

STATE OF VERMONT
OFFICE OF THE STATE TREASURER



2016 ANNUAL REPORT

January 15, 2017

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

I am pleased to submit my sixth annual report as your State Treasurer. As you read this report, you will find useful information on the many Treasury related activities and initiatives. As we look at the past year and the initiatives we are working on for the coming year, collaboration and partnership with all our citizens, advocacy groups, government officials, the Administration, and the General Assembly remain as the focal point of all our work. Vermont gets things done because we work together to identify challenges and mutually develop solutions. Whether it's the continued financial management and discipline that underpins our superior bond ratings, efforts to provide capital for needed community initiatives, expanding our consumer protection and financial literacy work, improving the retirement security of Vermont citizens, or working with stakeholders to recommend a long-term financing recommendation for water quality, I am proud of the efforts of the Treasury staff and our partners.

You will find narratives outlining our various accomplishments throughout the report. In summary, I would like to group these into several themes and highlight some of these:

- **Commitment to our core responsibilities;**
- **Financial security for all Vermonters**
- **Transparency and accountability;**
- **Consumer protection;**
- **Fiscal discipline and bond rating;**
- **Strengthening partnerships with communities and citizens;**
- **Delivering cost effective services; and**
- **Completion of several special studies requested by the General Assembly including, but not limited to:**
 - **Clean Water Report pursuant to Act 64 of 2015**
 - **Financial literacy Commission report**
 - **Report of the Public Retirement Study Committee**

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 over \$5 billion in annual disbursements. We administer three legislatively authorized public retirement systems (State employees, teacher, and municipal) with just over 51,000 active, vested, inactive and retired members. In fiscal year 2016, we paid \$299.5 million to over 18,000 retirees and \$58.9 million in health care premium payments on behalf of retirees. We administer investment policies and strategic oversight for \$3.74 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 \$73 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 strive for excellence and the exercise of financial prudence over all the resources within our purview.

Financial Security for all Vermonters

On the 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. This past year we worked with the General Assembly to make changes to the State statutes to amortize our pension liabilities at a faster rate, a change that is estimated to save the taxpayers \$165 million through the year 2038, the date set in statute by which we plan to retire the unfunded liability. As noted in the charts in the retirement section of this report, substantial savings to the taxpayer have been realized through incremental steps to reduce pension and retiree health care costs. A conservative estimate is that the sum of these initiatives will save taxpayers over \$1.3 billion through 2038. I want to also acknowledge our State employees through the Vermont State Employees Association, and the Vermont Troopers' Association, who agreed to increase employee contributions by .25 percent effective July 1, 2016. I appreciate their willingness and shared responsibility in helping to shore up our current retirement plans. Our office will continue to review the changes to the benefit system to assess their impact and remain disciplined investors in partnership with VPIC and develop proactive strategies.

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 and that serious contemplation of a solution or measures to combat the problem of retirement security need to be taken. Further, 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.

This year we have submitted a plan to address this challenge and will be working with the General Assembly to introduce enabling legislation to create a “Multiple Employer Plan” or MEP, at no cost to the taxpayer, that will provide a range of retirement options for Vermonters who work for employers with 50 or less employees 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.

This office also has had the privilege of working with the General Assembly to initiate a program under the federal “Achieving a Better Life Experience Program” or ABLE. ABLE is intended to ease financial strains faced by individuals with disabilities by making federal tax-advantaged savings accounts available to cover qualified expenses such as education, housing, and transportation. Vermont passed enabling Legislation (S.138) for a Vermont ABLE Savings Program in Act 51 during the 2015 legislative session. In 2016, ACT 51 was amended by ACT 157 to allow for the State Treasurer to partner or contract with another State to implement an ABLE Program. This was necessary due to the size of the potential population and to obtain cost efficiencies.

On November 21, 2016, my office announced a partnership with the Ohio State Treasurer's Office in implementing the Vermont ABLE program in Vermont. The program will include a debit card and a Vermont branded webpage and a range of investment options for participants. The Vermont ABLE program will launch in the first quarter of 2017. I especially want to thank Tim Leuders-Dumont, Policy Director at the Treasurer's office and Kirsten Murphy, Executive Director, Vermont Developmental Disabilities Council for all their hard work on this project.

Financial literacy is an important component of all our efforts toward financial security. This year I co-chaired the Financial Literacy Commission with John Pelletier, Champlain College Director of the Center for Financial Literacy. Our 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.

Transparency and Accountability

As I reported last year, my office was a participant in the National Association of State Auditors, Comptrollers and Treasurers (NASACT) Continuing Disclosures Implementation project and developed a voluntary financial disclosure page for the State's website. In fact, Vermont was the first state in the nation to implement all the best practices and disclosures recommended by this national organization. We continue to update our investor information so that citizens and investors have access to the state and pension financial data.

I continue to work on corporate transparency, collaborating with other states on shareholder advocacy efforts (co-filing resolutions, proxy voting, and shareholder activism) on issues of disclosure of corporate political contributions, transparency of private equity fees and expenses, and environmental disclosure. As a member of the Investor Network for Climate Risk, we are also seeking increased disclosure of environmental risks in filings with the SEC. This past year, I joined with other institutional investors to call upon the SEC to enhance its environmental disclosure requirements. Specific recommendations included:

- Create an interagency workgroup to review climate risks to businesses;
- Create an SEC taskforce to review climate change disclosures, as per 2010 guidance;
- Review best practices for sustainability and climate-related reporting;
- Evaluate how risk and sustainability factors should be accounted for and disclosed;
- Better account for carbon costs in baseline reserve analyses; and
- Increase enforcement and outreach to companies that inadequately disclose risk.

Consumer Protection

Vermont has been a leader in unclaimed property administration, reuniting citizens with their rightful property. We have implemented new technologies to reach more and more Vermonters. As a past president of the National Association of Unclaimed Property Administrators and one of two state advisors to a national effort by the Uniform Law Commission to revise the national Unclaimed Property Act, I have had the opportunity to work with national groups to assure the continuation of the consumer protections in the law. In July of this year, a Revised Uniform Unclaimed Property Act was adopted by the national Uniform Law Commission. The Treasurer's office will be working with the General Assembly to bring Vermont's unclaimed property law up to date with this act while preserving some of the unique consumer protections provisions already enacted in Vermont. Vermont has been a leader in addressing life insurance issues. Vermont passed a law requiring enhanced due diligence by insurers to find the beneficiaries of deceased insureds. We worked closely with the National Conference of Insurance Legislators (NCOIL) on this issue and I am proud to say that many of our legislators have been leaders in this organization. I am currently providing comment to the National Association of Insurance Commissioners on policies relating to unclaimed property and life insurance.

Fiscal Discipline and Bond Rating

Maintaining the State's bond rating is a critical issue. The bond rating is an indicator of our economic condition, debt structure, overall financial condition, and the management practices of the State. Vermont has a reputation as a state that meets its fiscal challenges. As a result, we have the highest bond rating in New England. 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.

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. In the debt management section of this report we discuss this issue and the steps we need to take with our executive, legislative, business community and citizen partners to accomplish this.

Strengthening Partnerships with Communities and Citizens

The Treasurer's office has been a leader in identifying opportunities to invest locally in Vermont. To the extent possible, within liquidity, safety and yield parameters, we have been successful in pursuing investment opportunities that keep our dollars in Vermont. We have commitments of approximately \$33 million for local investment in the "10 Percent

in Vermont” program, with \$22 million currently in use in projects including affordable housing, renewable energy, energy efficiency, Vermont’s working landscape, and reducing the cost of higher education for Vermonters. This past year we made four significant investments. We increased our investment with the Vermont Community Loan Fund by \$500,000 to \$1 million to support their Food, Farm and Forest Initiative. We also partnered with Champlain Housing Trust, extending a line of credit to support affordable housing. We worked with the Vermont Student Assistance Corporation (VSAC) and made a \$4 million local investment to lower the fixed rates on Vermont Advantage loans for parents and students. Starting at 4.8 percent, these were the lowest loan rates ever offered by VSAC. In early fiscal year 2016, we provided \$1.75 million in lending capital authority for home rehabilitation loans and home purchasing assistance financing in Rutland.

Over the past few years, the “10 Percent in Vermont Program” was subject to being sunset by action of the General Assembly. I appreciate the General Assembly’s confidence in the program, as it has now been codified with a permanent Local Investment Advisory Committee. We look forward to continued investment in our community.

Since its inception in 2004 and through 2015, we have awarded just over \$782 million in certificates of deposits to local banks of varying maturities through the Bank in Vermont program. We have over \$121 million invested in the Vermont Manager Program (as of 6/30/2016) 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.

Delivering Cost Effective Services

This past year, under the leadership of our new chair, Tom Golonka, the Vermont Pension Investment Committee (VPIC) made changes to its asset allocation and manager line-up that now save the combined pension plans roughly \$6 million per year in fees.

We also continue to lower the fees for state, teacher and municipal employees who participate in our Vermont 457 Deferred Compensation Plan. In FY 2016, the per participant fee was lowered to 7 basis points, down from 10 basis points and 15 basis points in 2011.

We are currently 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 explore consolidation of our third-party administration, with the hope of a reduction in fees.

In our debt management programs, we continually seek ways to manage borrowing at the lowest possible cost to the taxpayer. Over the last several years we have completed bond refundings that have saved multiple millions of dollars, including a refunding issue in Fiscal Year 2016 that will save \$1.88 million in interest payments and will save the State over \$2.4 million in interest costs over the next fourteen years. Since 2012, the State has saved \$12.7 million through bond refundings.

Special Studies/Clean Water Report

We are excited to bring to the General Assembly recommendations from the Public Retirement Study Committee and the Financial Literacy Commission. These are referenced in previous sections of this letter. One additional study that was undertaken, at the request of the General Assembly, was to develop recommendations relative to the funding and financing of our waterways in Vermont.

Pursuant to Act 64 of 2015 (An act relating to improving the quality of State waters), the Treasurer’s Office submitted a report on January 15, 2017 on funding and financing of clean water in Vermont. While this report is submitted by the Treasurer’s Office it has been completed through a collaborative effort with the Agency of Natural Resources, particularly the Department of Environmental Conservation (DEC), the Agency of Administration, the Department of Taxes, the Agency of Transportation, Agency of Commerce and Economic Development, and the Agency of Agriculture. It also incorporates ideas and dialogue with approximately 1,000 participants from more than 23 stakeholder meetings and public outreach events that took place from March to November 2016.

The report is available on the Treasurer’s Office Web Site and recommends a set of long-term funding options. The Treasurer’s Office and its partners believe that it may take two years to implement some of the structures required for the two-year plan and has therefore provided a two-year interim funding plan. We believe that the two-year plan can be accom-

plished without increasing taxes and fees. Moreover, we encourage the use of existing resources as part of the long-term plan as well as a number of best management practices that we believe can lower the overall cost of the initiative while still achieving the desired results.

The Treasurer's Office urges the General Assembly to take action this year on both the interim and long-term plan. Clean water is an important asset, vital to our health, and essential to our prosperous economic future.

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. I want to especially thank my Deputy Treasurer, Michael Clasen, for his hard work and support.

The above accomplishments, and others detailed in our report, cover a wide range of activities. In all our activities, we have and will continue to provide the best value to the taxpayer in terms of services and cost and work with our partners to promote fiscal discipline, retirement security, local investment and economic prosperity. We can only achieve this by working together to meet the needs of our citizens. 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,

A handwritten signature in black ink that reads "Beth Pearce". The signature is written in a cursive, flowing style.

Beth Pearce
State Treasurer



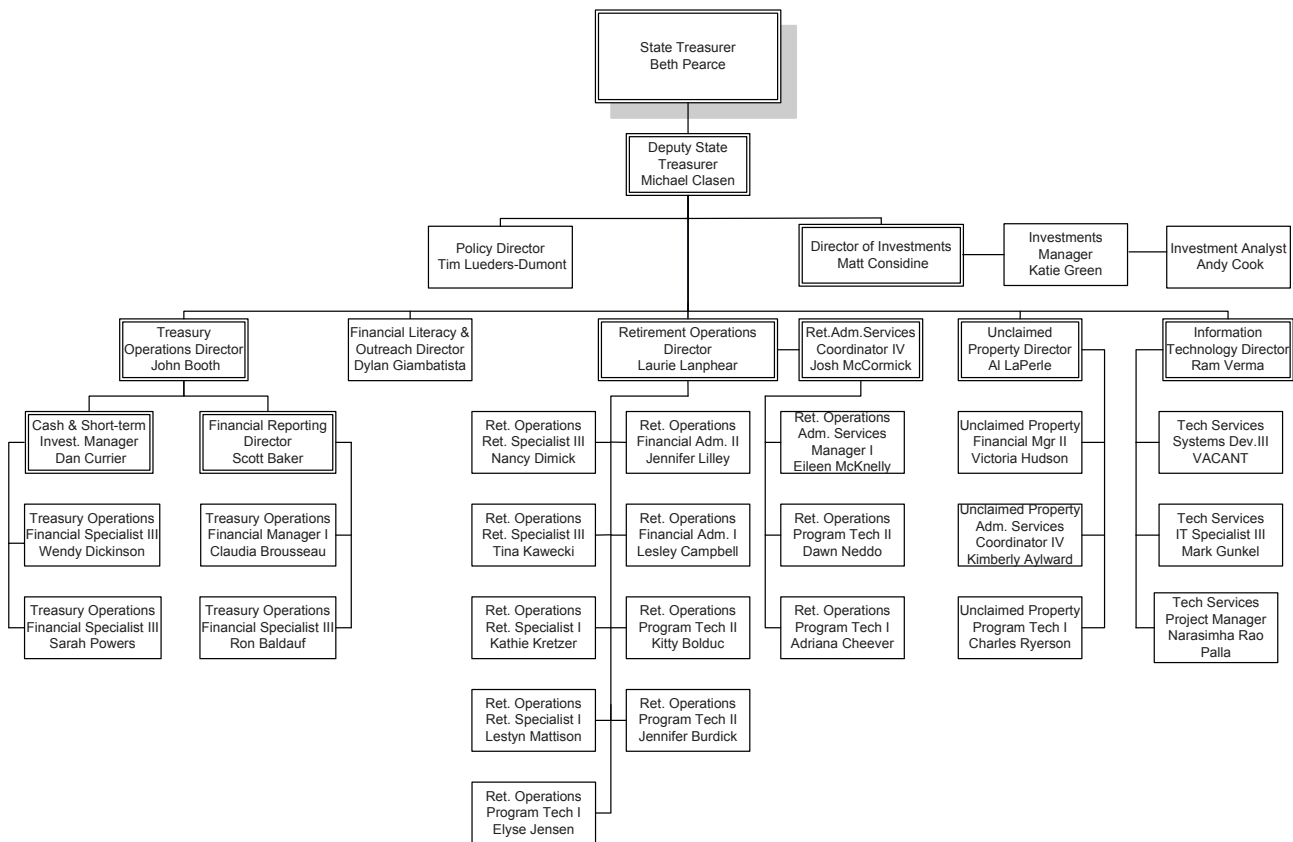
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Our Commitment to Vermonters

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 individuals. The organizational chart and staff listing above are effective as of January 15, 2017.

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 three 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.

The Work of the Boards 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 and board-established rules and policies as guidelines. If questions arise, or if a member or retiree does not agree with a decision made by staff, they may appeal to their 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 establish the necessary employer contribution for the coming year to achieve and preserve the financial integrity of the funds.

The Board of Trustees generally meet between ten and twelve times a year, and are 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 website. To read in-detail actions taken by the boards, go to www.vermonttreasurer.gov in a web browser and click on "Retirement". Each retirement system has its own set of web pages. In addition to the minutes, each retirement web page includes the composition of the board, a description of the defined benefit group plan(s), newsletters, insurance information, annual valuations, financial reports and a variety of other useful information.

Overview of the Three Retirement Systems

The Retirement Division is always busy serving the needs of the approximately 51,211 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 \$299.5 million in monthly benefit allowances in fiscal year 2016. 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 \$58.9 million. VMERS does not offer a health insurance plan, but instead established a health retirement savings plan in fiscal year 2008. All three systems offer retiree dental plans at no cost to the respective systems.

In a defined benefit system, there is a promise to provide members with a monthly retirement allowance, providing

Retirement Division Activity - FY 2016

| Activity | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| Estimates | 7,934 | 8,318 | 6,196 | 6,344 | 6,028 | 7,019 | 7,231 |
| Individual Counseling | 919 | 1,132 | 824 | 751 | 889 | 1,054 | 1,077 |
| Retirements | 1,054 | 1,118 | 1,081 | 1,082 | 1,068 | 1,008 | 1,023 |
| Withdrawals | 1,267 | 1,382 | 1,198 | 1,257 | 1,393 | 1,312 | 1,386 |
| Deaths | 335 | 463 | 329 | 377 | 349 | 376 | 291 |
| Seminars | 37 | 31 | 33 | 42 | 26 | 45 | 64 |
| Seminar Attendance | 809 | 872 | 752 | 1,243 | 783 | 1,000 | 1,496 |

These numbers are for the fiscal year, not calendar year.

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 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.

All three Boards have retained the actuarial firm of Buck Consultants to determine the amount of funding that must be set aside each year for current and future benefits. Buck Consultants 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, Buck Consultants 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 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, it is then increased for any expenses (excluding investment expenses) to be appropriated in the upcoming fiscal year. 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

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.

| Funding Valuations | | | |
|-----------------------------|------------------|----|---------------|
| Teacher Plan | 2015 | | 2016 |
| Actuarial Accrued Liability | \$ 2,837,374,737 | \$ | 2,942,024,080 |
| Actuarial Value of Assets | \$ 1,662,345,707 | \$ | 1,716,296,235 |
| Unfunded Liability | \$ 1,175,029,030 | \$ | 1,225,727,845 |
| Funding Percentage | 58.6% | | 58.3% |
| State Plan | | | |
| Actuarial Accrued Liability | \$ 2,178,826,481 | \$ | 2,289,451,540 |
| Actuarial Value of Assets | \$ 1,636,267,663 | \$ | 1,707,267,941 |
| Unfunded Liability | \$ 542,558,818 | \$ | 582,183,599 |
| Funding Percentage | 75.1% | | 74.6% |
| Municipal Plan | | | |
| Actuarial Accrued Liability | \$ 699,293,280 | \$ | 744,960,158 |
| Actuarial Value of Assets | \$ 543,768,156 | \$ | 581,611,235 |
| Unfunded Liability | \$ 155,525,124 | \$ | 163,348,923 |
| Funding Percentage | 77.8% | | 78.1% |

teachers paid for by federal grants.

For VMERS, Buck Consultants 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. Until recently, the standard accounting for public sector pension plans was GASB 25 and GASB 27, which dealt with financial reporting of pension plans. These standards were marked by strong links between funding and accounting, and included six methods for funding method and options for amortization for the Unfunded Actuarial Accrued Liability or UAAL. The net effect was an apple to oranges problem when comparing pension systems and their funded status across the county. To address this, new standards were created for accounting purposes:

- 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.

While the State included plan information in its fiscal year 2014 financials, Vermont municipalities and school systems had to include plan information on their June 30, 2015 financials. The Treasurer's Office has worked very closely with the Vermont League of Cities and Towns (VLCT) and the Vermont Association of School Business Officials (VASBO) to provide training and information to these entities so they can meet their reporting requirements.

The results of the updated GASB statements will not affect the amount governments and school districts pay to fund the plans. These liabilities have always existed and are not new. However, the new standards will require school districts and local governments to report liabilities that had previously not been reported in GAAP entity-wide financial statements (not the general fund). While this will have an impact on the presentation of financial statements, the basic financial reality of pensions has not changed.

GASB 67 and 68 essentially divorce 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 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. The results based on these standards are noted on page 11.

Healthcare, Dental and Life Insurance Coverage After Retirement

VSERS, VSTRS and VMERS members are offered various types of insurance protections after retirement. Some are offered with a portion of the premium paid by the retirement system, based on eligibility and total years of service at retirement.

Vermont State Employees' Retirement System (VSERS)

Employees retiring directly from active State service for any reason, may carry whatever coverage is in effect at that time into retirement for themselves and their covered dependents. As of June 30, 2016, 4,795 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

FY2015/FY2016 GASB 67 Results

(Dollar Amount in Thousands)

FY 2015

| | VSERS | VSTRS | VMERS |
|-----------------------------|--------------------|--------------------|------------------|
| Total Pension Liability | 2,169,909 | 2,839,621 | 613,000 |
| Plan Fiduciary Net Position | (1,624,861) | (1,653,116) | (535,904) |
| Net Pension Liability | 545,048 | 1,186,505 | 77,096 |

| | | | |
|--|---------------|---------------|---------------|
| Plan Fiduciary Net Position as a Percentage of Total Pension Liability | 74.88% | 58.22% | 87.42% |
|--|---------------|---------------|---------------|

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% |
|--|---------------|---------------|---------------|

year ending June 30, 2016. The State's fiscal year 2016 contributions to this trust fund totaled \$32.5 million. The trust fund then paid premium payments of \$31.6 million (calculated on a pay-as-you-go basis) to the State's medical insurance fund. At June 30, 2016, the trust fund had total net assets of \$21.35 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 understanding the full amount of the premium will be withheld from their monthly retirement allowance.

Vermont State Teachers' Retirement System (VSTRS)

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, 2016, 6,359 retirees were enrolled in the single, spouse, and family medical plan options. For fiscal year 2016, the Retired Teachers' Health and Medical Benefits Fund (RTHMB) received nonemployer contributions of \$16.4 million. The State Treasurer is authorized to use interfund borrowings of up to \$30 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, 2016, the balance on the loan was \$23.05 million. The RTHMB paid \$27.3 million in premiums to VEHI on a pay-as-you-go basis during fiscal year 2016. As of June 30, 2016, 6,359 retirees are enrolled in the single, spouse, and family medical plan

options. The retirees contributed \$17.9 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 understanding the full premium will be withheld from their monthly allowance.

Vermont Municipal Employees' Retirement System (VMERS)

VMERS retirees have access to dental coverage after retirement under the same rules as VSERS and VSTRS retirees.

Defined Contribution Plans

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 or the VMERS Board of Trustees. 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 are administered by Fidelity.

State Defined Contribution Plan

Established in 1999, the State's defined contribution plan had 602 participants and net assets of \$57.2 million as of June 30, 2016. 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, 2016, there were 88 municipalities offering the DC plan, with 512 participants and assets of \$20.6 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 administered by Empower Retirement. As of June 30, 2016, there were 7,034 participants in the 457(b) program. Total assets in the plan were valued at \$401.09 million. During fiscal year 2016, participating employees made contributions in the amount of \$21.24 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, 2016, 2,427 school employees were participating in the program and assets had grown to \$77.52 million. Participating employees made contributions in the amount of \$10.13 million to the plan during fiscal year 2016. 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 administered by Empower Retirement.

RETIREMENT DIVISION OPERATIONS

Comparative Membership Information - Vermont Retirement System

Vermont State Employees' Retirement System (VSERS)

| | <u>June 30, 2016</u> | <u>June 30, 2015</u> | <u>% Change</u> |
|-----------------------------------|----------------------|----------------------|-----------------|
| Active Members | | | |
| Vested | 5,285 | 5,465 | -3.29% |
| Not Vested | 3,151 | 2,981 | 5.70% |
| Total Active members | 8,436 | 8,446 | -0.12% |
| Average Age | 46.17 | 46.54 | -0.80% |
| Average Service | 11.27 | 11.71 | -3.76% |
| Average Compensation | \$ 55,864 | \$ 54,707 | 2.11% |
| Retired Members and Beneficiaries | | | |
| Number | 6,542 | 6,204 | 5.45% |
| Annual Retirement Allowances | \$ 119,422,979 | \$ 111,516,073 | 7.09% |
| Inactive Members | 1,012 | 891 | 13.58% |
| Terminated Vested Members | 728 | 735 | -0.95% |

Vermont State Teachers' Retirement System (VSTRS)

| | <u>June 30, 2016</u> | <u>June 30, 2015</u> | <u>% Change</u> |
|-----------------------------------|----------------------|----------------------|-----------------|
| Active Members | | | |
| Vested | 7,435 | 7,295 | 1.92% |
| Not Vested | 2,484 | 2,290 | 8.47% |
| Total Active members | 9,919 | 9,585 | 3.48% |
| Average Age | 45.91 | 46.23 | -0.69% |
| Average Service | 12.67 | 12.88 | -1.63% |
| Average Compensation | \$ 59,119 | \$ 58,186 | 1.60% |
| Retired Members and Beneficiaries | | | |
| Number | 8,763 | 8,484 | 3.29% |
| Annual Retirement Allowances | \$ 168,768,818 | \$ 160,847,936 | 4.92% |
| Inactive Members | 2,454 | 2,260 | 8.58% |
| Terminated Vested Members | 747 | 1,163 | -35.77% |

Vermont Municipal Employees' Retirement System (VMERS)

| | <u>June 30, 2016</u> | <u>June 30, 2015</u> | <u>% Change</u> |
|-----------------------------------|----------------------|----------------------|-----------------|
| Active Members | | | |
| Vested | 4,073 | 4,026 | 1.17% |
| Not Vested | 2,893 | 2,659 | 8.80% |
| Total Active members | 6,966 | 6,685 | 4.20% |
| Average Age | 48.54 | 48.71 | -0.35% |
| Average Service | 8.96 | 8.73 | 2.63% |
| Average Compensation | \$ 36,855 | \$ 37,369 | -1.38% |
| Retired Members and Beneficiaries | | | |
| Number | 2,734 | 2,539 | 7.68% |
| Annual Retirement Allowances | \$ 23,509,470 | \$ 19,065,769 | 23.31% |
| Inactive Members | 2,099 | 1,958 | 7.20% |

-3.11%

RETIREMENT DIVISION OPERATIONS

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) |
|------------------------|--|---|------------------------------------|--------------------------|---------------------------|---|
| 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

| | | | | | | |
|------|--------------|--------------|--------------|-------|------------|--------|
| 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

| | | | | | | |
|------|---------|---------|----------|--------|---------|--------|
| 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% |

RETIREMENT DIVISION OPERATIONS

OPEB - Schedule of Funding Progress (dollar amounts in thousands)

| Actuarial Valuation Date 6/30 | 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) |
|--|--|---|------------------------------------|--------------------------|---------------------------|---|
| VSERS * | | | | | | |
| 2016 | \$ 21,353 | \$ 1,165,803 | \$ 1,144,450 | 1.8% | \$ 497,222 | 230.2% |
| STRS ** | | | | | | |
| 2016 | \$ (20,961) | \$ 656,937 | \$ 677,898 | -3.2% | \$ 606,843 | 111.7% |

* - Based on discount rate of 4.00% for 2016
 ** - Liabilities based on assumed discount rate of 7.95% for 2016

OTHER POST-EMPLOYMENT BENEFITS FUNDING ANALYSIS

| VSERS - Other Post-Employment Benefits Funding Analysis | | |
|---|--------------------------|----------------------------|
| | <u>Pre-Funding Basis</u> | <u>Pay-As-You-Go Basis</u> |
| Assumed Discount Rate | 7.95% | 4.00% |
| Actuarial Value of Assets | \$ 21,352,818 | \$ 21,352,818 |
| Actuarial Accrued Liability | | |
| - Active Participants | \$ 308,856,459 | \$ 604,907,205 |
| - Retired Participants | \$ 394,957,484 | \$ 560,895,581 |
| - TOTAL | \$ 703,813,943 | \$ 1,165,802,786 |
| Unfunded Actuarial Liability | \$ 682,461,125 | \$ 1,144,449,968 |
| Funded Ratio | 3.0% | 1.8% |
| Annual Covered Payroll | \$ 497,222,039 | \$ 497,222,039 |
| Unfunded Actuarial Liability as % of covered payroll | 137.3% | 230.2% |
| Normal Cost for the 2017 fiscal year | \$ 16,468,917 | \$ 39,632,838 |
| Amortization of Unfunded Actuarial Liability for FY 2017 (30 yr) | \$ 33,038,639 | \$ 33,092,184 |
| Interest on expected benefit payments | \$ (1,756,542) | \$ (892,190) |
| Annual Required Contribution (ARC) for the 2017 fiscal year | \$ 47,751,014 | \$ 71,832,832 |
| Expected net retiree claims | \$ 45,051,214 | \$ 45,051,214 |
| Normal Cost for the 2018 fiscal year | \$ 17,210,018 | \$ 41,416,315 |
| Amortization of Unfunded Actuarial Liability for the 2018 fiscal year (30 yr) | \$ 34,259,860 | \$ 34,279,239 |
| Interest on expected benefit payments | \$ (1,841,429) | \$ (935,306) |
| Annual Required Contribution (ARC) for the 2018 fiscal year* | \$ 49,628,449 | \$ 74,760,248 |

* ARC for fiscal year 2018 is estimated using roll forward from fiscal year 2017 results.

RETIREMENT DIVISION OPERATIONS

| VSTRS - Other Post-Employment Benefits Funding Analysis | | |
|--|--------------------------|----------------------------|
| | Pre-Funding Basis | Pay-As-You-Go Basis |
| Assumed Investment Return | 7.95% | 4.00% |
| Actuarial Value of Assets | \$ (20,961,074) | \$ (20,961,074) |
| Actuarial Accrued Liability | | |
| - Active Participants | \$ 140,126,575 | \$ 290,742,125 |
| - Retired Participants | \$ 242,128,581 | \$ 366,194,455 |
| - TOTAL | \$ 382,255,156 | \$ 656,936,580 |
| Unfunded Actuarial Liability | \$ 403,216,230 | \$ 677,897,654 |
| Funded Ratio | -5.5% | -3.2% |
| Annual Covered Payroll | \$ 606,842,668 | \$ 606,842,668 |
| Unfunded Actuarial Liability (as % of covered payroll) | 66.4% | 111.7% |
| Normal Cost for the 2017 fiscal year | \$ 7,411,280 | \$ 16,815,904 |
| Amortization of Unfunded Actuarial Liability for the 2017 fiscal year (30 yr) | \$ 19,520,109 | \$ 19,601,656 |
| Interest on expected benefit payments | \$ (983,285) | \$ (499,434) |
| Annual Required Contribution (ARC) for the 2017 fiscal year * | \$ 25,948,104 | \$ 35,918,126 |
| Expected net retiree claims | \$ 25,218,962 | \$ 25,218,962 |
| Normal Cost for the 2018 fiscal year | \$ 7,781,844 | \$ 17,656,699 |
| Amortization of Unfunded Actuarial Liability for the 2018 fiscal year (30 yr) | \$ 20,190,791 | \$ 20,147,753 |
| Interest on expected benefit payments | \$ (960,129) | \$ (487,673) |
| Annual Required Contribution (ARC) for the 2018 fiscal year ** | \$ 27,012,506 | \$ 37,316,779 |
| * Payment is assumed to be made at the beginning of the fiscal year. | | |
| ** ARC for fiscal year 2018 is estimated using roll forward from fiscal year 2017 results. | | |

State Employees' Retirement System - Summary of Operations

| Category | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---------------|----------------|------------------|------------------|----------------|----------------|----------------|---------------|----------------|-----------------|-----------------|
| Employee Contributions | \$ 14,561,467 | \$ 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 |
| Employer Contributions | 36,866,451 | 39,297,002 | 39,179,823 | 25,134,235 | 31,468,884 | 37,572,599 | 40,302,433 | 51,370,307 | 56,482,985 | 55,881,364 | 54,347,060 |
| Other Income | 1,171,516 | 205,321 | 169,984 | 1,041,870 | 227,524 | 743,172 | 377,562 | 638,736 | 453,852 | 423,273 | 293,444 |
| Investment Income (Reduction) | 115,146,415 | 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 |
| Retirement Benefits | 53,435,617 | 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 |
| Refunds | 1,351,911 | 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 |
| Health/Life Insurance Expenses | 11,590,588 | 13,541,092 | 16,371,373 | - | - | - | - | - | - | - | - |
| Administrative Expenses | 1,329,081 | 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 |
| Other Expenses | 668,929 | 344,719 | 631,321 | 477,966 | 568,278 | 613,899 | 702,136 | 437,367 | 595,306 | 721,810 | 893,254 |
| Addition (Reduction) to Net Assets Held in Trust for Pension Benefits | \$ 99,369,723 | \$ 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) |

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

| Category | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Employee Contributions | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Employer Contributions | 1,444,757 | 19,893,129 | 20,888,347 | 24,963,027 | 25,865,470 | 23,888,787 | 22,782,575 | 29,028,016 | 32,522,691 |
| Other Income | - | - | 1,640,420 | 2,431,447 | 1,786,719 | 1,668,896 | 1,489,569 | - | - |
| Investment Income (Reduction) | 7,886 | 86,454 | 480,064 | 802,020 | 375,423 | 613,290 | 1,455,290 | 331,945 | 494,668 |
| Retirement Benefits | - | - | - | - | - | - | - | - | - |
| Refunds | - | - | - | - | - | - | - | - | - |
| Health/Life Insurance Expenses | - | 17,894,518 | 20,860,032 | 24,878,272 | 25,863,989 | 23,887,003 | 22,485,894 | 28,359,565 | 31,568,917 |
| Administrative Expenses | - | - | - | 68 | 275 | 71 | 175 | 86 | 83 |
| Other Expenses | - | - | - | - | - | - | - | - | - |
| Addition (Reduction) to Net Assets Held in Trust for Pension Benefits | \$ 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 |

* 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

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------------------------|---------------|----------------|------------------|------------------|----------------------|----------------|-----------------|---------------|----------------|-----------------|-----------------|
| | | | | | SOURCE OF FUNDS | | | | | | |
| Employee Contributions | \$ 21,884,140 | \$ 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 |
| Employer Contributions | 24,446,282 | 37,341,609 | 39,549,097 | 35,960,934 | 40,545,321 | 47,134,361 | 51,731,875 | 63,646,240 | 71,869,736 | 72,908,805 | 73,225,064 |
| Other Income | 1,180,606 | 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 |
| Investment Income (Reduction) | 130,835,585 | 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 |
| | | | | | APPLICATION OF FUNDS | | | | | | |
| Retirement Benefits | 66,272,471 | 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 |
| Refunds | 1,290,197 | 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 |
| Health/Life Insurance Expenses | 11,233,854 | 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 | 1,679,883 | 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 |
| Other Expenses | 580,403 | 203,444 | 542,665 | 606,434 | 303,741 | 609,091 | 391,832 | 233,735 | 491,184 | 824,951 | 536,088 |
| Addition (Reduction) to Net Assets | | | | | | | | | | | |
| Held in Trust for Pension Benefits | \$ 97,289,805 | \$ 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) |

Municipal Retirement System - Summary of Operations

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------------------------|---------------|---------------|-----------------|-----------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | | | SOURCE OF FUNDS | | | | | | |
| Employee Contributions | \$ 8,744,718 | \$ 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 |
| Employer Contributions | 7,926,436 | 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 |
| Other Income | 228,746 | 206,101 | 124,132 | 1,321,919 | 203,549 | 266,425 | 118,191 | 170,381 | 2,142,868 | 384,009 | 351,434 |
| Investment Income (Reduction) | 27,697,371 | 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 |
| | | | | | APPLICATION OF FUNDS | | | | | | |
| Retirement Benefits | 7,120,325 | 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 |
| Refunds | 1,102,940 | 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 |
| Health/Life Insurance Expenses | - | - | - | - | - | - | - | - | - | - | - |
| Administrative Expenses | 439,983 | 687,382 | 623,619 | 798,458 | 393,947 | 569,603 | 672,851 | 749,447 | 588,022 | 1,056,094 | 890,802 |
| Other Expenses | 1,101,883 | 560,473 | 506,817 | 588,899 | 795,522 | 886,709 | 469,599 | 999,434 | 774,543 | 941,191 | 971,912 |
| Addition (Reduction) to Net Assets | | | | | | | | | | | |
| Held in Trust for Pension Benefits | \$ 34,832,140 | \$ 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 |

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

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

- **2015: Created Retired Teachers' health and Medical Benefits Fund starting FY2015**
 - Since the 1980s, health care premiums for teachers paid out of a sub-trust of teachers pension fund; by 2014 costing over \$20 million per year in interest costs to taxpayer
 - Collaborative solution: Successfully convened over a dozen stakeholders, including employee group, to address the problem including combined pension/health care changes. In addition to pension and health care changes previously stated, a new health care assessment for LEAs, linking local employment decisions to the benefit costs.
 - **Projected to save taxpayers \$480 million** in unfunded liability interest costs through FY2038.
- 2016: Changes to the amortization financing schedule for the State and Teacher systems. **Will result in saving the taxpayer \$165 million** in interest from present to 2038. See next page for explanation.
- 2016: Increased employee contributions will result in **\$1.2 million in annual savings, with savings growing larger in future years.**

At the same time creating additional Transparency and Accountability

- 2013: Pension forfeiture statute, applicable to all three systems (state, teacher and municipal).
- 2015: VSERS Disability retirement reform permitting wage verification of disability pensioners.

Collaborative Approach Key to Success

- All benefit changes made through collaborative efforts involving Administration, Treasurer's Office, General Assembly and Employee Groups.
- No court litigation/disruptions in planned implementations.

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.

Private Activity Bond Allocations

During the 2016 legislative session, the Private Activity Bond Advisory Committee (PABAC) was discontinued due to decreased demand for utilization of Vermont's bond cap. The Treasurer's Office worked with the issuing authorities to recommend to the Governor reallocation of the state's 2016 volume cap totaling \$302.875 million, and the initial allocation of \$305.315 million of 2017 volume cap to the Emergency Board.

Vermont's Bond Ratings

Vermont was upgraded to a Aaa rating by Moody's in February of 2007 and Fitch "recalibrated" Vermont's rating from AA+ to AAA in April 2010. In 2016, Fitch Ratings updated their rating criteria for debt issued by state and local governments. The key rating factors in their assessment include revenue framework, expenditure framework, long-term liability burden, and operating performance. In December 2016, Fitch affirmed the Vermont's general obligation and Issuer Default ratings at AAA Stable, citing the State's conservative financial management, including prompt action to address projected budget gaps as they emerge, and maintenance of sound reserves. Combined with a AA+ bond rating from S&P, Vermont enjoys the highest general obligation bond ratings of any New England state. The triple-A ratings by Moody's and Fitch, and the excellent rating from S&P, are reflective of sound fiscal practices that include: (1) budgetary discipline; (2) an economy with significant breadth; (3) strong debt management practices; and (4) effective State governance reflecting sound statutes and legislative history.

Since a higher rating enhances the State's reputation in the municipal marketplace, Vermont's bonds are very marketable to a broad range of individual and institutional investors. As noted previously, this generally results in a lower interest rate or cost of capital for borrowing. It also reduces borrowing costs for municipalities that issue debt through the Vermont

Municipal Bond Bank or other borrowers relying on the State's moral obligation. This includes 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 bottom line is that 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.

The Treasurer's Office, in conjunction with the Governor and General Assembly, has set a course of maintaining modest levels of new authorizations of long-term debt and net tax-supported debt outstanding. A major contributing factor to Vermont's respected debt management is the work of CDAAC. In 2016, CDAAC recommended 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 follows a \$9.9% (\$15.9 million) reduction from the preceding biennium.

Bond issuance is currently at substantially lower levels than in the early and mid-1990s. Reduction in debt, plus continued improvement in the State's economic indices and financial condition over recent years, has improved the State's debt ratios to those among the highest-rated states. The State's practice of issuing debt with level annual principal installments has also resulted in a favorable amortiza-

tion rate. At a rate of almost 70 percent retirement within 10 years, the State's bond payoff ratio continues to be favorably received by the rating agencies.

New England General Obligation Bond Ratings

| <u>STATE</u> | <u>FITCH</u> | <u>MOODY'S</u> | <u>S&P</u> |
|---------------|--------------|----------------|----------------|
| Vermont | AAA | Aaa | AA+ |
| Connecticut | AA- | Aa3 | AA- |
| Maine | N/A | Aa2 | AA |
| Massachusetts | AA+ | Aa1 | AA+ |
| New Hampshire | AA+ | Aa1 | AA |
| Rhode Island | AA | Aa2 | AA |

Debt Ratios

Vermont's debt ratios rank favorably among triple-A rated states. Key to maintaining or obtaining other triple-A ratings is to demonstrate continued diligence in the areas previously discussed. As noted in the CDAAC report submitted for fiscal year 2016, debt issuance among Vermont's peer triple-A rated states and the fifty states declined in 2014, and outstanding debt continues to be lower than its peak in 2013. 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 continues to rise. 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 2016, is noted. This provides an understanding of 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, Ver-

mont 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.

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 2016, the State's debt per capita was \$1,002 versus the Moody's median and mean of \$1,025 and \$1,431, respectively, ranking 27th among the 50

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: \$991 MEDIAN: \$847 5-Year Average - VERMONT: \$887

| Triple-A Rated States ¹ | Moody's Ratings ² | S&P Ratings ² | Fitch Ratings ² | Moody's Debt Per Capita | | | | |
|---------------------------------------|---------------------------------|-----------------------------|-------------------------------|-------------------------|--------------|--------------|------------|------------|
| | | | | 2012 | 2013 | 2014 | 2015 | 2016 |
| Alaska | Aa1/Negative | AA+/Negative | AAA/Negative | \$1,454* | \$1,251 | \$1,573 | \$1,489 | \$1,422* |
| Delaware | Aaa/Stable | AAA/Stable | AAA/Stable | 2,674 | 2,536 | 2,485 | 2,438 | 2,385 |
| Florida | Aa1/Stable | AAA/Stable | AAA/Stable | 1,167 | 1,087 | 1,008 | 973 | 1,038 |
| Georgia | Aaa/Stable | AAA/Stable | AAA/Stable | 1,099 | 1,061 | 1,064 | 1,043 | 1,029 |
| Indiana | Aaa/Stable | AAA/Stable | AAA/Stable | 446 | 424 | 533 | 474 | 463 |
| Iowa | Aaa/Stable | AAA/Stable | AAA/Stable | 310 | 287 | 275 | 250 | 239 |
| Maryland | Aaa/Stable | AAA/Stable | AAA/Stable | 1,742 | 1,799 | 1,791 | 1,889 | 1,928 |
| Missouri | Aaa/Stable | AAA/Stable | AAA/Stable | 741 | 699 | 668 | 606 | 574 |
| North Carolina | Aaa/Stable | AAA/Stable | AAA/Stable | 815 | 853 | 806 | 739 | 721 |
| South Carolina | Aaa/Stable | AA+/Stable | AAA/Stable | 827 | 780 | 749 | 672 | 603 |
| South Dakota | Aaa/Stable | AAA/Stable | AAA/Stable | 358* | 355* | 391* | 547* | 652 |
| Tennessee | Aaa/Stable | AAA/Stable | AAA/Stable | 343 | 343 | 324 | 327 | 298 |
| Texas | Aaa/Stable | AAA/Stable | AAA/Stable | 588 | 580 | 614 | 406 | 383 |
| Utah | Aaa/Stable | AAA/Stable | AAA/Stable | 1,393 | 1,275 | 1,187 | 1,060 | 921 |
| Virginia | Aaa/Stable | AAA/Stable | AAA/Stable | 1,169 | 1,315 | 1,302 | 1,356 | 1,418 |
| MEAN³ | | | | 1,024 | 1,021 | 1,027 | 980 | 904 |
| MEDIAN³ | | | | 827 | 957 | 907 | 856 | 687 |
| VERMONT | Aaa/Stable | AA+/Stable | AAA/Stable | 792 | 811 | 878 | 954 | 1002 |

¹ Carry at least two triple A ratings.

² Ratings as of July 29, 2016

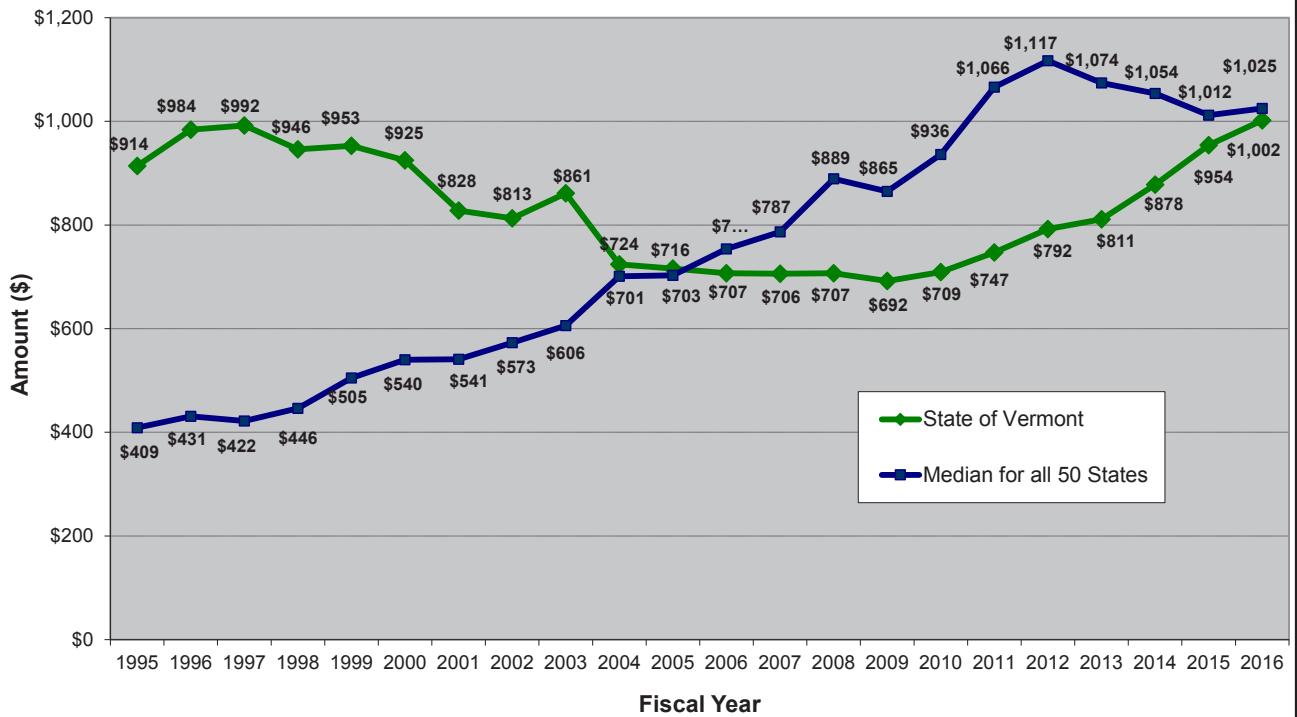
³ The calculations exclude all Vermont numbers.

* 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.

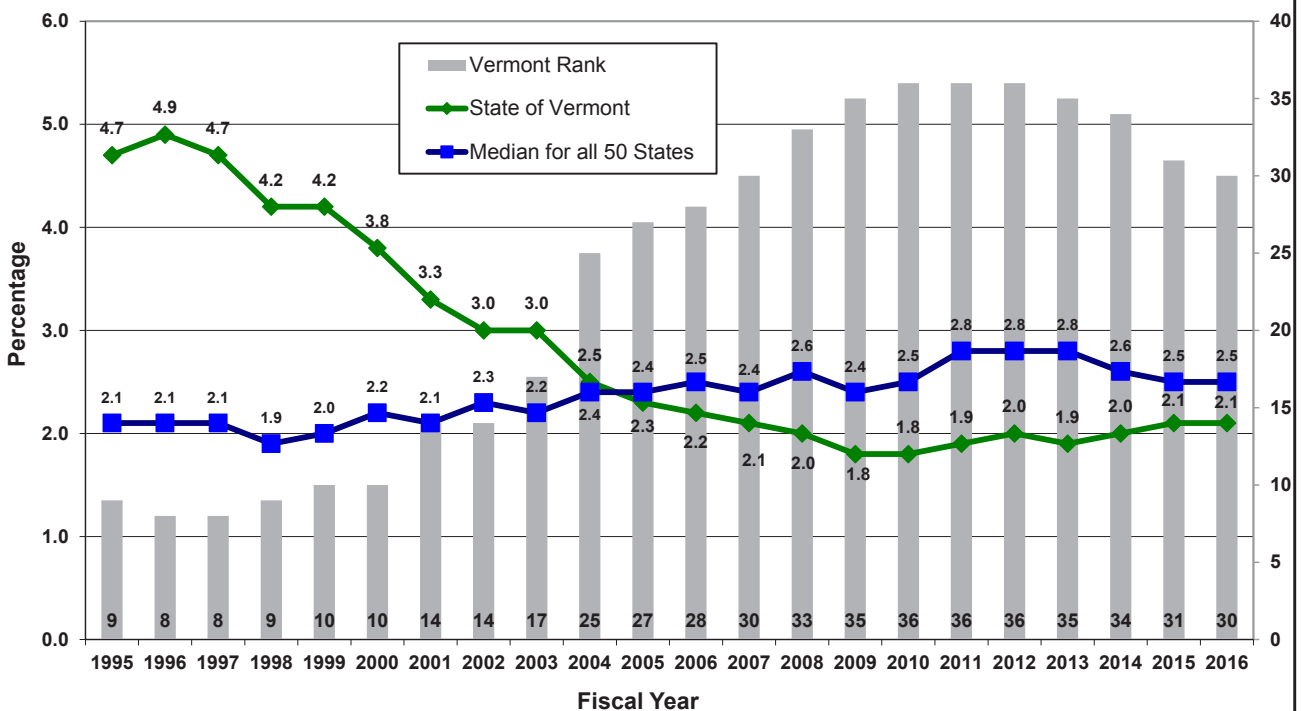
states. The higher the ranking figure, the lower a state's debt per capita is relative to all other states.

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 \$887 versus a mean of \$991 and a median of \$847 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 \$1,143 by 2024. That forecast assumes a steady level of debt authorization and the issuance of \$82.53 million in fiscal year 2017, and \$66.23 million per year from fiscal years 2018 through 2027. Under this scenario, the debt per capita would exceed the projected state guideline through 2026, but would revert to a level lower than the projected five–year median for peer triple-A group in 2027. Given the weight placed on this ratio versus the other debt ratios noted below, CDAAC limited the constraining impact of this in its recommendations.

Net Tax Supported Debt Per Capita



Net Tax Supported Debt as a Percent of Personal Income



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 2.1 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 in the most recent year. Again, the CDAAC guideline was to perform better than the Moody's five-year mean (2.1 percent) and median (1.8 percent) for triple-A rated states. using the current CDAAC projection, this ratio will improve to 1.6 percent by fiscal year 2027.

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 4.2 percent for fiscal year 2016. This percentage is expected to rise to 4.8 percent by fiscal year 2026. 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 and, as stated above, have not yet been tapped in response to the recent economic conditions.

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: 2.4% MEDIAN: 2.3% 5-Year Average VERMONT: 2%

| Moody's Debt as % of 2014 Personal Income | | | | | |
|---|------------|------------|------------|------------|------------|
| Triple-A Rated States | 2012 | 2013 | 2014 | 2015 | 2016 |
| Alaska | 3.3%* | 2.8% | 3.2% | 3.0% | 2.7%* |
| Delaware | 6.8 | 6.2 | 5.7 | 5.5 | 5.2 |
| Florida | 3.0 | 2.8 | 2.5 | 2.4 | 2.5 |
| Georgia | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 |
| Indiana | 1.3 | 1.2 | 1.4 | 1.2 | 1.2 |
| Iowa | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 |
| Maryland | 3.6 | 3.6 | 3.4 | 3.5 | 3.5 |
| Missouri | 2.0 | 1.8 | 1.7 | 1.5 | 1.4 |
| North Carolina | 2.3 | 2.4 | 2.1 | 1.9 | 1.8 |
| South Carolina | 2.5 | 2.3 | 2.2 | 1.9 | 1.7 |
| South Dakota | 0.9* | 0.9* | 0.9* | 1.2* | 1.4 |
| Tennessee | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 |
| Texas | 1.5 | 1.5 | 1.5 | 1.0 | 0.9 |
| Utah | 4.4 | 3.8 | 3.4 | 3.0 | 2.5 |
| Virginia | 2.6 | 2.9 | 2.7 | 2.8 | 2.9 |
| MEAN¹ | 2.7 | 2.6 | 2.4 | 2.3 | 2.1 |
| MEDIAN¹ | 2.5 | 2.6 | 2.4 | 2.2 | 1.8 |
| VERMONT | 2.0 | 1.9 | 2.0 | 2.1 | 2.1 |

(1) These calculations exclude all Vermont numbers and include only states rated triple-A by two or more of the 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.

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.

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, 2016, the VSERS funding level is at 74.6 percent and the VSTRS funding level is 58.3 percent. These levels are changed from 75.1 percent and 58.6 percent, respectively in 2015. 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 70.86 percent and 55.31 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.

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 Fund to provide a dedicated funding source for these benefits. In 2016, the Treasurer recommended 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.

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. 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

ACCOMPLISHMENTS IN 2016

- The Vermont Pension Investment Committee ("VPIC" or the "Committee") reassessed the asset allocation strategy in place since 2009 and implemented modest changes to select asset classes. At fiscal year end, the target asset allocation of the portfolio was 35 percent allocated to equities, 32 percent to fixed income, 16 percent to multi-strategies and 17 percent to alternatives.
- VPIC conducts an annual asset allocation review from January to March 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. The following decisions arose from the latest review:
 - The Committee terminated its dedicated global fixed income mandate due to a reduction in expected return for the asset class over a five to seven-year market cycle.
 - To increase transparency within the pension fund's target allocations, the Committee voted to eliminate the asset class title "Global Asset Allocation" and replace it with "Absolute Return" to better reflect the target return characteristics of the alternative funds within this allocation, which aim to have positive returns over a five-year market cycle in all market environments.
 - The Committee voted to reduce its exposure to inflation sensitive asset classes with the belief that the Federal Reserve's actions can mitigate unexpected inflation over a five-year horizon. This culminated in the termination of the portfolio's long-only commodity allocation with a gradual withdrawal schedule to capture expected market gains in the short term. To take a more tactical approach to the commodity markets, VPIC hired a long/short hedge fund-of-funds manager. In addition, VPIC terminated a long-only tactical inflation protection allocation and re-allocated those funds to TIPS (1%), High Yield (1%), International Equity (1%), and Large Cap Domestic Equity (3%).
 - The Committee increased its exposure to private markets by increasing its Private Equity target allocation to 5% from 3% and its Real Estate target allocation to 8% from 6.5%. Most recently the Committee voted to commit \$40 million to the HarbourVest Dover IX fund and \$65 million to the HarbourVest Partners X fund (Venture/Buyout). These are "fund-of-funds" structures that benefit from diversification across geography, year of investment, fund manager, and industry. The Committee also initiated an Opportunistic real-estate search for both domestic and international allocations. These are expected to be finalized in fiscal year 2017.

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 and conducts day-to-day activities with investment managers, custodians and other service providers. VPIC acts as the trustee for the defined benefit plan investments, while the Board of Trustees for each system maintains its fiduciary role in the area of benefits administration and actuarial recommendations.

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.

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, a proxy voting vendor, VPIC's master custodian, VPIC's investment consultant, Treasurer's Office investment staff, and the Vermont Attorney General's office. VPIC has operating policies in place to manage these delegated responsibilities, and VPIC receives reports and responds to recommendations from staff and from its investment consultant.

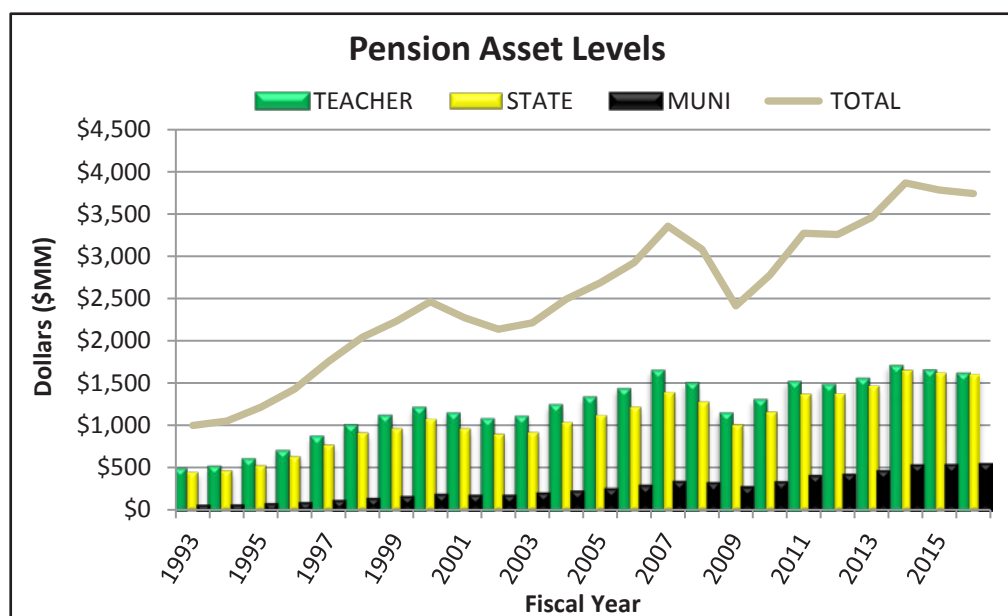
The 11-member VPIC consists of six voting members, a Chair, and four alternates. Each retirement system Board of Trustees has representation, along with the Governor's Office, and the Treasurer's Office. At the end of fiscal year 2016, individuals appointed to the Committee are: Chair, Thomas Golonka; Vice-Chair and Treasurer Beth Pearce; VSERS member, Robert Hooper; VSERS alternate, Jeff Briggs; VMERS member, Peter Amons; 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, 2016, the total assets under management of VPIC portfolio were \$3.74 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 investment, 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 of 60% MSCI ACWI/ 40% Citi WGBI, 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, 2016, the VPIC portfolio had a composite 5-year return of 4.8%, compared to the actuarial rate of return of 7.95%. The 60% MSCI ACWI / 40% Citi WGBI 5-year return was 3.9%, which the VPIC portfolio outperformed by 0.90%. In fiscal year 2016, the VPIC performance was 1.2% while the benchmark returned 0.9%, resulting in

0.30% outperformance. Compared to a median public fund peer universe return of -0.50% for fiscal year 2016 (InvestorForce Public peer database of defined benefit plans with assets under management greater than \$1 billion) the VPIC outperformed peers by 1.7%.



Outperformance by VPIC versus the peer universe and the VPIC policy index was due to VPIC's active managers outperforming their indices and peers in Emerging Market Equities, Quantitative International Equity, Diversified Fixed Income, and Private Equity. VPIC's overweight versus peers to the Fixed Income markets and underweight versus peers to the Global Equities market also bolstered VPIC's return versus peers. The current market environment of compressed yields in the fixed income marketplace and high volatility within the global equity market due to geopolitical uncertainty and depressed growth rates, has made it challenging for most public plans over the past five years to attain their actuarial rate of return.

Investment Performance Of Vermont's Retirement Systems

As of June 30th of Fiscal Year 2016

Net of Fees

| Retirement System | Last 1 Year | Last 3 Years** | Last 7 Years** |
|---------------------|-------------|----------------|----------------|
| Teachers Composite | 1.4% | 4.8% | 8.6% |
| State Composite | 1.1% | 4.8% | 8.7% |
| Municipal Composite | 1.1% | 4.7% | 8.7% |
| Median Public Fund* | 0.4% | 6.0% | 8.7% |

* As of FY 2013 the peer fund universe ICC Public Defined Benefit Median replaced with the InvestorForce Public Defined Benefit Gross Median

** Annualized

Source: NEPC, LLC

VPIC has taken steps since 2014 toward adding private market exposure in the form of Private Equity and Opportunistic Real Estate. Private markets take significant time to build a diversified position and in a long-term private portfolio, diversification is critical. VPIC chose to increase its Private Equity allocation in February 2016 to 5% from 3% and increase its Real Estate allocation from 6.5% to 8% due to the favorable risk/return profiles expressed by VPIC's investment consultant for these asset classes versus others. VPIC will likely continue to build and maintain these allocations in the coming fiscal years.

Short-term, Local Investments, and Other Investments

The State Treasurer and the State Treasurer's Office are responsible for the management of the State's operating funds and certain other funds. The State 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 policies set by this Office. The State 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 2016 saw continued challenges in the short-term investments market place. Due to the Fed's continued low rate policy during FY2016, 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 December of 2016, the Federal Reserve raised the federal funds rate 0.25% to a range of 0.50% to 0.75%. This was only the second 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

Asset Allocation Target of VPIC as of June 30, 2016

| Investment Category | Allocation |
|-------------------------------|---------------|
| Equity | |
| Domestic Large Cap | 13.0% |
| Domestic Mid Cap | 2.5% |
| Domestic Small Cap | 2.5% |
| International Equity | 11.0% |
| <u>Emerging Market Equity</u> | <u>6.0%</u> |
| Total Equity | 35.0% |
| Fixed Income | |
| Diversified Bonds | 15.0% |
| Long Treasuries | 3.0% |
| High Yield Bonds | 5.0% |
| Emerging Market Debt | 5.0% |
| <u>TIPS</u> | <u>4.0%</u> |
| Total Fixed Income | 32.0% |
| Alternatives | |
| Real Estate | 8.0% |
| <u>Private Equity</u> | <u>5.0%</u> |
| Total Alternatives | 13.0% |
| Multi-Strategy | |
| Risk Parity | 8.0% |
| <u>Absolute Return</u> | <u>12.0%</u> |
| Total Multi-Strategy | 20.0% |
| Cash | 0.0% |
| Grand Total | 100.0% |

¹ Absolute Return category includes Hedge Fund-of-Funds, Equity Options Strategy, and a Dynamic Growth Strategy

INVESTMENTS

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, 2016, there was \$20.2 million invested, with maturities from 12 months to 10 years, at yields from 0.85% to 2.76%.

Summary of Credit Facilities and Local Investment Initiatives Status as of December 31, 2016

| 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 | 7/15/2017 ^[1] | 1.00% |
| Act No. 87 of 2013, Sec. 8, as amended by Act No. 199 of 2014, Sec. 22: | 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 | \$1,959,094 | \$4,540,906 | | | |
| 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. 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 | \$2,700,000 | \$5,500,000 | | | |
| 12. NeighborWorks of Western Vermont (Note B-001) | | | | \$400,000 | \$400,000 | 7/15/2025 | 2.10% |
| 13. NeighborWorks of Western Vermont (Note B-002) | | | | \$250,000 | \$250,000 | 7/15/2026 | 2.00% |
| 14. NeighborWorks of Western Vermont (Note B-003) | | | | \$250,000 | \$250,000 | 10/15/2026 | 2.00% |
| 15. Champlain Housing Trust (Note A-001) | | | | \$1,000,000 | \$1,000,000 | 3/31/2026 | 2.48% |
| 16. VSAC- higher education loan cost reduction | | | | \$3,600,000 | \$4,000,000 | 6/15/2021 | 2.00% |
| TOTALS: | | \$25,700,000 | \$4,659,094 | \$21,040,906 | \$21,700,000 | | |

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 \$850,000 as of 12/31/2016
5. Champlain Housing Trust had remaining authorization of \$1,000,000 as of 12/31/2016

Interfund Loans

Additionally, Act 179 of 2014 created the Retired Teachers Health and Medical Benefits 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 \$30 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, 2016, the balance of such interfund loans was \$23.1 million.

Investment Results

For fiscal year 2016 these short-term, local investments and other investments, and the Trust Investment Account had a combined average balance of \$414.967 million, and combined earnings of \$3.431 million, resulting in a gross rate of return of 0.827%.

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 2016, \$782 million in CDs have been awarded. As of June 30, 2016, there was one CD outstanding. During fiscal 2016, a total of \$12 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, 2016 was \$53.0 million. No new monies have been invested in the SDIA since 1990, but disbursements to members continue on an ongoing basis. Administrative services for the SDIA are provided by Empower Retirement.

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. Unclaimed property can include, but is not limited to: 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 insurance property. We act as the steward for approximately \$73 million in unclaimed financial property and actively work to return those funds to the rightful owner.

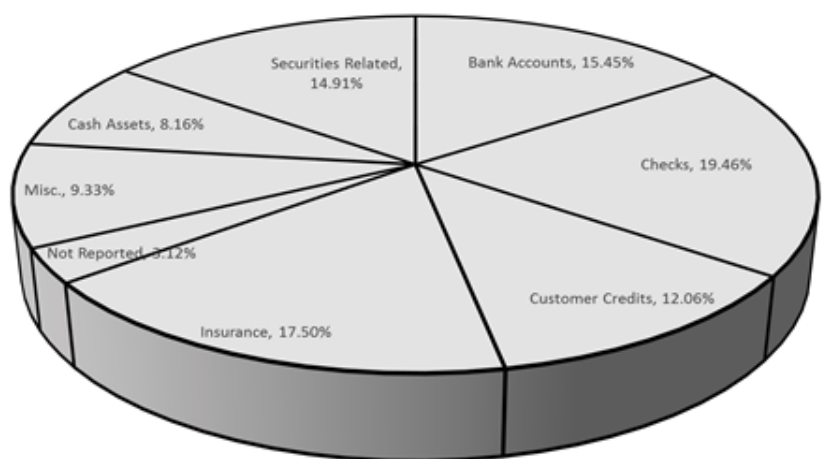
To ensure holders of property are following Vermont law, Treasurer's Office staff conducts examinations of holders' records. Just before the State receives the property, holders are required to notify the individual by mail, at the last known address on record, for all property valued at \$50 or more.

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 \$4.5 million to current and former Vermonters.

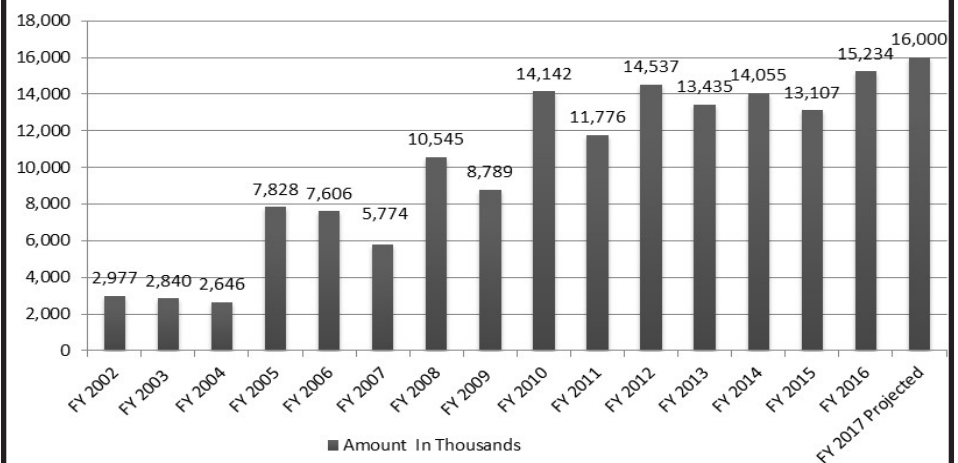
In Fiscal Year 2016 the Division paid out a record number of claims, paying 15,234 totalling just over \$4.5 million, with the average claim being \$298.73. In addition, the Division received \$10.1 million remitted by holders.

The future of unclaimed property includes the development of more on-line applications that will consist

Property Type Reported



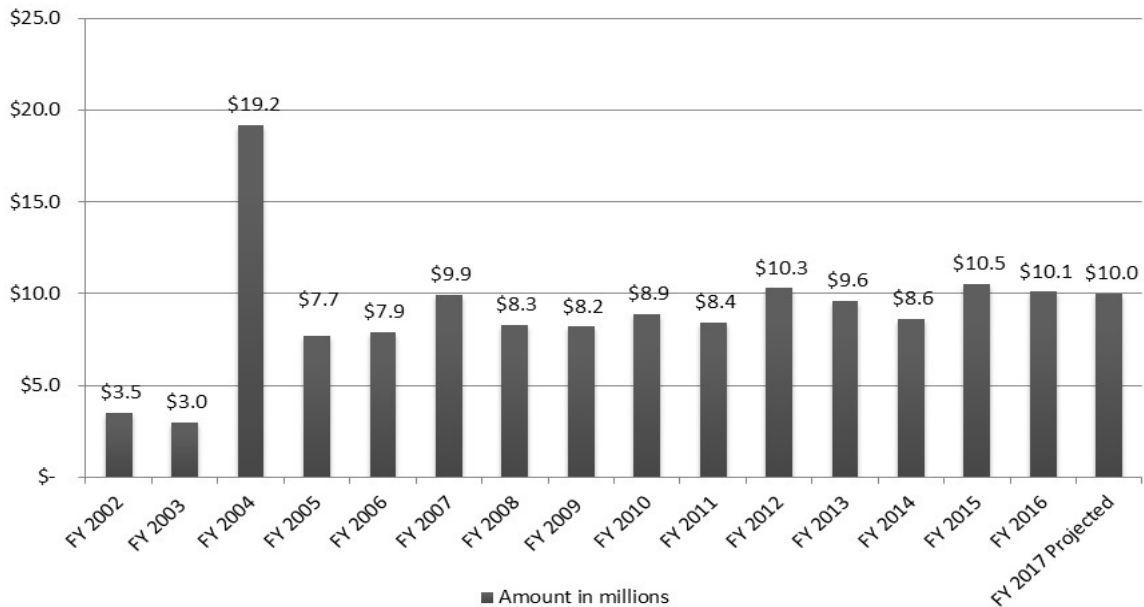
Number of Claimants Paid



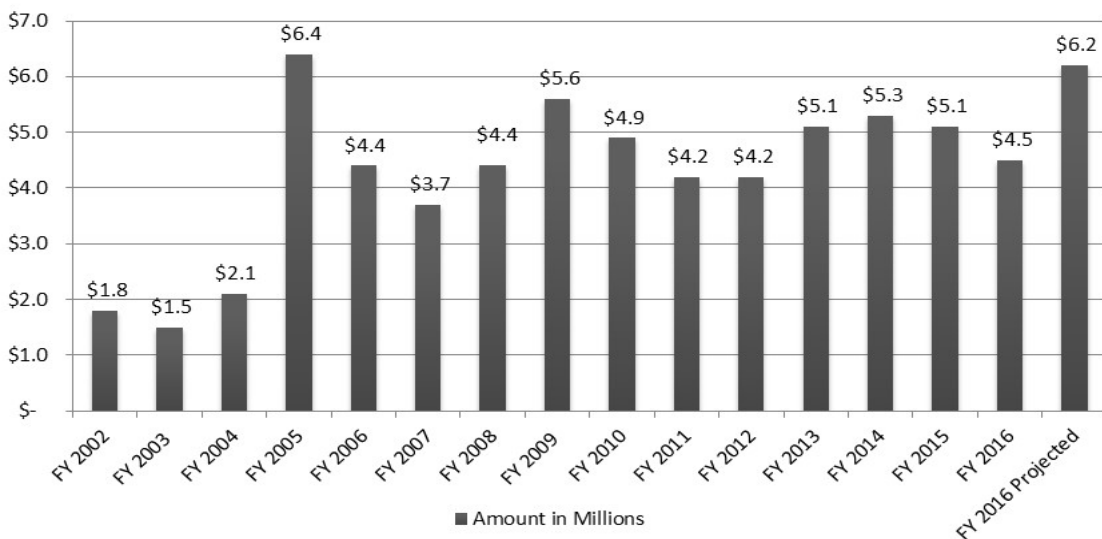
UNCLAIMED PROPERTY

of systems for owners to file claims and for holders to report property electronically. To reach more owners of property, we will be using available social media platforms to include Facebook and Twitter. The division continues to seek more effective ways to reunite owners and heirs with their forgotten property.

Unclaimed Property Turned Over to the State Treasurer



Unclaimed Property Amount Returned to Vermonters



*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 State Treasurer's Office has actively worked to promote financial literacy for nine 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.

Vermont Financial Literacy Commission

The Financial Literacy Commission (FLC) was created in 2015 to “measurably improve the financial literacy and financial capability of Vermont’s citizens.” Additionally, a special fund (9 V.S.A. § 6004) was enacted to support financial literacy projects. The State Treasurer Co-Chairs and serves as a member of FLC, along with Co-Chair John Pelletier, and ten other Commission members.

FLC held a preliminary planning meeting on November 30, 2015. Eleven meetings were convened in 2016. A variety of stakeholders and participants attended FLC meetings. Additionally, after several months of taking testimony, FLC divided into subgroups to engage stakeholders in the topical areas of K-12, higher education, and adult personal finance education.

FLC has prepared recommendations for the Governor and General Assembly on strategies to measurably increase the financial sophistication of Vermont citizens. The recommendations urge action steps to encourage State agencies and departments to coordinate personal finance education outreach efforts and review the feasibility of combining duplicative services and funds. It is the hope of the Co-Chairs that any new outreach will be supplemented with new, broadly available structures to manage credit and save money so every Vermonter can achieve financial well-being and adequate financial capability for a lifetime of success and opportunity.

The State Treasurer and Treasurer's Office staff will continue to provide technical support to FLC in 2017. 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 hardback books for their library, a curriculum guide and promotional materials. A personal reading program challenges students to read books about money. Students who completed their reading logs are entered into a state-wide drawing for one of twenty \$250 college savings accounts. During the 2015-2016 school term the program was used in 137 schools.

The program is made financially possible through the support of the TD Bank Charitable Foundation and Windham Foundation. Additional financial support is provided by Comcast and Community National Bank. All college savings accounts are donated by the Vermont Student Assistance Corporation.

Vermont Treasury Cup Challenge

Following more than 17 rounds of head-to-head competition, Essex High School emerged as the winner over Mount Mansfield Union High School to win the championship of the 2016 Vermont Treasury Cup Challenge. MMU fin-

ished second and South Burlington finished third. The tournament was held March 11 in Montpelier. 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. This was the eighth year for the statewide tournament.

Each member of the championship team received a \$500 college savings account and members of the second place team a \$250 account, donated by the Vermont Student Assistance Corporation. The tournament is underwritten by the TD Bank Charitable Foundation with support from the Vermont JumpStart Coalition.

Financial Literacy Poster Contest

For the ninth year in a row, the Treasurer's Office, in partnership with the Vermont Bankers Association, sponsored the Be Money Wise financial literacy poster competition. The contest is 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 2016 theme was, "I am a Money Maker!" There were 139 posters entered.

Winning first place in the elementary school division was Marin Hemmett of Williston Central School. In the middle school division, Hailey Chase of Williston Central School won first place. In the high school division, Carol Fagan of Milton High School took the top prize.

Treasury Operations Division

Overview

The Treasury Operations Division is responsible for the banking and cash management of more than \$5 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 State Treasurer's Office, and administering various special funds. TD Bank, N.A. serves as the State's master banking contractor. Bank personnel and Treasurer's Office staff work continuously together to provide new and improved services and processes.

Reconciliations

Treasury Operations Division staff reconcile approximately 30 State core bank accounts. In fiscal year 2016, more than 123,000 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, 1.94 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 State Treasurer's Office has an ongoing initiative to encourage State agencies and departments to use electronic payments whenever feasible.

Of the more than 1.94 million payments processed during fiscal year 2016, approximately 81 percent were electronic funds transfers. The Treasurer's Office maintains a "Vendor Portal" secure web site to provide payees with electronic access to remittance information. This has significantly reduced the number of payment information requests received by the Treasurer's Office.

In November of 2016, 98.0 percent of monthly benefit payments to retired State employees, retired teachers and municipal employees were made via direct deposit.

Act 68 Receipts

Per statute, the Treasury Operations Division receives and monitors education tax payments to the State as mandated by Act 68. Notification and initial invoicing of the municipalities for the principal payment are completed by the Agency of Education. In fiscal year 2016, all municipalities remitted the billed education tax principal payments.

Technology Update

Overview

The Technology Services Division is committed to providing the best in class service and technology to enable the Treasurer's Office to be the best office in the country. Technology solutions are deployed to enable our staff to be productive, efficient and accurate.

In FY2016 a new portal for VSTRS Federal Grant billing was successfully deployed to over 60 supervisory unions across the state in accordance with a new state law that provides a comprehensive financing plan for retired teachers' health benefits. This was a quick response to a law enacted to help fund future healthcare costs.

Technology is evolving constantly. Infrastructure upgrades are necessary. This past year has seen its share of projects on this regard. Technology refresh on the server and workstation were completed in FY2016. Office 365 was rolled out by the State of Vermont to replace in-house operations and save limited resources. It does not stop there. More technology updates are planned for the coming fiscal year and beyond.

Legislative Reporting Requirements

Financial Literacy Trust Fund

The General Assembly established a trust fund in 2008 to finance 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 2016, the fund received deposits of \$0.00 and earned \$98.05 in interest on its principal. \$9,341.90 was expended from the trust fund during fiscal year 2016. Funds were expended in support of the Reading is an Investment program; to pay for expenses related to the 2016 Vermont Treasury Cup Challenge; and for programmatic costs for the annual financial literacy poster competition. The June 30, 2016 trust fund balance was \$26,270.

Local Investment Advisory Committee (LIAC)

Pursuant to Act 199 of 2014, Act 51 of 2015, and Act 571 of 2016, the Local Investment Advisory Committee (LIAC), chaired by the State Treasurer, met on three occasions in 2016. The goal of LIAC is to increase 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.

In March 2016, a \$2 million agreement was reached with Champlain Housing Trust (CHT) to provide financing for CHT’s Local Investment Financing Trust (LIFT) to support the preservation, acquisition, and stabilizing of multifamily and single family housing for the benefit of low, moderate, and median income families and individuals in Vermont.

In May 2016, a \$4 million agreement was reached with the Vermont Student Assistance Corporation (VSAC) that directed local investment dollars towards lowering the fixed rates on Vermont Advantage loans for parents and students, starting at 4.8 percent – the lowest rates ever offered in Vermont.

Although not under the jurisdiction of the LIAC, ACT 157 of the 2016 Legislative Session 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.

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 then, two reports have been completed. These reports are available on the Public Retirement Study Committee webpage. The enabling legislation was amended by Act 157 of 2016 to extend the work of the committee until 2018.

In 2016, PRSC collected resources regarding retirement security as well as potential plan options for Vermont. Upon the request of PRSC, the Treasurer’s Office employed the Center for Retirement Initiatives at the McCourt School of Public Policy at Georgetown University to author a report detailing potential plan options for PRSC. PRSC has reported its findings and recommendations to the General Assembly. PRSC will continue to study the feasibility of a potential plan until it sunsets in 2018.

Please visit Public Retirement Study Committee webpage for more information.

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 2016, there were no new funds deposited into this fund. There was \$154.15 earned on the balance in the fund. There were no claims submitted and, therefore, no expenditures from the fund during fiscal year 2016. The fund balance as of June 30, 2016 was \$50,241.54.

Vermont Achieving a Better Life Experience (ABLE)

The General Assembly passed enabling legislation for a Vermont Achieving a Better Life Experience (ABLE) Savings Program in Act 51 during the 2015 legislative session. In 2016, the language 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.

The Vermont ABLE 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. Pursuant to Act 51, the State Treasurer convened an ABLE Task Force on August 31, 2015. In 2015 and 2016 the Task Force met six times.

In June 2016, the Treasurer's Office and the Vermont Developmental Disabilities Council (VTDDC) convened a meeting of New England state disability organizations, 529 Administrators, and Treasurer's Offices to discuss ABLE implementation, the feasibility of forming partnerships, and concerns of potential participants.

In the summer and fall of 2016, the Treasurer's Office, Vermont Developmental Disabilities Council, and Green Mountain Self-Advocates, conducted a series of interviews with potential partner states. On September 23, 2016 the Treasurer's Office convened a meeting with the Vermont ABLE Task Force and other organizations that work with Vermonters with disabilities. The Task Force agreed that the State of Ohio's STABLE program was the best product available for Vermonters with disabilities and their families. The Task Force recommended that the State Treasurer pursue a partnership with the Ohio State Treasurer's Office to implement Vermont's ABLE program.

On November 21, 2016, The Treasurer's Office announced a partnership with the Ohio Treasurer's Office. Vermont's ABLE program is currently in development. Preliminary plans call for a debit card and a Vermont branded webpage. The Vermont ABLE program will launch in the first quarter of 2017 in partnership with the Ohio State Treasurer's Office.

The Task Force and State Treasurer continue to recommend that the Vermont Agency of Human Services (AHS) and its departments conduct rulemaking and other appropriate measures to ensure that ABLE accounts are expressly exempt from consideration as an asset or resource in determining eligibility for State benefit programs. This will eliminate confusion for administrators and beneficiaries and ensure that participants in ABLE savings plans may continue participation in other benefit programs uninterrupted, and without affecting their eligibility. Rules will also ensure consistency across public benefits programs. AHS, the Department on Aging and Independent Living (DAIL), and VTDDC are currently collaborating to set rules and procedures to address these considerations.

The Task Force and State Treasurer recommend that an annual update be submitted to the General Assembly through the Treasurer's Office regarding participation and progress of the Vermont ABLE program.

The Task Force and State Treasurer advocate for the continuation of the Vermont ABLE Task Force, rather than forming an "ABLE Advisory Board." The Task Force and the Treasurer's Office will continue to convene the Vermont Able Task Force in an ad-hoc fashion. Additional members may be added in consultation with VTDDC.

Please visit the Vermont ABLE Task Force webpage for more information.

Trust Investment Account

The 2000 State Legislature 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, 2016, the fund had a principal balance of \$60.7 million, of which 50% was allocated to the Higher Education Endowment Trust Fund, 32% to the VSERS OPEB, 15% 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, 2016 balance of \$1,355,647 and the Tobacco Trust Fund had a balance of \$474,122.

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 2016, the fund returned 2.5%. 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 0.6% 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.

Below please find additional details regarding the largest component of the Trust Investment Account.

| | | |
|--|--|---------------------|
| Ending balance FY 2015 | | \$30,888,836 |
| | FY15 Contributions received in FY 2016 | \$54,006 |
| Opening balance FY 2016 | | \$30,942,842 |
| | Distributions FY2015 | |
| | 5%: <i>University of Vermont</i> | (\$506,785) |
| | <i>Vermont State Colleges</i> | (\$506,785) |
| | <i>Vermont Student Assistance Corp.</i> | (\$506,785) |
| | 2%: <i>University of Vermont</i> | \$0 |
| | <i>Vermont State Colleges</i> | \$0 |
| | Income earned FY 2016 | \$856,793 |
| | Appreciation (Depreciation) FY 2016 | (\$84,393) |
| | Fees and Other Charges FY 2016 | (\$2,878) |
| Balance June 30, 2016 | | \$30,192,009 |
| | Statutory Distributions FY2016 ¹ | |
| | 5% of 12-Quarter Moving Average as of June 30, 2016 | (\$1,505,318) |
| | 2% of 12-Quarter Moving Average as of June 30, 2016 | (\$608,142) |
| | Total Statutory Distribution Projected | (\$2,113,460) |
| Total contributions as of June 30, 2016 | | \$29,038,711 |
| | Dollar Adjustment to the Statutory Distribution to maintain the Principal Balance level required by statute | (\$960,162) |
| | 5% Distribution Adjusted -23.4% | (\$352,020) |
| | 2% Distribution Adjusted -100% | (\$608,142) |
| | Total Distribution Adjusted to Maintain the Principal Balance Floor as Required by Statute | \$1,153,297 |
| Balance after distributions | | \$29,038,711 |
| | 2% Income Available for Endowments from FY 2017 (contingent on an institutional match in FY 2017) | \$602,127 |

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

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, 2016 have been \$29,038,711. The 5% distribution available this year is \$1,153,297 in total or \$384,432 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 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 Johnson 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 2016 totaled \$29,038,711. For more detailed information regarding the Higher Education Endowment Trust Fund, please visit the State Treasurer's website at http://www.vermonttreasurer.gov/sites/treasurer/files/pdf/trustFunds/Higher_Education_Trust_Fund_Report_2016.pdf

Higher Education Endowment Trust Fund Balance: June 30, 2016

| | |
|--|---------------------|
| Ending balance FY 2015 | \$30,888,836 |
| FY15 Contributions received in FY 2016 | \$54,006 |
| Opening balance FY 2016 | \$30,942,842 |
| Distributions FY2015 | |
| 5%: <i>University of Vermont</i> | (\$506,785) |
| <i>Vermont State Colleges</i> | (\$506,785) |
| <i>Vermont Student Assistance Corp.</i> | (\$506,785) |
| 2%: <i>University of Vermont</i> | \$0 |
| <i>Vermont State Colleges</i> | \$0 |
| Income earned FY 2016 | \$856,793 |
| Appreciation (Depreciation) FY 2016 | (\$84,393) |
| Fees and Other Charges FY 2016 | (\$2,878) |
| Balance June 30, 2016 | \$30,192,009 |
| Statutory Distributions FY2016 ¹ | |
| 5% of 12-Quarter Moving Average as of June 30, 2016 | (\$1,505,318) |
| 2% of 12-Quarter Moving Average as of June 30, 2016 | (\$608,142) |
| Total Statutory Distribution Projected | (\$2,113,460) |
| Total contributions as of June 30, 2016 | \$29,038,711 |
| Dollar Adjustment to the Statutory Distribution to maintain the Principal Balance level required by statute | (\$960,162) |
| 5% Distribution Adjusted -23.4% | (\$352,020) |
| 2% Distribution Adjusted -100% | (\$608,142) |
| Total Distribution Adjusted to Maintain the Principal Balance Floor as Required by Statute | \$1,153,297 |