	
- TOTAL	\$ 1,633,194,151	\$ 904,920,202	
Health Care Fund Assets	\$ 23,307,439	\$ 24,189,513	
Unfunded Actuarial Accrued Liability	\$ 1,609,886,712	\$ 880,730,689	
Funded Ratio	1.43%	2.67%	
Normal Cost for the 2019 fiscal year	\$ 45,921,632	\$ 16,319,997	
Amortization of Unfunded Actuarial Liability for FY 2019	\$ 54,266,264	\$ 48,235,394	
Total Actuarially Determined Contribution (ADC)	\$ 100,187,896	\$ 64,555,391	
Projected Payroll	\$ 532,613,700	\$ 532,613,700	
ADC as a % of pay	18.81%	12.12%	

Other Post-Employment Benefits Funding Analysis

VSTRS - Other Post-Employment Benefits Funding Analysis		
	<u>Pay-As-You-Go Basis</u>	<u>Pre-Funding Basis</u>
Assumed Discount Rate - June 30, 2017	4.00%	7.95%
Actuarial Accrued Liability as of June 30, 2017		
- Current Retirees, beneficiaries, and dependents	\$ 391,660,189	\$ 262,194,849
- Current Active members	\$ 473,141,183	\$ 248,587,108
- TOTAL	\$ 864,801,372	\$ 510,781,957
Health Care Fund Assets	\$ (26,657,646)	\$ (26,657,646)
Unfunded Actuarial Accrued Liability	\$ 891,459,018	\$ 537,439,603
Funded Ratio	-3.08%	-5.22%
Normal Cost for the 2018 fiscal year	\$ 17,592,760	\$ 7,320,956
Amortization of Unfunded Actuarial Liability for FY 2018	\$ 34,064,828	\$ 32,623,387
Total Actuarially Determined Contribution (ADC)	\$ 51,657,588	\$ 39,944,343
Projected Payroll	\$ 603,988,984	\$ 603,988,984
ADC as a % of pay	8.55%	6.61%
Assumed Discount Rate - June 30, 2018	3.58%	7.50%
Actuarial Accrued Liability as of June 30, 2018		
- Current Retirees, beneficiaries, and dependents	\$ 401,714,326	\$ 268,524,271
- Current Active members	\$ 546,687,489	\$ 288,742,736
- TOTAL	\$ 948,401,815	\$ 557,267,007
Health Care Fund Assets	\$ (24,968,540)	\$ (25,962,619)
Unfunded Actuarial Accrued Liability	\$ 973,370,355	\$ 583,229,626
Funded Ratio	-2.63%	-4.66%
Normal Cost for the 2019 fiscal year	\$ 19,502,203	\$ 8,147,279
Amortization of Unfunded Actuarial Liability for FY 2019	\$ 35,156,442	\$ 33,779,419
Total Actuarially Determined Contribution (ADC)	\$ 54,658,645	\$ 41,926,698
Projected Payroll	\$ 622,108,654	\$ 622,108,654
ADC as a % of pay	8.79%	6.74%

RETIREMENT DIVISION OPERATIONS

State Employees' Retirement System - Summary of Operations

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	SOURCE OF FUNDS										
Employee Contributions	\$ 15,456,691	\$ 18,614,102	\$ 22,148,754	\$ 22,840,354	\$ 22,269,041	\$ 27,708,009	\$ 29,847,352	\$ 31,745,692	\$ 33,296,248	\$ 34,055,217	\$ 35,966,987
Employer Contributions	39,297,002	39,179,823	25,134,235	31,468,384	37,572,599	40,302,433	51,370,307	56,482,985	55,981,364	54,347,060	60,280,480
Other Income	205,321	169,984	1,041,870	22,752,24	743,172	377,562	638,736	453,852	423,273	293,444	785,504
Investment Income (Reduction)	192,625,279	(84,156,254)	(242,976,381)	182,593,261	238,386,383	23,604,774	110,715,697	203,721,748	(8,484,694)	17,962,425	170,358,016
APPLICATION OF FUNDS											
Retirement Benefits	58,859,659	64,060,488	70,043,119	79,001,908	84,716,513	90,170,209	96,241,493	101,436,005	107,877,482	115,880,147	122,139,440
Refunds	1,526,140	1,414,144	1,403,995	1,521,440	1,731,375	1,908,752	2,515,758	2,461,242	2,796,892	3,320,185	3,640,086
Health/Life Insurance Expenses	13,541,092	16,371,373	-	-	-	-	-	-	-	-	-
Administrative Expenses	511,435	1,254,577	1,219,287	891,477	1,147,576	1,328,919	1,374,643	1,158,183	2,104,636	1,775,647	2,119,044
Other Expenses	344,719	631,321	477,966	568,278	613,899	702,136	437,367	595,306	721,810	893,254	700,275
Addition (Reduction) to Net Assets	\$ 172,801,248	\$ (109,924,248)	\$ (267,795,889)	\$ 155,146,920	\$ 210,761,832	\$ (2,117,238)	\$ 92,002,831	\$ 186,753,541	\$ (32,384,629)	\$ (15,211,087)	\$ 138,792,142

State Employees' Retirement System - (OPEB) Summary of Operations*

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
	SOURCE OF FUNDS										
Employee Contributions	\$ 1,444,757	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Employer Contributions	-	19,893,129	20,888,347	24,963,027	25,865,470	23,888,787	22,782,575	29,028,016	32,522,691	32,948,697	
Other Income/ Transfers	-	1,640,420	2,431,447	1,786,719	1,668,856	1,489,569	-	-	-	174,190	
Investment Income (Reduction)	7,886	86,454	480,064	802,020	375,423	613,290	1,455,290	331,945	494,668	1,372,446	
Retirement Benefits	-	-	-	-	-	-	-	-	-	-	
Refunds	-	-	-	-	-	-	-	-	-	-	
Health/Life Insurance Expenses	-	-	-	-	-	-	-	-	-	-	
Administrative Expenses	-	-	-	-	-	-	-	-	-	-	
Other Expenses	-	-	-	-	-	-	-	-	-	-	
Addition (Reduction) to Net Assets	\$ 1,452,643	\$ 2,085,065	\$ 2,148,799	\$ 3,318,154	\$ 2,163,348	\$ 2,283,899	\$ 3,241,365	\$ 1,000,310	\$ 1,448,359	\$ 1,149,055	\$ 1,149,055
Change in Net Position	\$ 17,894,518	20,860,032	24,878,272	25,863,989	23,887,003	22,485,894	28,359,565	31,568,917	33,346,196	33,346,196	82

* In 2008, changes made to the Government Accounting Standards Board requirements mandated that institutions report the future cost of other post-employment benefits (OPEB).

Teachers' Retirement System - Summary of Operations

	2007	2008	2009	2010	SOURCE OF FUNDS	2011	2012	2013	2014	2015	2016	2017
Employee Contributions	\$ 22,533,479	\$ 22,918,798	\$ 20,937,686	\$ 25,315,397	\$ 32,062,253	\$ 31,827,995	\$ 32,343,368	\$ 32,558,584	\$ 34,863,531	\$ 35,408,763	\$ 36,142,412	
Employer Contributions	37,341,609	39,549,997	35,960,934	40,545,321	47,134,361	51,731,875	63,646,240	71,869,736	72,908,805	73,225,064	78,663,674	
Other Income	2,093,219	1,628,242	3,754,020	1,817,540	3,341,877	4,505,246	1,733,033	1,209,177	830,887	4,187,473	4,465,026	
Investment Income (Reduction)	244,437,213	(110,019,634)	(307,382,559)	208,723,610	261,886,311	24,726,665	120,403,030	212,338,194	(7,566,697)	19,877,270	173,166,612	
APPLICATION OF FUNDS												
Retirement Benefits	74,368,306	82,157,642	89,825,986	96,448,102	106,930,467	117,801,002	129,416,052	138,484,665	148,074,836	160,689,363	169,369,143	
Refunds	1,625,140	1,280,715	1,420,776	1,183,659	1,218,955	1,521,099	1,604,283	1,870,988	1,833,058	1,525,958	2,067,039	
Health/Life Insurance Expenses	13,040,783	15,081,847	16,421,176	17,203,669	18,749,675	20,620,144	22,459,219	24,640,986	-	-	-	
Administrative Expenses	817,052	866,473	1,249,774	1,078,762	1,399,732	1,604,735	1,680,722	1,474,827	2,551,845	2,163,853	2,623,836	
Other Expenses	203,444	542,665	606,434	303,741	609,991	391,832	233,735	491,184	824,951	536,088	719,882	
Addition (Reduction) to Net Assets	\$ 216,350,795	\$ (145,852,839)	\$ (356,254,065)	\$ 160,183,935	\$ 215,516,882	\$ (29,147,031)	\$ 62,731,660	\$ 151,013,041	\$ (52,248,164)	\$ (32,216,692)	\$ 117,657,824	
Change in Net Position												

Municipal Retirement System - Summary of Operations

	2007	2008	2009	2010	SOURCE OF FUNDS	2011	2012	2013	2014	2015	2016	2017
Employee Contributions	\$ 9,769,882	\$ 9,906,709	\$ 9,557,973	\$ 10,711,600	\$ 11,702,728	\$ 11,337,926	\$ 15,060,665	\$ 13,233,728	\$ 13,587,975	\$ 15,226,948	\$ 25,210,413	
Employer Contributions	8,535,396	-	8,008,862	10,592,919	11,117,363	11,532,230	12,014,186	12,805,737	14,136,067	15,235,742	16,481,881	
Other Income/Transfers	206,101	124,132	1,321,919	203,549	266,425	118,191	170,381	2,142,868	384,009	351,434	149,536	
Investment Income (Reduction)	46,637,360	(19,472,654)	(56,937,342)	47,598,096	66,957,781	7,671,464	34,838,507	64,346,116	(2,358,518)	6,776,933	59,486,928	
APPLICATION OF FUNDS												
Retirement Benefits	7,969,703	9,064,725	10,228,263	11,073,098	12,298,902	14,214,160	16,101,187	18,153,649	20,593,892	22,912,363	24,915,886	
Refunds	1,389,583	1,143,397	1,223,465	1,127,574	1,275,979	1,664,687	1,587,311	1,673,188	1,780,091	1,704,609	1,858,831	
Health/Life Insurance Expenses	-	-	-	-	-	-	-	-	-	-	-	
Administrative Expenses	687,382	623,619	798,458	393,947	569,603	672,851	749,447	588,022	1,056,094	890,802	1,030,159	
Other Expenses	560,473	506,817	588,899	795,522	886,709	469,599	99,434	774,543	941,191	971,912	1,028,673	
Addition (Reduction) to Net Assets	\$ 54,541,598	\$ (20,780,371)	\$ (50,887,673)	\$ 55,716,023	\$ 75,013,104	\$ 13,638,514	\$ 42,646,360	\$ 71,339,047	\$ 1,378,265	\$ 11,111,371	\$ 72,495,229	
Change in Net Position												

History of Disciplined Incremental Steps to Reduce Pension and Retiree Health Care Liabilities

2005: Teacher Study made changes to the State's actuarial methods and put full funding of the ARC on track. The 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 VSERS and the teachers' (VSTRS) system

2010 VSTRS: Lengthened age for normal retirement, contribution increases, and other changes, effective in FY 2011, resulting in \$15 million in annual pension savings. In addition to pension costs, additional health care savings accrued

2011 VSERS: Employee contribution rate increases beginning FY 2012, initially generating \$5 million in savings per year, increasing each 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 (VMERS), demonstrating shared responsibility by all parties. These changes put VMERS on a stronger financial track

2014 VSTRS: additional contribution increases for new and non-vested members, effective FY 2015, generating \$1 million initial annual savings, increasing each year

2014 VSTRS: Statute change permitting that teacher pension costs be charged to federal grants, effective FY 2016, creating an estimated \$3 to \$4 million of savings per year

2015: Created Retired Teachers' Health and Medical Benefits Fund starting FY 2015

Since the 1980s, health care premiums for teachers were paid out of a sub-trust of teachers pension fund: by 2014 this arrangement was costing over \$20 million per year in interest costs

Collaborative solution: Successfully convened over a dozen stakeholders, including employee group, to address the problem with combined pension/health care changes

In addition to pension and health care changes previously stated, a new health care assessment for LEAs was implemented, linking local employment decisions to the benefit costs

Projected to save taxpayers \$480 million in unfunded liability interest costs through FY 2038

2016: Changes to the amortization financing schedule for VSERS and VSTRS will result in saving \$165 million in interest from present to 2038

2016: Increased employee contributions resulting 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 adopted for all three systems (VSERS, VSTRS, VMERS)

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

Collaborative Approach Key to Success:

All benefit changes made through collaborative efforts involving Administration, Treasurer's Office, Legislature and employee groups

No court litigation/disruptions in planned implementations

Recent Actuarial Assumption Changes:

Lowered investment rate of return assumption to 7.5% based on independent analysis by actuary and pension consultant

Currently updating mortality table assumptions

Debt Management

Overview

The State of Vermont's approach to debt management is characterized by conservative debt issuance and debt management policies that adhere to rigorous disclosure practices. These policies include moderate levels of bond issuance; careful consideration of debt affordability; strict adherence to credit rating agency guidelines; and strong fiscal budget policies to ensure that the State has funds readily available for bond principal and interest payments. Years of attention to rating agency and investor interest and concerns has earned the State a high debt rating and correspondingly very low borrowing costs. Vermont has steered clear of financial and regulatory concerns thanks to the State's disciplined practices and uncomplicated debt profile. With the exception of transportation infrastructure bonds, Vermont issues general obligation debt. All of the State's debt is fixed-rate debt.

In looking at the capital budget and the use of bonds, a distinction should be made between financing and funding. Bond financing leverages the value of a stream of revenue and then pays over time for the current use of those future revenues. In cases where there are significant inflationary costs, this can also result in increased net resources, but as a general rule they add little or no new resources to the funding gap and are not solutions to meet budgetary shortfalls. Funding refers to the generation of revenue, through various means such as taxes and fees, that provides needed services or capital infrastructure. The bonds to finance these must be repaid through future revenue flows. The State Treasurer's Office urges prudence when issuing bonds. Borrowing makes sense when:

- The costs saved through accelerated construction (inflation and preventative maintenance) exceed the interest paid on the funds; and/or
- a quantifiable economic benefit exceeds the cost of borrowing; and
- a future identifiable and available revenue source exists to pay for the bonds.

Bond Activity

In August, the Treasurer's Office conducted a General Obligation bond sale, generating \$117.2 million of proceeds to finance a number of capital projects authorized by the General Assembly, including improvements to State-owned buildings and properties, investments in IT infrastructure, housing and conservation initiatives, and lake and river clean-up efforts. The sale was conducted in two separate offerings – one on a negotiated basis as Vermont Citizen Bonds, with Vermont citizen and retail investors given first priority, and the second being sold on a competitive basis.

The Treasurer, along with the Governor, members of the Administration, and the State's financial advisor and economist coordinated to visit the three rating agencies (Moody's, S&P Global, and Fitch) to provide updates on the State's finances in advance of the bond offering, resulting in affirmation of the State's bond ratings by all three agencies.

Vermont's Bond Ratings

The State's general obligation bond ratings were affirmed in August 2017 by Moody's (Aaa, highest rating), Fitch Ratings (AAA, highest rating), and S&P Global Ratings (AA+, second highest rating), all with stable outlooks. These bond ratings, the highest in the Northeast, are critical to Vermont's financial future and allows access to capital at low rates. This not only supports the State's infrastructure needs, but also lowers borrowing costs for municipalities that issue debt through the Vermont Municipal Bond Bank or other borrowers that rely on the State's bond rating. These include authorities providing affordable housing (Vermont Housing Finance Agency or VHFA), economic development (Vermont Economic Development Agency or VEDA), and selected issuance for student loans (Vermont Student Assistance Corporation or VSAC). The State's bond rating is important to every citizen, each community, non-profits, and businesses.

Debt Affordability

The Capital Debt Affordability Advisory Committee (CDAAC) is made up of the State Treasurer (chair), three ex officio members, two appointees of the Governor, one appointee of the State Treasurer, and an appointee of the Vermont Municipal Bond Bank. CDAAC completes an annual review of the size and affordability of the State tax-supported general obligation debt and submits 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 of the committee is advisory, but historically has been adopted by the State as a bonding limit.

In 2017, CDAAC re-affirmed their recommendation for a two-year maximum net tax-supported debt authorization of \$132.46 million, a reduction of 8.01% (or \$11.54 million) from the \$144 million recommendation from the previous biennium. This followed a 9.9% (\$15.9 million) reduction from the preceding biennium.

Debt Ratios

Vermont's debt ratios still rank favorably among triple-A rated states, although it was in the minority of states that increased their debt level in the last year. As noted in the CDAAC report submitted for fiscal year 2017, debt issuance among states remained essentially flat in 2017.

This has resulted in a noticeable impact on Vermont's debt ratio rankings compared to other states.

Vermont's projected debt issuance exceeds scheduled debt retirements, so the state's overall debt outstanding has steadily increased since 2008. In the sections below, the mean and median for all fifty (50) states, as a part of an annual series most recently released by Moody's Investor Service in May 2017, is noted. This provides detail on Vermont's relative position. In addition, CDAAC calculates debt per capita and debt as a percentage of personal income based on the annual Moody's Report, using a five-year median and mean for

triple-A states. In the case of debt service as a percentage of revenues, Vermont uses an absolute guideline rather than a comparison to the peer triple-A states. This forms the basis for guidelines for the State in shaping its CDAAC recommendations.

The State has made recently made strides to reduce the amount of annual debt issuance. As mentioned above, the amount of debt authorization has decreased by 18% from four years ago, and recommendations for further reductions are possible.

Debt Per Capita

Debt as a percentage of personal income and debt service as a percentage of revenues are generally understood to be the better credit indicators of the State's ability to pay; however, the rating agencies continue to calculate and monitor the State's debt per capita as an indicator and it is included as a factor in CDAAC's deliberations. In 2017, the State's debt per capita was \$1,068 versus the Moody's median and mean of \$1,006 and \$1,473, respectively, ranking 24th among the 50 states. The higher the ranking figure, the lower a state's debt per capita is relative to all other states.

For the purposes of establishing CDAAC guidelines the five year average of our peer triple -A states is used. Vermont has a five year average of \$943 versus a mean of \$967 and a median of \$811 for the same five year period for our peer triple-A states. The State's net tax-supported debt per capita is forecast to grow to \$1,165 by 2024. That forecast assumes a

New England General Obligation Bond Ratings

STATE	FITCH	MOODY'S	S&P
Vermont	AAA	Aaa	AA+
Connecticut	A+	A1	A+
Maine	AA	Aa2	AA
Massachusetts	AA+	Aa1	AA
New Hampshire	AA+	Aa1	AA
Rhode Island	AA	Aa2	AA

steady level of debt authorization and the issuance of \$108.835 million in fiscal year 2019, and \$66.23 million per year from fiscal years 2020 through 2028. Under this scenario, the debt per capita would exceed the projected state guideline. Given the weight placed on this ratio versus the other debt ratios noted below, CDAAC limited the constraining impact of this in its recommendations.

Debt as a Percentage of Personal Income

Another credit factor for assessing a state's relative ability to pay its general obligation debt is the ratio of net tax-supported debt as a percent of personal income. As of the last Moody's Report, Vermont had a ratio of 2.2 percent as compared to a fifty state mean of 3.0 percent and a median of 2.5 percent. Since 2005 Vermont has been below the fifty-state median although its ranking has decreased slightly for the last two years. Again, the CDAAC guideline was to perform better than the Moody's five-year mean (2.0 percent) and median (1.6 percent) for triple-A rated states using the current CDAAC projection, this ratio will improve to 1.8 percent by fiscal year 2027.

Moody's Investors Service -- Debt Per Capita -- State of Vermont

Triple-A Rated States--5-Year Average Mean and 5-Year Median Excluding Vermont
MEAN: \$967 MEDIAN: \$811 5-Year Average - VERMONT: \$943

Triple-A Rated States ¹	Moody's Ratings ²	S&P Ratings ²	Fitch Ratings ²	Moody's Debt Per Capita				
				2013	2014	2015	2016	2017
Alaska	Aa2/Negative	AA+/Negative	AA+/Negative	\$1,251	1573*	1489*	\$1,422*	1691*
Delaware	Aaa/Stable	AAA/Stable	AAA/Stable	\$2,536	\$2,485	\$2,438	\$2,385	\$2,544
Florida	Aa1/Stable	AAA/Stable	AAA/Stable	\$1,087	\$1,008	\$973	\$1,038	\$961
Georgia	Aaa/Stable	AAA/Stable	AAA/Stable	\$1,061	\$1,064	\$1,043	\$1,029	\$992
Indiana	Aaa/Stable	AAA/Stable	AAA/Stable	\$424	\$533	\$474	\$463	\$310
Iowa	Aaa/Stable	AAA/Stable	AAA/Stable	\$287	\$275	\$250	\$239	\$228
Maryland	Aaa/Stable	AAA/Stable	AAA/Stable	\$1,799	\$1,791	\$1,889	\$1,928	\$2,122
Missouri	Aaa/Stable	AAA/Stable	AAA/Stable	\$699	\$668	\$606	\$574	\$579
North Carolina	Aaa/Stable	AAA/Stable	AAA/Stable	\$853	\$806	\$739	\$721	\$659
South Carolina	Aaa/Stable	AA+/Stable	AAA/Stable	\$780	\$749	\$672	\$603	\$564
South Dakota	Aaa/Stable	AAA/Stable	AAA/Stable	\$355*	\$391*	\$547*	\$652	\$641
Tennessee	Aaa/Stable	AAA/Stable	AAA/Stable	\$343	\$324	\$327	\$298	\$322
Texas	Aaa/Stable	AAA/Stable ⁴	AAA/Stable	\$580	\$614	\$406	\$383	\$383
Utah	Aaa/Stable	AAA/Stable	AAA/Stable	\$1,275	\$1,187	\$1,060	\$921	\$824
Virginia	Aaa/Stable	AAA/Negative	AAA/Stable	\$1,315	\$1,302	\$1,356	\$1,418	\$1,486
MEAN⁵	-----	-----	-----	1,021	\$1,027	\$980	\$904	\$901
MEDIAN⁵	-----	-----	-----	\$957	\$907	\$856	\$687	\$650
VERMONT	Aaa/Stable	AA+/Stable	AAA/Stable	\$811	\$878	\$954	\$1,002	\$1,068

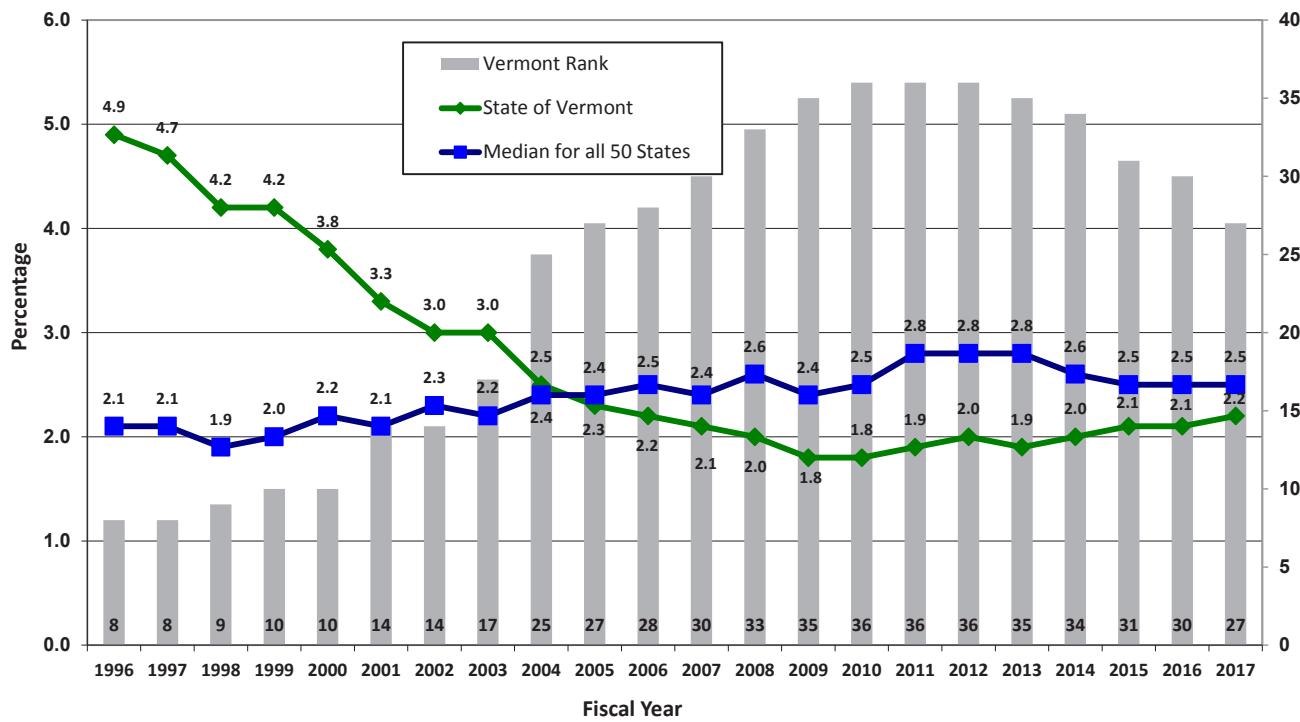
¹ Carry at least two triple A ratings.

² Ratings as of June 30, 2017

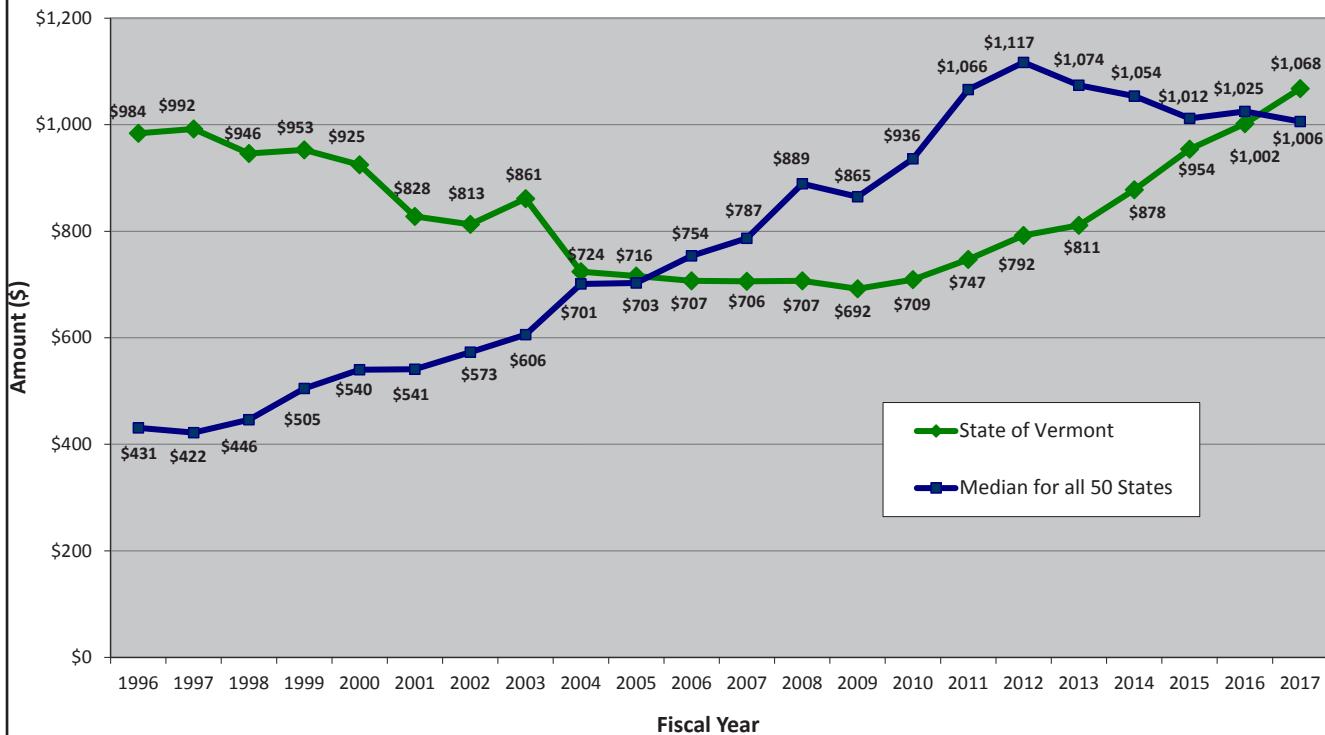
³ The calculations exclude all Vermont numbers.

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

State of Vermont Net Tax Supported Debt Per Capita



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



Debt as a Percentage of Revenue

The guideline used for determining debt as a percentage of revenue states that projected annual State debt service on bonds should not be more than 6 percent of projected revenues in the combined general and transportation funds. The debt service as a percentage of revenues ratio was 4.1 percent for fiscal year 2017. This percentage is expected to rise to 5.0 percent by fiscal year 2025. Given the potential for wide variances in State revenues at various points in the economic cycle, CDAAC proposed a significant buffer between the recommended level and the guideline. During the Great Recession, this ratio jumped from 5 percent in 2008 to 5.5 percent in 2009 and 5.7 percent in 2010.

Budget Stabilization Reserves

The State has budget stabilization reserve levels required by statute for each of the State's General Fund, Transportation Fund, and Education Fund. Required reserves for the General Fund and Transportation Fund are 5 percent. The Education Fund's required reserve levels are 3.5 percent to 5 percent of the previous year's appropriations. Currently, all three funds are at their statutory requirements. While the General and Transportation Fund reserves have remained at their statutory maximum levels despite recent economic conditions, the Education Fund is currently budgeted beneath the maximum 5 percent level. Expectations are that this will be raised back to the statutory maximum level. This is an important consideration as the credit rating of some states have been downgraded due to their use of reserve funds.

The combined effect of full budget stabilization reserves, plus the caseload reserves, is positive for the State's ratings. Additionally, the State Treasurer has recommended a long-term goal to increase the general fund reserve to 8 percent. The Treasurer's Office recommends building to a target of 3 percent for the Rainy Day Fund, which, combined with the budget stabilization reserves, would match the rating agencies' preferred 8 percent total reserves level.

Moody's Investors Service -- Debt as % of Personal Income -- Vermont

Triple-A Rated States--5-Year Average Mean and 5-Year Median Excluding Vermont
MEAN: 2.3% MEDIAN: 2.1% 5-Year Average VERMONT: 2.1%

Triple-A Rated States	Moody's Debt Per Capita				
	2013	2014	2015	2016	2017
Alaska	2.8%	3.2%	3.0%	2.7%*	3.0%
Delaware	6.2%	5.7%	5.5%	5.2%	5.4%
Florida	2.8%	2.5%	2.4%	2.5%	2.2%
Georgia	3.0%	2.9%	2.8%	2.7%	2.5%
Indiana	1.2%	1.4%	1.2%	1.2%	0.8%
Iowa	0.7%	0.6%	0.6%	0.5%	0.5%
Maryland	3.6%	3.4%	3.5%	3.5%	3.8%
Missouri	1.8%	1.7%	1.5%	1.4%	1.4%
North Carolina	2.4%	2.1%	1.9%	1.8%	1.6%
South Carolina	2.3%	2.2%	1.9%	1.7%	1.5%
South Dakota	0.9%*	0.9%*	1.2%*	1.4%	1.4%
Tennessee	0.9%	0.8%	0.8%	0.7%	0.8%
Texas	1.5%	1.5%	1.0%	0.9%	0.8%
Utah	3.8%	3.4%	3.0%	2.5%	2.1%
Virginia	2.9%	2.7%	2.8%	2.9%	2.9%
MEAN¹	2.6%	2.4%	2.3%	2.1%	2.0%
MEDIAN¹	2.6%	2.4%	2.2%	1.8%	1.6%
VERMONT	1.9%	2.0%	2.1%	2.1%	2.2%

(1) These calculations exclude all Vermont numbers and include only states rated triple-A by two or more rating agencies during the periods shown, year ended June 30th.

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

Pension Funding

Of the three State-level pension funds, two receive State contributions – the Vermont State Employees’ Retirement System (VSERS) and the Vermont State Teachers’ Retirement System (VSTRS). Since State contributions derive from taxes, as is the case in other states, the rating agencies have expressed concern about the percentage of future pension liabilities that are funded in these plans. As of June 30, 2017, the VSERS funding level is at 71.4 percent and the VSTRS funding level is 54.2 percent. These levels are changed from 74.6 percent and 58.3 percent, respectively in 2016. The State is also required to report pension liabilities in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, which requires reporting of pension assets based upon market value as opposed to actuarial value. The funded ratios as reported under GASB No. 67 were 71.99 percent and 53.98 percent, respectively.

In recent years, the Governor and General Assembly have a sustained track record of fully funding the annual actuarially required contributions (ARC) to both the VSERS and VSTRS systems. According to a national study by PEW Charitable Trusts, state pension contributions in 2013 totaled \$74 billion dollars, but were \$18 billion short of what was needed based on the actuarial recommendations (ARC), with only 24 states setting aside at least 95 percent of the ARC at full levels. Vermont is one of those states and continues to fund the ARCs. In comparing percentage of contributions, Vermont has outperformed all but one of its triple-A peer states. While budgets are squeezed, continued discipline in funding the actuarial required contribution (ARC) is an important factor to maintain our bond ratings. The State has consistently budgeted the full actuarial required contributions to both of the systems since 2011. Given that contributions are made through the assessment of employer payroll, there may be variances between budgeted and actual contribution amounts. Any variance is adjusted as a “true-up” to the budgeted amount in the following year. The accompanying chart demonstrates the efforts that the State has made to contribute an excess amount to the ARC each year.

Vermont Continues its Efforts to Contribute in Excess of the ARC

Vermont Contributed 117.54% for VSERS and 101.11% for VSTRS in 2016 and 124.28 for VSERS and 100.28 for VSTRS in 2017

System Name	2011	2012	2013	2014	2015	Five Year Average
Vermont State RS	84.5	140.2	130.4	132	125.1	122.44
Indiana 1977 Police Off. & FF PDF	113.5	102.3	121.8	135.5	123.2	119.26
Indiana STRS (1996)	123.4	117	108	109.6	115.4	114.68
South Dakota RS	100	100	100	121.9	115.1	107.4
Vermont State Teachers RS	104.2	109.6	108.1	106.3	100.1	105.66
Georgia ERS	100	100	100	100.2	100.2	100.08
Delaware SEPP	100	100	100	100	100	100
Georgia TRS	100	100	100	100	100	100
Indiana STRS (Pre-1996)	100	100	100	100	100	100
Missouri DOT & Hwy. Patrol ERS	100	100	100	100	100	100
Missouri SEP	100	100	100	100	100	100
South Carolina Police Officers' RS	100	100	100	100	100	100
South Carolina RS	100	100	100	100	100	100
Tennessee Closed State & Teachers	100	100	100	100	100	100
Utah PERS - Noncontributory	100	100	100	100	100	100
Utah Public Safety RS	100	100	100	100	100	100
Indiana PERF	97.7	88.5	98.2	98.3	103.6	97.26
Iowa PERS	82.3	98.2	98	100	101.9	96.08
North Carolina Teachers' & State ERS	73	100	104	100	100	95.4
Florida RS	83	60	66	100	100	81.8
Texas TRS	86	74	74	79.1	93.6	81.34
Maryland Teachers RPS	75.1	71.2	77.5	73.6	89.4	77.36
Maryland Employees RPS	68.8	65.9	66.9	72.9	83.9	71.68
Virginia RS	46.7	59.6	75.8	75.8	83.5	68.28
Texas ERS	58.5	49.2	50.7	66.3	67.9	58.52

Source: Adapted from Fitch Ratings, 2016 State Pension Update: New Accounting, Old Challenges, November 15, 2016

Vermont has also made significant steps to limit the growth in liabilities. In 2010, the Vermont National Education Association (Vermont-NEA) worked with the Treasurer’s Office to help pass some of the most progressive pension reforms in

the country, significantly improving the sustainability of VSTRS. In addition, changes to other post-employment benefits (OPEBs) significantly reduced the unfunded liability associated with retired teacher health care costs. In 2011, the State enacted employee rate increases improving the long-term stability of State employee pension benefits. In 2013, VSTRS adopted changes to retiree drug subsidies that further reduced unfunded liabilities. In 2014, the Governor and General Assembly, working with many other stakeholders, created a Retired Teachers' Health and Medical Benefits (RTHMB) Fund to provide a dedicated funding source for these benefits. In 2016, the State Treasurer recommended, and the General Assembly adopted, changes to the way that the State pays its unfunded liabilities to both improve the funded status of the plans and reduce the interest cost to Vermont taxpayers. These and other initiatives are outlined on page 23.

Other Factors and Summary

The rating agencies also consider the breadth of the economy; the level and condition of the State's transportation, utilities and other infrastructure; personal income levels; fiscal responsibility; employment levels; workforce size and training; population demographics and trends; internal controls and auditing standards; need for short-term borrowings; and other factors.

In looking at our bond rating profile, Vermont's strong fiscal discipline, a record of surpluses, modest debt burden, progress on funding liabilities—despite a net pension liability—are generally seen as strengths. Maintaining our reserves is also a strength, although additional increases to reserves would be a credit plus. On the credit challenge side, our demographics, particularly our aging workforce and population and slow revenue growth, are seen as challenges.

There are many external national and international economic factors that put stress on state ratings. In order to maintain and foster economic health, the State of Vermont must continue a collaborative, disciplined approach to financial management, punctuated by timely, balanced budgets; proactive budget management using consensus revenue forecasting; full funding of the required actuarial contributions; and continuous improvement of State stabilization and rainy day reserves.

Investments

Overview

The State Treasurer's Office is responsible for the investment of funds that can be generally divided into three groups: 1) operating and restricted funds; 2) non-retirement related trust funds; and 3) post-retirement funds including pensions, health care/other post-employment benefits and supplemental retirement programs.

For operating funds and restricted funds (those funds identified as having certain federal restrictions, grant restrictions, or funds that must be segregated by statute), the State has an investment policy with an overriding goal of minimizing exposure to risk and maintaining liquidity necessary for future cash needs, while maximizing the return on investments. Types of investments allowed include obligations of the United States and its agencies and instrumentalities; certificates of deposit issued by banks and savings and loan associations approved by the State Treasurer; domestic money market funds; and other money market instruments. The Treasurer's Office issues additional formal guidance that is reviewed periodically to assure that the three investment objectives – safety, liquidity, and yield – are met.

A portion of these funds is permitted by State statute to be invested for longer maturity periods to provide the ability to obtain additional return consistent with liquidity needs. Beginning in 2013, local investment initiatives were implemented to develop a diversified portfolio of varying maturities.

Certain trust funds are contained in 32 V.S.A. § 434, referred to collectively as the Trust Investment Account. These funds include the Tobacco Trust Fund, the Higher Education Trust Fund, the ANR Stewardship Fund, two Veterans' Home trusts, the Fish and Wildlife Trust, Vermont State Retirement OPEB Fund, and various small trusts. The State Treasurer may invest funds in accordance with the standard of care established by the Prudent Investor rule and apply the same investment objectives and policies adopted by the Vermont State Employees' Retirement System, where appropriate, to the investment of funds in the Trust Investment Account.

As noted in the retirement operations section of this report, certain optional pension plans (deferred compensation, SDIA) and defined benefit plans are managed through third-party contracts with investment authority resting with the retirement boards, or in the case of the State defined contribution plan, the State Treasurer.

The funds of the defined benefit pensions plans (VMERS, VSERS, and VSTRS) are invested under the authority of the Vermont Pension Investment Committee (VPIC), of which the State Treasurer is a member. The Treasurer's office also provides administrative support to the plans.

Vermont Pension Investment Committee (VPIC)

The mission of VPIC is to manage investments for the participating retirement plans with integrity, prudence, and skill to meet or exceed the financial objectives of the beneficiaries of the participating retirement systems. VPIC acts as the trustee for the defined benefit plan investments, while the Board of Trustees for each retirement system maintains its fiduciary role in the area of benefits administration and actuarial recommendations. The State Treasurer serves on the retirement boards, VPIC, and is the custodian of the funds, providing administrative support and oversight. Investment services within the Treasurer's Office provide cash and investment management for the State of Vermont and conducts day-to-day activities with investment managers, custodians, and other service providers.

VPIC was established by Act No. 215 of 2005, and amended by Act No. 100 of 2007 and Act No. 130 of 2009, to combine the assets of VSERS, VSTRS, and VMERS for the purpose of (i) investment in a manner that is more cost- and resource-efficient; (ii) improving the effectiveness of the oversight and management of the assets of the Retirement Systems; and (iii) maintaining the actuarial, accounting, and asset allocation integrity of the Retirement Systems.

VPIC maintains a governance framework that ensures that all its fiduciary and legal responsibilities are addressed on an ongoing basis. VPIC focuses its time on its four core responsibilities: asset allocation, risk management, governance, and member education. Other VPIC responsibilities are largely delegated to investment managers, although with VPIC and Treasury staff review and oversight. These include a proxy voting vendor, VPIC's master custodian, and VPIC's investment

consultant. The Vermont Attorney General's office provides legal counsel and support to VPIC and the retirement boards. VPIC has operating policies in place to manage these delegated responsibilities.

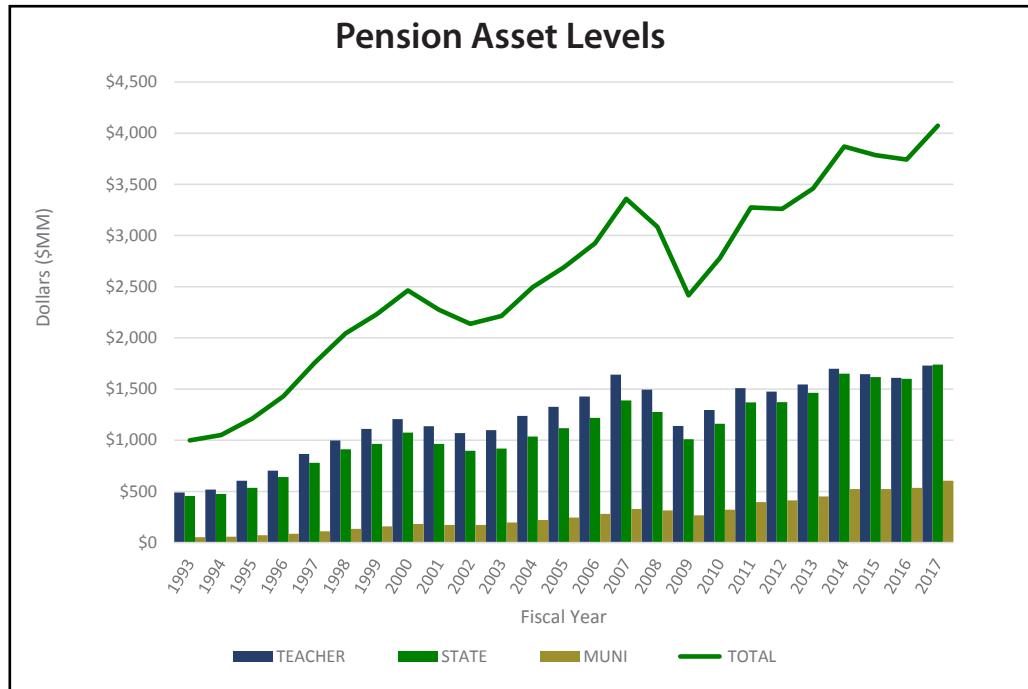
The 11-member VPIC consists of six voting members, a Chair, and four alternates. Each retirement system Board of Trustees has representation, along with the Governor's Office, and the Treasurer's Office. At the end of fiscal year 2017, individuals appointed to the Committee are: Chair, Thomas Golonka; Vice-Chair and Treasurer Beth Pearce; VSERS member, Robert Hooper; VSERS alternate, Jeff Briggs; VMERS member, Peter Ammons; VMERS alternate, Steven Jeffrey; VSTRS member, Joseph Mackey; VSTRS alternate, Linda Deliduka; Governor's members, Karen Paul and Vaughn Altemus; and Governor's alternate, David Starr. As of June 30, 2017, the total assets under management of VPIC portfolio were \$4.07 billion.

VPIC Investments

VPIC seeks to measure its performance on a long-term basis versus the following benchmarks in order of importance: 1) a net return, over rolling 5-year periods, which meets or exceeds the actuarially-established rate of return, 2) on a risk-adjusted basis, net of fees, and over a rolling 5-year period, an overall benchmark comprising 60% in global equities and 40% in global bonds (as represented by the MSCI ACWI and Citigroup WGBI indices, respectively), 3) generate a total portfolio return, which exceeds the allocation index return, 4) achieve comparable investment results to a peer group of public defined benefit retirement systems with like investment characteristics and risk parameters.

Through June 30, 2017, the VPIC portfolio had a composite 5-year net return of 6.6%, compared to the actuarial rate of return of 7.5% (on a 7-year basis, the 7-year compound annual return of 7.7% exceeded the actuarial rate of return). The 5-year return for the global stock/bond benchmark mentioned above was 6.3%, which the VPIC portfolio outperformed by 0.20%. In fiscal year 2017, the VPIC performance was 10.5% while the policy benchmark returned 10.1%, resulting in 0.40% outperformance. Compared to a median public fund peer universe return of 12.7% for fiscal year 2017 (InvestorForce Public peer database of defined benefit plans) the VPIC underperformed peers by 1.4%.

In the bull market post the Great Recession, pension plans heavily weighted toward equities experienced higher performance measured in terms of return. Greater reliance on equities can provide short-term gains but also increases the



Investment Performance of Vermont's Retirement Systems

As of June 30th of Fiscal Year 2017

Net of Fees

Retirement System	Last 1 Year	Last 3 Years*	Last 7 Years *
Teachers Composite	10.40%	3.70%	7.70%
State Composite	10.60%	3.70%	7.80%
Municipal Composite	10.80%	3.60%	7.80%

*Annualized
Source: NEPC, LLC

risk of higher volatility and does not protect from down markets. For instance, the bull markets of the 1990s were offset by the volatile markets of the 2000s. VPIC believes that, over the long-term, pensions are better served with a well-diversified portfolio. A portfolio with diverse assets with low correlation to each other should result in lower portfolio volatility and risk. At the same time, higher concentrations in bonds, with lower risk (but also return), does not keep pace with pension liabilities. Over the past few years VPIC and Treasury Staff have worked to find a balance between return and volatility. VPIC reassessed the asset allocation strategy and implemented changes to obtain a higher expected risk-adjusted return profile. Therefore, VPIC has looked to selected alternative funds to provide return within acceptable levels of risk, volatility and liquidity needs.

At fiscal year end, the target asset allocation of the portfolio was 51 percent to equities, 29 percent to fixed income, 12 percent to absolute return strategies, and 8 percent to real assets. VPIC conducts an annual asset allocation review from each year, where the investment consultant, NEPC, presents their capital market assumptions and recommends their best ideas over a five to seven-year horizon for the portfolio, reflecting changes in the market environment from the prior year.

In the 2017 review, the VPIC voted to make allocations to private debt (5%) and global equity (9%) strategies. Providing funds for these new investments will be reductions in the allocations to international, emerging market, and small/mid-cap equities. Also providing funds over time will be existing positions in dedicated high yield bonds. During the year a long-only commodity investment was terminated and replaced with an absolute-return strategy instead.

The VPIC also increased allocations to private equity (10%), Treasury inflation-protected securities (aka TIPS; 6%) and an opportunistic real-estate position. The goal of the real-estate position is to create more of a global allocation within the portfolio's dedicated real estate position (8%). The Committee also eliminated the core bonds allocation and reduced exposure to an existing risk parity strategy (4%), given concerns over the interest-rate environment.

VPIC's structural changes have also included efforts to reduce fees and increase transparency. While alternatives are, as noted above, essential to a diversified portfolio, many products on the market can be overly complex, difficult to value, difficult to unwind, less liquid and result in higher fees. VPIC and Treasury Staff have sought a balance, by using passive investment vehicles, such as index funds, where appropriate, using comingled vehicles, and evaluating the risk-return and fee attributes of investments using new tools. VPIC also conducts an annual review of its fee structure compared to other public funds and, as a result, has demonstrated increasing value to the taxpayer and the beneficiaries of the pension plans. Since 2015, the VPIC and Treasurer's office have worked diligently to improve the expense structure associated with the pension portfolio. The last three years have seen a reduction in fees from 0.65% to an expected level of 0.50% of assets, as the implementation of the 2017 asset allocation is completed. Assuming a similar level of asset growth, this represents a

Asset Allocation Target of VPIC as of June 30, 2017

Investment Category	Allocation
Equity	
Domestic Large Cap Equities	13.00%
Domestic Small/Mid Cap Equities	3.00%
International Equity (Unhedged)	6.00%
International Equity (Hedged)	6.00%
Emerging Market Equity	4.00%
Global Equity	9.00%
Private Equity	10.00%
Total Equity	51.00%
Fixed Income	
TIPS	6.00%
Emerging Market Debt (External)	2.50%
Emerging Market Debt (Local Currency)	2.50%
Long Treasuries	2.00%
Diversified Fixed Income	7.00%
Unconstrained Fixed Income	4.00%
Private Debt	5.00%
Total Fixed Income	29.00%
Alternatives	
Real Estate	8.00%
Total Alternatives	8.00%
Multi-Strategy	
Risk Parity	4.00%
Absolute Return ¹	8.00%
Total Multi-Strategy	12.00%
Cash	0.00%
Grand Total	100.00%

¹ Absolute Return category includes hedge fund-of-funds, and options strategy.

savings of nearly \$6.4 million over the prior fee structure.

Environmental, Social and Corporate Governance (ESG) Initiatives

As noted in its investment policies, “The VPIC recognizes that environmental, social and governance (ESG) issues are among core factors when assessing the risks and opportunities of an asset and should be fully integrated into the investment process by VPIC and its managers. ESG should be weighed with all other risks and opportunities and not considered in isolation. Engagement on ESG issues can result in more informed decision-making and VPIC recognizes the importance of shareholder engagement.”

VPIC and the Treasurer’s Office participate in many efforts to integrate ESG issues into the investment process and, as shareholders, to advocate for policies that enhance the long-term profitability of companies with whom we invest, including, but not limited to the following:

- The Treasurer’s Office is a founding member of the Investment Network for Climate Risk (INCR), operating through Ceres, a non-profit organization advocating for sustainability. INCR has since grown to a network of 130 institutional investors representing more than \$20 trillion in assets under management, pooling their collective efforts for joint action on climate risk.
- The Treasurer’s Office and VPIC utilize their proxy-voting rights at shareholder meetings according to the VPIC proxy policies in support of progressive ESG initiatives endorsed by the VPIC. Some recent successes are highlighted below.
- The Treasurer’s Office and VPIC use investor sign-on letters to urge companies to require transparency in their political spending, increase environmental disclosure, and to support ESG initiatives.
- The Treasurer’s Office participates in the Carbon Asset Risk project, an effort to advocate for business planning for a transition to a low-carbon economy.
- The Treasurer’s Office and VPIC work with its investment managers to survey how they are incorporating ESG concerns, including those related to climate change, and specifically how they integrate these concerns into security selection, fund allocation decisions, and strategic fund initiatives.

2017 included a number of accomplishments on ESG issues. In February 2017, Pension Consulting Alliance (PCA) a pension consulting and advisory firm, completed its review of climate risk divestment and ESG issues. This was a collaborative effort that involved all stakeholders and many interested parties. While the report stated that divestment would increase costs and add diversification and technological risk to the portfolio, it also identified opportunities to address climate risk and move to a low-carbon economy consistent with VPIC’s fiduciary responsibility. The Treasurer’s Office proposed a five-point plan or set of recommendations that were subsequently adopted by the VPIC. These and the PCA report are available on the Treasurer’s website.

One of the recommendations included updating the VPIC ESG policy. This policy - which was approved by the Committee - can also be found on the Treasurer’s website. The policy was adopted and, as a result, VPIC now requires, when conducting a manager search, that the investment consultant shall require each prospective investment manager to disclose, in addition to its proposed investment guidelines and practices for investment selection, its ESG policies, processes and systems for identifying ESG-related value drivers and managing material ESG-related risks.

In line with a belief that constructive engagement provides a better foundation for advocacy, the Treasurer’s office co-filed – on behalf of VPIC – a number of proxy resolutions which met with significant success. Primary among these was a filing with Exxon, which was co-filed with New York State and which requested the company publish an assessment of portfolio risks under a 2-degree warming limit scenario. This garnered 62.1% support among shareholders. Also, as a result, in part, of the previous year’s efforts, Exxon now has an environmental expert on its Board. While more needs to be accomplished, these were positive steps.

Several past successes with shareholder resolutions and sign-on letters have occurred including successful efforts with the palm oil industry to develop environmentally sustainable practices, and addressing climate risk with BP and Shell. While other shareholder proxy efforts have not resulted (yet) in majority votes they have spurred ESG initiatives and engagement with the companies and have found significant support among shareholders. These include VPIC’s co-filing

of proxy resolutions in 2017 with other institutional investors directed at Marathon, Dominion, Chevron and Southern Company on environmental issues. This past month VPIC continued its efforts to push for environmental disclosure by companies but also filed shareholder resolutions at Exxon (independent chair), Chevron (independent chair), and Devon Energy (lobbying). In December 2017, VPIC and the Treasurer's Office joined Climate Action 100+, an investor-led initiative to engage with the world's largest greenhouse gas emitters to curb emissions, strengthen financial disclosures, and improve environmental governance. Also in December the Treasurer joined a coalition of state and local public finance officials to urge the Environmental Protection Agency (EPA) to halt repeal of the Clean Power Plan, an EPA regulation developed to reduce harmful greenhouse gas emissions. This coalition included state treasurers and state finance officials from California, Connecticut, New Mexico, Iowa, Illinois, Maryland, and New York as well as New York City. On January 31, 2018, Treasurer Pearce will serve as a convener for the Investor Summit on Climate Risk at the United Nations, a role she also held in 2014 and 2016.

Short-term, Local Investments, and Other Investments

The State Treasurer and the Treasurer's Office are responsible for the management of the State's operating funds and certain other funds. The Treasurer's Office is committed to meeting the cash needs of State operations in the short-term, as well as prudently investing the other funds while they are held in the state treasury, according to office policies. The Treasurer's Office approaches these responsibilities using a prudent and deliberative process. The funds under management include the following categories. In addition to these funds, the State Treasurer is responsible for administering the Trust Investment Account (TIA).

Operating Funds

These funds are used for the ongoing cash flow needs of State government, for which preservation of principal and daily liquidity are the critical objectives, followed by yield. These funds are typically held in bank deposits, money market funds, and certificates of deposit. At times when cash levels are higher, portions of these funds may be invested in U.S. Treasury and Agency Securities and other short-term investments with maturities from one to twelve months. Certificates of deposit are offered through the Bank in Vermont CD program, which provides opportunities to invest State funds in banks with branches in Vermont on a predictable basis via a competitive bidding process.

Fiscal year 2017 saw continued challenges in the short-term investments market place. Due to the Fed's continued low rate policy during FY2017, yields on high quality, short-term fixed income securities maturing in three years or less stayed compressed and are expected to remain near or below the Fed target rate. This limits the returns available on operating funds - including the general fund, transportation, and education fund. In June of 2017, the Federal Reserve raised the federal funds rate 0.25% to a range of 1.00% to 1.25%. This was only the fourth increase in the federal funds rate in a decade, and is expected to result in increases in the rate of return on operating funds investments.

Local Investments

In November 2012, the Treasurer's Office convened a capital gaps/local investment working group to identify areas where capital was not matched to needs and then take steps to address these barriers with substantial proposals. Several successful proposals were developed as a result. These successes led to an expansion of the program with the mandate stating that "the Vermont State Treasurer shall have the authority to establish a credit facility of up to 10 percent of the State's average cash balance on terms acceptable to the Treasurer consistent with the provisions of the Uniform Prudent Investor Act, 14A V.S.A. chapter 9." (2014 Act 199. Sec. 23.) Through this program, investments have been made with entities such as: Neighborworks of Western Vermont, the Vermont Community Loan Fund, the Vermont Economic Development Authority, Vermont Housing Finance Agency, and Champlain Housing Trust. As of June 30, 2017, there was \$21.6 million invested, with maturities from 12 months to 10 years, at yields from 1.00% to 3.02%. This had increased to \$23.4 million as of Sept 30, 2017. See page 44 of this report for additional detail on local investments.

Interfund Loans

Additionally, Act 179 of 2014 created the Retired Teachers Health and Medical Benefits (RTHMB) fund for the purpose of paying retired teacher health and medical benefits. Pursuant to this statute, the State Treasurer may use interfund loans from the General Fund up to an aggregate amount of \$28.5 million for this purpose. Pursuant to 16 V.S.A. § 1944b., “the State Treasurer shall assess a rate of interest on the outstanding balance of the interfund loan comparable to the rate paid by private depositories of the State’s monies, or to the yield available on investments made pursuant to 32 V.S.A. § 433.” As of June 30, 2017, the balance of such interfund loans was \$26.7 million.

Investment Results

For fiscal year 2017 these short-term, local investments and other investments, and the Trust Investment Account had a combined average balance of \$426.581 million, and combined earnings of \$7.115 million, resulting in a gross rate of return of 1.668%. There was an increase in rates from the first half of the fiscal year (.747%) to the second half of the fiscal year (2.504%). During the first half of fiscal 2018, we expect to see an additional increase as the rate environment continues to rise.

Bank in Vermont

Since 2004, the Treasurer’s Office has maintained a Bank in Vermont program to invest State funds on a predictable basis through certificates of deposit (CDs) via a competitive bidding process in banks with branches in Vermont. The program is designed to be attractive to the wide range of banking institutions in Vermont, and is predicated on the belief that investing Vermont funds in Vermont, consistent with earning a competitive rate of return, is good public policy. A block of funds is set aside for the scheduled bid in specified time frames. The CDs may be short duration, or have longer maturities, depending on the yield curve and cash management requirements. Between its inception and June 2017, \$818 million in CDs have been awarded. As of June 30, 2017, there were no CD’s outstanding. During fiscal 2017, a total of \$36 million was invested in CDs, with varying maturities and rates well above comparable maturity Treasury rates. There have been no losses associated with this program.

Single Deposit Investment Account

The Single Deposit Investment Account (SDIA) is a non-contributory defined contribution plan. The fund was formed in 1981 and is closed to new membership. The portfolio is invested in a commingled stable value fund managed by ICMA-RC. The fund’s objective is to provide a relatively high fixed income yield with little market-related risk. Primary importance is the preservation of principal and earned interest, with a secondary need to generate a composite yield in excess of short-term money market yields available in the marketplace. The balance as of June 30, 2017 was \$47.5 million. No new monies have been invested in the SDIA since 1990, but disbursements to members continue on an ongoing basis.

Unclaimed Property Division

Overview

In accordance with V.S.A 27, Chapter 14, the Unclaimed Property Division is responsible for safeguarding assets turned over to the Treasurer's Office until the rightful owners are located. The primary objective of the program is consumer protection. Property is remitted to the Treasurer's Office by business entities (holders) after they lose contact with their customer for a certain period of time, usually three years.

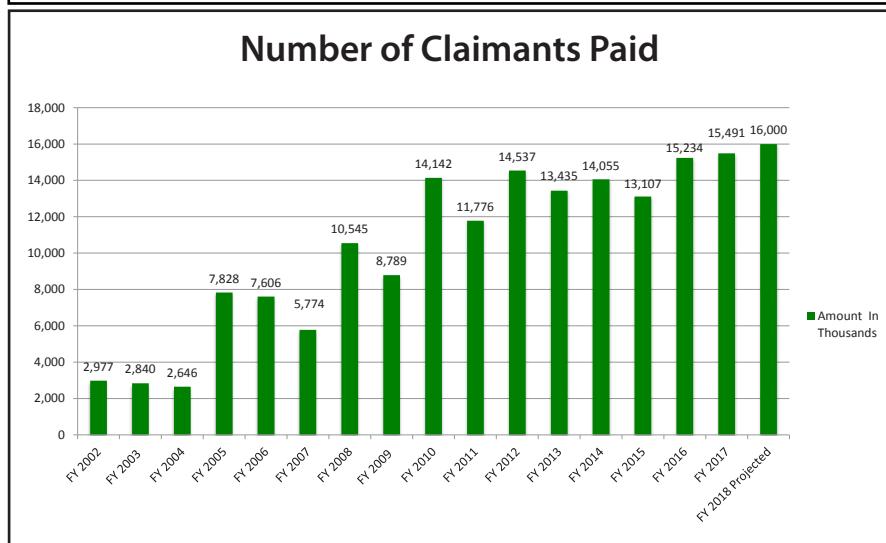
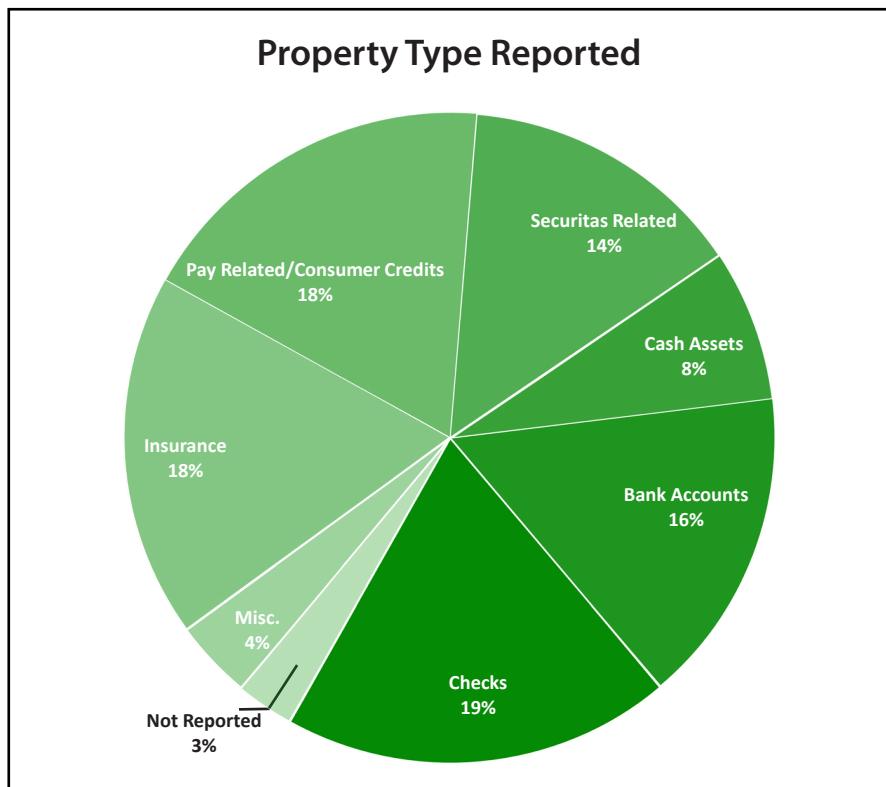
The Vermont Unclaimed Property Law does not include real estate, but unclaimed property can include: savings or checking accounts, uncashed checks, matured certificates of deposit, stocks, bonds or mutual funds, travelers' checks or money orders and proceeds of life insurance policies. Uncashed checks continue to be the most reported property type, followed closely by pay related items and credits, then insurance property. We act as the steward for over \$80 million in unclaimed financial property and actively work to return those funds to the rightful owner.

To ensure holders of property are following Vermont law, Treasurer's Office staff conducts examinations of holders' records. Just before the State receives the property, holders are required to notify the individual by mail, at the last known address on record, for all property valued at \$50 or more. This year, we were able to introduce an on-line reporting tool for holder to remit their information electronically. Holders reported over \$942,000 using this method. This saved the staff from manually loading 573 paper reports. This initiative will continue in future outreach to holders.

Efforts to locate owners and heirs of unclaimed property include the semi-annual advertising campaigns, to include print, web-based, and television ads. Annual lists to legislators and attending outreach events, such as fairs and

conferences assisted the division in returning over \$5.1 million to current and former Vermonters.

In Fiscal Year 2017 the Division enhanced its proactive claims process, allowing a record number of claims, paying 15,491 totaling just over \$5.1 million, with the average claim being \$333.89. In addition, the Division received \$10.54

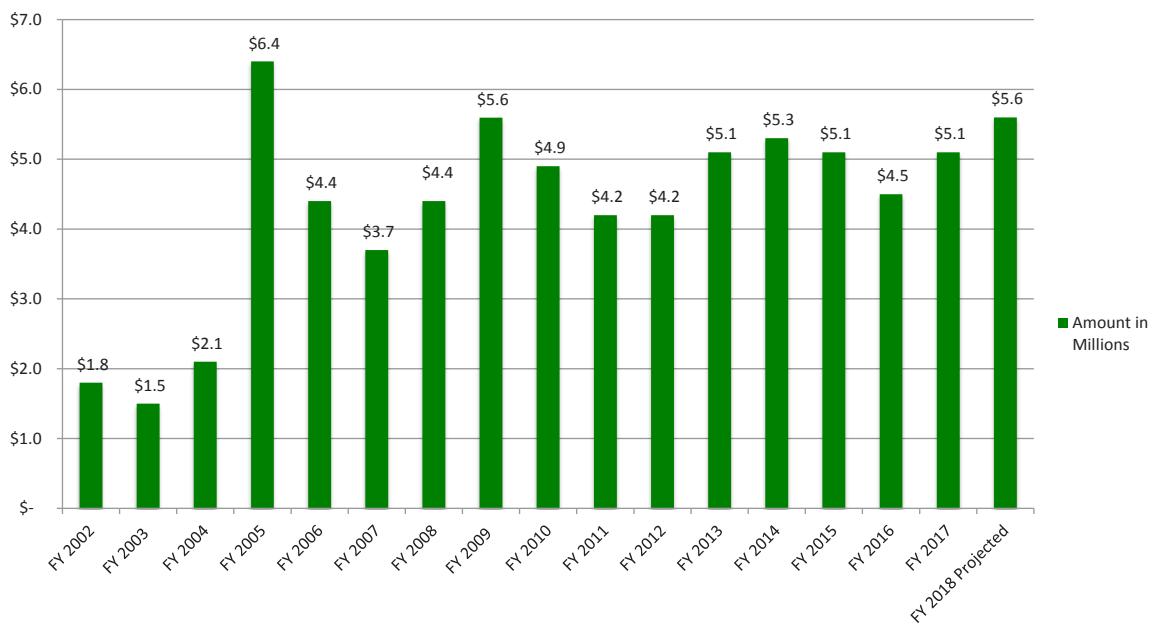


UNCLAIMED PROPERTY

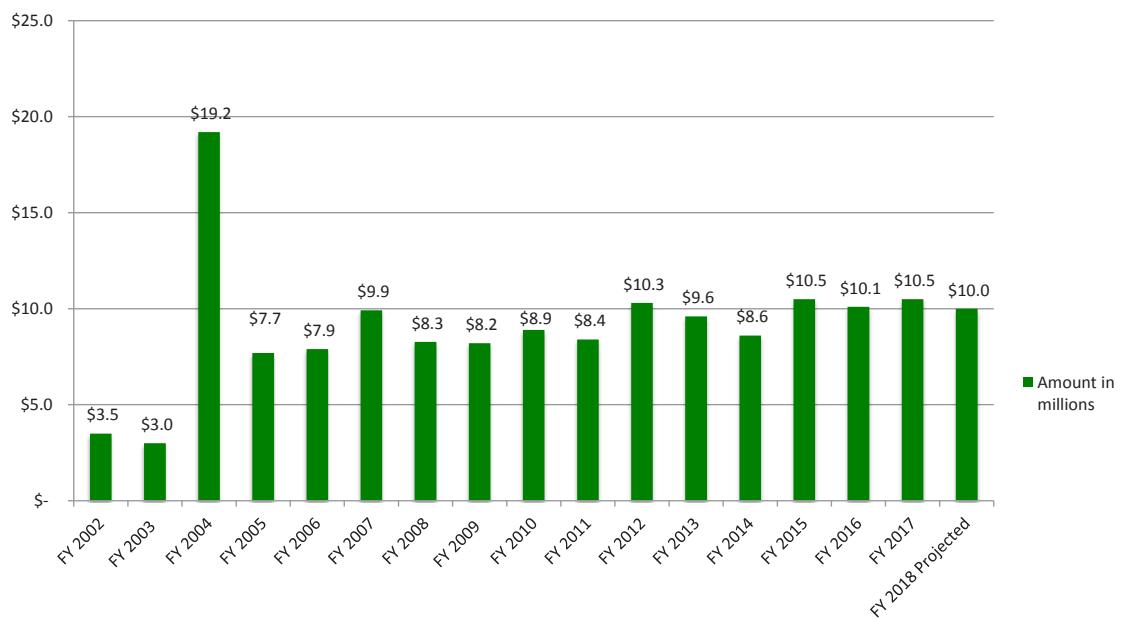
million remitted by holders.

The future of unclaimed property includes the development of an online applications that will consist of system for owners to file claims electronically. To reach more owners of property, we will continue to enhance our proactive owner search's in addition to using available social media platforms. The division continues to seek more effective ways to reunite owners and heirs with their property.

Unclaimed Property Amount Returned to Vermonters



Unclaimed Property Turned Over to the State Treasurer



*The amount returned to Vermonters only includes cash and liquidated securities and does not include the value of securities/mutual funds returned to owners in share format.

Financial Literacy

Overview

The Treasurer's Office has actively worked to promote financial literacy for ten years. The goals of the program are (1) advocacy—working to promote the adoption of fiscally sound money management practices by Vermonters of all ages; (2) collaboration—working with local, state and national groups to build support for and participation in activities that promote and teach personal finance; and (3) development—creating new financial education programs and resources for Vermont citizens where gaps exist.

New Initiatives

The Treasurer's Office worked on many personal finance education initiatives in 2017. These include forming a Financial Literacy Working Group to assess State activities that promote the financial well-being of Vermont citizens, the launch and promotion of the ABLE-Vermont disabilities savings program (see p. 43), and development of the Green Mountain Secure Retirement Plan (see p. 42).

In September 2017, the Treasurer's Office and Department of Financial Regulation executed a Memorandum of Understanding to review State policies and personal finance education outreach activities. The collaborative effort followed a recommendation made by the Vermont Financial Literacy Commission (FLC) to “[c]reate an interagency task force to review and evaluate current state policies and programs and coordinate new outreach to promote these efforts.” Staff from the Treasurer's Office and Department of Financial Regulation subsequently formed a Financial Literacy Working Group to conduct research.

The Working Group circulated a memorandum requesting data from relevant State agencies and departments describing: 1. If State agencies and departments currently provide personal finance education; 2. How State agencies and departments utilize Vermont's network of reputable private and community-based groups that provide financial education services; 3. Whether there are unutilized or underutilized outreach efforts that could be refined or redeveloped to deliver easily accessible personal finance education resources; and 4. If State special funds and trust funds that are related to personal finance are properly arranged and whether these resources, and the funds contained therein, should be managed differently to maximize investment returns.

The Financial Literacy Working Group collected and inventoried preliminary agency and department responses. The Treasurer's Office and Department of Financial Regulation will continue to review findings and recommendations, including those put forth by FLC, to determine short- and long-term goals. The Financial Literacy Working Group will continue its work in 2018 to coordinate State personal finance resources to better serve Vermonters.

Vermont Financial Literacy Commission

The Vermont Financial Literacy Commission (FLC) was created in 2015 to “measurably improve the financial literacy and financial capability of Vermont's citizens.” A special fund (9 V.S.A. § 6004) was enacted to support financial literacy projects. In calendar year 2017 there were no disbursements made from the Financial Literacy Commission Fund. The fund earned \$127.53 interest. After fee expenses, the fund carried a balance of \$12,144.58. The State Treasurer Co-Chairs and serves as a member of FLC, along with Co-Chair John Pelletier, and eleven other Commission members.

FLC issued 13 recommendations to improve the financial sophistication of Vermont citizens in its 2017 report. FLC met eight times throughout 2017 to evaluate the status of FLC's report recommendations and to provide advocacy on key topics, such as the creation of an intergovernmental task force to evaluate the State's role in providing personal finance education, development of a public awareness campaign, and maintaining robust financial literacy education graduation standards for public schools. In April 2017, FLC held an outreach event at the State House.

FLC's 2018 report provides an update on implementation of its 2017 recommendations and additional actions State

government and community partners can take to improve the financial well-being of Vermonters. FLC is set to sunset in 2018, notwithstanding legislative action to the contrary.

Reading is an Investment

The Reading is an Investment program was started by the Treasurer's Office as a means of promoting financial literacy among elementary-age children. Personal finance concepts are taught using children's literature. Each year, participating schools receive three new books for their library, a curriculum guide and promotional materials. A personal reading program challenges students to read books about money. Students who complete their reading logs are entered into a state-wide drawing for one of twenty \$250 college savings accounts. All college savings accounts are donated by the Vermont Student Assistance Corporation. During the 2016-2017 school term the program was provided to 136 schools. Over 4,200 students completed the program's requirements.

Vermont Treasury Cup Challenge

The 2017 Vermont Treasury Cup Challenge was held in Montpelier on April 7, 2017. This was the ninth year for the statewide tournament. The Treasurer's Office holds the annual tournament in Montpelier to promote student interest in and knowledge of personal finance, economics and consumer affairs topics. 45 students representing 10 teams competed with Mount Mansfield Union High School besting the competition to win the Treasury Cup trophy and first place prize.

Each member of the championship team received a \$500 college savings account and members of the second place team were awarded \$250 accounts, donated by the Vermont Student Assistance Corporation (VSAC). Since the competition's inception, over 35 Vermont high schools have participated.

Financial Literacy Poster Contest

For the tenth year in a row, the Treasurer's Office, in partnership with the Vermont Bankers Association, sponsored the Be Money Wi\$e financial literacy poster competition. The contest was open to students in grades 3-12. The contest encourages adults to discuss the annual poster theme with students and provides a creative outlet for students to demonstrate their knowledge. The 2017 theme was, "Race to Savings Success."

73 student posters were submitted. Winning first place in the elementary school division was Alex Zuchowski of Williston Central School. In the middle school division, Isabella Gaffney, a homeschooled student, won first place. In the high school division, Charlotte Brace of Montpelier High School took the top prize.

Treasury Operations Division

Overview

The Treasury Operations Division is responsible for the banking and cash management of approximately \$5.8 billion annually in both receipts and disbursements; the establishment and maintenance of the State's banking services network; the disbursement of the State's warranted payments and debt service; the collection of certain receipts; and the recording of associated accounting transactions. Monitoring and reconciliation of internal and external accounts comprise a major portion of staff time, in addition to the proper reporting and recording on the State's books. The Treasury Operations Division also is responsible for preparing financial statement schedules and disclosures for the annual audit of the State's books for cash, investments, and pension systems managed in the Treasurer's Office, and administering various special funds.

In August 2017, as the result of a request for proposal, the Treasurer's Office entered into a five-year contract with People's United Bank, N.A. for core deposit and disbursement banking services for State government. After an exhaustive review, it was determined that People's United Bank will provide the best value and lowest cost service to the State. These services are scheduled to transition in January 2018. Also as a result of this request for proposal process, TD Bank, N.A. was selected to continue to provide lockbox processing and merchant card processing services to the State.

Reconciliations

Treasury Operations Division staff reconcile approximately 30 State core bank accounts. In fiscal year 2017, more than 123,500 deposits were processed to State accounts through a network designed to accelerate cash collection for operating needs or for efficient placement in short-term investments. On the disbursement side, 1.96 million payments were processed, either through electronic funds transfers (EFT) or check. Working cooperatively with the Treasury Operation Division's business partners, the Treasurer's Office has maintained prompt recording of the bank deposits in the State's accounting systems, while assuring that the number and duration of reconciling items from user department entries remain low.

Electronic Payments

Electronic payments are more efficient, safer, less costly, and require significantly less follow-up than checks. Electronic payments are more convenient for payees, and eliminate the labor and other costs associated with researching and replacing checks that are lost or destroyed. The Treasurer's Office has an ongoing initiative to encourage State agencies and departments to use electronic payments whenever feasible. Of the more than 1.96 million payments processed during fiscal year 2017, approximately 81 percent were electronic funds transfers. The "2015 AFP Payments Cost Benchmarking Survey Report Of Survey Results" report found that the median cost of producing a paper check at \$3.00 and a median total cost of originating an electronic funds payment by ACH at \$0.56, resulting in an average savings of \$2.44 per electronic payment (estimate based on banking fees, printing, postage, reconciliation and additional staff time). While the State of Vermont may or may not conform with national averages, these improvements have generated significant savings.

During FY2017, the Treasurer's Office implemented an updated version of a secure online reporting tool, called the Vendor Payment Portal, which vendors use to access information about payments received from the State by ACH direct deposit. The updated version contains an option for generating a payment advice, which eliminated the need for mailing paper advices to these vendors. This change allows the vendors to see the payment information on the day funds are deposited in their accounts, eliminates the cost of generating and mailing paper advices, and significantly reduces the number of payment information requests received by the Treasury Operations Division.

In November of 2017, over 97 percent of monthly benefit payments to retired State employees, retired teachers and municipal employees were made via ACH direct deposit.

Technology Update

Overview

The Technology Services Division is committed to providing best in class service and technology to enable the Treasurer's Office to maximize its efficiency and achieve optimal function. Technology solutions are deployed to enable our staff to be productive, efficient and accurate. All our systems are tested for disaster recovery and are upgraded continuously to stay current with the latest security patches and best practices.

In FY2017 an updated Vendor Payment Portal was successfully deployed for all vendors receiving ACH payments from the State of Vermont. This version allows the vendor to print their own ACH advices. Previously these advices were printed and mailed to all vendors receiving payments via ACH. The updated system allows the State of Vermont to save significant dollars on the cost of printing and mailing paper advices. For the first six months after ending the mailing of ACH advices for State vendor payments, approximately 39,250 advices were not printed and mailed, resulting in approximately \$22 thousand in cost savings for printing and postage.

Technology is constantly evolving. Infrastructure upgrades are necessary to ensure optimal performance. In 2017, a new phone system was deployed to all office staff. An updated backup system was implemented to help protect important electronic records for the office. Additionally, a new document imaging system was launched to refresh an outdated version that had previously been used.

More technology updates are planned for the coming fiscal year to keep pace as technology evolves. During calendar year 2018 we plan on implementing a self-service portal for the active and retired members of the Teacher, State, and Municipal Retirement Systems. Members will have 24/7 online access to a variety of account information including account summary, payment details and history, beneficiary information as well as the ability to calculate retirement benefit estimates and download forms. The unclaimed property system will be improved to expedite claims and claim payments for certain dollar amounts.

Legislative Reporting Requirements

Financial Literacy Trust Fund

The General Assembly established a trust fund in 2008 to support financial literacy in Vermont. As enacted, “the purpose of the fund is to promote the adoption of fiscally sound money management practices by Vermonters through education and outreach efforts that raise awareness of the need for and benefits of practicing such skills; and to create opportunities to build and encourage the development of new financial literacy activities and educational products for Vermont citizens.” The State Treasurer is authorized to collect money from a variety of sources to fund these activities. For fiscal year 2017, there were no new funds, however, \$163.05 of interest was earned. \$8,502.98 was expended from the trust fund during fiscal year 2017. Funds were expended in support of the Reading is an Investment program; to pay for expenses related to the 2017 Vermont Treasury Cup Challenge; and for programmatic costs for the annual financial literacy poster competition or de minimis administrative expenses. The June 30, 2017 trust fund balance was \$19,907.10.

Local Investment Advisory Committee (LIAC)

Pursuant to Act 199 of 2014, Act 51 of 2015, and Act 157 of 2016, the Local Investment Advisory Committee (LIAC), chaired by the State Treasurer, is mission-driven to increase the economic development activity in Vermont and create jobs by committing up to 10 percent of the state’s average available cash balance to local investments. The State Treasurer oversees commitment of funds for local investment purposes. To date, over \$33 million has been obligated to projects. See page 33 of this report for an overview of existing loans.

Pursuant to Act 178 of 2014, in 2017 the Department of Buildings and General Services (BGS), the Agency of the Administration (AOA), and the Treasurer’s Office have partnered to commit \$1,106,459 in new energy efficiency projects in State buildings in Burlington, Springfield, and Derby. BGS operates a State Energy Management Program (SEMP), under which it reviews State owned facilities for energy improvement and efficiency projects. These projects are intended to generate significant savings in energy costs over the useful lives of each project. The projects are developed and reviewed with assistance from Efficiency Vermont. One method of funding these projects is the State Energy Revolving Fund (SERF). By funding these projects through the SERF, existing State cash is used to pay for the projects in the current fiscal period. This allows the annual savings from the project to be used to repay State cash over the payback period of the project, instead of BGS requesting capital projects funding through the capital bill and incurring the associated debt service costs, or using other funding sources. Once the payback period of the project has been reached, the State benefits from the ongoing operating cost savings attributable to the project.

The State Treasurer’s Office has authority under the SERF statute (29 V.S.A. § 168 (d)) to provide a credit facility of up to \$8,000,000 from the State’s operating cash balances to fund SEMP projects. For funding projects via the credit facility, SEMP staff forward applications to the State Treasurer’s Office for review once they have been approved by SEMP staff. In order to receive SEMP staff approval, the applications must demonstrate that the projects meet all SEMP requirements. Prior to reviewing a project for funding from the SERF credit facility, Treasurer’s Office staff verify with SEMP staff that the project has passed a review by Efficiency Vermont and been approved by the appropriate management at BGS. A breakdown of State building investments is below. For more detailed information regarding the efficiency work, please contact BGS directly.

The LIAC met on November 7, 2017 to discuss an overview of current LIAC and Local Investment dollars committed to date and to discuss concerns regarding uncertainty at the federal level with respect to the State’s average daily cash bal-

Project	Investment
108 Cherry Street Lighting and Controls	\$566,879
Springfield State Office Building	\$387,600
Derby Public Safety Facility Energy Retrofit	\$151,980
Total	\$1,106,459

ance. The group came to a consensus that shorter-term borrowing should generally be encouraged. The LIAC unanimously voted in favor of encouraging projects that are, at a maximum, 5-7-year total terms, and that a focus be placed on shorter-term borrowing until certainty returns at the federal level. The LIAC unanimously approved that the Treasurer's Office and LIAC defer review of any new proposal until at least the conclusion of the first quarter of the new year.

Summary of Credit Facilities and Local Investment Initiatives Status as of September 30, 2017

Authorizing Legislation and Agency	Statutory Description	Amount Authorized	Remaining Capacity	Amount Utilized	Original Amount	Maturity Date	Rate
Act No. 179 of 2014, Sec. E.131 (2014 Appropriations Bill):	Investment	\$1,000,000	\$0	\$1,000,000			
1. Vermont Community Loan Fund [3]				\$1,000,000	\$1,000,000	7/15/2018 ^[1]	1.00%
Act No. 87 of 2013, Sec. 8, as amended by Act No. 199 of 2014	Credit Facility	\$10,000,000	\$0	\$10,000,000			
2. Vermont Economic Development Authority (Note VEDA-003)				\$10,000,000	\$10,000,000	1/31/2025 ^[2]	2.43%
Act No. 87 of 2013, Sec. 8a:	Credit Facility	\$6,500,000	\$1,709,094	\$4,790,906			
3. NeighborWorks of Western Vermont (Note A-001)				\$95,225	\$250,000	10/15/2023	2.00%
4. NeighborWorks of Western Vermont (Note A-002)				\$157,464	\$250,000	4/15/2024	2.27%
5. NeighborWorks of Western Vermont (Note A-003)				\$250,000	\$250,000	10/15/2024	2.35%
6. NeighborWorks of Western Vermont (Note A-004)				\$238,217	\$250,000	1/15/2025	2.00%
7. NeighborWorks of Western Vermont (Note A-005)				\$250,000	\$250,000	10/15/2025	2.00%
8. NeighborWorks of Western Vermont (Note A-006)				\$250,000	\$250,000	10/15/2025	2.26%
9. NeighborWorks of Western Vermont (Note A-007)				\$250,000	\$250,000	10/15/2026	2.00%
10. NeighborWorks of Western Vermont (Note A-008)				\$250,000	\$250,000	10/15/2026	2.63%
11. NeighborWorks of Western Vermont (Note A-009)				\$250,000	\$250,000	7/15/2027	2.49%
12. Vermont Housing Finance Agency (Note VHFA-001)				\$2,800,000	\$2,800,000	2/15/2024	2.76%
Act No. 199 of 2014, Sec. 23: [4][5]	Credit Facility	\$8,200,000	\$2,128,453	\$6,071,547			
13. NeighborWorks of Western Vermont (Note B-001)				\$400,000	\$400,000	7/15/2025	2.10%
14. NeighborWorks of Western Vermont (Note B-002)				\$250,000	\$250,000	7/15/2026	2.00%
15. NeighborWorks of Western Vermont (Note B-003)				\$250,000	\$250,000	10/15/2026	2.00%
16. NeighborWorks of Western Vermont (Note B-004)				\$250,000	\$250,000	1/15/2027	2.52%
17. NeighborWorks of Western Vermont (Note B-005)				\$400,000	\$400,000	4/15/2027	2.45%
18. Champlain Housing Trust (Note A-001)				\$1,000,000	\$1,000,000	3/31/2026	2.48%
19. Champlain Housing Trust (Note A-002)				\$321,547	\$321,547	3/31/2027	3.02%
20. VSAC- higher education loan cost reduction				\$3,200,000	\$4,000,000	6/15/2021	2.00%
Act No. 178 of 2014, Sec. 41 [6]	Credit Facility	\$8,000,000	\$6,492,510	\$1,507,490			
21. 32 Cherry St. Exhaust Air Heat Recovery				\$401,031	\$524,172	6/30/2026	2.00%
22. 108 Cherry St. Lighting & Controls				\$566,879	\$566,879	6/30/2030	2.00%
23. Springfield State Office Building				\$387,600	\$387,600	6/30/2025	2.00%
24. Derby Public Safety Facility Energy Retrofit				\$151,980	\$151,980	6/30/2027	2.00%
TOTALS:		\$33,700,000	\$10,330,057	\$23,369,943	\$24,552,178		

Notes:

1. Subject to annual review and renewal.
2. Subject to a "put" provision enabling the Treasurer's Office to demand full or partial repayment within 60 days if the State's unrestricted cash balance falls below \$75,000,000.
3. Additional capacity added to VCLF (up to 1,000,000 - Act 157 of 2016)
4. Neighborworks had remaining authorization of \$200,906 as of 09/30/2017
5. Champlain Housing Trust had remaining authorization of \$678,453 as of 09/30/17
6. Establishes an Energy Revolving Fund under 29 V.S.A. § 168(c)

Although not under the jurisdiction of the LIAC, Act 157 of 2016 authorized the Treasurer's Office to invest up to \$1 million with the Vermont Community Loan Fund (VCLF). This was an increase of \$500,000, doubling the prior authorization. The new investment will increase access to capital for businesses working to improve local food production, small farms, sustainable forestry, and affordable housing programs. Please visit the Local Investment Advisory Committee webpage for more details.

Public Retirement Study Committee

In 2014 the Public Retirement Study Committee (PRSC), chaired by the State Treasurer, was charged with completing an interim study of the feasibility of establishing a statewide public retirement plan for private sector employees. Since PRSC's launch, three reports have been completed. These reports are available on the PRSC webpage. The enabling legislation was amended by Act 157 of 2016, and again by Act 69 of 2017.

Act 69 of 2017 was drafted based on recommendations included in the January 2017 PRSC report. The report included recommendations that the state implement a voluntary Multiple Employer Plan (MEP), hereafter known as the Green Mountain Secure Retirement Plan (GMSRP). Act 69 became law on June 9, 2017. The GMSRP will be implemented by January 15, 2019. See below for GMSRP key information and Essential Elements as provided by Act 69 of 2017:

- The State intends to implement a voluntary Multiple Employer Plan (MEP) no later than January 15, 2019;
- the plan will be voluntary for employers and employees;
- once an employer opts-in, employees are auto-enrolled with the option to opt-out;
- the plan is intended to be available to employers that do not currently offer a retirement plan to their employees;
- the plan is intended to be available to self-employed individuals;
- employers with 50 employees or less are eligible (if they do not currently offer a retirement plan to their employees);
- the plan will be funded by employee contributions with an intention for future voluntary employer contributions; and,
- a successor board shall oversee the plan and assist the Treasurer's Office with vendor selection, approval of plan documents and the adoption agreement.

The Public Retirement Study Committee will sunset on January 15, 2018. Appointments to the Green Mountain Secure Retirement successor board are currently in process and are expected to be finalized by early February. The Treasurer's Office expects the board to begin meeting in late February.

Highlights of GMSRP proposal and the draft workplan and timeline are available on the Treasurer's Office's website at greenmountainsecure.vermont.gov. The workplan includes key tasks to be completed prior to launch of the program. The Treasurer's Office will solicit input from employers and employees at January 2017 public meetings.

For prior reports from the Committee and a full list of resources please visit the Public Retirement Study Committee webpage.

State PACE Reserve Fund

The 24 V.S.A. § 3270 specifies that the State Treasurer shall administer the State PACE Reserve Fund, see Act 47 of the Public Acts of 2011. The purpose of the fund is to reduce, for certain Property-Assessed Clean Energy districts, the risk faced by an investor making an agreement with a Vermont municipality to finance such a district. Monies deposited in this fund may be invested by the State Treasurer. The balance of this fund may be expended for the sole purpose of paying claims resulting from certain losses related to a Property-Assessed Clean Energy district. During State fiscal year 2017, there were no new funds deposited into this fund. There was \$385.82 earned on the balance in the fund. There were no claims submitted and, therefore, no expenditures, other than de minimis administrative expenses, from the fund during fiscal year 2017. The fund balance as of June 30, 2017 was \$50,573.18.

Vermont Achieving a Better Life Experience (ABLE)

The General Assembly passed enabling legislation for a Vermont Achieving a Better Life Experience (VermontABLE) Savings Program in Act 51 of 2015. In 2016, the law was amended by Act 157 to allow for the State Treasurer to partner or

contract with another state, if feasible, to implement an ABLE Program.

In November 2016, The Treasurer's Office announced a partnership with the Ohio Treasurer's Office. On February 22, 2017 the VermontABLE program was launched for users. The VermontABLE Savings Program is intended to help ease the financial hardships individuals with disabilities face by making federal tax-advantaged savings accounts available to cover qualified expenses such as education, housing, and transportation.

The following data provides a snapshot of enrollment to date and the savings behavior of program participants. Additional data will be provided as the program continues in future years.

- Enrollees: As of December 24, 2017: 116 Vermonters have enrolled in the VermontABLE program
- Average Account Balance: As of November 30, 2017, VermontABLE members hold an average account balance of approximately \$3,800 which is approximately \$1,800 over the previous benefit cliff level for individuals on means-tested programs.
- Assets Under Management: As of November 30, 2017, VermontABLE participants hold total assets under management of approximately 352,000.

The Vermont Developmental Disabilities Council and Treasurer's Office have collaborated to take advantage of many cost-effective opportunities to advertise and promote VermontABLE. Outreach had prioritized reaching organizations and professionals who are most likely to field questions about ABLE in their capacity as advisors or case managers. For example, special educators and licensed social workers throughout Vermont have each received a mailing with information about ABLE. Additionally, training has been provided to public guardians, staff at designated agencies for developmental services and community mental health, and Vermont Family Network. Staff from community action agencies are slated to receive similar training at a conference in April 2018. Training for families is available as a webinar at Vermont Family Network and was provided to self-advocates at their annual Voices and Choices Conference. Approximately 450 Vermonters attended a presentation about ABLE.

Advertising has included both general outreach through newspapers and Front Porch Forum, as well as information in publications that target individuals and families impacted by disability. For example, the Vermont Parent's Home Companion & Resource Directory is a free publication with a circulation of 15,000 that is placed thought Vermont Parent Child Centers, pediatrician's office, early learning centers, and other places where parents of children with disabilities are likely to seek services. The total number of Vermonters reached by print advertising during VermontABLE's first year is estimated to be 146,000.

The Treasurer's Office will hold its annual VermontABLE Task Force meeting on Disability Awareness Day on February 28, 2018, which coincides with the first anniversary of the launch of the VermontABLE program. We will continue outreach throughout the year with paid- and earned-media to promote awareness. Please visit the VermontABLE.com and the Vermont ABLE Task Force webpage for more information.

Trust Investment Account

In 2000, the General Assembly authorized the establishment of a Trust Investment Account (TIA) administered by the State Treasurer for the purpose of investing restricted funds with non-expendable principal balances and other long-term funds. As of June 30, 2017, the fund had a principal balance of \$64.2 million, of which 48% was allocated to the Higher Education Endowment Trust Fund, 32% to the VSERS OPEB, 16% to various Agency of Natural Resources Funds, and the remainder to various smaller trust funds. Of those smaller trust funds, the Veteran's Home had a June 30, 2017 balance of \$1,416,138 and the Tobacco Trust Fund had a balance of \$296,073.

The current target allocation of the Trust Investment Account is 60% Fixed Income, 20% Domestic Large Cap Equities, 15% International Equities, and 5% Emerging Market Equities. In fiscal year 2017, the fund returned 6.7%. In 2014, the Treasurer's Office transitioned the fund's allocation to a passive strategy mix of index funds. This change in allocation helped decrease management fees from 0.38% to 0.06% and allowed the Treasurer's staff to construct a portfolio with a higher expected return-risk profile relative to the fund's return objectives by improved diversification.

Vermont Higher Education Endowment Trust Fund

16 V.S.A. § 2885 provides that in August of each fiscal year, the State Treasurer is to withdraw up to 5% of the 12-quarter moving average of the Fund's assets and divide the amount equally among UVM, the Vermont State Colleges, and the Vermont Student Assistance Corporation (VSAC). The amount appropriated, however, cannot exceed an amount that would bring the Fund balance below total contributions to principal. Total principal contributions through June 30, 2017 have been \$29,109,166. The 5% distribution available this year is \$1,502,187 in total or \$500,728.96 each for UVM, the Vermont State Colleges, and VSAC.

16 V.S.A. § 2885 further provides that during the first quarter of each fiscal year, the Secretary of Administration and the Subcommittee may authorize the State Treasurer to make an additional distribution of up to 2% of the Fund's average assets available to UVM and the Vermont State Colleges for the purpose of creating or increasing a permanent endowment fund. Similar to the 5% distribution, the amount appropriated cannot exceed an amount that would bring the Fund balance below total contributions to principal. Further, each institution is required to match the appropriation by raising private donations of at least twice the appropriated amount. At its meeting last year, Secretary Young and the Subcommittee voted to forgo this 2% appropriation for distribution to UVM and the Vermont State Colleges, based upon a recognition that lower expected returns in the near term do not support a total distribution of 7% from the fund.

After payments the Fund balance at the end of Fiscal Year 2017 totaled \$29,639,716. For more detailed information regarding the Higher Education Endowment Trust Fund, please visit the State Treasurer's website.

Higher Education Endowment Trust Fund Balance: June 30, 2017

Ending balance FY 2016	\$30,192,009
FY 2016 Contributions received in FY 2017	\$50,288
Opening balance FY 2017	\$30,242,297
Actual Distributions FY2016	
5%: University of Vermont	-\$384,432
Vermont State Colleges	-\$384,432
Vermont Student Assistance Corp.	-\$384,432
2%: University of Vermont	\$0
Vermont State Colleges	\$0
Income earned FY 2017	\$822,068
Appreciation (Depreciation) FY 2017	\$1,234,539
Fees and Other Charges FY 2017	-\$3,703
Principal Balance June 30, 2017 ³	\$31,141,903
Statutory Distributions Available ¹	
5% of 12-Quarter Moving Average as of June 30, 2017	(\$1,502,187)
2% of 12-Quarter Moving Average as of June 30, 2017	(\$602,127)
Total Projected Statutory Distribution	(\$2,104,314)
Balance After Projected Statutory Distribution	\$29,037,589
Total Contributions Received as of June 30, 2017	\$29,109,166
Principal Balance Shortfall After Projected Statutory Distribution	(\$71,577)
Adjustments to Distributions Due to Shortfall	
5% Distribution Adjusted 0.00%	(\$1,502,187)
2% Distribution Adjusted -11.89%	(\$530,550)
Total Available Distribution Adjusted to Maintain the Principal Balance Floor as Required by Statute	(\$2,032,737)
Actual Distributions for FY2017	
5% Distribution	(\$1,502,187)
2% Distribution ²	\$0
Total Actual Distribution	(\$1,502,187)
Principal Balance after distributions	\$29,639,716
Fundraising target for potential 2% distribution in next FY 2018 (contingent on an institutional match in FY 2018 and Principal Balance greater than total Contributions)	\$600,875

¹ Assuming statutory levels (5% distribution & 2% distribution) without regard to statutory requirement to keep balance at or above the total principal contributions.

² Committee elected to forego the 2% distribution for the fiscal year.

³ Numbers may not add due to rounding.

Transportation Infrastructure Bonds

Beginning in 2010, the State began issuing Special Obligation Transportation Infrastructure Bonds (TIBs), which are payable from assessments on motor vehicle gasoline and diesel fuel. The State has issued three series of TIBs bonds (in 2010, 2012 and 2013) totaling \$36,385,000. As of June 30, 2017, there were \$28,340,000 of bonds outstanding.