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STATE OF VERMONT
OFFICE OF THE STATE TREASURER

TO: Pension Benefits, Design, and Funding Task Force

FROM: Beth Pearce, Vermont State Treasurer

DATE: September 23, 2021

RE: OPEB Background Information, Initiatives, and Funding Requests

Thank you for the opportunity to present OPEB pre-funding proposals to the Task Force. The issue of prefunding has been presented to, and vetted by, legislative committees year after year. FY22 provided an opportunity to accomplish prefunding but the requisite dollars and the necessary statutory changes to establish prefunding were not included in the final COVID relief and the appropriations bills.

The Trustee Boards and the Treasurer's Office have consistently advocated for prefunding of the OPEB benefits, and the Administration and the General Assembly have both committed to pay down our debts, including pension and OPEB. The state's independent actuaries estimate that moving to prefunding for both the state and teacher OPEB funds would reduce our liabilities by \$1.68 billion. While an investment of dollars is needed to accomplish this, it will pay dividends and is the most cost-effective way to pay for benefits. As noted in my presentation to the Task Force on July 22nd, prefunding sets aside funds to pay for future benefits to employees in retirement. These assets are invested, and the proceeds are used to pay for future benefits. Prefunding facilitates employee recruitment and retention, and it provides needed security for our valued public employees in retirement. It is time to take this over the finish line.

Over the past several years we have taken steps to lower the liabilities associated with health care. Until FY15, the State was not even meeting its pay-go obligations for teacher health care, instead putting it on our "credit card". The State now appropriates the cost of premiums on an annual basis with a combination of federal, state, and local dollars. This change alone is projected to save \$480 million in interest from FY15 through FY38. The Administration also made several contractual changes to the state health care system, lowering liabilities over \$200 million. Both systems moved to a tiered benefit structure that has saved, and will save, hundreds of millions of dollars in health care costs while rewarding long-term service.

On September 1, 2020, we submitted a memo with a four-point plan to the legislative leadership and the House and Senate Government Operations and Appropriations Committees. That plan included the following initiatives:

1. Work with our actuaries to incorporate a portion of VSTRS claims experience to adjust use of national health care trend rates, lowering the liability.
2. Review alternative structures for VSTRS health care through a Request for Proposals with the goal of reducing expenditures while maintaining the current level of benefits.
3. Develop statutory changes to invest OPEBs in either the Trust Investment Account or with pension funds while maintaining segregated accounting; and
4. Propose a prefunding policy to the General Assembly.

Since submitting the plan in September 2020, the Treasurer's Office has achieved significant developments with respect to each of the above initiatives. The VSTRS claims experience is superior compared to national trends. By integrating these into the trend rates, the liabilities were reduced by approximately \$25 million.

The VSTRS Board of Trustees has signed a contract to move to a Medicare Advantage Health system which allows us to closely match the benefits provided to Medicare-eligible members and provide significant enhancements, including a new vision and hearing benefit, at reduced premiums averaging between 30% and 40%, depending on the plan selected by the retiree. This means more money in the pockets of retirees, a phased-in reduction of state/employer health care costs, and enhanced services.

Additionally, the General Assembly enacted legislative changes that permit investments in other vehicles that will maximize return, and lower employer and employee costs. Funds were recently moved to the Trust Investment Account and the Treasurer's Office is working with VPIC on the asset allocation and a memorandum of understanding prior to moving a portion into pension fund investment vehicles.

Finally, our proposal to the General Assembly, as developed in FY19, FY20 and again in FY21, was resubmitted in February 2021 to both Government Operations and Appropriations for consideration for the FY22 fiscal year. The General Assembly chose not to enact the proposal in FY22, and so we are submitting the same proposal for FY23, although a second alternative for the VSTRS Retiree Teachers Health and Medical Benefits Fund (RTHMB) was recommended by Senate Appropriations. According to our actuaries, this alternative does meet the requirements for prefunding.

The proposals are outlined in two letters from our consulting actuaries, included as Exhibit A. In summary, the elements of each proposal are as follows.

VSTRS OPEB:

- This approach would require a policy for a graduated funding scale to fund the liability gap over time. It builds up to the actuarially determined contribution, in incremental prefunding contributions (IPC) based on a funding schedule established in statute.
- Goal: Meet full funding no later than the current amortization period, end of FY2049.

- Scenario¹:
 - FY22 employer contribution at requested amount of \$41,818,509
 - FY23, FY24, and FY25 employer contribution at 10% increases annually
 - FY26 – FY49 at 3% increases annually
 - There is a one-time increase to the \$35.1 million Year 1 base appropriation of \$6.7 million, bringing it to the \$41.8 million noted above.
 - Subsequent to the development of Exhibit A-1, the Treasurer’s Office requested an additional \$13.3M (not reflected in the exhibit) to safeguard against early experience volatility.
 - The analysis does not reflect teachers hired after the latest valuation date. Hires after that date would be funded using the “New Teacher Assessment”² established by statute, in FY2014/2015.
 - The assumed interest rate is at 7%, consistent with pension funds but was also “stressed tested” at 6.25%.
 - Statutory language to codify the funding policy will be needed. That language was developed in February 2021 although some minor adjustments may be necessary. Language was developed by Treasury Counsel and Legislative Counsel with input from House Government Operations.
- Result: Full funding is achieved in FY2046 at the 7% scenario and FY2048 in the 6.25% scenario.
- Advantages:
 - Builds up to the ADEC in increments over time.
 - The 3% increases after the first three-year cash infusion are not significantly over the cost of inflation.
 - Using the 3% increments provides a more predictable change from year to year, assisting in the budget process.
- Downside: Will take longer to pay off the unfunded liability.

If the funding and policy had been developed in the last legislative session, it could have been used to lower the liabilities in the FY21 valuation. The longer we wait to adopt a pre-funding package, the greater the amount of cash infusion that will be needed. In this case, however, we believe the dollar levels will be adequate to jumpstart the prefunding. The RTHMB had positive FY21 financial results, over the estimated surplus and the contractual changes will drive down the premium payments, although it is not possible to fully quantify at this time.

Alternative Proposal for VSTRS:

During the most recent legislative session, the Senate Appropriations Committee developed an alternative approach to prefunding. Our consulting actuaries have stated that this also meets the requirements to employ prefunding:

¹ Since this proposal was not adopted for FY2022, it will be necessary to roll forward this scenario into FY23.

² The New Teacher Assessment is paid by the local education entities for any hire made after 7/1/2015 so that costs for health care are shared by the State and local schools.

- The amount determined necessary to pay all retiree health and medical benefits, including prescription drug benefits (essentially pay-go) will be paid for out of the General Fund.
- The amount determined in the most recent actuarial valuation to be the “normal cost” for the same fiscal year will be appropriated from the Education Fund.
- New entrants (retirees) will continue to be funded by the “New Teacher Assessment” noted above.
- This will provide some relief to the General Fund and the normal cost for retiree health care seems to be an appropriate cost for the Education Fund.

VSERS:

- The VSERS plan will necessitate funding of the full ADEC, rather than the “ramp up” model. The reasons for this are:
 - The VSERS does not assess a “New Teacher Assessment” or equivalent charge to account for new hires.
 - VSERS provides for full family coverage for long-serving employees while VSTRS is limited to spousal coverage for retirees with 25 years of experience.
 - VSERS and VSTRS have a different occupational mix and resulting claims experience.
 - There is an implicit subsidy for retirees that are in the insurance pool with active employees that the actuary needs to adjust in the development of liabilities.³
 - The funding schedule is included in Exhibit A.

The aggregate increased funding in Year 1 of adoption of prefunding for both VSERS and VSTRS is as follows:

OPEB Pre-funding Requirement and Impact on Liabilities (In Millions \$)						
System/Category:	FY 22 Estimated Net (unfunded) OPEB Liability	Current Funding in Governor's Budget	Treasurer's Office Recommended Funding	Increased Funding	Estimated Resulting Net OPEB Liability	Change to Net OPEB Liability
State (VSERS)	\$1,617	\$36.7	\$58.8	\$22.1	\$754.9	\$861.8
Teacher (VSTRS)	\$1,480.7	\$35.1	\$55.1	\$20.0	\$658.8	\$821.9
Total Unfunded Liability	\$3,097.4	\$71.8	\$113.9	\$42.1	\$1,413.7	\$1,683.7
* Approximately 40% of the VSERS increase is expected to be allocated to the general fund. Approximately 23% of total expenditures is reimbursed by through federal funds						

³ From the Society of Actuaries: “It is a common practice for employers to permit retired employees (and their spouses or dependents) to continue in the employer’s group health insurance plan (which also covers active employees) by paying the group premium charged to active employees once eligibility for employer paid benefits is exhausted. This practice creates an OPEB liability based on the theory that retirees have higher utilization of health care benefits than active employees. Unless the premium rate for retirees is set to fully recover their health costs, the premium for active employees is implicitly overstated to subsidize utilization by retirees. Similarly, unless the premium rate for retirees is set to fully recover their health costs, the premium for retirees is understated. This difference creates an implicit rate subsidy.

As noted in the chart, OPEB costs for VSERS are allocated across all funds/cost centers. The General Fund would be expected to pick up 35 to 40% of the increased funding. Also as noted above, a significant portion of OPEB cost is reimbursed through federal grants. The alternative proposal for VSTRS as developed by Senate Appropriations, would shift costs from the General Fund.

VSERS has received substantial funds at year end as the statute provides for a formula to distribute a portion of surplus funds to the VSERS OPEB, after reserves are fully funded. This past year that amount was \$52.4M, bringing the total assets of the fund to \$120.3M. We will evaluate to what extent the additional dollars will lower the ADEC, but it is not a significant percentage of the total liability. It does, however, provide a cushion for any volatility in the early years.

At this point, proposals have been developed for both plans and statutory language to codify the funding policies has been reviewed and approved, pending any final revisions from legal counsel.

The Trustee Boards and the Treasurer's Office urge the Task Force and, ultimately, the General Assembly to adopt these recommendations. Failure to favorably act on these proposals will only cost all taxpayers⁴ more money in the long run and place benefits in jeopardy sometime down the road. Failure to fully fund the pensions, especially the teachers' plan, has had an impact on the past and current ADEC. As you can see from the history noted in Appendix B, this request has languished for some time. Let's not make the same mistake now and regret these decisions down the road. We have an obligation to pay our liabilities and, when creating budgets, recognize both the short-term and the long-term consequences of failing to act. The time to prefund and invest resources, with a substantial future payback, is now.

Please let us know if you have any questions.

⁴ Based on past studies, roughly 78% of VSERS retirees and 75% of VSTRS retirees, reside in Vermont, pay taxes and are part of the economy.



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February 5, 2021

Via Email beth.pearce@vermont.gov

Ms. Beth Pearce
State Treasurer
Office of the State Treasurer
109 State Street, 4th Floor
Montpelier, VT 05609-6901

Re: Effect of Proposed Funding Schedule on VSTRS Unfunded Liability

Dear Beth:

As requested, we have calculated the effect the newly proposed funding schedule would have on the projected Unfunded Liability under GASB 74 for the Vermont State Teachers' Retirement System (VSTRS). The funding schedule, confirmed via e-mail on January 19, 2021, reflects an employer contribution for the fiscal year ending June 30, 2022 of \$41,818,509, 10% increases in the employer contribution for fiscal years' ending 2023, 2024, and 2025, and then 3% annual increases thereafter. These analyses were performed using the Projected Unit Credit actuarial method and assuming long-term rate of returns of 7.00%, and 6.25%. Note that the blended rate of return used may be slightly lower than the long-term rate of return during the early stages of funding the plan. Assuming the proposed funding schedule is enacted this Spring and GASB OPEB valuation assumptions are met, the June 30, 2021 GASB OPEB Valuations would be calculated using this blended rate of return.

Benefit payments and liabilities for teachers hired after June 30, 2019 are not included in these analyses. It was assumed that the "New Teacher Assessment" would be sufficient to fund teachers hired after June 30, 2019. If the "New Teacher Assessment" falls short of funding these teachers or if the "New Teacher Assessment" ends, then additional contributions may be necessary to continue utilizing the long-term rate of return in future GASB OPEB valuations.

The measurements shown in these analyses may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

Exhibit 1 presents the Projected Unfunded Liability Schedule assuming a long-term rate of return of 7.00%. Note that beginning in 2046 VSTRS is fully-funded and that at the beginning of the Fiscal Year Ending June 30, 2049 the Fund has a projected surplus of \$278.6 million.

EXHIBIT A-1

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Exhibit 2 presents the Projected Unfunded Liability Schedule assuming a long-term rate of return of 6.25%. Note that beginning in 2048 VSTRS is fully-funded and that at the beginning of the Fiscal Year Ending June 30, 2049 the Fund has a projected surplus of \$29.9 million.

Please refer to our Actuarial Valuation and Review of Other Postretirement Benefits Measured at June 30, 2020 for the assumptions and plan of benefits underlying these calculations.

The Coronavirus (COVID-19) pandemic is rapidly evolving and is having a significant impact on the US economy in 2021, including most retiree health plans, and will likely continue to have an impact in the future. Our results do not include the impact of the following:

- Direct or indirect effects of COVID-19 on short-term health plan costs
- Changes in the market value of plan assets since June 30, 2020
- Changes in interest rates since June 30, 2020
- Short-term or long-term impacts on mortality of the covered population
- The potential for federal or state fiscal relief

Each of the above factors could significantly impact these results.

Segal accounting results are based on proprietary actuarial modeling software. The accounting valuation models generate a comprehensive set of liability and cost calculations that are presented to meet accounting standards and client requirements. Our Actuarial Technology and Systems unit, comprising both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

The results are also based on models for cost projections developed by Segal actuaries and programmers. The client team customizes and validates the models, and reviews the results, under the supervision of the responsible actuary.

Our claims costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the paid claims, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in these exhibits are complete and accurate. In my opinion, each assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

EXHIBIT A-1

Ms. Beth Pearce
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Please let me know if you have any questions or need any additional information.

Sincerely,

Yori Rubinson, FSA MAAA
Vice President and Retiree Health Actuary

yr/baa

cc: Mr. Daniel A. Levin
Mr. William Kriewald

Attachments

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DRAFT

Vermont State Teachers' Retirement System

Exhibit 1: 7.00% Rate of Return (All Numbers in Millions)

Fiscal Year Ending June 30	Actuarial Accrued Liability at Beginning of Period	Health Care Fund Assets at Beginning of Period	Net OPEB Liability at Beginning of Period	Contributions During Fiscal Year	Benefit Payments During Fiscal Year*	Investment Earnings During Fiscal Year	Health Care Fund Assets at End of Period	Actuarial Accrued Liability at End of Period	Funded Ratio	Annual Change in Contributions
2021	\$640.9	\$8.7	\$632.2	\$31.8	\$31.1	\$1.7	\$11.2	\$668.2	1.67%	-
2022	668.2	11.2	657.0	41.8	32.5	2.6	23.1	696.1	3.31%	31.51%
2023	696.1	23.1	673.1	46.0	34.2	3.6	38.5	724.6	5.32%	10.00%
2024	724.6	38.5	686.0	50.6	36.0	5.0	58.1	753.3	7.71%	10.00%
2025	753.3	58.1	695.2	55.7	38.1	6.6	82.2	781.9	10.52%	10.00%
2026	781.9	82.2	699.7	57.3	40.2	8.4	107.7	810.4	13.29%	3.00%
2027	810.4	107.7	702.6	59.1	42.3	10.2	134.6	838.6	16.05%	3.00%
2028	838.6	134.6	704.0	60.8	44.7	12.1	162.8	866.5	18.79%	3.00%
2029	866.5	162.8	703.6	62.6	47.1	14.1	192.5	893.8	21.54%	3.00%
2030	893.8	192.5	701.3	64.5	49.8	16.3	223.5	920.0	24.30%	3.00%
2031	920.0	223.5	696.5	66.5	52.6	18.5	255.9	944.9	27.08%	3.00%
2032	944.9	255.9	689.0	68.5	55.5	20.8	289.6	968.3	29.91%	3.00%
2033	968.3	289.6	678.7	70.5	58.2	23.2	325.1	990.1	32.84%	3.00%
2034	990.1	325.1	665.0	72.6	61.1	25.7	362.3	1,009.8	35.88%	3.00%
2035	1,009.8	362.3	647.5	74.8	63.8	28.4	401.7	1,027.6	39.09%	3.00%
2036	1,027.6	401.7	625.9	77.0	65.7	31.2	444.2	1,044.0	42.55%	3.00%
2037	1,044.0	444.2	599.8	79.4	67.6	34.3	490.3	1,058.9	46.30%	3.00%
2038	1,058.9	490.3	568.6	81.7	70.2	37.6	539.4	1,071.4	50.35%	3.00%
2039	1,071.4	539.4	532.0	84.2	72.5	41.1	592.2	1,081.3	54.77%	3.00%
2040	1,081.3	592.2	489.1	86.7	74.0	44.9	649.9	1,089.5	59.65%	3.00%
2041	1,089.5	649.9	439.6	89.3	76.3	49.1	712.0	1,094.8	65.04%	3.00%
2042	1,094.8	712.0	382.8	92.0	78.3	53.5	779.3	1,097.1	71.03%	3.00%
2043	1,097.1	779.3	317.9	94.8	79.8	58.4	852.6	1,096.6	77.75%	3.00%
2044	1,096.6	852.6	244.0	97.6	81.6	63.7	932.2	1,092.8	85.31%	3.00%
2045	1,092.8	932.2	160.6	100.5	82.9	69.4	1,019.2	1,086.3	93.82%	3.00%
2046	1,086.3	1,019.2	67.1	103.5	84.1	75.6	1,114.3	1,077.5	103.41%	3.00%
2047	1,077.5	1,114.3	-36.8	106.7	85.1	82.5	1,218.4	1,066.7	114.22%	3.00%
2048	1,066.7	1,218.4	-151.7	109.9	86.5	89.9	1,331.7	1,053.0	126.46%	3.00%
2049	1,053.0	1,331.7	-278.6	113.1	87.5	98.1	1,455.4	1,037.0	140.35%	3.00%

* Benefit payments net of retiree self-pay contributions and EGWP reimbursements

Notes: Contributions are assumed to be made at the beginning of the fiscal year.

This exhibit only reflects teachers hired on or before June 30, 2019. No provision was made for future members.

Vermont State Teachers' Retirement System

Exhibit 2: 6.25% Rate of Return (All Numbers in Millions)

Fiscal Year Ending June 30	Actuarial Liability at Beginning of Period	Health Care Fund Assets at Beginning of Period	Net OPEB Liability at Beginning of Period	Contributions During Fiscal Year	Benefit Payments During Fiscal Year*	Investment Earnings During Fiscal Year	Health Care Fund Assets at End of Period	Actuarial Liability at End of Period	Funded Ratio	Annual Change in Contributions
2021	\$710.6	\$8.7	\$701.9	\$31.8	\$31.1	\$1.6	\$11.0	\$740.3	1.49%	-
2022	740.3	11.0	729.3	41.8	32.5	2.3	22.6	770.7	2.93%	31.51%
2023	770.7	22.6	748.1	46.0	34.2	3.2	37.6	801.5	4.70%	10.00%
2024	801.5	37.6	763.8	50.6	36.0	4.4	56.6	832.5	6.80%	10.00%
2025	832.5	56.6	775.9	55.7	38.1	5.8	79.9	863.3	9.26%	10.00%
2026	863.3	79.9	783.3	57.3	40.2	7.3	104.4	893.8	11.68%	3.00%
2027	893.8	104.4	789.4	59.1	42.3	8.9	130.0	924.0	14.07%	3.00%
2028	924.0	130.0	794.0	60.8	44.7	10.5	156.6	953.7	16.42%	3.00%
2029	953.7	156.6	797.1	62.6	47.1	12.2	184.4	982.7	18.77%	3.00%
2030	982.7	184.4	798.3	64.5	49.8	14.0	213.2	1,010.4	21.10%	3.00%
2031	1,010.4	213.2	797.2	66.5	52.6	15.8	242.9	1,036.6	23.43%	3.00%
2032	1,036.6	242.9	793.7	68.5	55.5	17.7	273.6	1,061.2	25.78%	3.00%
2033	1,061.2	273.6	787.5	70.5	58.2	19.7	305.6	1,083.9	28.20%	3.00%
2034	1,083.9	305.6	778.2	72.6	61.1	21.7	338.8	1,104.3	30.68%	3.00%
2035	1,104.3	338.8	765.5	74.8	63.8	23.9	373.7	1,122.6	33.29%	3.00%
2036	1,122.6	373.7	748.9	77.0	65.7	26.1	411.2	1,139.3	36.09%	3.00%
2037	1,139.3	411.2	728.2	79.4	67.6	28.5	451.4	1,154.2	39.11%	3.00%
2038	1,154.2	451.4	702.8	81.7	70.2	31.1	494.1	1,166.6	42.36%	3.00%
2039	1,166.6	494.1	672.5	84.2	72.5	33.9	539.7	1,176.1	45.89%	3.00%
2040	1,176.1	539.7	636.4	86.7	74.0	36.8	589.3	1,183.6	49.79%	3.00%
2041	1,183.6	589.3	594.3	89.3	76.3	40.0	642.3	1,187.9	54.07%	3.00%
2042	1,187.9	642.3	545.5	92.0	78.3	43.5	699.5	1,189.0	58.83%	3.00%
2043	1,189.0	699.5	489.5	94.8	79.8	47.1	761.6	1,187.0	64.16%	3.00%
2044	1,187.0	761.6	425.4	97.6	81.6	51.1	828.7	1,181.4	70.15%	3.00%
2045	1,181.4	828.7	352.7	100.5	82.9	55.5	901.8	1,172.9	76.89%	3.00%
2046	1,172.9	901.8	271.1	103.5	84.1	60.2	981.4	1,162.0	84.46%	3.00%
2047	1,162.0	981.4	180.5	106.7	85.1	65.3	1,068.4	1,148.8	93.00%	3.00%
2048	1,148.8	1,068.4	80.5	109.9	86.5	70.9	1,162.7	1,132.8	102.64%	3.00%
2049	1,132.8	1,162.7	-29.9	113.1	87.5	77.0	1,265.3	1,114.2	113.56%	3.00%

* Benefit payments net of retiree self-pay contributions and EGWP reimbursements

Notes: Contributions are assumed to be made at the beginning of the fiscal year.

This exhibit only reflects teachers hired on or before June 30, 2019. No provision was made for future members.



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February 23, 2021

Via Email beth.pearce@vermont.gov

Ms. Beth Pearce
State Treasurer
Office of the State Treasurer
109 State Street, 4th Floor
Montpelier, VT 05609-6901

Re: VSERS Ten-Year Actuarially Determined Contributions Forecast

Dear Beth:

As requested, we have performed a ten-year forecast of the Actuarially Determined Contributions (ADC) for fiscal years ending June 30, 2023 through June 30, 2032 for the Vermont State Employees' Retirement System (VSERS). The ADC for the fiscal year ending June 30, 2023 includes the estimated normal cost for all new hires from July 1, 2019 through June 30, 2020. Similarly, the ADC for the fiscal year ending June 30, 2024 includes the estimated normal cost for all new hires from July 1, 2019 through June 30, 2021 – and so on for later years. Additionally, the ADC is assumed to be contributed in the middle of each year beginning with the fiscal year ending June 30, 2022.

The attached exhibit presents the Ten-Year ADC Forecast assuming a long-term rate of return of 7.00% and additional new entrants.

Assuming a funding schedule of contributing the ADC is enacted in the spring of 2021, the June 30, 2021 GASB OPEB Valuations would be calculated using the long-term rate of return. Assuming all actuarial assumptions are met, the plan would be fully funded by the fiscal year ending June 30, 2047.

The forecasted ADC is based on data, assumptions and the plan of benefits as described in the Actuarial Valuation and Review of Other Postretirement Benefits Measured at June 30, 2020, except for the addition of projected new entrants.

For all years ending June 30, 2020 and beyond, 761 new entrants were assumed to enter annually. The projected new entrant assumption is based on the average annual number of state employees hired between July 1, 2016 and June 30, 2019. New entrants were assumed to have similar demographics to the average composition of all state employees hired between July 1, 2016 and June 30, 2019.

These analyses were performed using the Projected Unit Credit actuarial method assuming a long-term rate of return of 7.00%. Assets were projected forward from June 30, 2020 assuming the System contributes the amount of expected benefit payments for the year ending June 30, 2021 and the ADC thereafter. The Unfunded Actuarially Accrued Liability was amortized using a

closed amortization period calculated as a level percent of projected payroll, with an assumed annual payroll growth of 3.50%.

The measurements shown in these analyses are made for funding purposes may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, including the projection of new entrants; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The Coronavirus (COVID-19) pandemic is rapidly evolving and is having a significant impact on the US economy in 2021, including most retiree health plans, and will likely continue to have an impact in the future. Our results do not include the impact of the following:

- Direct or indirect effects of COVID-19 on short-term health plan costs
- Changes in the market value of plan assets since June 30, 2020
- Changes in interest rates since June 30, 2020
- Short-term or long-term impacts on mortality of the covered population
- The potential for federal or state fiscal relief

Each of the above factors could significantly impact these results.

Segal valuation results are based on proprietary actuarial modeling software. The valuation models generate a comprehensive set of liability and cost calculations that are presented to meet client requirements. Our Actuarial Technology and Systems unit, comprising both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

The results are also based on models for cost projections developed by Segal actuaries and programmers. The client team customizes and validates the models, and reviews the results, under the supervision of the responsible actuary.

Our claims costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the paid claims, enrollments, plan provisions and assumptions into these models and reviews the results for reasonableness, under the supervision of the responsible actuary.

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in these exhibits are complete and accurate. In my opinion, each assumption is

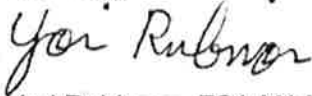
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reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

Please let me know if you have any questions or need any additional information.

Sincerely,



Yori Rubinson, FSA MAAA
Vice President and Retiree Health Actuary

yr/baa

cc: Mr. Daniel A. Levin
Mr. William Kriewald

Attachment

6022335v2/14794.014

**Actuarially Determined Contribution (ADC) For
Fiscal Year Ending**

	June 30, 2022	June 30, 2023	June 30, 2024	June 30, 2025	June 30, 2026	June 30, 2027
Normal Cost	\$18.0	\$19.4	\$20.7	\$22.0	\$23.5	\$25.3
Amortization of Unfunded Actuarial Accrued Liability	<u>40.8</u>	<u>42.3</u>	<u>43.9</u>	<u>45.6</u>	<u>47.3</u>	<u>49.1</u>
ADC	\$58.8	\$61.7	\$64.6	\$67.6	\$70.8	\$74.4
Total Payroll	\$619.9	\$641.6	\$664.1	\$687.3	\$711.4	\$736.3
ADC as Percent of Payroll	9.48%	9.61%	9.73%	9.83%	9.95%	10.11%
Percent Increase in ADC		4.90%	4.80%	4.53%	4.77%	5.14%
Includes Normal Cost for all new entrants between July 1, 2019 and	N/A	June 30, 2020	June 30, 2021	June 30, 2022	June 30, 2023	June 30, 2024

**Actuarially Determined Contribution (ADC) For
Fiscal Year Ending**

	June 30, 2028	June 30, 2029	June 30, 2030	June 30, 2031	June 30, 2032
Normal Cost	\$27.3	\$29.3	\$31.3	\$33.2	\$35.3
Amortization of Unfunded Actuarial Accrued Liability	<u>51.0</u>	<u>53.0</u>	<u>55.0</u>	<u>57.2</u>	<u>59.4</u>
ADC	\$78.3	\$82.2	\$86.3	\$90.4	\$94.7
Total Payroll	\$762.0	\$788.7	\$816.3	\$844.9	\$874.5
ADC as Percent of Payroll	10.27%	10.43%	10.58%	10.69%	10.83%
Percent Increase in ADC	5.20%	5.06%	4.98%	4.65%	4.85%
Includes Normal Cost for all new entrants between July 1, 2019 and	June 30, 2025	June 30, 2026	June 30, 2027	June 30, 2028	June 30, 2029

Notes: All calculations are net of retiree, self-pay contributions and EGWP reimbursements.

For the year ending June 30, 2022, assets were projected forward from June 30, 2020 assuming the System contributes the amount of expected benefit payments for the year ending June 30, 2021. For all following years, assets were projected forward assuming the System contributes the ADC in the middle of the fiscal year.

For all years ending June 30, 2020 and beyond, 761 new entrants were assumed to enter annually. The projected new entrant assumption is based on the average annual number of state employees hired between July 1, 2016 and June 30, 2019. New entrants were assumed to have similar demographics to the average composition of all state employees hired between July 1, 2016 and June 30, 2019.

Exhibit B: Chronology of Treasurer Presentations/Memos/Reports Directed to Prefunding of Other Post-Employment Benefits

Reports

- 1/15/21- Report to the General Assembly and VSERS and VSTRS Boards of Trustees on Recommendations to Reduce Pension and OPEB Liabilities.
 - Submitted to Boards of Trustees and General Assembly 1/15/21
 - Testified:
 - House Ways & Means, 2/18/21
 - Senate Government Operations, 1/28/21
 - Senate Finance, 2/4/21

Presentations and/or Memos to General Assembly

- Retired Teacher Health and Medical Benefit Projection:
 - House Appropriations, 1/23/20
- A Path Towards Prefunding: History of the Retired Teacher's Health and Medical Benefit Fund
 - Presentation dated 1/31/20 and presented to House Appropriations
- Request to restore funding to VSTRS Pension (\$3.5M) and RTHMB (\$6M):
 - Testimony and spreadsheet demonstrating need to commit to prefunding
 - Presentation to House Appropriations, 3/11/20
- Formal Update Regarding the Retired Teachers Health and Medical Benefit Fund ("RTHMB") and the Vermont State Employees Other Post-Employment Benefits Fund (collectively "OPEB")
 - Memo dated 9/1/20, to Speaker, Senate President Pro Tempore, House and Senate Appropriations, House and Senate Government Operations
 - Request funds and commitment to pre-funding in state statute
- Other Post-Employment Benefits (OPEB funding for FY22)
 - Memo dated 12/17/20 to Secretary of Administration and Commissioner of F&M
 - Requesting restoration of funding
- Formal Request Regarding the Retired Teachers Health and Medical Benefits:
 - Memo dated 2/25/20 to Speaker, Senate President Pro Tempore, House and Senate Appropriations, House and Senate Government Operations
 - Requests full funding of FY22 budget, reinstating Governor's budget reduction of approximately \$6 million and statutory language to begin prefunding
 - Testimony- 2/27/20
 - Testimony- House Appropriations 3/11/20
- An Analysis of Proposed Reductions to Retired Teachers Health Care
 - Memo dated 3/10/20 to Speaker, Senate President Pro Tempore, House and Senate Appropriations, House and Senate Government Operations
 - House Appropriations 3/11/20

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- Power Point with overview of 1/15/report (brief reference to OPEBs)
 - Senate Finance, 2/4/21
 - Senate Government Operations. 1/28/21
- Effect of Proposed Funding Schedule on VSTRS Unfunded Liability
 - Memo dated 2/5/21 (updated 2/9/21) from Segal, OPEB Liabilities: Proforma Detailed proposal for prefunding to 2040
 - House Appropriations 2/11/21
 - House Government Operations 2/12/21 and 2/16/21
 - Senate Appropriations 3/11/21
- OPEB 101 Presentation
 - House Government Operations 2/16/21
- OPEB for State and Teachers Retirement Systems: House Government Operations requested an overview of other post-employment benefits for our state and teacher retirees. A brief description of health and dental insurance coverage and premium subsidies is provided herein for both the Vermont State Employees' Retirement System (VSERS) and the Vermont State Teacher's Retirement System (VSTRS).
 - Included OPEB Primer
 - Presented 2/12/2021
- Mid-February emails to
 - Series of emails from Vice-Chair of Government Operations. Legislative Counsel and Treasurer's Office on use of surplus funds to pre-fund OPEB and language to establish prefunding
 - Proposal is of VSTRS prefunding to be included in H.315
 - \$20 million funding included but not language but intent to develop recommendations by May 31
- Pension and OPEB Initiatives
 - Memo dated 3/3/21 to Speaker, Senate President Pro Tempore, House and Senate Appropriations, House and Senate Government Operations, Secretary of Administration, Finance & Management, and JFO.
 - Update on requests from Treasurer's Office and overview of consequences of not funding OPEB
 - Review of inclusion of \$20 million in H.315, the COVID relief bill
 - Note: Requisite statutory language not included in H.315 and \$20 million removed from H.315.
- Pension Presentation
- Overview of pensions with a small section on VSTRS OPEB funding
 - House Government Operations, 3/19/21
- Pension and OPEB Initiatives. 3/3/21.
 - Memo to Speaker, Senate President Pro Tempore, House and Senate Appropriations, House and Senate Government Operations, JFO, Secretary of Administration, Commissioner of Finance & Management
 - Presented to Senate Appropriations 3/17/21
 - Outlined cost of prefunding for VSERS and VSTRS OPEBs

EXHIBIT B

- Series of emails with JFO in late April to develop language to appropriate “pay-go” dollars in general fund and “normal cost”, currently estimated for FY22 at approx. \$14 million appropriated in the Education Fund, with requisite prefunding language. This approach was included in the Senate version of Appropriations Bill but was removed in Conference Committee, substituting it with a \$14 million reserve in the Education Fund for possible future action.

Other Documents

- Tom Huestis, Principal, Public Resources Advisory Group, Financial Advisor, works with Rating Agencies:
 - State of Vermont Pensions and OPEB, Presentation Dated 2/19/21
 - Testimony - House Government Operations, 2/19/20
- Letter, Rubinson, Segal, Effect of Proposed Funding Schedule on VSTRS Unfunded Liability
 - Letter dated 2/5/21 (updated 2/9/21)
 - Contemplates appropriation of \$20 million (\$13.3 million one-time appropriation to FY22 base, \$6.7 million incremental prefunding contribution)
- Letter, Yori Rubinson, Segal, VSERS Ten Year Actuarially Determined Contribution Forecast,
 - Letter dated 2/23/21
 - Proposal recommends funding of ADEC