Office of the Vermont State Treasurer

Pension Presentation House Committee on Government Operations

January 11, 2019





PLAN CHARACTERISTICS: VSERS

Vermont State Employ	yees' F	Retirement S	ystem (VSERS)	
Active Members	<u>June</u>	e 30, 2018	<u>June</u>	e 30, 2017	% Change
Vested		5,370		5,367	0.06%
Not Vested		3,160		3,253	-2.86%
Total Active members		8,530		8,620	-1.04%
Average Age		45.9		46.0	-0.22%
Average Service		11.0		11.1	-0.90%
Average Compensation	\$	61,157	\$	58,533	4.48%
Retired Members and Beneficiaries					
Number		6,974		6,727	3.67%
Annual Retirement Allowances	\$ 13	34,073,423	\$ 12	5,628,642	6.72%
Inactive Members		1,266		1,098	15.30%
Terminated Vested Members		753		742	1.48%

PLAN CHARACTERISTICS: VSTRS

Vermont State Teach	ners' R	etirement Sy	stem (\	/STRS)	
Active Members	June	e 30, 2018	<u>June</u>	e 30, 2017	% Change
Vested		7,413		7,508	-1.27%
Not Vested		2,479	e	2,520	-1.63%
Total Active members		9,892		10,028	-1.36%
Average Age		45.7		45.8	-0.22%
Average Service		12.6		12.6	0.00%
Average Compensation	\$	61,959	\$	60,566	2.30%
Retired Members and Beneficiaries					
Number		9,269		9,021	2.75%
Annual Retirement Allowances	\$ 18	38,721,417	\$ 17	9,082,530	5.38%
Inactive Members		2,613		2,381	9.74%
Terminated Vested Members		787		763	3.15%

PLAN CHARACTERISTICS: VMERS

Vermont Municipal Emp	loye	es' Retiremen	t Syst	em (VMERS)	
Active Members	<u>Jι</u>	ine 30, 2018	<u>Ju</u>	ıne 30, 2017	<u>% Change</u>
Vested		4,051		4,113	-1.51%
Not Vested		3,401	·>	3,189	6.65%
Total Active members		7,452	·	7,302	2.05%
Average Age		48.3		48.4	-0.21%
Average Service		8.6		8.8	-2.27%
Average Compensation	\$	38,894	\$	37,635	3.35%
Retired Members and Beneficiaries					
Number		3,189		2,942	8.40%
Annual Retirement Allowances	\$	30,830,833	\$	26,963,962	14.34%
Inactive Members		2,516		2,221	13.28%
Terminated Vested Members		798		797	0.13%

HISTORICAL PERSPECTIVE: PAYING FOR THE SINS OF THE PAST AND WHAT THAT MEANS FOR THE FUTURE

"A recommendation to reduce the FY 1990 retirement fund appropriations is made for two reasons.

First, the immediate impact would be far less than for most operating programs and:

Second, a review of the systems funding is warranted. In light of the change in the <u>market value of the funds' investments</u> during fiscal year 1989 there is no certainty that the suggested reduction would have any impact on the long range ability of the funds' to meet the obligations for which they were established."

— Vermont Joint Fiscal Office (JFO), 9/15/89

Comments from various Officials in the 1990s

"The bottom line is that we do not believe the FY1994 so called "underfundings" suggested by the numbers shown above, really exist"

"...the actuarial "gains" associated with lower than projected salary increases, combined with returns on the asset portfolio in excess of the 8.5% assumed rate, have resulted in the improved funded position despite so-called "underfundings"... it is not expected that there will be any long term detrimental impacts to the pension systems..."

"I firmly believe that <u>funding of our pension plans has been adequate given the State's fiscal problems</u> and in fact improved during the past five years"

DESPITE WARNINGS IN THE 1990s AND EARLY 2000s

Comments by State's Independent Actuary in testimony 1990

- "Pensions are deferred Compensation"
 - "This makes it tempting to short-change the funding in times of perceived need"
 - "Failure to fund is nothing more or less than saying that <u>future taxpayers should pick up the cost for the services</u> rendered by today's public employees- it is borrowing to meet current expenses"
- "Funding as benefits accrue is also significantly less expensive than not funding"

Comments by State Auditor in 1995

"By underfunding the retirement system today, we only delay the inevitable reckoning. It amounts to a kind of camouflaged deficit spending, because the state must eventually cure the funding deficiency."

<u>Then Treasurer Douglas in 1995 Letter to Legislative Council</u>

"Dipping into the retirement systems' appropriation will be regarded by the investment community as a quick fix to the current year's budget deficit and a <u>failure by the state to</u> <u>address the fundamental weaknesses in our revenue structure and spending patterns.</u>"

THERE IS NO SILVER BULLET TO REDUCING THESE LIABILITIES

- Learn from history: The same arguments made in 1990s and early 2000 (for instance, budget constraints and impacts on important programs) should not be used to support quick fixes at the expense of future taxpayers
- The changes we make now, or in the future, should be based on an effective means of providing retirement benefits at the best value to the taxpayer
- Defined benefit plans provide the best value per retirement benefit for both the employee and other taxpayers for Vermont
- Disciplined, forward thinking approach is needed

A HISTORY OF <u>UNDERFUNDING</u> THE ARC LED TO THE CURRENT UNDERFUNDING OF TEACHERS PLAN, FURTHER NEGATIVELY IMPACTED BY GREAT RECESSION

Year	Total VSTRS Payroll	Recommended Contribution For Budget Based on Actuarial Projection	Actual Contribution	\$ Difference: Act vs. Rec. (Uses Budget Beginning 1996)	Percentage of Request
1979	96,725,620		4,825,155	2,981,670	61.8%
1980	104,521,888		8,471,960	472,130	94.7%
1981	112,811,389		8,830,900	1,031,961	89.5%
1982	126,748,398		7,822,760	2,377,449	76.7%
1983	139,085,342		10,929,355	(207,541)	101.9%
1984	153,329,729		11,592,100	748,969	93.9%
1985	169,219,652		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		16,239,416	(313,964)	102.0%
1988	230,430,153		17,186,259	(891,913)	105.5%
1989	261,596,990		19,000,000	(927,828)	105.1%
1990	273,951,188		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		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 2000	372,298,852 387,998,959	27,232,542 23,573,184	18,080,000 18,586,240	9,152,542 4,986,944	66.4%
2000					78.8% 91.7%
2001	403,258,305		19,143,827	1,738,694	93.1%
2002	418,904,021 437,238,543	21,965,322 23,197,088	20,446,282 20,446,282	1,519,040 2,750,806	93.1% 88.1%
2003	453,517,153	29,608,892	24,446,282	5.162.610	82.6%
2004	486,857,658		24,446,282	19.146.050	56.1%
2005	499.044.327	49,923,599	24,985,506	24.938.093	50.0%
2007	515,572,694		38,496,410	(296,410)	100.8%
2007	535,807,012		40,955,566	(206,469)	100.5%
2009	561,588,013		37,349,818	(272,768)	100.7%
2010	562,149,916		41,920,603	(417,601)	101.0%
2011	547,748,405		50,268,131	(2,035,125)	104.2%
2012	561,179,272		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	557,708,310		72,908,805	(50,942)	100.1%
2016	586.397.072		76,947,869	(844,960)	101.1%
2017	607.354.756		82,887,174	(227.598)	100.3%
2018	612,899,069	88,409,437	114,598,921	(26,189,484)	129.6%

TEACHER FUNDING ISSUE: PRE-2014

"Unlike the state system where the "pay-as-you-go" portion is budgeted and funded in a separate OPEB Trust fund, the health care expenses for VSTRS are paid out of the pension fund and are treated as an actuarial loss to the system, creating additional financial stresses on the pension system...Health care costs over the last decade or more have risen at a much higher rate than the rate of inflation, and while some stabilization of that trend is expected, costs are projected by our actuaries to continue to exceed CPI. The situation for the teachers' health care payments is <u>reaching a critical phase</u>..."

Source: "Report of the Commission on the Design and Funding of Retirement and Retiree Health Benefits Plans for State Employees and Teachers", December 2009, p.37.

For example: \$20 million of health care premium costs "put on the credit card" in FY2012 will cost taxpayers \$58.8 million over the amortization period

FUNDAMENTAL CHANGES TO VSTRS HEALTH CARE FUNDING EFFECTIVE 7/1/2014

- The State has established and funded a separate trust to account for the assets and liabilities of the retiree medical benefit plan
- Annual contributions to the Retiree Medical Plan are separately identified in the State budget and not commingled with Retirement Plan contributions
- A series of funding sources were put in place, replacing the "retroactive" funding approach
- Projected to save \$480 million in avoided interest costs through 2038

ANNUAL REQUIRED CONTRIBUTION (NOW ADEC)

- Method by which UAL is eventually paid off (assuming it is funded)
- Annual Required Contribution (ARC)/Actuarially Determined Employer Contribution (ADEC):
 - A measure of needed plan funding
 - The actuarially determined pension fund contribution in a single year
- The ARC has two parts:

1. The Normal Cost

- The normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year
- The employer normal cost equals the total normal cost of the plan reduced by employee contributions

2. Amortization

• The annual amount needed to eliminate the unfunded liability over the plan's amortization period

FY 2018 VALUATION RESULTS

VSERS

Incorporates an FY 2020 ARC/ADEC recommendation of

\$78,943,914

- Normal \$17,587,034
- Amortization \$61,356,880
- Increase from prior year of \$16.0 million
- Normal Cost: 3.12% of projected payroll
- 77.7% of the ARC/ADEC is to pay down a portion of the unfunded liability
- Includes planned change in amortization schedule
- Prior Year increase was \$10.9 million, primarily related to return assumption changes, mortality assumptions, workforce experience. Workforce issues: Retirement Incentive program increased costs

VSTRS

Incorporates an FY 2020 ARC/ADEC recommendation of

\$129,491,206*

Normal \$7,116,765

Amortization \$122,374,441

- Increase from prior year of \$23.9 million
- Normal Cost: 1.08% of projected payroll
- 94.5% of the ARC is to pay down a portion of the unfunded liability
- Includes planned change in amortization schedule
- Prior Year increase was \$17.2 million. Includes rate assumption changes, mortality assumptions, and workforce experience, including: increase in retirements, local workforce changes have increased costs

^{*} Includes \$3.2 million additional contribution requested from VSTRS, reflecting adjustment for \$26.2 million FY2018 appropriation. Also included in the calculation of increase from prior year.

AMORTIZATION CHANGE EXPLAINED

- While the State has a date set in statute—2038—to pay down the unfunded liability, the payment schedule was established with increases in 5% increments each year
- This has the effect of increasing interest costs associated with the payment of these liabilities
- Leveling out the payment schedule would:
 - increase ARC payments in the short-term, but have the effect of saving the taxpayers millions of dollars over the long-term
 - more rapid reduction of the unfunded liability
- Changes to amortization schedule will be phased in to cushion budgetary impact
- Adopted by the Legislature in 2016 for VSERS and VSTRS. Effective FY 2020.
- Treasurer's Office proposed, and the Legislature adopted, phasing in a payment schedule with increases at 3% increments each year, closer to the projected long-term rate of inflation. Interest savings through 2038 were estimated at \$165 million.

FUNDING STATUS

VSERS	2017	2018
Actuarial Accrued Liability	\$ 2,511,372,455	\$ 2,661,608,857
Actuarial Value of Assets	\$ 1,793,794,733	\$ 1,881,804,847
Unfunded Liability	\$ 717,577,722	\$ 779,804,010
Funding Percentage	71.43%	70.70%

VSTRS	2017	2018
Actuarial Accrued Liability	\$ 3,282,045,614	\$ 3,379,553,748
Actuarial Value of Assets	\$ 1,779,592,227	\$ 1,866,120,413
Unfunded Liability	\$ 1,502,453,387	\$ 1,513,433,335
Funding Percentage	54.22%	55.22%

FUNDING HISTORY

VSERS

Year ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b) (in thousands)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)
2018	\$ 1,881,805	\$ 2,661,609	\$ 779,804	70.7%
2017	1,793,795	2,511,373	717,578	71.4%
2016	1,707,268	2,289,452	582,184	74.6%
2015	1,636,268	2,178,827	542,559	75.1%
2014	1,566,076	2,010,090	444,014	77.9%
2013	1,469,170	1,914,300	445,130	76.8%
2012	1,400,779	1,802,604	401,825	77.7%
2011	1,348,763	1,695,301	346,538	79.6%
2010	1,265,404	1,559,324	293,920	81.2%
2009	1,217,638	1,544,144	326,506	78.9%
2008	1,377,101	1,464,202	87,101	94.1%
2007	1,318,687	1,307,643	(11,044)	100.8%
2006	1,223,323	1,232,367	9,044	99.3%
2005	1,148,908	1,174,796	25,888	97.8%
2004	1,081,359	1,107,634	26,275	97.6%
2003	1,025,469	1,052,004	26,535	97.5%
2002	990,450	1,017,129	26,679	97.4%
2001	954,821	1,026,993	72,172	93.0%
2000	895,151	967,064	71,913	92.6%
1999	804,970	876,412	71,442	91.8%
1998	733,716	804,501	70,785	91.2%
1997	639,128	753,883	114,755	84.8%

			Actuarial			
	Actuarial		Accrued		Unfunded	
	Value of		Liability		AAL	Funded
Year ending	Assets		(AAL)	AL) (UA		Ratio
June 30	(a)		(b)	(b)		(a/b)
		(iı	n thousands)			
2018	\$ 1,866,121	\$	3,379,554	\$	1,513,433	55.2%
2017	1,779,592		3,282,045		1,502,453	54.2%
2016	1,716,296		2,942,024		1,225,728	58.3%
2015	1,662,346		2,837,375		1,175,029	58.6%
2014	1,610,286		2,687,049		1,076,764	59.9%
2013	1,552,924		2,566,834		1,013,910	60.5%
2012	1,517,410		2,462,913		945,503	61.6%
2011	1,486,698		2,331,806		845,108	63.8%
2010	1,410,368		2,122,191		711,823	66.5%
2009	1,374,079		2,101,838		727,759	65.4%
2008	1,605,462		1,984,967		379,505	80.9%
2007	1,541,860		1,816,650		274,790	84.9%
2006	1,427,393		1,686,502		259,109	84.6%
2005	1,354,006		1,492,150		138,144	90.7%
2004	1,284,833		1,424,661		139,828	90.2%
2003	1,218,001		1,358,822		140,821	89.6%
2002	1,169,294		1,307,202		137,908	89.5%
2001	1,116,846		1,254,341		137,495	89.0%
2000	1,037,466		1,174,087		136,621	88.4%
1999	931,056		1,065,754		134,698	87.4%
1998	821,977		955,694		133,717	86.0%
1997	717,396		849,179		131,783	84.5%

VSTRS

VMERS FUNDED STATUS

VMERS	2017	2018
Actuarial Accrued Liability	\$ 754,876,508	\$ 827,556,305
Actuarial Value of Assets	\$ 634,690,493	\$ 680,005,197
Unfunded Liability	\$ 120,186,015	\$ 147,551,108
Funding Percentage	84.08%	82.17%

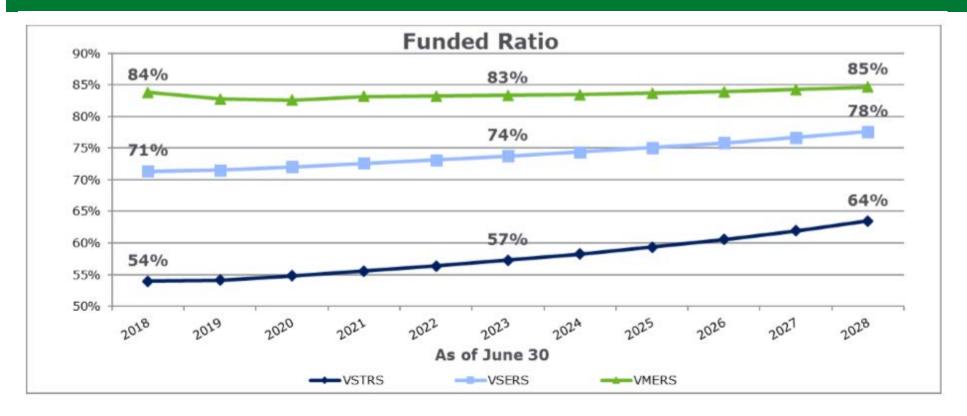
- VMERS is better funded than the state and teacher systems but nonetheless has stresses that must be addressed.
- VMERS funding adopted decades ago, utilizes a different funding methodology than the other systems which use entry age normal (EAN).
- The Trustee Board took steps to transition to EAN. Moving to EAN will create a more predictable long-term funding path but would also impact short-term employer and employee rates.

VMERS FUNDING HISTORY

				A	Actuarial		
		Actuarial		Accrued		Unfunded	
		Value of		Liability		AAL	Funded
	Year ending		Assets	(AAL)		(UAAL)	Ratio
	June 30		(a)	(b)		(b-a)	(a/b)
			(in	thou	ısands)		
VMERS	2018- EAN method	\$	680,005	\$	827,556	\$ 147,551	82.2%
	2018- current method	\$	680,005	\$	886,656	206,651	76.7%
	2017-EAN method	\$	634,690	\$	754,877	120,187	84.1%
	2017-current method		634,690		813,046	178,356	78.1%
	2016		581,611		744,960	163,349	78.1%
	2015		543,768		699,293	155,525	77.8%
	2014		500,558		580,972	80,414	59.9%
	2013		446,236		528,426	82,190	84.4%
	2012		417,443		488,572	71,129	85.4%
	2011		402,550		436,229	33,679	92.3%
	2010		376,153		409,022	32,869	92.0%
	2009		331,407		366,973	35,566	90.3%
	2008		348,740		343,685	(5,055)	101.5%
	2007		325,774		309,853	(15,921)	105.1%
	2006		288,347		276,552	(11,795)	104.3%
	2005		259,076		248,140	(10,936)	104.4%
	2004		232,890		225,092	(7,798)	103.5%
	2003		222,854		218,533	(4,321)	102.0%
	2002		193,278		176,109	(17,169)	109.7%
	2001		177,928		158,786	(19,142)	112.1%
	2000		161,900		138,697	(23,203)	116.7%
	1999		137,454		114,481	(22,973)	120.1%
	1998		113,678		102,005	(11,673)	111.4%
	1997		96,196		85,686	(10,510)	112.3%

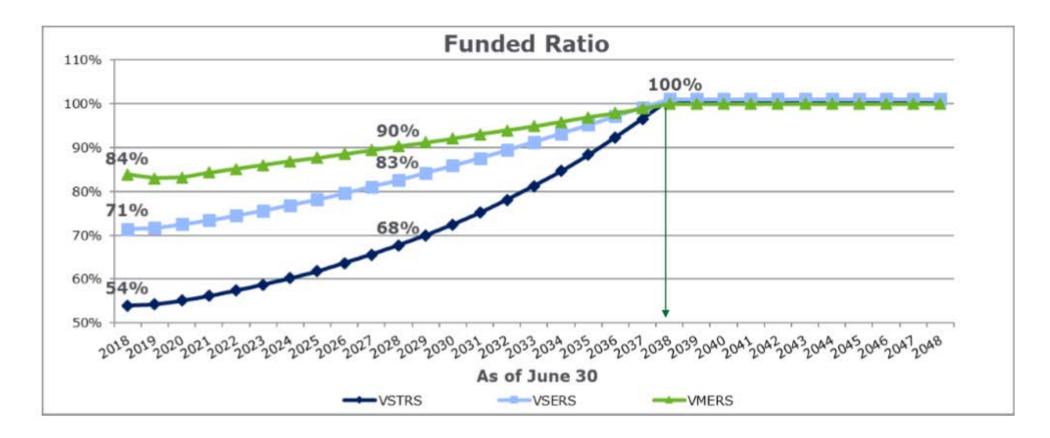
Note: slight differences due to rounding

MEDIUM TERM: FUNDED RATIO



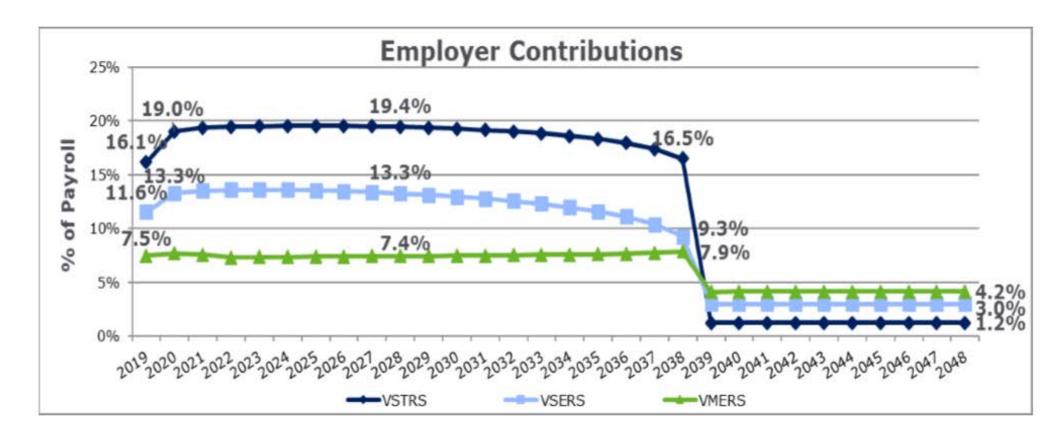
- While Investment returns are assumed at 7.5% over the long-term, our pension investment advisor currently projects a 5-7 year assumption of 6.4% per year.
- Per an independent actuarial review, the funded ratio VSERS and VSTRS is expected to increase over the next 10 years, with all other experience approximating actuarial assumptions.
- Driven by funding policy

LONG-TERM: FUNDED RATIO



- Long-term projections use the 30 year return assumption of 7.5% per year
- All plans are projected to be fully funded by 2038
- Funding policy amortizes the unfunded liability over a closed period ending in 2038

EMPLOYER CONTRIBUTIONS



DISTRIBUTION OF STATE ARC/ADEC PAYMENT BY ENTITIES AND FUNDS

- VSERS Pension and Health Care Premiums—Included across various state funds as part of a payroll benefit charge. Approximately 35%-40% of VSERS ARC/ADEC is paid by the General Fund, depending on year
- 22.8% of the total ARC/ADEC for VSERS is reimbursed by Federal reimbursements
- VSTRS Pension—While most of the ARC paid with general fund dollars, beginning in FY2015, a portion paid through federal grants via local school systems; for 2019 this is calculated to be 5.4%
- Approximately \$8 million of VSTRS normal cost funded through the Education Fund
- 23% of the Teachers' OPEB pay-go payments through FY2023 are projected to be reimbursed with Non-State Revenues (EGWP & Teacher Healthcare Assessment)
- The Teachers' OPEB plan expects to have paid off all loans and begin generating surplus by FY2022
- VMERS employer payments made by participating entities

EMPLOYEE CONTRIBUTIONS HAVE INCREASED

Teachers (VSTRS):

In 2009, a teacher paid 3.54% of salary for their pension. Employees agreed to an increase to 5% effective 7/1/10. Employees also agreed to work longer to receive a full benefit – the result was a reduction for taxpayers of \$15 million per year in the ARC, increasing over time.

For new employees after 7/1/15, that increased to 6%, generating \$1 million initial annual savings, increasing each year

State Employees (VSERS):

In 2010, Group A, D and F employees were paying 5.1% of pay for their retirement, scheduled to go to 4.85% in FY16

Employees agreed to increase this to 6.4% effective 7/1/10. In 2016, employees agreed to increase to 6.65%. Group C employees agreed to similar increases and are paying 8.53% of payroll today. For FY17, this is estimated to result in at least \$8.4 million in additional contributions from state employees.

DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS

- Under a defined benefit (DB) system the employer guarantees an annual retirement payment for their employee that is based on a formula
- The defined benefit is calculated based on an employee's years of service, age at retirement, and either ending salary or average salary a period of time (AFC or average final compensation)
- In a defined contribution (DC) system, the ultimate retirement benefit is the accumulated value of an individual's account at retirement, resulting from his/or her own contributions and investment returns

DEFINED BENEFIT VS. DEFINED CONTRIBUTION PLANS

A DC system will cost MORE money than the current defined benefit system

- Based on 2017 valuations and payroll levels projected by the actuary, an increase cost, if a new DC system were implemented and applied to all employees, this would INCREASE the cost of pensions by \$21.7million in 2019, expected to grow to \$22.5million in 2020 and growing each subsequent year*
- At 5% instead of 7% (lower state contribution rate than for existing DC plan), this would result in an increase cost of \$10.8 million in 2019, expected to grow to \$11.2 million in 2020 and growing each subsequent year
- Even limiting conversion of new employees would be a substantial cost, growing every year as new employees are hired.
- It will NOT eliminate the unfunded liability. Evidence exists in other states that the unfunded liability would continue to grow.

^{*}Example using the state's current DC system limited to exempt employees. A move to current state DC plan would require higher contribution than current normal cost of payroll for every employee in DC system were to the pension plan, normal cost for new entrants, cash flows, and other factors to compared to the pension plan, normal cost for new entrants, cash flows, and other factors to complete the estimate.

DEFINED BENEFIT VS. DEFINED CONTRIBUTION PLANS

- Towers Watson has been comparing annual investment returns in defined benefit (DB) and defined contribution (DC) plans since 1995
 - Their latest analysis adds investment returns for 2009 through 2011.
 - Findings:
 - Consistent with other down stock market years, defined benefit plans outperformed defined contribution plans in 2011 by one of the largest margins since 1995
 - Among the largest one-sixth of plans, defined benefit plans have outperformed defined contribution plans by almost a percentage point since 1995
 - Defined contribution plans are outperforming defined benefit plans in market booms, while defined benefit plans are better equipped to weather downturns
- Supported by other studies (National Institute on Retirement Security or NIRS)

WHY ARE DB PLANS A BETTER BANG FOR YOUR BUCK?

- The National Institute on Retirement Security (NIRS) released its report, <u>Still a Better Bang for the Buck</u>
 - DB plans can deliver a given level of retirement income at a cost that is <u>48%</u> lower than 401(k)-type
 DC accounts
 - In addition, the report found that DB plan investment returns are around 100 basis-points higher on average than DC plan investment returns due to higher DC plan expenses and longer DB plan investment horizons
- Cost Factors Cited In Report:
 - Longevity risk pooling generates a cost savings of about 10%
 - In order to provide lifelong income to each and every retiree, DB plans only have to fund benefits to last to average life expectancy
 - In a DC plan, an individual must accumulate extra funds in order to self-insure against the
 possibility of living longer than average or possibly buy a life annuity from an insurance Company,
 at a cost
 - Well-diversified, long-term portfolios generates a cost savings of about 11%
 - DB plans can maintain a diversified investment portfolio over the long-term
 - Individuals in DC plans are often advised to shift to lower-risk/lower-return assets as they age
 - Low-fee professional investment management and higher investment returns generates a costsavings of about 27%
 - DB plans generally have lower investment and administrative expenses than DC plans and have better access to professional investment management

DEFINED BENEFIT PENSIONS ARE AN ECONOMIC GENERATOR

Reliable and adequate income in retirement is important to Vermont's economic prosperity

- Retirees with adequate and reliable income buy good and service and are part of the economic generator
- Per 2016 NIRS study, retiree spending of pension benefits in 2014 generated \$1.2 trillion in total economic output, supporting some 7.1 million jobs across the U.S.
- Per NIRS, each dollar paid out in pension benefits supported \$2.21 in total economic output nationally
 - In 2014, State and local pension funds in Vermont and other states paid a total of \$308.7 million in benefits to 17,125 Vermont residents in 2014. Retirees' expenditures from these benefits supported a total of \$386.5 million in total economic output in the state
 - In 2014, the average pension benefit received was \$1,468 per month or \$17,622 per year in Vermont
 - Retiree expenditures stemming from state and local pension plan benefits supported 2,809 jobs in Vermont

On the other hand...

LACK OF RETIREMENT SAVINGS ADDS TO BUDGETARY PRESSURES

Per U.S. Governmental Accountability Office:*

"...for those who do have access (to employer sponsored retirement plans), traditional defined benefit pensions have become much less common. Since 1975, there has been a <u>marked shift to defined contribution plans</u>, <u>such as 401(k)s</u>, as the <u>primary type of retirement plan</u>. Combined with increases in longevity, this shift has increased the risks and responsibilities for individuals in planning and managing their retirement. Yet research shows that many households are ill-equipped for this task and have little or no retirement savings"

"Moreover, to the extent that individuals find that their savings are inadequate as a supplement to their retirement benefits from Social Security and any employer-sponsored plan, they may need to rely more heavily on various safety net programs for help, putting increasing pressure on the federal budget for these programs, and state and local governments' budgets, as well."**

The safety net itself is also under stress: Recent studies point to rising levels of bankruptcy among older Americans, citing reductions in safety-net programs and a shift to 401(k)-type plans. The rate of seniors age 65 and older who have filed for bankruptcy has tripled since 1991. ***

^{*} See https://www.gao.gov/key_issues/financial_security_for_older_americans/issue_summary and GAO, The Nation's Retirement System, GAO-18-111SP, October 2017

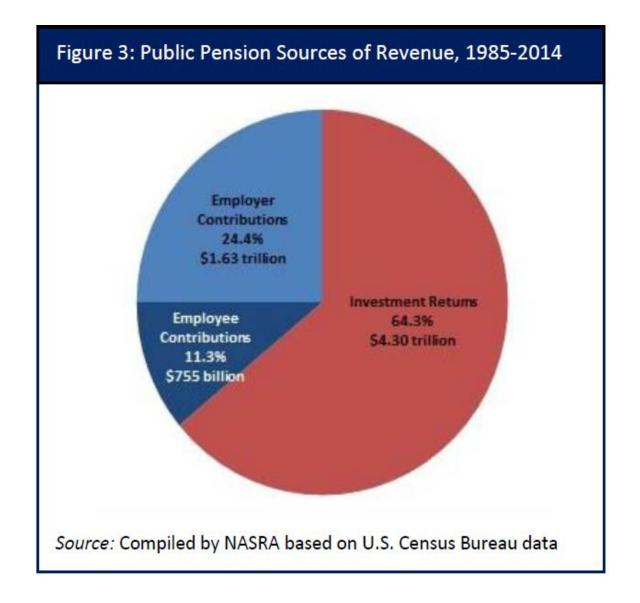
^{**}See: GAO, Older Adults: Federal Strategy Needed to Help Ensure Efficient and Effective Delivery of Home and Community-Based Services and Supports, GAO-15-190 (Washington, D.C.: May 20, 2015).cited in The Nation's Retirement System.

^{***}Thorne, Deborah and Foohey, Pamela and Lawless, Robert M. and Porter, Katherine M., Graying of U.S. Bankruptcy: Fallout from Life in a Risk Society, August 5, 2018.

DC PLANS TRANSFER ADDITIONAL COSTS TO PUBLIC SECTOR

Investment earnings comprise the greatest source of revenue

Past studies in Vermont show some variations from year to year and by system, but general rule of thumb is that for every dollar paid to retirees, 65 to 70 cents comes from investment income



DC PLANS TRANSFER ADDITIONAL COSTS TO PUBLIC SECTOR

- Inadequate retirement from DC plans requires additional public sector supports in retirement- fuel assistance, assistance payments
 - To extent DB plans are replaced "with high-risk, employee-owned 401(k)s, the values of which fluctuate with the stock market. With the 401(k)-style of savings, payout during retirement is not defined or predictable, employees bear all of the market risks, and returns depend on employees' investment skills"*
- These do not have the added benefit of investment return instead this requires dollar for dollar payout in form of assistance payments instead reaping up to 70 cents from investment income
- Utah Study: "Increasing net worth among the bottom one-third of retirees by just 10 percent over the worker's career would decrease government outlays by more than \$194 million over the next 15 years"**
 - DC plans provide less retirement security, adding to government budgetary pressures in the long-run
- Dignity in retirement at a lower cost to the taxpayer should be the goal

^{**}AARP Utah Commissions Study on Cost of Retiring Poor in the State, "http://states.aarp.org/aarp-utah-commissions-study-oncost-of-retiring-poor-in-the-state/

UNFUNDED LIABILITIES AND RESIDUAL PLAN MANAGEMENT

- The unfunded pension liability in the Vermont system's cover benefits already earned by current employees and retirees
- Changing pension systems for new employees will not reduce the unfunded liability
- It will cost more dollars as the employer contribution rates of existing state and municipal DC plans exceed the current "normal cost" component.
- Introducing or expanding a DC option will not eliminate the necessity of continued maintenance of the DB plan
- Allocation of Unfunded Liabilities: Shorter time frame for amortizing unfunded liabilities as you approach
 the amortization end date could create a spike in costs, at least in short-term
- Investment of Plan Assets
 - If DB plan is closed, the age profile of the plan will change, necessitating revisions to the asset investment horizon at some point in the future (not likely a near term event)
 - More liquidity required to meet obligations
 - Changes to asset allocation plan would be necessitated, to a more conservative profile, likely adversely impacting return at some point in the future

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

- 2005: Teacher Study made changes to the State's actuarial methods and put full funding of the ARC on track. The Legislature has
 consistently adopted a budget with full funding of the ARC since 2007.
- 2008: Committee restructured state system (VSERS) Group F benefits, lengthening age of retirement, effective in FY2009, in concert with health care changes.
- 2009: Pension and Health Care Study completed providing basis for negotiated savings over the next few years for both VSERS and the teachers' (VSTRS) system.
- 2010 VSTRS: Lengthened age for normal retirement, contribution increases, and other changes, effective in FY2011, resulting in \$15 million in annual pension savings. In addition to pension costs, additional health care savings accrued.
- 2011 VSERS: Employee contribution rate increases beginning FY2012, generating \$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 (VMERS), demonstrating <u>shared</u> responsibility by all parties. These changes put VMERS on a stronger financial track.
- 2014 VSTRS: additional contribution increases for new and non-vested members, effective FY2015, generating \$1 million initial annual savings, increasing each year.
- 2014 VSTRS: Statute change permitting that teacher pension costs be charged to federal grants, effective FY2016, creating an estimated \$3 to \$4 million of 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 were paid out of a sub-trust of teachers pension fund. By 2014 this arrangement
 was costing over \$20 million per year in interest costs.
 - Collaborative solution: Successfully convened over a dozen stakeholders, including employee group, to address the problem with combined pension/health care changes. In addition to pension and health care changes previously stated, a new health care assessment for LEAs was implemented, linking local employment decisions to the benefit costs.
 - Projected to save taxpayers \$480 million in unfunded liability interest costs through FY2038.
- 2016: Changes to the amortization financing schedule for VSERS and VSTRS. Will result in saving \$165 million in interest from present to 2038.
- 2016: Increased employee contributions will result in \$1.2 million in annual savings, with savings growing larger in future years.
- 2018: Paid additional \$26.2 million above ADEC for VSTRS and \$12.5 million for VSERS
- 2018: Risk Assessment per ASOP 51 Early Implementation by State
- 2019-2020: Amortization Plan enacted in 2016 takes effect

At the same time creating additional Transparency and Accountability

- 2013: Pension forfeiture statute adopted for all three systems (VSERS, VSTRS, VMERS).
- 2015: VSERS Disability retirement reform permitting wage verification of disability pensioners.

Collaborative Approach Key to Success

- All benefit changes made though collaborative efforts involving Administration, Treasurer's Office, Legislature and employee groups.
- No court litigation/disruptions in planned implementations.

Recent Actuarial Assumption Changes:

- Lowered investment rate of return assumption to 7.5% based on independent analysis by actuary and pension consultant.
- Updated mortality table assumptions.

IN CONCLUSION, WE NEED TO CONTINUE TO . . .

- Avoid a quick fix and address the fundamental weaknesses in our revenue structure and spending patterns, including the paydown of long-term liabilities over the long term
- Maintain continued polices for full actuarial funding of the pension funds
- Utilize periodic valuations with reasonable assumptions to assure that the pension systems are achieving the dual goals of benefit security and fiscal responsibility to both members and taxpayers
- Review changes to the benefit system to asses their impact
- Remain disciplined investors
- <u>Exercise prudence</u>, assess current risk management framework and develop productive strategies