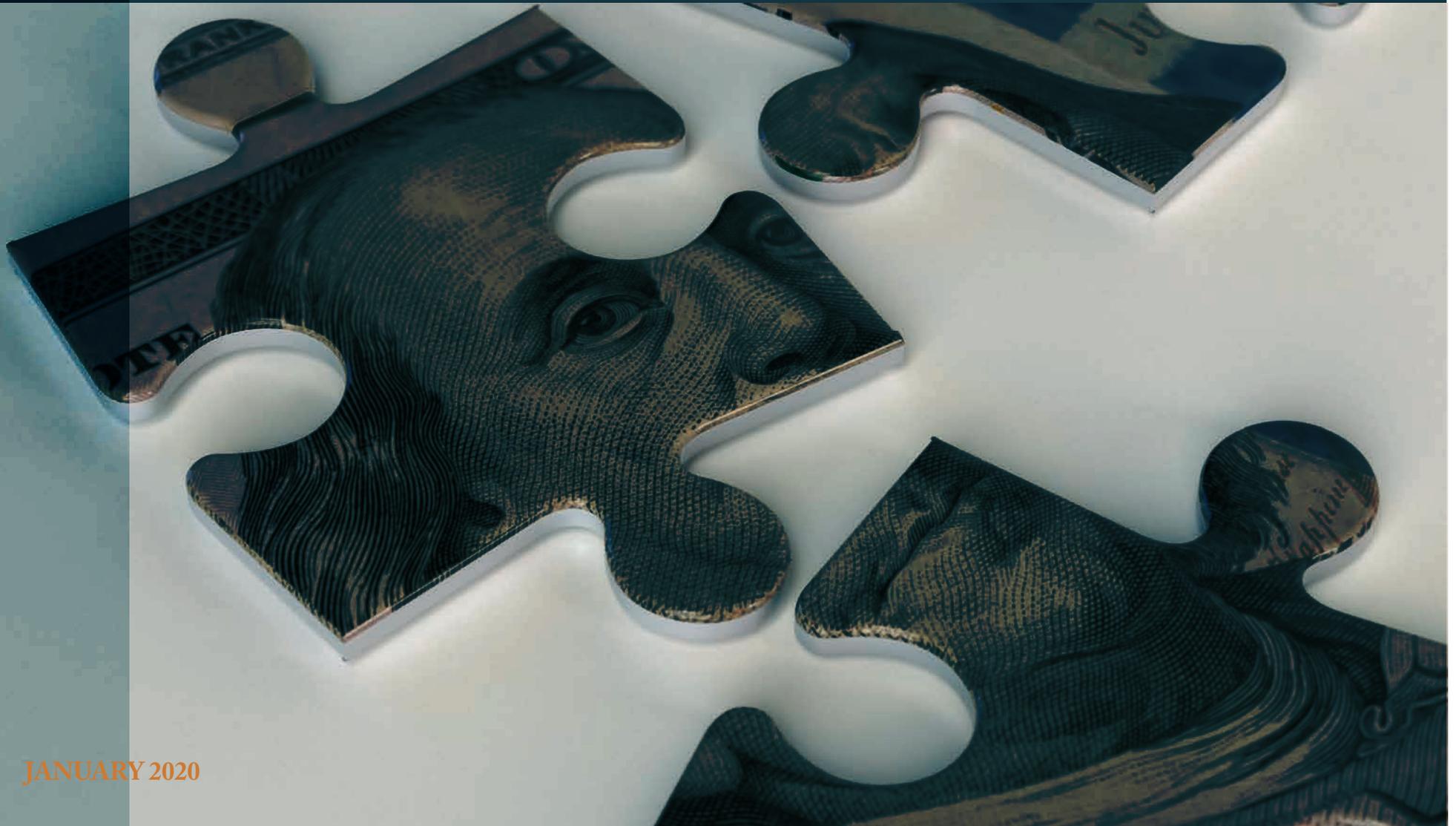




VERMONT  
BUSINESS  
ROUNDTABLE

POLICY OPTIONS  
FOR VERMONT STATE EMPLOYEE AND TEACHER  
PENSION AND HEALTH CARE RETIREMENT SYSTEMS



JANUARY 2020

## VERMONT BUSINESS ROUNDTABLE

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## INTRODUCTION

Vermont's elected representatives have some critical decisions to make regarding the state's long-term economic viability and the future health of everyone who calls the Green Mountain State home.

This challenge is focused primarily on the well-being of two groups, Vermont state employees and public school teachers. The Vermont State Teachers' Retirement System (VSTRS) pension and retiree health care benefits plan and the Vermont State Employees' Retirement System (VSERS) pension and retiree health care benefits plan are seriously underfunded—and have been for a number of years. This has created escalating taxpayer liabilities that each year consume more and more of the General Fund, leaving fewer financial resources for vital state programs and much-needed infrastructure improvements.

Vermont has a collective obligation to provide a secure retirement for these public employees. As of June 30, 2018, there were 19,161 active and retired VSTRS pension participants and 15,504 active and retired VSERS pension participants, for a total of 34,665 participants.

The Vermont State Treasurer's Office published the *Guiding Principles for a Retirement Plan*, which provides guidance on how to most effectively manage pension and health care plans so that they are *competitive, stable, compatible with changing workforce and demographic trends, sustainable and predictable over the long term, and affordable and equitable for current and future public employees and taxpayers.*

(<https://www.vermonttreasurer.gov/content/retirement/teacher>)

(<https://www.vermonttreasurer.gov/content/retirement/state>)

([https://www.vermonttreasurer.gov/sites/treasurer/files/Reports/2017/10\\_17%20Pension%20Presentation.pdf](https://www.vermonttreasurer.gov/sites/treasurer/files/Reports/2017/10_17%20Pension%20Presentation.pdf))

(See Appendix 1, Guiding Principles for a Retirement Plan)

## EXECUTIVE SUMMARY

Vermont is obligated to help fund the pension and retiree health care plans that it provides to its 34,665 (as of 2018) teachers and state employees. While the state has made some payments to these plans over time, billions are owed—and the amounts owed keep increasing at an accelerated rate. The unfunded liabilities for the pension plans have increased almost 110 percent in about a decade, from \$1.1 billion in 2009 to \$2.3 billion in 2018. At the same time, the unfunded liabilities for the retiree health care plans have reached \$2.2 billion, bringing Vermont's total unfunded pension and retiree health care liabilities to \$4.5 billion, with no sign of the increasing debt burden slowing down.

Due in part to these unfunded liabilities, for the first time in modern history, Vermont has a negative net worth, and the state's bond credit ratings have been lowered, making it more expensive to borrow money for infrastructure improvements and other projects. Unfortunately, given past investment performance for these plans, the situation is unlikely to improve. An August 2019 Institute for Pension Fund Integrity report identified Vermont as "one of the top 10 worst performing pension funds" in the nation.

Most Vermonters aren't aware of—and likely don't have the time, let alone desire, to try and understand—the complexities associated with these unfunded liabilities. But they should, because they are likely to feel the impact. Participants in these plans could lose their

benefits or see them dramatically curtailed. Taxpayers could see higher taxes, as these unfunded liabilities continue to grow and, ultimately, come due. The social safety net could be eroded because, as the costs of servicing these unfunded liabilities grow, less funds will be available for vital government services. And, economic development could suffer as potential investors shy away from a debt-ridden state.

And, trends indicate that the burden will continue to grow. Vermont's state and public school teacher workforce is aging and retiring, which will increase these unfunded liabilities. There are more participants in these pension and retiree health care plans now than there were 10 years ago, and fewer working Vermonters available to pay the taxes to fund these plans.

The purpose of this report is to educate stakeholders about the evolution and impact of these unfunded liabilities, utilizing facts and figures from reliable, objective sources, and to outline pathways and policy options for reducing these unfunded liabilities. Doing so will not be easy, as there are no quick fixes for a problem that has been growing for many years. Options for legislators include:

- Implementing rigorous annual stress tests to ensure Vermont can cover its future obligations without cutting core social services.

- Improving governance and transparency.
- Exploring cost-sharing policies.
- Creating defined contribution, hybrid, or other plans for new public employees.
- Developing an amortization plan for the retiree health care plans similar to the one designed to reduce pension payment obligations.

Maintaining the status quo, however, is just not viable or sustainable.

## OVERVIEW OF A CRISIS: UNDERFUNDED, UNDERPERFORMING, AND UNSEEN BY MOST

In just the past decade, the unfunded liability for the state employees' and teachers' pension plans (the Pension Plans) has swelled from \$1.1 billion in 2009 to \$2.3 billion in 2018. This is nearly a 110 percent increase in just 10 years.

In June 2019, the Pew Charitable Trusts issued its annual report on state public worker Pension Plans. The report indicated that, as of 2017, Vermont's funded ratio (the percent of plan accrued assets relative to the plan's current accrued liability) was 64.3 percent. The funded ratio lets Vermonters know if our savings are on track to pay the pension promises made. This report is telling Vermont that we have saved less than two-thirds of what should have been saved so far to meet this important obligation. Sixty-six percent of other states have a higher funded ratio than Vermont. (<https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/06/the-state-pension-funding-gap-2017>)

Similarly, the unfunded liability for the state employees' and teachers' retiree health care plans (the Health Care Plans and collectively, with Pension Plans, the Plans) has increased by almost 30 percent during the same period, rising from \$1.7 billion to \$2.2 billion. That means Vermont's total combined unfunded liability (for pensions and retiree health care) in 2018 under the Plans was \$4.5 billion—an increase of 61 percent in the last decade—and it continues to grow.

Across the country, state retirement systems are carrying a combined \$1.28 trillion in pension-

funding deficits and are struggling to provide benefits to their public-sector retirees. And these deficits would be even higher today if not for states' strong investment returns achieved by higher-risk plans in the bull market that has extended since March 2009, the longest in our nation's history. (<https://taxfoundation.org/state-pension-plan-funding-2019/>)

For the first time in modern history, Vermont has a negative net worth, having dropped from \$1.3 billion on June 30, 2017, to negative \$200 million just one year later. The reason is that as of 2018, the Government Accounting Standards Board (GASB) requires states to include retiree health care liabilities on financial statements, something it had not done before. That accounting change led to the state's bond credit rating being reduced, making it more expensive for Vermont state agencies and quasi-state agencies to borrow funds.

And on top of all these funding and budgetary challenges, the financial performance of Vermont's pension funds has been among the worst in the nation. Historical performance data shows that the Pension Plans, during the decade ending in June 2018, underperformed their peer groups—public pension funds of less than \$5 billion—by 81 percent (VSTRS) and 74 percent (VSERS). (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2018/FYE%20Q4%202018%20State%20Teachers%20IPA%20Full.pdf>) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2018/FYE%20Q4%202018%20State%20Employees%20IPA%20Full.pdf>)

*This report is telling Vermont that we have saved less than two-thirds of what should have been saved so far to meet this important obligation. Sixty-six percent of other states have a higher funded ratio than Vermont.*

In August 2019, the Institute for Pension Fund Integrity's Public Pension Performance report identified Vermont's pension plans as being in the "Top 10 Worst Performing Pension Funds" in the nation. ([http://ipfiusa.org/wp-content/uploads/2019/08/Public-Pension-Performance\\_IPFI\\_August2019.pdf](http://ipfiusa.org/wp-content/uploads/2019/08/Public-Pension-Performance_IPFI_August2019.pdf))

For most Vermonters, the idea of long-term pension and retiree health care obligations for state retirees is abstract and seems irrelevant to daily life. Many people are just trying to make it to the next paycheck, and others think it doesn't have an impact on them personally because they don't work for the state or teach in a public school.

It matters.

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## EVERYONE WILL BE IMPACTED

### **Public Pensioners—*Potential loss of benefits***

Vermont state employees and public school teachers have been working hard for decades, providing valuable services to everyone in the state. As these public employees move toward retirement, they have been promised a secure future in exchange for their years of service.

Unfortunately, Vermont's long history of underfunding and underperforming puts that future at risk. In other states, similar pension funding failures have led to the elimination of cost-of-living increases for pensioners, the pushing back of retirement ages, or cutting overall benefit packages.

### **Taxpayers—*Higher taxes, fiscal liability, and uncertainty***

In 2009, every Vermonter was responsible for approximately \$4,500 of the Plans' unfunded liabilities. By 2018, that cost had already jumped to about \$7,100 per Vermonter, and there's no indication that this progression is slowing down. And, as we move forward, any costs not covered by potential market gains (or losses) or through employee obligations will continue to be borne by Vermont taxpayers.

### **Government and the Social Safety Net—*Higher debt service, less funding for government services***

In April 2019, an article in VTDigger noted that "although Vermont's economy is humming right

now, about 40 percent of the \$54 million in expected surplus state revenue this year is going to be consumed by the pension liability." (<https://vtdigger.org/2019/04/06/whos-to-blame-for-the-crushing-burden-of-vermonts-retired-teachers-pension-fund/>)

To put the numbers in perspective, 3.8 percent (\$44 million) of Vermont's \$1.1 billion General Fund was consumed by the annual pension payment in 2009. By 2018, the General Fund was \$1.6 billion, but the share spent on the annual pension payment had almost doubled to 7.1 percent (\$111 million). In the approved 2020 budget, the share has grown to 9.0 percent (\$149 million). Other Vermont state funds, including the Education Fund, also are used to make pension payments. When compared to total state funds, 1.3 percent (\$59 million) of the Education Fund was used for pension payments in 2009. By 2018, the Education Fund's share had doubled to 2.6 percent (\$152 million), and in the 2020 budget it's 3.4 percent (\$208 million).

According to the State of Vermont's Fiscal Fundamentals Working Group, the state's fiscal solvency issue is worsening. Comparing Fiscal Year 2019 to Fiscal Year 2020, the working group notes that "in one year, overall payments toward the pension systems, other post-employment benefits (OPEB), and debt service will increase by \$36 million, consuming a significant portion of any projected revenue growth." The key takeaway? The working group concludes that "under the current framework, the situation will get worse in future years—

pension and OPEB obligations will continue to absorb a greater share of General Fund appropriations and crowd out spending on other programs."

Since October 2018, two of the three independent national rating agencies—Moody's Investor Service and Fitch Ratings—have lowered Vermont's bond rating, citing slower-than-average growth, an aging population, and high pension plus OPEB obligations. This leads to less credit-worthy entities paying higher financing costs for state, municipal, and other projects because of investor concerns about the quality and stability of state bonds and their long-term potential. (<https://www.vermonttreasurer.gov/sites/treasurer/files/debt/Moody%27s%20Credit%20Opinion.pdf>) (<https://www.vermonttreasurer.gov/sites/treasurer/files/debt/pdf/Fitch%20Rating%20Report.pdf>)

What does this mean for Vermont's legislative priorities? Given the yoke of the unfunded liabilities, how can we make meaningful advances on other urgent state priorities, including early child care and learning, college and career readiness, keeping Vermont affordable for all, and a host of other important initiatives?

### **Businesses and Economic Development—*Vermont considered an unattractive place to invest***

During a CNBC interview in early 2019, billionaire investor Warren Buffett issued a warning to business owners regarding the

## HOW WE GOT HERE

pension crisis: “If I were relocating into some state that had a huge unfunded pension plan, I’m walking into liabilities.” (<https://www.cnbc.com/2019/02/25/full-transcript-billionaire-investor-warren-buffett-speaks-with-cnbc-becky-quick-on-squawk-box-today.html>)

Unfortunately, Vermont is the poster child for the cautionary investment and economic development tale shared by the “Oracle of Omaha” in the CNBC interview. Although we certainly are not alone in carrying a pension funding gap, as the 50 states combined have unfunded liabilities of more than \$1 trillion, the unfunded liabilities create an additional challenge for economic development in Vermont.

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Funding for the Plans, at current levels, is not sustainable. The problem has been building for decades, through almost every administration, and it continues to grow.

### Growth of Health Care Plans’ Obligations: 1979-Present

When state employees and teachers retire, they receive pension payments as well as other post-employment benefits, known as OPEB. States’ costs for OPEB are almost exclusively related to health care, and that is the case under the Health Care Plans.

In a 2017 Pew Charitable Trusts study (updated in October 2018 to reflect additional information provided by states), there is a large disparity in OPEB-funded ratios, ranging from 19 states—including Vermont—whose ratios are less than 1 percent, up to 92 percent in Arizona. The variation in these OPEB liabilities reflects the difference in how states structure health care benefits for retirees, and the expected cost of the benefits for current workers and retirees over the course of their lives. (<https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2017/09/state-retiree-health-care-liabilities-an-update>)

Like many other states, Vermont has a pay-as-you-go system; annual contributions are expected to cover only the current costs of health care for participating retirees. That means that the state is paying only the retirees’ annual medical and administrative health care expenses while unfunded liabilities grow each year. In 2018, the unfunded amount for one year was approximately \$60 million, bringing the total unfunded liability for the Health Care Plans to \$2.2 billion. Future health care liabilities, on a system-wide scale, are unfunded and unknown.

Effective July 1, 2014, Vermont established a separate trust in an attempt to account for the assets and liabilities of the teachers’ retiree health care fund. Prior to that date, payments for the retired teachers’ medical expenses were taken from the teachers’ pension investments. This practice was one of the main drivers for the funding ratio difference between the teachers’

pension funds and the state employees’ pension funds. Although Vermont’s treasurer projected a savings of \$480 million in avoided interest costs through 2038 from this change, it has not headed in that direction. The unfunded liability of the teachers’ retiree health care plan, at June 30, 2014, was \$766 million; as of June 30, 2018, it was \$954 million—an increase of \$188 million.

### The Underfunded Teachers’ Pension Years: 1979-2006

Between 1979 and 2006, Vermont shortchanged the teachers’ pension plan by almost \$172 million (net), with the majority of the underfunding—\$160 million—taking place during the 14 years highlighted in the following Vermont state treasurer’s chart (1991-2000, 2003-2006). Between 1991 and 2000, the teachers’ pension plan received only 62 percent, or less than two-thirds, of its actuarially recommended contributions from the state. In all but four of the years between 1979 and 2006—more than a quarter century—Vermont underfunded its teachers’ pension plan.

*That means that the state is paying only the retirees’ annual medical and administrative health care expenses while unfunded liabilities grow each year.*

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

([https://www.vermonttreasurer.gov/sites/treasurer/files/Reports/2017/10\\_17%20Pension%20Presentation.pdf](https://www.vermonttreasurer.gov/sites/treasurer/files/Reports/2017/10_17%20Pension%20Presentation.pdf))

## The 30-Year Pension “Mortgage”: 2009-2038

Effective July 1, 2008, Vermont required that the Pension Plans amortize their unfunded liabilities over a 30-year period. In other words, the Legislature required that these obligations be fully funded by the end of Fiscal Year 2038.

Each year, the payment is calculated using an assumed rate of return, which is defined as the net gain (or loss) on an investment during a specified time period expressed as a percentage of the initial cost. If that assumed rate of return is not met, then the state must make up the difference in contributions to the Pension Plans.

Unfortunately, the Pension Plans’ earnings have not come close to meeting the targeted rates of return. For Fiscal Year 2018, the assumed rate of return for the Pension Plans was 7.5 percent. During the same fiscal year, the 10-year actuarial value return was much lower—5.32 percent for the teachers’ pension plan and 5.61 percent for the state employees’ pension plan—leaving significant liabilities for Vermont taxpayers to cover.

(See Appendix 2, VSTRS and VSERS 10-Year and 20-Year Actuarial Value vs. Market Value Returns, to see how actuarial value investment returns are different from market returns because they allocate investment gains and losses over multiple years to reduce year-to-year pension plan volatility. Actuarial value returns, not market returns, determine pension funding levels required each year.)

To help the general public better understand the 2008 legislation, some commentators have compared it to the 30-year fixed mortgages that countless Vermonters have taken out to finance

the purchase of a home that serves as a key step toward living the American Dream. Yet there's one critical difference that largely nullifies this comparison: Unlike those mortgages, Vermont's pension payments and the debt owed are not fixed, and they keep spiraling upward owing to poor investment performance, plus unrealistic assumptions about what those rates of return will be in the future.

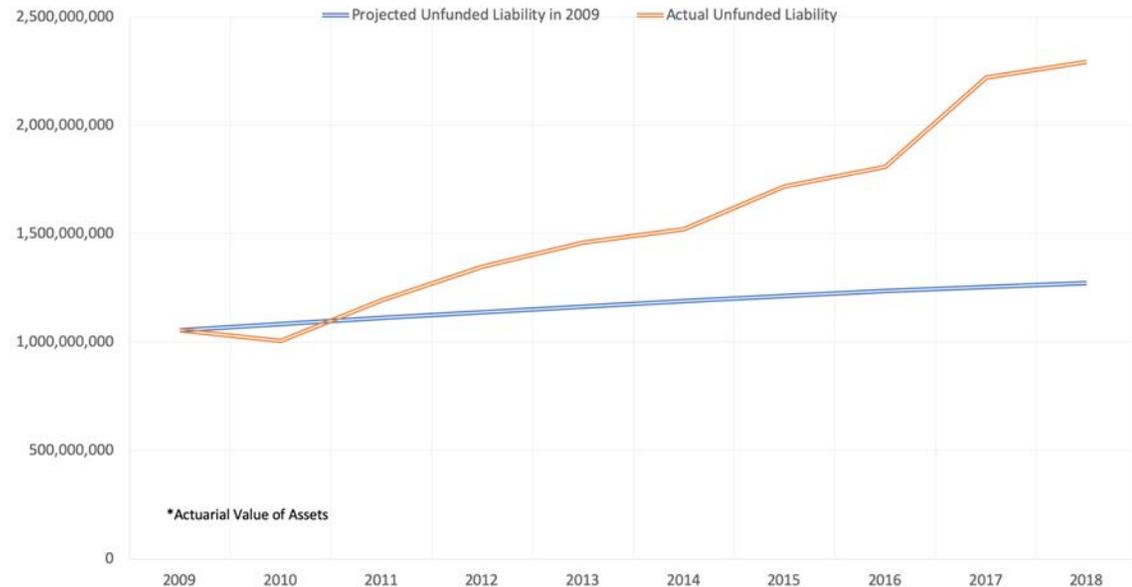
As mentioned above, each year Vermont's "mortgage" payment to the Pension Plans is calculated, in part, on an assumed rate of return. To the extent the assumed rate of return is not met for a particular year, the payment for the following year is increased to cover the difference.

Though they were well-intentioned, the changes implemented in 2008 did not make the intended difference. In fact, the unfunded liability for the Pension Plans increased by 110 percent, from \$1.1 billion in 2009 to \$2.3 billion in 2018, and the required annual payment for the Pension Plans' unfunded liability almost quintupled, from \$30 million in 2009 to \$147 million in 2018. In the unfunded pension liabilities chart below, the discrepancy between the 2009 actuarial projections for the Pension Plans and the fiscal reality is represented by the divergence of the blue and red lines.

Setting unrealistically high rates of return seems like something that would be easy to correct. Yet those determining state policy may perceive advantages to projecting higher rates.

Extending the mortgage analogy to include how individuals plan for retirement clarifies the current financial situation.

**PROJECTED (IN 2009 FIRST YEAR OF 30 YEAR AMORTIZATION PROCESS) AND ACTUAL TOTAL UNFUNDED PENSION LIABILITIES OF TEACHERS AND STATE EMPLOYEES PENSION FUNDS (AVA\*) IN DOLLARS**



(<https://vtdigger.org/2019/09/04/john-pelletier-a-tale-of-two-states-pension-plans/>)

### The Mortgage Metaphor

Imagine buying your home with a \$200,000 mortgage that has a 30-year term and making every payment for 10 years. Yet during this same decade, your monthly mortgage payments increase. After 10 years, the bank informs you that although you still have 20 years to pay off your mortgage, you now owe \$420,000—110 percent more than the principal on your original loan. Between 2008 and 2018, through unrealistic expectations and poor investment performance, this is exactly what happened to the Pension Plans' unfunded liability.

As a homeowner, you want the lowest interest rate possible so as to reduce your monthly mortgage payments. But in state government, smaller payments made by the state into the Pension Plans translate into more money being available in the General Fund for existing and new programs. One way to achieve these smaller payments is by setting unrealistically high rates of return on pension investments.

Now, pension plans are essentially the same thing as individual retirement plans. If you estimate that you're 30 years from retirement, and you're an optimist, you calculate that your savings will generate a return of 8.25 percent, on average, for the next three decades. If you want to be a millionaire when you retire, you'll need to save \$7,800 per year (assumes annual contribution and annual compounding). Over 30 years you will have \$234,000 in savings, and the rest (\$767,494) will be investment gains from your savings. That's the power of compound interest at work.

But what if your original estimated rate of 8.25 percent is wrong, and the actual return on your retirement investments is much lower, say 6.5 percent? You won't retire a millionaire because you'll have less than 72 percent (\$717,516) of your goal available to spend. You will have the same \$234,000 in savings, but now your investment gains will be much lower, only \$483,516.

This is essentially what has happened with the Pension Plans. The higher rate of return assumptions greatly reduced the annual payment by the state from the General Fund, allowing the state to spend more money on other programs. While that may have some short-term benefits, it creates long-term problems. Because they were unrealistically optimistic about rates of return, we must make up the difference each year as the costs spiral upward. The use of unrealistic rates of return increases our Pension Plans' liabilities each year. This is the power of compound interest, but in reverse.

## The Select-and-Ultimate Years: 2012-2015

Since 2006, Vermont has met or exceeded its annual actuarially recommended Pension Plans' contributions.

However, in Fiscal Years 2012 through 2015, that achievement was made possible in part by a significant change in the actuarial assumptions, which materially reduced the state's annual contributions to the Pension Plans. The Pension Plans changed their assumed rate of pension investment returns from a flat rate of 8.25 percent to what is known as the "select-and-ultimate rate system," which is used by very few states.

The select-and-ultimate rate system used the following assumed rates of return, which were reset/started over at Year 1 each fiscal year:

Year(s)	Actuarial Assumed Rate of Return
Year 1	6.25%
Year 2	6.75%
Year 3	7.00%
Year 4	7.50%
Year 5	7.75%
Years 6-8	8.25%
Years 9-15	8.50%
Year 16	8.75%
Years 17 and later	9.00%

Compound interest calculation was done using Bankrate's calculator at: <https://www.bankrate.com/calculators/savings/compound-savings-calculator-tool.aspx>

This low-now-but-high-later sequence of returns resulted in the following overly optimistic average annual assumed rates of return—through 2038—for just the four years that the select-and-ultimate system was in place:

- 2012: 8.42%
- 2013: 8.39%
- 2014: 8.37%
- 2015: 8.34%

A February 2018 report from the Center for Retirement Research at Boston College, *The New Hampshire Retirement System: A Look Backward and Forward*, includes the following assessments:

"Vermont TRS [Teachers Retirement System] experimented with the use of what is called a select-and-ultimate assumed return. This approach required the plan to maintain separate short- and long-term return expectations. Vermont TRS set lower return expectations in the short-term with higher expectations for the long-term, based on the plan's target asset allocation."

"Interestingly, the plan annually reset the return schedule so that its assumed return always reflected the low short-term returns expectations, which increased the UAAL [unfunded actuarial accrued liability] each year. The plan switched back to a single rate of 7.95 percent in 2015. While it is not explicitly clear why the plan returned to its old method, the 2010 experience study indicated that shifting to a select-and-ultimate approach increased costs." (<https://crr.bc.edu/special-projects/special-reports/the-new-hampshire-retirement-system-a-look-backward-and-forward/>)

This framework allowed Vermont to justify an artificially high assumed rate of return for four

years and contribute less to the Pension Plans. The actuarial valuation reports for the Pension Plans from Fiscal Year 2012 through Fiscal Year 2015 indicate that the use of the select-and-ultimate system increased the unfunded pension liabilities by \$323 million in four years—\$186 million for the teachers’ pension plans and \$137 million for the state employees’ pension plans. This one actuarial assumption change is responsible for more than a quarter of the increase in the Pension Plans’ unfunded liabilities since 2009. It has been estimated that without the select-and-ultimate approach, the General Fund would have contributed an additional \$157 million into the Pension Plans during those four years. With investment returns, these contributions should have been worth about \$241 million on June 30, 2019. (<https://vtdigger.org/2019/09/04/john-pelletier-a-tale-of-two-states-pension-plans/>)

For more details on the increased liabilities as well as links to the actuarial reports, see Appendix 3.

## High Assumed Rates of Pension Investment Return: 2009-2018

Vermont’s assumed rate of return for the Pension Plans’ investments is higher than that of most other states, and historically the assumed rate has been more optimistic than the actual returns realized. This means Vermont’s actual liability is understated, and the unfunded liabilities continue to grow. Each year, the state must make up the difference, with funding coming from an increasing percentage of the General Fund.

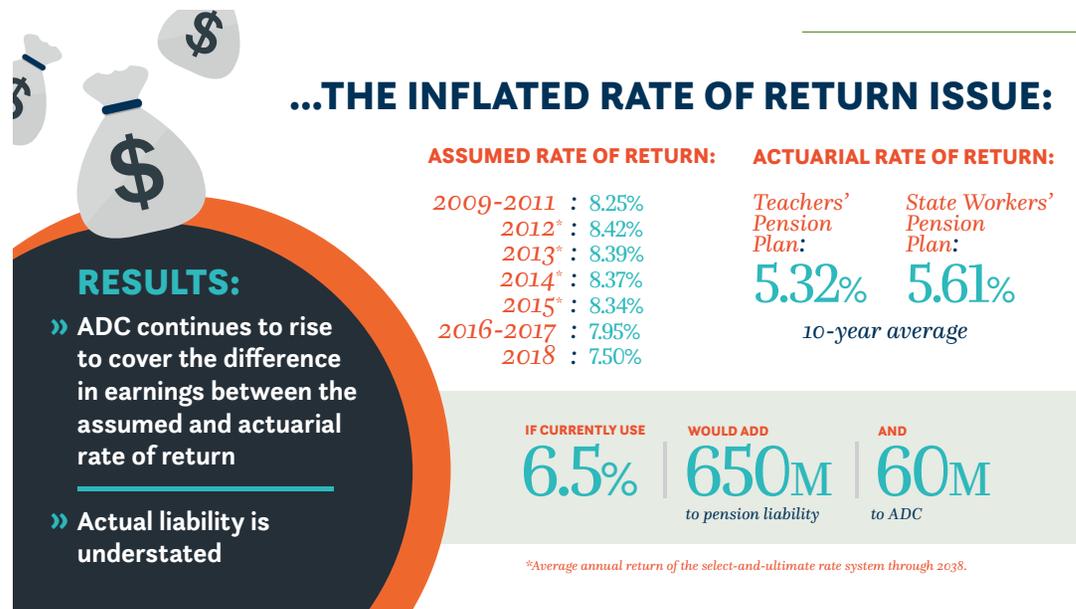
Among the assumed rates of return for pension funds among our New England neighbors as well as in New York State, Vermont’s is the highest based on 2018 assumptions:

- Connecticut: 6.90%
- Maine: 6.875% (reduced to 6.75% in 2019)
- Massachusetts: 7.35%
- New Hampshire: 7.25%
- New York State: 7.00%
- Rhode Island: 7.00%
- Vermont: 7.50%

We should note that at the end of 2016, the California Public Employees’ Retirement System (CalPERS), the largest pension plan in the country, voted to lower its assumed rate of return to 7 percent by 2020 after having failed to meet its 7.5 percent target for two years (<https://www.reuters.com/article/us-california-calpers/calpers-votes-to-lower-expected-investment-return-rate-to-7-percent-by-2020-idUSKBN14A2EE>). In fact, Bloomberg reported in June 2019 that the chief investment officer of CalPERS told its board that “for the next 10 years, our expected returns are 6.1 percent, not 7 percent.” (<https://www.bloomberg.com/news/articles/2019-06-28/pension-crisis-deepens-as-strategies-shift-outlooks-dim-chart>)

Vermont’s current assumed rate of return is set at 7.5 percent versus a median (for 2017) assumed return for all states of 7.15 percent, according to the Pew Charitable Trusts report published in 2019. And Vermont’s assumed rate of return was as high as 8.25 percent in 2009-2011 (and even higher during the 2012-2015 select-and-ultimate years) and 7.95 percent in 2016-2017. These higher expectations contrast starkly with Vermont’s 2018 true 10-year average annual rate of actuarial value return of 5.32 percent for VSTRS and 5.61 percent for VSERS.

The national median rate of return has decreased because the “trend toward lower investment assumptions is consistent with observations by experts, who forecast lower-than-historical returns of 6.5 percent due to expectations of lower economic growth and persistent low interest rates.” In 2017, only 13 states had assumed rates of return higher than Vermont. (<https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/06/the-state-pension-funding-gap-2017>)



(<https://www.vermonttreasurer.gov/content/retirement/teacher/financial-reports>)  
 (<https://www.vermonttreasurer.gov/content/retirement/state/financial>)

# DEMOGRAPHIC AND ECONOMIC CHALLENGES

The realities of Vermont's reduced (and aging) workforce—plus rising debt, and payments to the Plans—are such that policymakers will have to wrestle with a series of difficult questions. This includes deciding how to provide retirement benefits that the state has historically neglected to fully fund, that are increasingly unaffordable, that imperil retirees' benefit levels, and that limit the state's ability to support other important public investments.

During the past decade, Vermont's population has essentially remained stagnant, hovering near 625,000 people. At the same time, the total workforce has decreased by about 5 percent. And, importantly, in the same period, the net number of retired and active participants in the Plans has increased by 17 percent, with almost 4,800 more plan participants (active and retired) since 2009.

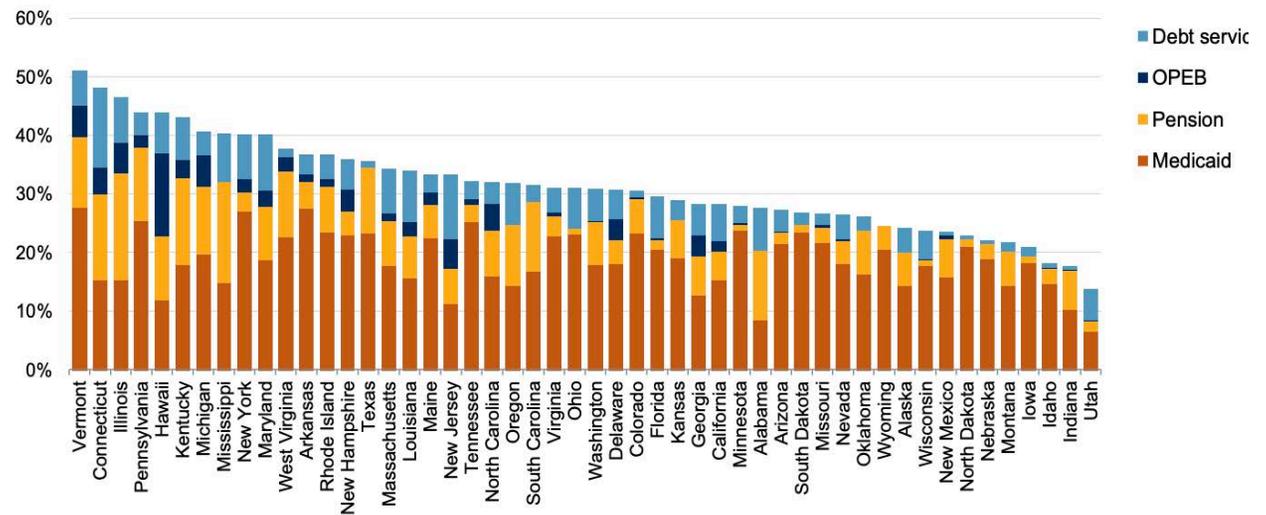
U.S. Census data shows that between 2010 and 2018, about 1,500 more people left the state than moved to Vermont. High-profile initiatives such as the Remote Worker Grant Program and others that offer cash incentives for people to move here have been successful, but the focus of such programs is on a small cohort of the population. Younger working-class and middle-class residents—those who typically are more likely to work for the state or teach in the public school system—are more likely to move away seeking brighter economic horizons. (<https://vtdigger.org/2019/09/13/people-are-leaving-vt-in-droves-where-are-they-going/>)

In August 2019, the Vermont Legislative Joint Fiscal Office reported that the state lost more than 4,100 tax filers during a five-year period. As a percentage of the total taxpayer base, this net loss is the 11th-worst in the country during that period. (<https://ljfo.vermont.gov/assets/Publications/Issue-Briefs/3bed2c98d0/Age-and-Income-Issue-Brief-Final.pdf>)

And finally, what information do bond rating agencies consider when establishing credit

ratings for states? They look, in part, at each state's general fund expenditures that go to Medicaid, debt service and pensions, plus OPEB contributions (e.g. retiree health care plans). As shown on the chart below, according to S&P Global Ratings, over 50% of Vermont's General Fund is spent on these expenditures, the highest percentage in the country.

**Combined Medicaid, Debt Service, Pension And OPEB Contributions Share Of General Fund Expenditures**  
Mandatory expenditures can reduce fiscal flexibility



Source: S&P Global Ratings' survey of state budgets, adjusted for biennial budgets where applicable. Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

([https://www.capitaliq.com/CIQDotNet/CreditResearch/RenderArticle.aspx?articleId=2101107&SctArtId=460009&from=CM&ns\\_code=LIME&sourceObjectId=10694436&sourceRevId=5&fee\\_ind=N&exp\\_date=20280917-19:23:31](https://www.capitaliq.com/CIQDotNet/CreditResearch/RenderArticle.aspx?articleId=2101107&SctArtId=460009&from=CM&ns_code=LIME&sourceObjectId=10694436&sourceRevId=5&fee_ind=N&exp_date=20280917-19:23:31))

# PATHWAYS AND POLICY OPTIONS

## POLICY OPTION #1

### Conduct Rigorous Annual Stress Testing

Stress tests are designed to ensure that public employee pension systems can pay future obligations without sacrificing fiscal discipline or cutting core services. As noted in a May 2018 analysis from the Harvard Kennedy School's Mossaver-Rahmani Center for Business & Government, "standard stress test reporting . . . better inform(s) policymakers about the costs and risks associated with funding pension promises."

In Susan K. Urahn's article *Why Our Public Pensions Need Stress Tests*, the executive vice president and chief program officer at the Pew Charitable Trusts points out that "with a nonpartisan, data-driven approach to stress testing, states can go a long way toward making sure that their pension funds will weather all cycles of the economy. This will enable them to adopt funding and benefit policies that are fair, affordable and fiscally sustainable while also putting employees on the path to a secure retirement." (<https://www.pewtrusts.org/en/about/newsroom/opinion/2018/07/31/why-our-public-pensions-need-stress-tests>)

Conducting an annual and robust stress test, including the potential for market and other economic downturns, is the best way to identify and correct issues before they become problems. Stress tests can help assess current contribution policies, provide an early warning

system, improve budgetary planning, encourage assessment of any proposed plan changes, avoid costly mistakes, and inform long-term constraints.

The Vermont Pension Investment Committee (VPIC) and each of the Pension Plans asked an actuarial firm to do a partial, one-time risk assessment—not as rigorous as a full stress test—that was issued in September 2019. This risk assessment does not cover financial risks associated with the Health Care Plans and does not look at the sustainability of the Plans due to other economic conditions.

What will happen if we continue to not meet our optimistic rate of return targets, or if state revenue drops? The United States is currently experiencing the longest bull market and economic recovery in its history, so the potential for a recession or bear market must be a part of any stress test.

Currently, 10 states require by law some measure of routine financial risk analysis and risk reporting for their public worker retirement funds, including the requirement for public pension systems to analyze the impact of downturns on pension costs and liabilities, financial market volatility, and contributions.

In 2017, Connecticut lawmakers mandated an annual stress test for Connecticut's State Employee Retirement System and Teachers' Retirement System. The process simulates a

The weight of prior decisions to not fully fund our obligations has been building; unfortunately, there is not a silver bullet that can quickly remove the threat. Maintaining the status quo, however, is not a viable or sustainable option.

With no quick fixes to reducing these liabilities, it will take discipline, forward-thinking, and broad-based support to implement what's best for the long-term security of all Vermonters. Guided by the principles mentioned previously in the Vermont State Treasurer's Office's *Guiding Principles for a Retirement Plan*, changes to the Plans should exemplify the best value for participants as well as for taxpayers.

The Vermont Business Roundtable's Pension Reform Task Force suggests that legislators think about their options through the lens of the following central policy questions:

- What policy actions are in the best long-term interest for Vermont's fiscal stability through varied economic cycles?
- How can Vermont honor its obligations to current beneficiaries over the long term?
- What sustainable benefit program designs should be considered for future enrollees?
- How can the people's representatives be held accountable to future generations of Vermont taxpayers, who otherwise will inherit the full force of these liabilities?

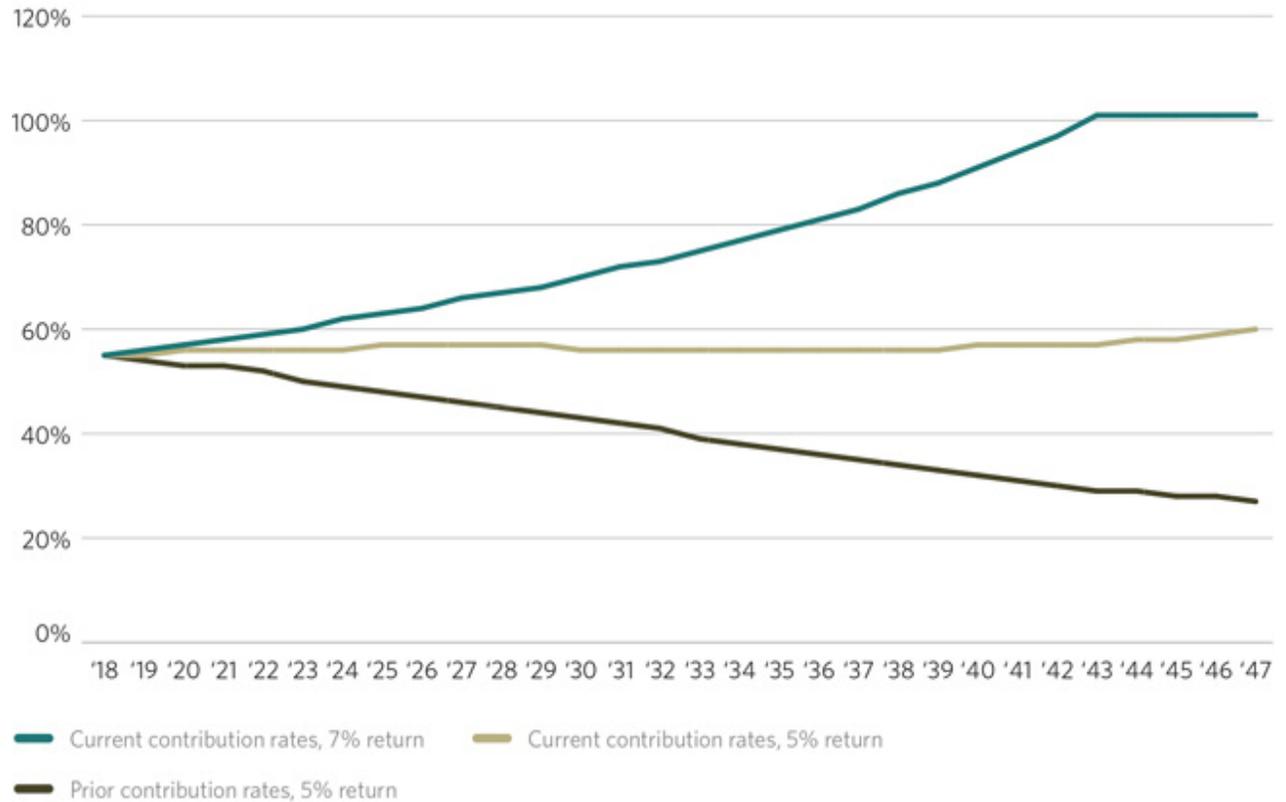
variety of economic scenarios and investment returns that can guide lawmakers on potential liabilities and costs, for not only the state’s budget, but investments for the retirement system. Using the results of the first stress test, Connecticut saw improvements by making changes to avoid cost increases that could have limited the funds available if there had been an economic downturn. (<https://www.pewtrusts.org/en/research-and-analysis/articles/2019/01/30/stress-testing-in-connecticut-shows-reforms-stabilizing-state-pension-system>)

In the same year, Pennsylvania lawmakers enacted significant pension reforms that required annual stress testing of the state’s public worker and teacher retirement systems. Designed to help the state weather economic cycles, the stress tests model a wide range of economic projections and investment returns to give policymakers a better sense of potential costs and liabilities. (<https://www.pewtrusts.org/en/research-and-analysis/articles/2019/04/17/pennsylvania-seeks-to-strengthen-state-retirement-systems>)

In Hawaii, lawmakers adopted in 2017 regular stress testing while implementing a set of standards from the GASB that were enacted after the Great Recession to require disclosure of liabilities that are one percentage point above or below the assumed rate of return. Two years later, in 2019, Hawaii’s funding projections are on a better trajectory, and policymakers can understand them—and take action, if needed—to avoid future vulnerabilities. (<https://www.pewtrusts.org/en/research-and-analysis/articles/2017/09/11/hawaii-adds-new-tool-to-monitor-state-pension-fund>) (<https://www.pewtrusts.org/en/research-and-analysis/articles/2019/03/29/hawaiis-pension-fund-positioned-to-withstand-next-recession>)

## Hawaii Pension Funded Ratio Under Stress Test Analysis

### 2017 reforms reduce chances of fiscal distress



Source: Projections under current contribution rates from the Employees’ Retirement System of Hawaii, “Actuarial Asset and Liability Stress Test” (2018), <http://ers.ehawaii.gov/wp-content/uploads/2018/12/Stress-Test-2018.pdf>; projections of contribution rates before the 2017 changes under lower-than-expected returns based on Pew calculations using data from Hawaii’s 2018 report

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(Source: <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/03/29/hawaiis-pension-fund-positioned-to-withstand-next-recession>)

## POLICY OPTION #2

### Improved Governance and Transparency

The challenges that states face to fully fund their pension obligations are well documented—in Vermont and across the country—but the same attention must be paid to the role of state pension boards and all those involved in making the decisions that will have a major impact on these obligations and therefore on the state's future.

For example, when setting assumed rates of return, the issue is less whether the rates are too low or too high than whether they are realistic and not subject to other concerns.

Paradoxically, “the governance structures of public pension funds typically lack many features that such funds champion for private companies,” according to the Manhattan Institute’s 2016 report *Safeguarding Public-Pension Systems: A Governance-Based Approach*. (<https://media4.manhattan-institute.org/sites/default/files/R-JCSM-0316.pdf>)

The Manhattan Institute report also notes that public pension boards often lack diversity and financial expertise. The National Association of State Retirement Administrators studied 87 boards and found that 73 percent of all board members were plan beneficiaries or elected officials. Another study conducted by the National Education Association reported that only 24 of 89 major public education pension plans required at least one citizen financial expert on the board.

To improve governance and transparency, the Manhattan Institute recommends that all states ensure that the composition of their pension

boards is as diverse as possible by including members with financial expertise and an advocate for taxpayers, and that union members who are plan participants don't hold a majority of the seats. To codify responsibilities, states should develop ethics guidelines and conflict-of-interest rules and adopt “prudent investor” fiduciary standards. Numerous controls can be enacted, including prohibiting lobbying by members, standardizing the process of choosing rates of return and investment assumptions, and prohibiting investing that is based on political or social agendas.

Five suggestions from the Pew Charitable Trusts would go a long way toward increasing the transparency of pension investments:

- Adopt comprehensive fee-reporting standards.
- Make investment policy statements transparent and accessible.
- Disclose bottom-line performance, both net and gross of fees.
- Expand performance reporting to include 20-year results by investment type.
- Include performance results by asset class, both net and gross of fees.

(<https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/02/making-state-pension-investments-more-transparent>)

As an example, South Dakota has the best-performing pension fund in the country, and it is 100 percent funded. When the South Dakota Retirement System was formed in 1974, policymakers set statutory funding thresholds as well as requirements for changes when needed so that it would stay within its budget. South Dakota statutes require a review of the investment policies—and a report to the governor and legislature—when the returns are lower than average, plus certified approval for any changes to assumed rates of return or other actuarial assumptions, a formal review of the funding system when certain criteria are not met, an annual report, and public records of all proceedings of the pension board.

For more details, see Appendix 5, How to Run a Pension Plan—The South Dakota Retirement System.

## POLICY OPTION #3

### Cost-Sharing Policy (Pension and Retirement Health Care Plans)

Although pension plans typically provide defined benefits to participants upon their retirement, there are a number of states with these traditional defined benefit plans that also have enacted cost-sharing plans or risk-sharing policies to equitably distribute unexpected cost increases between the state employer and state employees.

Events covered by cost-sharing policies in other states include short- or long-term deviations from plan assumptions, such as the Great Recession that began in December 2007. Often codified in state statutes, the policies are put in

place as a response to poor investment returns or unrealistic plan-funding ratios.

The need for cost-sharing policies reinforces the importance of conducting annual stress tests that can anticipate—and then mitigate—risks for pension participants and taxpayers.

Of course, legislators also must keep in mind that “the challenge of balancing pension costs with the need to recruit and retain a strong workforce has prompted policymakers in many states to take a closer look at how they provide retirement benefits,” according to Greg Mennis, director of the public sector retirement systems project at the Pew Charitable Trusts. (<https://www.pewtrusts.org/en/research-and-analysis/reports/2017/01/cost-sharing-features-of-state-defined-benefit-pension-plans>)

In a 2017 report, the Pew Charitable Trusts identified 29 defined benefit plans in 17 states (roughly one-third of all states) that use cost-sharing mechanisms to manage risks by:

- Splitting some or all of the plan costs between employers and employees.
- Adjusting employee contributions in response to investment returns.
- Adjusting benefit increases after retirement in response to investment returns.
- Adjusting benefit increases after retirement in response to plan funding levels.

(<https://www.pewtrusts.org/en/research-and-analysis/reports/2017/01/cost-sharing-features-of-state-defined-benefit-pension-plans>)

In 2009, the Vermont General Assembly created the Commission on the Design and Funding of Retirement and Retiree Health Benefit Plans for State Employees and Teachers. Operating within

the context of Vermont’s guiding principles for retirement plans mentioned earlier in this report, this “pension commission” recommended that an expenditure growth rate target of 3.5 percent be implemented (meaning that if the Plans’ costs increased by more than 3.5 percent in a year, that the state and the Plans’ participants would share in that increase), acknowledging that similar efforts were being made across the country because the costs of maintaining retirement programs—and related health benefits—were continually increasing faster than states’ ability to pay for them. Unfortunately, that recommendation was not included in the final negotiated agreement with the unions in 2010. If it had been included, Vermont could have saved millions of dollars and significantly reduced its current unfunded liability predicament. (<https://www.vermonttreasurer.gov/content/retirement-commission/>)

#### POLICY OPTION #4

### Creating Alternative Pension/Retirement Plan Designs for New Employees

As noted above, traditional pension plans provide defined benefits to participants upon their retirement. Defined contribution plans, including individual retirement savings accounts and 403(b) plans—the equivalent to 401(k) plans for private employers—are funded by a combination of employees and employers making contributions. The goal of creating defined contribution, hybrid, and other options is to equitably distribute unexpected costs between the state and its employees.

In other states that have enacted changes in how they manage their costs, risks, and obligations, new state employees and teachers typically have felt the greatest impact because negotiated

changes are more likely to affect those who have joined the workforce most recently rather than those with existing protections. (<https://www.pewtrusts.org/-/media/assets/2017/05/definedbenefitplansreport.pdf>)

As of 2017, the Pew Charitable Trusts reported that 13 states had pension plans with alternative plan designs going beyond the traditional defined benefit model. The states, representing all regions of the country and including our New England neighbor Rhode Island, have mandatory alternative plans as the primary benefit for at least some state workers or teachers. (<https://www.pewtrusts.org/en/research-and-analysis/reports/2017/01/cost-sharing-features-of-state-defined-benefit-pension-plans>)

In Pennsylvania, lawmakers enacted comprehensive reforms through a risk-managed hybrid retirement savings plan for new employees. Set up as a combination of a defined benefit and defined contribution pension plan, the 2017 legislation also requires the state to uphold all of its commitments to fully fund the existing pension system. State officials estimate that the reforms will save Pennsylvania taxpayers as much as \$20 billion over 30 years, depending on investment performance. (<https://www.pewtrusts.org/en/research-and-analysis/articles/2019/04/17/pennsylvania-seeks-to-strengthen-state-retirement-systems>)

#### POLICY OPTION #5

### Amortize Health Care Plans’ Unfunded Liabilities

In Vermont, when state employees and teachers retire, they receive pension payments as well as retiree health care benefits. The current pay-as-you-go system for the Health Care Plans makes no provisions to reduce the state’s legal obligation to cover health care costs for its retirees. As Vermont’s treasurer has pointed out,

## CALL TO ACTION

the rule of thumb is that for every dollar paid to retirees, 65 to 70 cents should come from investment income. (<https://legislature.vermont.gov/Documents/2020/WorkGroups/Senate%20Government%20Operations/Office%20of%20the%20Vermont%20State%20Treasurer/W~Beth%20Pearce~Office%20of%20the%20Treasurer-%20Pension%20Presentation~1-24-2019.pdf>)

As mentioned previously, in 2008, Vermont legislators passed a law requiring the state to have fully funded the Pension Plans' at the end of a 30-year amortization period ending in Fiscal Year 2038. While there are additional options for addressing the Health Care Plans' liabilities listed in Appendix 4 below, at a minimum, the Health Care Plans should have an amortization plan similar to what has been established for the Pension Plans.

**For more information on all policy options, see Appendix 4.**

Downplaying the significant challenges and long-term solvency associated with underfunded pension and health care obligations puts everyone in the state at risk.

The state has a legal obligation to provide a secure retirement for its employees and public school teachers. Yet, this challenge is compounded by escalating financial liabilities associated with pension and health care debt that each year consume more and more of the General Fund, leaving fewer resources available to fund vital state programs and much-needed infrastructure improvements.

In this report, the Vermont Business Roundtable has outlined pathways taken by other states and recommended five options for the Legislature to consider:

- Rigorous annual stress tests.
- Improved governance and transparency.
- Cost-sharing policies for existing employees and plan participants.
- Alternative pension/retirement plan designs for new employees
- 30-year amortization schedule for the Health Care Plans.

The Roundtable stands ready to engage with and support the efforts of legislative and administrative leaders to take on Vermont's pension and health care unfunded liabilities. Maintaining the status quo is not an option for the state's public employees and teachers who deserve a secure retirement. At the same time, all Vermonters deserve our best efforts to reduce the debt burden and to ensure long-term economic viability.

## APPENDICES

*Appendix 1: Guiding Principles for a Retirement Plan*

*Appendix 2: VSTRS and VSERS 10-Year and 20-Year Actuarial Value vs. Market Value Returns*

*Appendix 3: Actuarial Valuations During the Select-and-Ultimate Years*

*Appendix 4: Vermont Policy Options*

*Appendix 5: How to Run a Pension Plan—the South Dakota Retirement System*

*Appendix 6: The Vermont Business Roundtable’s Commitment to Pension Reform*

## **Appendix 1: Guiding Principles for a Retirement Plan**

(from the Vermont State Treasurer's Office website (2015 study, slide 2))

(<https://www.vermonttreasurer.gov/sites/treasurer/files/Reports/2015/Pen%20Overview%20Leg%20rev%202015%209.4.pdf>)

### ***Guiding Principles for a Retirement Plan***

Fairness and Sustainability Are Both Essential to Benefit Plans

#### **What Do We Want From Our Retirement Benefit Plan?**

- ▶ **Recruitment** – The benefit plan should act as an incentive for recruiting high quality employees. The plan must be competitive with those in other states and within Vermont.
- ▶ **Retention** – The benefit plan should act as an incentive for retaining high-quality employees and maintaining a stable workforce. The plan should also be compatible with changing workforce and demographic trends.
- ▶ **Reward** – The benefit plan should provide a solid foundation for retirement security following a career in public service.
- ▶ **Sustainability** – The cost of the benefit plan should be sustainable and predictable over the long term.
- ▶ **Affordability** – The cost of the benefit plan should be affordable for current and future public employees and other taxpayers.
- ▶ **Fairness** – The benefit plan should be fair to workers and other taxpayers.
- ▶ **Equity** – The benefit plan should be equitable for all parties.

## Appendix 2: VSTRS and VSERS 10-Year and 20-Year Actuarial Value vs. Market Value Returns

VSTRS Actuary Report	10-Yr Actuarial Value Return	20-Yr Actuarial Value Return	10-Yr Market Value Return	20-Yr Market Value Return
FY 2018	5.32%	6.90%	5.92%	6.10%
FY 2019	7.16%	6.67%	8.49%	5.92%

VSERS Actuary Report	10-Yr Actuarial Value Return	20-Yr Actuarial Value Return	10-Yr Market Value Return	20-Yr Market Value Return
FY 2018	5.61%	6.87%	6.17%	6.04%
FY 2019	7.11%	6.64%	8.23%	5.93%

VSTRS VPIC Report	10-Yr Return	Peer Median Return	Rank
FY 2018 (Revised)	5.5%	6.2%	82%
FY 2019	8.5%	9.0%	70%

VSERS VPIC Report	10-Yr Return	Peer Median Return	Rank
FY 2018 (Revised)	5.6%	6.2%	75%
FY 2019	8.5%	9.0%	70%

VSTRS FY 2018 Actuary Report (Page 20): ([https://www.vermonttreasurer.gov/sites/treasurer/files/VSTRS/VSTRS-reports/Actuarial-Valuation/VSTRS\\_2018\\_Valuation\\_Report.pdf](https://www.vermonttreasurer.gov/sites/treasurer/files/VSTRS/VSTRS-reports/Actuarial-Valuation/VSTRS_2018_Valuation_Report.pdf))

[www.vermonttreasurer.gov/sites/treasurer/files/VSERS/PDF/2019/VSERS%206-30-2019%20Valuation%20Report%20-%20Copy.pdf](https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/PDF/2019/VSERS%206-30-2019%20Valuation%20Report%20-%20Copy.pdf)

VSTRS FY 2019 VPIC Report (Page 7): (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2019/FYE%20Q4%202019%20State%20Teachers%20Retirement%20System%20Full%20IPA.pdf>)

VSERS FY 2018 Actuary Report (Page 20): ([https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS\\_2018\\_Valuation\\_Report.pdf](https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS_2018_Valuation_Report.pdf))

VSTRS FY 2018 VPIC Report (Page 7): (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2018/FYE%20Q4%202018%20State%20Teachers%20IPA%20Full.pdf>)

VSERS FY 2019 VPIC Report (Page 7): (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2019/FYE%20Q4%202019%20State%20Employees%20Retirement%20System%20Full%20IPA.pdf>)

VSERS FY 2019 Actuary Report (Page 20): (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/PDF/2019/VSERS%206-30-2019%20Valuation%20Report%20-%20Copy.pdf>)

VSERS FY 2018 VPIC Report (Page 7): (<https://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/2018/FYE%20Q4%202018%20State%20Employees%20IPA%20Full.pdf>)

## Appendix 3: Actuarial Valuations During the Select-and-Ultimate Years

From 2012 through 2015, the Pension Plans issued separate annual actuarial reports. Each contains a section called “comments on valuation” that includes a table presenting a summary of the approximate effects of major experiences on the system’s unfunded actuarial-accrued liability since the prior fiscal year-end. Numbers within parentheses reduced the liability, and numbers without parentheses increased the liability.

In each of these tables is a line called “Restart of the Select-and-Ultimate Interest Rate Set” for all eight reports. Each contains a line that shows the use of the select-and-ultimate system increasing the unfunded liability by a material amount in every fiscal year.

Vermont State Teachers’ Retirement Plan (increase of liability created by the select-and-ultimate rate system in each fiscal year):

- 2012: increase of \$43,012,727 (page 7 of the report, line item 7)
- 2013: increase of \$44,499,276 (page 7 of the report, line item 7)
- 2014: increase of \$46,354,354 (page 7 of the report, line item 7)
- 2015: increase of \$52,268,706 (page 5 of the report, line item 7)

*The total increase of the unfunded pension liability over four years for the teachers’ plan was \$186,135,063.*

Vermont State Employees’ Retirement Plan (increase of liability created by the select-and-ultimate rate system in each fiscal year):

- 2012: increase of \$31,587,726 (page 9 of the report, line item 6)
- 2013: increase of \$33,541,162 (page 9 of the report, line item 6)
- 2014: increase of \$35,135,438 (page 9 of the report, line item 6)
- 2015: increase of \$37,273,643 (page 5 of the report, line item 6)

*The total increase of the unfunded pension liability over four years for the state employees’ plan was \$137,537,969.*

*The total increase of unfunded liabilities in both plans over four years equals more than \$323 million.*

*The Plans’ unfunded pension liability has increased by \$1.24 billion from Fiscal Year 2009 to Fiscal Year 2018. Using the select-and-ultimate system on these pension funds over four years accounts for 26 percent of this increase, according to the eight actuarial reports.*

### VSTRS Actuarial Valuations

Report on the Sixty-Fifth Actuarial Valuation of the State Teachers’ Retirement System of Vermont (as of June 30, 2012) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/VSTRS-actuarial-valuation/VSTRS%202012%20valuation%20report.pdf>)

Report on the Sixty-Sixth Actuarial Valuation of the State Teachers’ Retirement System of Vermont (as of June 30, 2013) (<http://secure2.vermonttreasurer.gov/legacywebsite/www.vermonttreasurer.gov/sites/treasurer/files/pdf/retireTeacher/reports/VSTRS%202013%20valuation%20report.pdf>)

Report on the Sixty-Seventh Actuarial Valuation of the State Teachers’ Retirement System of Vermont (as of June 30, 2014) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/VSTRS-actuarial-valuation/VSTRS%202014%20Valuation%20Report.pdf>)

State Teachers’ Retirement System of Vermont Actuarial Valuation Report (as of June 30, 2015) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/VSTRS-actuarial-valuation/VSTRS%202015%20valuation%20report%20REVISED-FINAL.pdf>)

### VSERS Actuarial Valuations

Report on the Actuarial Valuation of the Vermont State Employees’ Retirement System (as of June 30, 2012) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS%202012%20valuation%20report%20-%20FINAL.pdf>)

Report on the Actuarial Valuation of the Vermont State Employees’ Retirement System (as of June 30, 2013) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS%202013%20valuation%20report.pdf>)

Report on the Actuarial Valuation of the Vermont State Employees’ Retirement System (as of June 30, 2014) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS%202014%20Valuation%20Report.pdf>)

Vermont State Employees’ Retirement System Actuarial Valuation Report (as of June 30, 2015) (<https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/actuarial-valuation/VSERS%202015%20Valuation%20Report.pdf>)

## Appendix 4: Vermont Policy Options

### POLICY OPTION #1

#### Conduct Rigorous Annual Stress Test<sup>1</sup>

A stress test of public pension plans is one way of dealing with the following challenge: how to ensure that their public employee pension systems can pay future obligations without sacrificing fiscal discipline or cutting core services. In July 2019, the Kennedy School of Government at Harvard University released the following report: *Better Measurements: Risk Reporting for Public Pension Funds*. This report builds on the 2018 five-point pension risk reporting framework. Both of these documents are tied to the 2014 recommendations made in a report by the Blue Ribbon Panel on Public Pension Funding commissioned by the Society of Actuaries.

#### POLICY OPTION DESCRIPTION

(includes states employing policies, when available, and organizations used as sources)

#### Stress Test policy options include:

Ten states now require some measure of routine financial risk analysis and risk reporting for their public worker retirement funds: *California, Colorado, Connecticut, Hawaii, Indiana, Maryland, Montana, New Jersey, Virginia, and Washington*. They require their public pension systems to analyze the impact of downturns on pension costs and liabilities, financial market volatility, and contributions.

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<sup>1</sup> Pew Charitable Trusts Pension Stress Tests Articles, August 2019: [Pension Risk Management Focus of Harvard Kennedy School Convening](#); April 2019: [A Stress Test of Philadelphia's Retirement System](#); March 2019: [Hawaii's Pension Fund Positioned to Withstand Next Recession](#); January 2019: [Stress Testing in Connecticut Shows Reforms Stabilizing State Pension Plans](#); July 2017: [Why Our Public Pensions Need Stress Tests](#); June 2018: [Financial Stress Test of Colorado Pension System Spurs Reforms](#); June 2018: [Stress Testing Can Help Troubled State Public Pension Funds](#); May 2018: [States Turn to New Tool to System Pension System Funding](#); September 2017: [Hawaii Adds New Tool to Monitor State Pension Fund](#).

## POLICY OPTION #2

### Improved Governance and Transparency<sup>2</sup>

Can Vermont's pension board and investment committee oversight process be improved? Can legislative oversight process of these liabilities be improved?

As described earlier in the report, there are also a variety of ways to increase investment-related pension plan transparency.

#### Improved Governance and Transparency policy options include:

Improve pension board and investment committee composition; clearly define and educate members on their fiduciary responsibilities; and implement better systems and controls.

The following excerpts are from a 2018 Manhattan Institute report:

- “[P]ublic pension board members have incentives to neglect the fiscal health of the pension fund. On the one hand, political appointees are responsive to constituencies—such as...the governor’s budget—that steer them away from acting in the interest of long-term pension fund performance. On the other hand, public employees and their union representatives are also tempted to trade pension savings tomorrow for higher salaries today.”
- “Scholars point to political manipulation as the source of pension underfunding. To hold down short-run costs, politicians favor a high discount rate. A high discount rate makes it appear as though the pension plan is fully funded because it assumes a high rate of return on existing assets.”
- “A board member appointed by a governor is likely to be sensitive to the governor’s budget proposals and unlikely to push for a lower discount rate that would drive up the annual required contribution (ARC) and jeopardize the governor’s agenda.”
- “Board members elected by government workers and retirees—or their unions—also have perverse incentives. Government workers and their unions are acutely conscious that increasing pension contributions reduces a government’s ability to pay higher salaries.”
- “Ultimately, the incentives of almost all board members consistently point to their favoring short-term policies at the expense of pension plans’ long-term health.”

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2 Pew Charitable Trust Article, February 2016: [Making State Pension Investments More Transparent](#). Manhattan Institute Report, March 2016: [Safeguarding Public-Pension Systems: A Governance-Based Approach](#); and [summary article](#). Society of Actuaries Report, June 2018: [The South Dakota Retirement System, Generational Benefit Structure](#). Manhattan Institute Report, September 2018: [The Politics of Public Pension Fund Boards](#).

## Improved Governance and Transparency policy options (continued):

The following excerpts are from a 2016 Manhattan Institute report:

“[O]ne significant shortcoming of current board structures is that many boards lack the kind of financial expertise that is so necessary to understanding the key issues in pension-fund governance.”

Some recommendations from this report:

**“Board Composition.** Reforms should strive for more balance in boards, including requiring public-citizen members and members with financial expertise. Ideally, boards should have a majority of members who are not union members or other beneficiaries of the pension system... Pension-board members should also undergo a mandatory training period before assuming their duties so that they can clearly understand the complex design of pension systems and the long-term consequences of decisions they make.”

**“Fiduciary Duties.** States should adopt well-defined fiduciary duties for all public pension boards. The Uniform Management of Public Retirement Systems Act may serve as a possible template for such duties.”

**“Systems and Controls.** One study on government pension funds defines governance as “the systems and processes by which a company or government manages its affairs with the objective of maximizing the welfare of and resolving the conflicts of interest among its stakeholders...”

“[S]tates...should seek as much as possible to institutionalize how pension funds govern themselves by enshrining best practices into their bylaws and, in the process, removing key decisions from the discretion of board members. Under this scenario, the boards of pension funds become watchdogs... Board members, however, would not have the ability to alter those principles on their own.”

**“Standardize the process of choosing discount rates/investment assumptions based on a formula, determined by an independent expert, that reasonably projects long-term rates of return.** One academic study found that many pension systems tend to set discount rates and other key variables in response to fiscal stress that their governments face. In 1992, for instance, New Jersey’s legislature passed legislation to change its retirement system’s discount rate to reduce the state’s annual contribution to its pension system and to more easily balance its budget. That made this crucial measure of a pension system’s health a victim of the political process. Governments must remove this variable from the governance of pensions.”

The following is from a 2018 Society of Actuaries report:

“State legislatures govern state retirement systems. In many states, one or more legislative committees that may have minimal experience with the complexities of retirement systems and have numerous other responsibilities initially review legislation impacting retirement systems. Ideally, to avoid competing political agendas and to provide a source of knowledge and familiarity, a single committee should oversee a state retirement system. The committee should preferably be a standing, bipartisan, bicameral body with the primary shared interest of promoting the sustainability and affordability of the system. Any proposal to modify system provisions should be thoroughly vetted by this committee to analyze long-term cost and policy implications.”

### Cost-Sharing Policy (Pension and Retirement Health Care Plans)<sup>3</sup>

A number of states with traditional defined benefit plans have cost-sharing plans to reduce budget uncertainty. A cost-sharing plan or risk-sharing policy distributes unexpected cost increases between the state employer and the employees. Events covered by cost-sharing policies often include unexpected costs from short- or long-term deviations from expected plan assumptions (such as the Great Recession). The policy is often codified in state statutes. The cost-sharing mechanism is automatically triggered when investment returns are poor or plan funding ratios drop below a certain threshold.

#### Cost-Sharing Policy (Pension and Retirement Health Care Plans) options include:

The Pew Charitable Trusts, in a 2017 report, identified 29 defined benefit plans in 17 states (about one-third of states) that use formal cost-sharing mechanisms to manage risk, such as:

- Splitting some or all of the plan costs between the employer and the employees
- Adjusting the employee contribution in response to investment returns
- Adjusting benefit increases after retirement (COLA or PBI) based on investment returns
- Adjusting benefit increases after retirement (COLA or PBI) based on plan funding level

The following 10 states have employee contribution cost sharing for pension plans: Arizona, California, Idaho, Iowa, Montana, Nevada, North Dakota, Pennsylvania, South Carolina, and Wisconsin.

The following 11 states have OPEB retirement benefit cost sharing: Arizona, Colorado, Connecticut, Idaho, Louisiana, Maryland, Minnesota, Montana, New Mexico, South Dakota, and Wisconsin.

#### ***AARP Center for State & Local Government Excellence***

Excerpts from AARP's 2019 report: "Public pension systems often require fine-tuning to ensure stable finances... One strategy for meeting those needs in a proactive way is to implement variable benefit and/or variable contribution arrangements. Under such arrangements, a pre-set formula drives occasional adjustments in the plan to maintain long-term stability... Variable benefit or contribution structures allow for adjustments in the benefit or contribution based on predetermined formulas, rather than postponing action until some later legislative correction. This is intended to bolster the plan's sustainability and improve predictability for retirees... Some of these plan designs are not new, with certain plans having used them for 30 or more years (as in Wisconsin), while others were adopted post-recession or more recently (as in Colorado)."

AARP has identified the following 11 states as having variable contribution policies: Arizona, California, Connecticut, Idaho, Iowa, Maine, Michigan, Montana, Nevada, Pennsylvania, and Wisconsin.

AARP has identified the following four states as having variable benefit policies: Kansas, Kentucky, Nebraska, and South Dakota.

## Cost-Sharing Policy (Pension and Retirement Health Care Plans) options include (continued):

### **National Association of State Retirement Administrators (NASRA)**

Excerpts from NASRA's 2018 report: "Nearly every state in recent years enacted reforms to pension plans within their purview. As a result, although most public employers in the U.S. have retained [defined benefit] plans, in many plans, more risk has shifted from employers to employees. In some cases, these reforms reduced benefit levels or increased contributions, or both, for participants who already were participating in the plan."

NASRA has identified the following 12 states as having variable employee contribution rates (required employee contribution rates that may change based on the plan's actuarial experience): Arizona, California, Colorado, Connecticut, Idaho, Iowa, Maine, Michigan, Pennsylvania, Montana, Nevada, and North Dakota.

NASRA has identified the following six states as having contingent or limited cost-of-living adjustments (a retirement benefit adjustment contingent upon or whose level is affected by external factors, such as the funding level of the plan or its fund's investment performance; or that is dependent on the retiree's age or length of retirement): Louisiana, Maryland, Massachusetts, Nebraska, South Dakota, and Wisconsin.

## POLICY OPTION #4

### Creating Alternative Pension/Retirement Plan Designs for New Employees<sup>4</sup>

These could include one of the following: the use of hybrid, defined contribution, or cash balance plans, to distribute unexpected costs between the state and employees.

#### Policy Options Include:

##### **Pew Charitable Trusts**

The Pew Charitable Trusts in a 2017 report identified 13 states with pension plans that have alternative plan designs and are not merely traditional defined benefit plans.

Those states are Alaska, Georgia, Indiana, Kansas, Kentucky, Michigan, Nebraska, Oklahoma, Oregon, Rhode Island, Tennessee, Virginia, and Utah. These states have a mandatory alternative plan as the primary benefit for at least some state workers or teachers. This list excludes states that offer alternative plans as an optional selection instead of a defined benefit plan.

<sup>3</sup> Pew Charitable Trusts 50-State Survey Report on Cost Sharing, January 2017: [Cost-Sharing Features of State Defined Benefit Plans](#) and [summary article](#); AARP Center for State & Local Government Excellence, September 2019 Report: Proactive Pension Management, An Elected Official's Guide to Variable Benefit and Contribution Arrangements; National Association of State Retirement Administrators December 2018 Report: [In-depth: Risk Sharing in Public Retirement Plans](#).

## Creating Alternative Pension/Retirement Plan Designs for New Employees options (continued):

### **AARP Center for State & Local Government Excellence**

AARP, in the 2019 report referenced above, indicates that 10 states have combinations of variable contribution, variable benefits and defined benefit/defined contribution hybrid plans: Colorado, Georgia, Indiana, Ohio, Oregon, Rhode Island, Tennessee, Utah, Virginia, and Washington.

### **NASRA**

NASRA, in the 2019 report referenced above, indicates that five states have cash balance hybrid plans (a retirement benefit based on an account balance with a credited investment return that is lower than the plan's expected investment return, determined actuarially based on the retiree's age at retirement, and that may share positive investment experience with plan participants): California, Kansas, Kentucky, Nebraska, and Texas.

NASRA, in the 2019 report referenced above, indicates that 12 states have defined benefit (DB) / defined contribution (DC) hybrid plans (a traditional defined benefit pension plan with a reduced benefit accrual rate, combined with a defined contribution plan): Arizona, Colorado, Georgia, Indiana, Michigan, Ohio, Oregon, Rhode Island, Tennessee, Utah, Virginia, and Washington.

### **Reason Foundation**

The Reason Foundation keeps a list of changes to pension systems over the past 20 years:

**Systems creating choice-based DB or DC plans:** *Default to DB:* Colorado PERA—State Employees (2005), South Carolina State & Local (2012), Arizona Police/Fire (2016), Arizona Corrections (2017), Colorado Local Government Employees & Higher Education (2018); *Default to DC:* Michigan Teachers (2017), Florida State/Teachers (2017).

**Systems creating choice-based hybrid or DC plans:** Utah (2014) and Pennsylvania State & Teachers (2017).

**Systems creating DC-only plans:** Michigan State (1996), Alaska State (2005), Alaska Teachers (2005), Arizona Elected Officials (2013), Arizona Corrections (2017).

**Systems creating CB (cash balance)-only plans:** Nebraska State (2002), Nebraska Local (2002), Kansas State (2012), Kentucky State & State Police (2014), Kentucky Local (2014).

**Systems creating hybrid-only plans:** Oregon State & Teachers (2003), Georgia State (2008), Rhode Island State & Teachers (2011), Virginia (2012), Tennessee (2013).

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<sup>4</sup> Related Pew Charitable Trusts Report, January 2017: [Cost-Sharing Features of State Defined Benefit Plans](#). Reason Foundation, April 2019: [Arizona State Retirement System Solvency Analysis](#) (see page 69).

### Amortize Health Care Plans' Unfunded Liabilities<sup>5</sup>

OPEB refers to other post-employment retirement benefits, which are mainly retiree health care costs. OPEB is the measurement by the state of these unfunded retiree benefits. According to a PEW Charitable Trusts 2017 report, state OPEB funded ratios vary widely, from less than 1 percent in 19 states (including Vermont) to 92 percent in Arizona (based on 2015 data).

#### Policy Options Include:

Many states are basically pay-as-you-go systems, that is, they use annual current employee and employer health care contributions to cover the current cost of the retirees in the health care plan. Little if any funds are earmarked for known future liabilities.

By far the most expensive element of a state's OPEB obligation is the cost to cover early retirees' health care benefits. These costs are reduced when a retiree turns 65 and becomes eligible for Medicare.

Policy options identified in a 2019 Manhattan Institute report to reduce state OPEB liabilities include:

- Increasing pre-funding of OPEB liabilities (according to Pew Charitable Trust, eight states have an OPEB funded ratio greater than 30%: Alaska, Arizona, Kentucky, North Dakota, Ohio, Oregon, Utah, and Wisconsin, as of 2015).
- Eliminating OPEB subsidies for health care (Kansas and South Dakota)
- Balancing OPEB benefits with pension penalties.
- Increasing the predictability of OPEB obligations by providing a health insurance premium subsidy indexed to inflation.
- Limiting the dollar amount of OPEB benefits to retirees under the age of 65.

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<sup>5</sup> Relevant Pew Charitable Trusts Pension Articles/Reports on OPEB: September 2017: [State Retiree Health Care Liabilities: An Update](#); and [summary article](#); December 2017: [Funding Levels Range Widely for State Retiree Health Care Liabilities](#), Manhattan Institute report, October 2019: [Post-Employment Benefits In New York, New Jersey, and Connecticut: The Case for Reform](#); and [summary article](#).

## Appendix 5: How to Run a Pension Plan—the South Dakota Retirement System

South Dakota is often held out as an exemplar for how a pension system can and should be run by a state. The pension's funded ratio has been enviable since the mid-1980s, and its long-term investment performance track record is equally desirable.

South Dakota is a sparsely populated state of approximately 760,000 people, making it the sixth smallest in the nation. Notably, it lacks the tax revenue from the extraction of oil and natural gas that is enjoyed by its neighbor North Dakota. Vermont has a population of approximately 630,000 people, making it the second-smallest state in the nation. South Dakota is an appropriate peer for our state to look to for pension and OPEB policy solutions.

According to the 2017 Annual Report of the Funded Status of the South Dakota Retirement System (SDRS) issued in January 2018, the SDRS was only 40 percent funded in 1973. It has been over 75 percent funded each year since 1984 and has been over 100 percent funded in 22 of the last 27 actuarial valuations. As was the case with other pension funds, the Great Recession dramatically impacted its funded ratio. The ratio dropped to 76 percent in 2009 but recovered to 107 percent by 2014. (<http://sdlegislature.gov/docs/budget/BoardPapers/2018/3%20-%20SDRS%20-%20Annual%20Report%20of%20Funded%20Status%20Jan2018.pdf>)

When the SDRS was created in 1974, through the consolidation of numerous separate systems, it became a cost-sharing system. The SDRS adopted hybrid plan provisions early in its history. The SDRS believes that “[h]ybrid features that

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combine the advantages of both defined benefit and defined contribution plans are essential for an equitable distribution of benefits to both career and non-career members.” For more, see *The South Dakota Perspective*. (<https://sdrs.sd.gov/docs/SDPerspective.pdf>)

Pension members and the state pay equal and fixed statutory contribution rates. Actual contribution rates have always matched the statutory rates in South Dakota regardless of economic conditions. Equal member contributions ensure shared responsibility for the overall management of the plan. Fixed contribution rates by statute prevent the transfer of costs from the current generation of workers to future generations.

The SDRS board has established an income replacement goal of 55 percent of final average compensation that should increase to 85 percent with Social Security benefits.

The South Dakota statutes require the SDRS board to immediately recommend pension benefit reductions to the legislature if (1) the fixed statutory contributions are not sufficient to pay the normal costs and expenses of the plan and amortize any unfunded actuarial accrued liability over 20 years or less or if (2) the funded ratio remains below a stated numerical rate for three years. (This was originally 80 percent but was recently increased to 100 percent to protect the ability to make COLA benefit increases to retirees.)

The South Dakota legislature has bicameral standing retirement laws committees (RLCs) with

oversight of the pension plans and OPEB. This committee structure ensures significant oversight of a large and important state liability by the state. Individuals on these legislative committees have significant experience in the complexities of state retirement systems—funding, benefit, and investment issues.

The SDRS uses a 6.5 percent discount rate in its actuarial assumptions. It also uses the fair valuation of assets as the actuarial value, with no smoothing. All changes in the actuarial assumption require the actuary to certify that the change is reasonable, and all such changes must be reported to the RLCs and the governor.

The SDRS keeps investment management fees low by managing most of the plan's assets internally. Total costs are expected to average 40 basis points, including payments to external managers. Over the 44 years between the inception of the SDRS and 2017, the annualized total rate of investment return on SDRS assets was 10.4 percent, compared with a benchmark return of 9.4 percent. During a difficult period, the 10-year period ended 2017, the SDRS had an average annual return of 6.1 percent. That compares with 4.2 percent for the VSERS plan and 3.9 percent for the VSTRS plan over the same time period. Returns of the Vermont Plans and the SDRS are both gross of fees.

Below are the relevant statutory provisions for the SDRS.

## Appendix 5: How to Run a Pension Plan—the South Dakota Retirement System (Continued)

3-12C-224. Quadrennial independent report on investment performance. The board shall retain the services of an independent contractor, not involved in the investment process, to make a report to the board not less than every four years on the investment performance results of the assets of the retirement funds.

3-12C-225. Review of investment policy when return lower than average—Report to Governor and Legislature. In the event the investment return on the common stock portfolio or bond portfolio is lower than the average return achieved by other institutional investors of pension funds, then the Investment Council shall review the way in which the assets are being invested and the sources of investment advice being utilized to determine what changes, if any, are desirable to produce an investment return equal to or greater than the average, and shall make a report to the Governor and the Legislature on the investment performance results and any changes necessary to improve the investment return.

3-12C-227. Actuarial assumptions on which valuation based—Report of change. The actuarial valuation required by § 3-12C-226 shall be based on actuarial assumptions adopted by the Board of Trustees as a result of an actuarial experience analysis. The board may not make any change in the actuarial assumptions unless the approved actuary retained to make the actuarial valuation certifies that the change is reasonable. If the board makes any such change, it shall report the change to the Governor and to the Retirement Laws Committee. The report shall

include the actuary's and board's analysis of the conditions that led to the change.

3-12C-228. System funding review—Report required for certain conditions—Recommended corrective action. The board shall review the funding of the system and shall make a report to the Governor and the Retirement Laws Committee if the funding of the system does not meet both of the following conditions:

- (1) The fair value funded ratio is greater than or equal to one hundred percent; and
- (2) The contribution rate meets or exceeds the minimum actuarial requirement to support benefits.

The report shall include recommendations for the circumstances and timing for any corrective action, including benefit changes, to improve the conditions in subdivisions (1) and (2). Based on this report and the recommendations of the board, the Legislature may adopt corrective action to improve the conditions in subdivisions (1) and (2).

Eligibility for benefits, the amount of any benefit, and the rate of member contributions established in this chapter are not the contractual rights of any member and are subject to change by the Legislature for purposes of corrective action to improve the conditions in subdivisions (1) and (2).

3-12C-229. Annual report of funded status of system. At the beginning of each legislative

session, the board shall provide the Governor and the Legislature with an annual report of the funded status of the system for the fiscal year that ended the previous June thirtieth.

3-12C-230. Record of board proceedings—Annual report. The board shall keep complete records of its proceedings which shall be open to public inspection. The board shall prepare an annual report setting forth its financial information for the previous fiscal period including the amount of the accumulated cash and securities of the system, and the results of the most recent actuarial valuation. A copy of the report shall be available on the system's website.

For more information, see the June 2018 Society of Actuaries report on SDRS and the 2018 SDRS Comprehensive Annual Report.

<https://sdrs.sd.gov/docs/Retirement2020Papers.pdf>  
<https://sdrs.sd.gov/docs/CAFR2018.pdf>

## Appendix 6: The Vermont Business Roundtable's Commitment to Pension Reform

Since it was founded as a civic welfare organization in 1987, the Vermont Business Roundtable has dedicated itself to thoughtful, deliberative, and well-documented analyses of significant, complex public policy issues affecting all Vermonters.

For over a decade, beginning in 2008, the Vermont Business Roundtable has studied the growth of the state's unfunded pension and other post-employment benefits (OPEB) liabilities. An important part of that effort was a sustained public information campaign to alert Vermont lawmakers, plan participants, and taxpayers as to the collective and personal risks of the mounting obligations. In 2009, the Roundtable issued a report containing recommendations to reform and increase the security and transparency of the system.

In 2017, the Vermont Business Roundtable joined with the Center for Financial Literacy at Champlain College to convene a policy summit focused on pension reform options. The event was attended by more than 100 leaders from the business, nonprofit, municipal, state government, and legislative sectors as well as interested members of the public. The sessions, led by state and national pension experts, were designed to provide comparative analyses on national trends for managing pensions and benefits as well as best- and worst-case policy practices at both the state and municipal levels.

This work product is the result of efforts by the Roundtable's Pension Reform Task Force, a diverse group of CEO members as well as non-members from the community who are knowledgeable on the relevant issues.



For Additional Information, visit:  
<https://vtroundtable.org/project/pension-reform-task-force/>

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