Vermont State Employees' Retirement System

Governmental Accounting Standards Board (GASB) Statement 74 Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) Measured at June 30, 2021

This report has been prepared at the request of the Board of Trustees to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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December 14, 2021

Office of the Vermont State Treasurer 109 State Street Montpelier, Vermont 05609

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2021 under Governmental Accounting Standards Board Statement No. 74. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB Liability (NOL) as of June 30, 2021, and analyzes the preceding year's experience. In addition, we have calculated the Actuarially Determined Contribution for the fiscal year ending June 30, 2023. This report was based on the census data provided by the Vermont State Employees' Retirement System, and the terms of the Plan. The actuarial calculations were completed under the supervision of Yori Rubinson, FSA MAAA, Vice President and Retiree Health Actuary.

If you have any questions, please feel free to call me. We look forward to discussing this material with you at your convenience.

Sincerely,

Segal

Daniel A. Levin, FSA MAAA FCA CEBS

Daniel A. Levin, FSA MAAA FCA CEBS Senior Vice President

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Actuarial Valuation Summary

Purpose and Basis

This report presents the results of our actuarial valuation of Vermont State Employees' Retirement System (VSERS) OPEB plan as of June 30, 2021, required by Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans.* The actuarial computations made are for purposes of fulfilling plan accounting and funding requirements. Determinations for purposes other than meeting financial accounting and funding requirements may be significantly different from the results reported here. This valuation is based on:

- The benefit provisions of VSERS, as administered by the System;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2020, provided by VSERS;
- The assets of the Plan as of June 30, 2021, provided by VSERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Highlights of the Valuation

Accounting and Financial Reporting

- The Net OPEB Liability (NOL) as of June 30, 2021 is \$1,473,073,282, an increase of \$47,695,633, from the prior valuation NOL of \$1,425,377,649. The difference between actual and expected unfunded actuarial accrued liabilities was the net effect of several factors:
 - Combined actuarial experience gains and losses increased the NOL by \$3,131,075. These were comprised of \$4,953,124 of losses due to differences between expected and actual experience on liabilities resulting from demographic changes and actual 2021 contributions and benefit payments that were different from expected offset by \$1,822,049 in gains due to differences between expected and actual earnings on investments.
 - Valuation assumption changes increased the NOL by \$43,572,802. This was primarily the result of updating the valuation-year per capita health costs. Additional changes include increasing the discount rate from 2.23% to 2.41% and updating the retiree contribution rates. The assumption changes are summarized in Exhibit II of Section 3.
- As of June 30, 2021, the ratio of assets to the Total OPEB Liability (the funded ratio) is 7.55%. This is based on the market value of assets at this point in time.



Funding

- For the fiscal year ending June 30, 2022, the ADC is \$109,708,031. The Normal Cost and Actuarially Accrued Liability were determined using the Projected Unit Credit actuarial method and a 2.23% rate of return. 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. The Unfunded Actuarially Accrued Liability was amortized using a closed 27 year amortization period calculated as a level percent of projected payroll, with an assumed annual payroll growth of 3.50%.
- For the fiscal year ending June 30, 2023, the ADC is \$122,114,722. The Normal Cost and Actuarially Accrued Liability were determined using the Projected Unit Credit actuarial method and a 2.41% rate of return. Assets were projected forward from June 30, 2021 assuming the System contributes the amount of expected benefit payments for the year ending June 30, 2022. The Unfunded Actuarially Accrued Liability was amortized using a closed 26 year amortization period calculated as a level percent of projected payroll, with an assumed annual payroll growth of 3.50%.
- The Coronavirus (COVID-19) pandemic has had a significant impact on the US economy, 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, 2021
 - Changes in interest rates since June 30, 2021
 - 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.

Summary of Key Valuation Results

	June 30, 2021	June 30, 2020
Total OPEB Liability	\$1,593,341,095	\$1,482,970,357
 Plan Fiduciary Net Position (Assets) 	120,267,813	57,592,708
Net OPEB Liability	\$1,473,073,282	\$1,425,377,649
Plan Fiduciary Net Position as a percentage of Total OPEB Liability	7.55%	3.88%
	For Year Ending	For Year Ending
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	June 30, 2021	June 30, 2020
Rate of Return	•	•
Rate of ReturnActuarially Determined Contributions	June 30, 2021	June 30, 2020
	June 30, 2021 3.50%	June 30, 2020 3.87%

Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to defining future uncertain obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. It is important for the Vermont State Employees' Retirement System to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by the Vermont State Employees' Retirement System.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. To determine the future costs of benefits, Segal collects claims, premiums, and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.



The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared for use by the Vermont State Employees' Retirement System Finance Department. It includes information for compliance with accounting standards and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.

If the Vermont State Employees' Retirement System is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

Sections of this report include actuarial results that are rounded, but that does not imply precision.

Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care trend, and investment losses, not just the current valuation results.

Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Vermont State Employees' Retirement System should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the Vermont State Employees' Retirement System upon delivery and review. Vermont State Employees' Retirement System should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Actuarial Certification

December 14, 2021

This is to certify that Segal has conducted an actuarial valuation of certain benefit obligations of Vermont State Employees' Retirement System's other postemployment benefit programs as of June 30, 2021, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statement 74 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits and reliance on participant, premium, claims and expense data provided by VSERS or from vendors employed by VSERS. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

The actuarial computations made are for purposes of fulfilling plan accounting and funding requirements. Determinations for purposes other than meeting financial accounting and funding requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience or rates of return on assets differing from that anticipated by the assumptions; changes in 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 retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. The scope of the assignment did not include performing an analysis of the potential change of such future measurements except where noted.

To the best of my knowledge, this report is complete and accurate and in my opinion presents the information necessary to comply with GASB Statement 74 with respect to the benefit obligations addressed. The signing actuary is a member of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and meets the "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

Yori Rubinson, FSA MAAA

Vice President and Retiree Health Actuary



Valuation Results

General Information about the OPEB Plan

Plan Description

Pursuant to contractual agreement and policy, VSERS provides postemployment healthcare benefits to eligible VSERS employees who retire from the System. Vermont Statute Title 3, Chapter 16 assigns the authority to VSERS to establish and amend the benefit provisions of the plan and to establish maximum obligations of plan members to contribute to the plan. The VSERS Board of Trustees is authorized to establish contribution rates of System employees and retirees, and they are set as part of the collective bargaining process.

At June 30, 2020, the Vermont State Employees' Retirement System membership consisted of the following:

	June 30, 2020
Retired members or beneficiaries currently receiving benefits	5,310
Active members	<u>8,788</u>
Total	14,098



Net OPEB Liability

Components of the Net OPEB Liability	June 30, 2021	June 30, 2020
Total OPEB Liability	\$1,593,341,095	\$1,482,970,357
Plan Fiduciary Net Position	120,267,813	57,592,708
Net OPEB Liability	\$1,473,073,282	\$1,425,377,649
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	7.55%	3.88%

The Net OPEB Liability was measured as of June 30, 2021 and 2020. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total OPEB Liability was determined from actuarial valuations using data as of June 30, 2020 and 2019, respectively.

The Total OPEB Liability was measured by an actuarial valuation using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

	June 30, 2021	June 30, 2020
Salary increases	Varies by age	Varies by age
Discount rate	2.41%	2.23%
Investment rate of return	7.00%	7.00%
Healthcare cost trend rates		
Non-Medicare	6.70% graded to 4.50% over 10 years	6.925% graded to 4.50% over 11 years
Medicare	6.00% graded to 4.50% over 12 years	6.14% graded to 4.50% over 13 years
Increase to Retiree Contributions	Equal to health trend	Equal to health trend
Mortality rates		
Pre-retirement Mortality		
Groups A/F/F*/DC	60% of PubG-2010 General Employee Headcount- Weighted Above Median, 40% of PubG-2010 General Employee Headcount-Weighted with generational projection using scale MP-2019	60% of PubG-2010 General Employee Headcount- Weighted Above Median, 40% of PubG-2010 General Employee Headcount-Weighted with generational projection using scale MP-2019
Group C	PubS-2010 Public Safety Employee Headcount- Weighted with generational projection using scale MP- 2019	PubS-2010 Public Safety Employee Headcount- Weighted with generational projection using scale MP- 2019
Group D	70% of PubG-2010 General Employee Headcount- Weighted Above Median, 30% of PubG-2010 General Employee with generational projection using scale MP- 2019	70% of PubG-2010 General Employee Headcount- Weighted Above Median, 30% of PubG-2010 General Employee with generational projection using scale MP- 2019
Post-retirement Mortality - Retirees		
Groups A/F/F*/DC	109% of PubG-2010 General Healthy Retiree Headcount-Weighted with generational projection using scale MP-2019	109% of PubG-2010 General Healthy Retiree Headcount-Weighted with generational projection using scale MP-2019
Group C	40% of PubS-2010 Public Safety Retiree Headcount- Weighted Above Median, 60% of PubS-2010 Public Safety Retiree Headcount-Weighted with generational projection using scale MP-2019	40% of PubS-2010 Public Safety Retiree Headcount- Weighted Above Median, 60% of PubS-2010 Public Safety Retiree Headcount-Weighted with generational projection using scale MP-2019



Group D	PubG-2010 General Healthy Retiree Headcount- Weighted Above Median with generational projection using scale MP-2019	PubG-2010 General Healthy Retiree Headcount- Weighted Above Median with generational projection using scale MP-2019
Post-Retirement Mortality - Spouses		
Groups A/F/F*/DC	Pub-2010 Contingent Survivor Headcount-Weighted with generational projection using MP-2019	Pub-2010 Contingent Survivor Headcount-Weighted with generational projection using MP-2019
Group C	40% of Pub-2010 Contingent Survivor Headcount- Weighted Above Median, 60% of Pub-2010 Contingent Survivor Headcount-Weighted with generational projection using MP-2019	40% of Pub-2010 Contingent Survivor Headcount- Weighted Above Median, 60% of Pub-2010 Contingent Survivor Headcount-Weighted with generational projection using MP-2019
Group D	Pub-2010 Contingent Survivor Headcount-Weighted Above Median with generational projection using MP- 2019	Pub-2010 Contingent Survivor Headcount-Weighted Above Median with generational projection using MP- 2019
Disabled Mortality	PubNS-2010 Non-Safety Disabled Retiree Headcount- Weighted Mortality Table with generational projection using scale MP-2019	PubNS-2010 Non-Safety Disabled Retiree Headcount- Weighted Mortality Table with generational projection using scale MP-2019

Detailed information regarding all actuarial assumptions can be found in Section 3, Exhibit II.



Determination of Discount Rate and Investment Rates of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which bestestimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset allocation as of June 30, 2021 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return [*]
Passive Global Equities	24.00%	5.05%
Active Global Equities	5.00%	5.05%
Large Cap US Equities	4.00%	4.00%
Small/Mid Cap US Equities	3.00%	4.50%
Non-US Developed Market Equities	7.00%	5.50%
Private Equity	10.00%	6.75%
Emerging Market Debt	4.00%	3.00%
Private and alternative Credit	10.00%	4.75%
Non-Core Real Estate	4.00%	5.75%
Core Fixed Income	19.00%	0.00%
Core Real Estate	4.00%	3.75%
US TIPS	3.00%	-0.50%
Infrastructure/Farmland	<u>3.00%</u>	4.25%
	100.00%	

* Calculated as the Arithmetic Rates of Return minus the Rate of Inflation (2.0%), as provided by the Vermont State Treasurers' Office

The target allocation above is based on the asset allocation used by the Vermont State Employees' Retirement System Pension Fund.

The System's Board established the Vermont State Employees' Postemployment Benefits Trust Fund (the Trust) in 2005. The Trust was created for the sole purpose of accepting irrevocable contributions from the System in order to provide postemployment health insurance benefits to current and future eligible retirees of the System in accordance with the terms of the healthcare plan.

Discount Rate

The discount rate is a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021) and a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (2.16% as of June 30, 2021). The blending is based on the sufficiency of projected assets to make projected benefits payments. Since assets are partially sufficient to cover projected benefit payments, the blended discount rate used to measure the total OPEB liability was 2.41% as of June 30, 2021. The projection of cash flows used to determine the discount rate assumed that contributions from the Vermont State Employees' Retirement System will continue to be made commensurate with their average contributions over the most recent five-year period (approximately \$52,000,000 per year).



Sensitivity

The following presents the NOL of Vermont State Employees' Retirement System as well as what the Vermont State Employees' Retirement System's NOL would be if it were calculated using a discount rate that is 1-percentage-point lower (1.41%) or 1-percentage-point higher (3.41%) than the current rate. Also, shown is the NOL as if it were calculated using healthcare cost trend rates that were 1-percentage-point lower or 1-percentage-point higher than the current healthcare trend rates.

	1% Decrease in	Current	1% Increase in
	Discount Rate	Discount Rate	Discount Rate
	(1.41%)	(2.41%)	(3.41%)
Net OPEB Liability (Asset)	\$1,748,129,741	\$1,473,073,282	\$1,254,002,486
	1% Decrease in	Current	1% Increase in
	Health Care Cost	Health Care Cost	Health Care Cost
	Trend Rates	Trend Rates	Trend Rates
Net OPEB Liability (Asset)	\$1,230,213,601	\$1,473,073,282	\$1,790,492,230



Schedule of Changes in Net OPEB Liability¹

	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
Total OPEB Liability					
Service cost	\$63,317,681	\$45,691,441	\$44,590,011	\$52,326,222	\$66,840,919
Interest	34,087,907	45,754,106	49,040,451	54,400,554	46,867,620
Change of benefit terms				-20,232,937	
Differences between expected and actual experience	4,953,124	20,360,909	6,284,223	7,140,411	
Changes of assumptions	43,572,802	127,632,837	-25,550,795	-303,321,519	-190,150,328
Benefit payments, including refunds of member contribution	ns <u>-35,560,776</u>	<u>-35,767,740</u>	<u>-35,340,403</u>	<u>-34,559,465</u>	<u>-33,346,278</u>
Net change in Total OPEB Liability	\$110,370,738	\$203,671,553	\$39,023,487	-\$244,246,734	-\$109,788,066
Total OPEB Liability – beginning	<u>1,482,970,357</u>	<u>1,279,298,804</u>	<u>1,240,275,317</u>	<u>1,484,522,051</u>	<u>1,594,310,117</u>
Total OPEB Liability – ending	<u>\$1,593,341,095</u>	<u>\$1,482,970,357</u>	<u>\$1,279,298,804</u>	<u>\$1,240,275,317</u>	<u>\$1,484,522,051</u>
Plan Fiduciary Net Position					
Contributions – employer	\$90,462,714	\$38,599,577	\$63,749,803	\$32,956,898	\$33,122,887
Contributions – employee					
Net investment income	7,775,040	3,029,909	1,554,329	872,659	1,372,446
Benefit payments, including refunds of member contribution	ns -35,560,776	-35,767,740	-35,340,403	-34,559,465	-33,346,278
Administrative expense	-1,873	-1,785	-1,897	-1,049	
Other					
Net change in Plan Fiduciary Net Position	\$62,675,105	\$5,859,961	\$29,961,832	-\$730,957	\$1,149,055
Plan Fiduciary Net Position – beginning	<u>57,592,708</u>	<u>51,732,747</u>	<u>21,770,915</u>	<u>22,501,872</u>	<u>21,352,817</u>
Plan Fiduciary Net Position – ending	\$120,267,813	\$57,592,708	\$51,732,747	\$21,770,915	\$22,501,872
Net OPEB Liability – ending	<u>\$1,473,073,282</u>	<u>\$1,425,377,649</u>	<u>\$1,227,566,057</u>	<u>\$1,218,504,402</u>	<u>\$1,462,020,179</u>
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	7.55%	3.88%	4.04%	1.76%	1.52%
Covered payroll	\$578,701,831	\$554,291,862	\$548,512,479	\$531,542,782	\$497,200,588
Plan Net OPEB Liability as percentage of covered payroll	254.55%	257.15%	223.80%	229.24%	294.05%

¹ The above information is required beginning in 2017. A full 10-year trend will be compiled in future years.

Notes to Schedule:

Benefit changes:	None.
Changes of assumptions:	The discount rate was increased from 2.23% to 2.41%.
	The valuation-year per capita health costs and retiree contribution rates were updated.

Schedule of Contributions¹

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2017	\$71,832,832 ²	\$33,122,887	\$38,709,945	\$497,200,588	6.66%
2018	74,760,248 ²	32,956,898	41,803,350	531,542,782	6.20%
2019	100,187,896	63,749,803	36,438,093	548,512,479	11.62%
2020	87,804,585	38,599,577	49,205,008	554,291,862	6.96%
2021	90,025,812	90,462,714	-436,902	578,701,831	15.63%

¹ The above information is required beginning in 2017. A full 10-year trend will be compiled in future years.

² The Actuarially Determined Contributions were calculated by the prior actuary, Buck Consultants.

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
Measurement date	June 30, 2021
Actuarial cost method	Projected Unit Credit
Amortization method	30 Years, Closed, Level Percent of Payroll
Remaining amortization period	27 Years as of July 1, 2021
Asset valuation method	The market value of assets as of the measurement date
Actuarial assumptions	The actuarial assumptions used to calculate the actuarially determined contribution rates can be found in Exhibit II.

Actuarially Determined Contribution

	Year Ending June 30, 2023	% of Payroll	Year Ending June 30, 2022	% of Payroll
Rate of Return	2.41%		2.23%	
Actuarial Accrued Liability	\$1,787,402,771	287.87%	\$1,675,647,526	270.30%
Health Care Fund Assets	123,166,267	<u> 19.84% </u>	<u>58,877,025</u>	9.50%
Unfunded Actuarial Accrued Liability	\$1,664,236,504	268.03%	\$1,616,770,501	260.80%
Normal Cost	\$66,216,417	10.66%	\$61,073,378	9.85%
Amortization of Unfunded Actuarial Accrued Liability	55,898,305	9.00%	48,634,653	7.85%
Total Actuarially Determined Contribution	\$122,114,722	19.67%	\$109,708,031	17.70%
Total Payroll	\$620,912,792		\$619,919,869	
Rate of Return	7.00%		7.00%	
Actuarial Accrued Liability	\$901,630,521	145.21%	\$816,505,857	131.71%
Health Care Fund Assets	128,686,560	20.73%	61,624,198	9.94%
Unfunded Actuarial Accrued Liability	\$772,943,961	124.49%	\$754,881,659	121.77%
Normal Cost	\$20,897,140	3.37%	\$18,032,856	2.91%
Amortization of Unfunded Actuarial Accrued Liability	43,680,845	7.03%	40,751,876	6.57%
Total Actuarially Determined Contribution	\$64,577,985	10.40%	\$58,784,732	9.48%
Total Payroll	\$620,912,792		\$619,919,869	

For the year ending June 30, 2022, the Normal Cost and Actuarially Accrued Liability were determined using the Projected Unit Credit actuarial method and a 2.23% and 7.00% rate of return. 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. The Unfunded Actuarially Accrued Liability was amortized using a closed 27 year amortization period calculated as a level percent of projected payroll, with an assumed annual payroll growth of 3.50%.

For the year ending June 30, 2023, the Normal Cost and Actuarially Accrued Liability were determined using the Projected Unit Credit actuarial method and a 2.41% and 7.00% rate of return. Assets were projected forward from June 30, 2021 assuming the System contributes the amount of expected benefit payments for the year ending June 30, 2022. The Unfunded Actuarially Accrued Liability was amortized using a closed 26 year amortization period calculated as a level percent of projected payroll, with an assumed annual payroll growth of 3.50%.

Statement of Fiduciary Net Position

	June 30, 2021
Total Assets	\$120,307,029
Total Liabilities	<u> </u>
Net position restricted for OPEB	\$120,267,813



Schedule of Investment Returns

Year	Annual Money Weighted Rate of Return, Net of Investment Expense
2017	6.5%
2018	4.0%
2019	6.9%
2020	6.2%
2021	13.9%



Supporting Information

Exhibit I: Summary of Participant Data

	As of June 30, 2020	As of June 30, 2019
Retirees Enrolled in Health Care:		
Number of retirees	5,066	4,999
Average age of retirees	71.1	70.7
Number of spouses and dependents (excluding children)	2,491	2,474
Average age of spouses	67.8	66.6
Surviving Spouses Enrolled in Health Care:		
Number	244	237
Average age	76.9	76.2
Active Participants:		
Number	8,788	8,725
Average age	45.8	45.8
Average years of service	10.9	11.0
Average expected retirement age	62.4	62.4



Exhibit II: Actuarial Assumptions and Actuarial Cost Method

Data: Detailed census data, premium data and/or claim experience, and summary plan descriptions for postretirement wifare benefits were provided and/or affirmed by the Vermont State Employees' Retirement System. Actuarial Cost Method: Entry Age Normal, level percent of pay Asset Valuation Method: Market Value Roll-forward Techniques: The results as of June 30, 2021 were based on participant data as of June 30, 2020 projected forward to June 30, 2021 using standard actuarial techniques. Measurement Date: June 30, 2021 Denographic Assumptions: Some of the demographic assumptions used in this valuation (including motality, disability, turover, and retirement), in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions, use in this valuation. The remaining demographic assumptions, such as errollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. Discount Rate: 241% based on a blend of the long-term expected rate of return on OPEE Trust assets (7.00% as of June 30, 2021 and a yield or index rate for 30, 3021). Salary Increases: Service Sanual Rate of 10 4.77% 15 4.42% 20 4.20% 33 3.62% 40 3.62%				
Asset Valuation Method: Market Value Roll-forward Techniques: The results as of June 30, 2021 were based on participant data as of June 30, 2020 projected forward to June 30, 2021 using standard actuarial techniques. Measurement Date: June 30, 2020 Demographic Assumptions: Some of the demographic assumptions used in this valuation (including mortality, disability, turnover, and retirement, in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the Plan and the Plan and the sepreince of similar plans. Discount Rate: 2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021). Salary Increases: Manual Rate of Service Salary Increase (%) 0 5.55% 5 5 5.31% 10 4.42% 20 4.20% 21 4.20% 21 4.20% 21 4.20% 21 4.20% 21 4.20% 21 4.20% 23 3.62% 33 3.62%	Data:			
Roll-forward Techniques: The results as of June 30, 2021 were based on participant data as of June 30, 2020 projected forward to June 30, 2021 using standard actuarial techniques. Measurement Date: June 30, 2021 Actuarial Valuation Date: June 30, 2020 Demographic Assumptions: Some of the demographic assumptions used in this valuation (including mortality, disability, turnover, and retirement), in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. Discount Rate: 2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021). Salary Increases: Annual Rate of Salary Increase (%) 0 5.55% 5 5.11% 10 4.77% 15 4.42% 20 4.20% 20 4.20% 25 3.99% 30 3.82% 35 3.62%	Actuarial Cost Method:	Entry Age Norma	l, level percent of pay	
2021 using standard actuarial techniques. Measurement Date: June 30, 2021 Actuarial Valuation Date: June 30, 2020 Demographic Assumptions: Some of the demographic assumptions used in this valuation (including mortality, disability, turnover, and retirement), in addition to the assume scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segai. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. Discount Rate: 2.41% based on a blend of the long-term term on OPEB Trust assets (7.00% as of June 30, 2021). Salary Increases: Service Salary Increase (%) 0 5.55% 5 5.31% 10 4.77% 15 4.42% 20 4.20% 20 4.20% 21 30 3.82% 30 3.82%	Asset Valuation Method:	Market Value		
Actuarial Valuation Date: June 30, 2020 Demographic Assumptions: Some of the demographic assumptions used in this valuation (including mortality, disability, turnover, and retirement), in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. Discount Rate: 2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021) and a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (2.16% as of June 30, 2021). Salary Increases: Service Salary Increase (%) 0 5.55% 15 4.42% 20 4.20% 20 4.20% 20 4.20% 20 4.20% 20 4.20% 20 4.20% 20 4.20% 20 4.20% <th< th=""><th>Roll-forward Techniques:</th><th></th><th></th><th>on participant data as of June 30, 2020 projected forward to June 30,</th></th<>	Roll-forward Techniques:			on participant data as of June 30, 2020 projected forward to June 30,
Demographic Assumptions: Some of the demographic assumptions used in this valuation (including mortality, disability, turnover, and retirement), in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. Discount Rate: 2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021). Salary Increases: Annual Rate of Service Salary Increase (%) 0 5.55% 5.31% 10 10 4.77% 15 4.42% 20 4.20% 23 3.62%	Measurement Date:	June 30, 2021		
retirement), in addition to the assumed salary scale are the same as used in the Vermont State Employees' Retirement System Actuarial Valuation and Review as of June 30, 2021 completed by Segal. These assumptions were reviewed as part of the pension valuation process, and we have no reason to doubt their reasonableness for use in this valuation. The remaining demographic assumptions, such as enrollment elections, percent married, and relative ages of spouses were based on the experience of the Plan and the experience of similar plans. 2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021) and a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (2.16% as of June 30, 2021). Salary Increases:	Actuarial Valuation Date:	June 30, 2020		
Discount Rate:2.41% based on a blend of the long-term expected rate of return on OPEB Trust assets (7.00% as of June 30, 2021) and a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (2.16% as of June 30, 2021).Salary Increases:Annual Rate of Service Salary Increase (%)05.55%55.31%104.77%154.42%204.20%253.99%303.82%353.62%	Demographic Assumptions:	retirement), in ad Retirement Syste were reviewed as use in this valuati The remaining de	dition to the assumed sala m Actuarial Valuation and part of the pension valuat ion. emographic assumptions, s	ry scale are the same as used in the Vermont State Employees' Review as of June 30, 2021 completed by Segal. These assumptions ion process, and we have no reason to doubt their reasonableness for such as enrollment elections, percent married, and relative ages of
Salary Increases:Annual Rate of Service05.55%55.31%104.77%154.42%204.20%253.99%303.82%353.62%		· ·	•	· · ·
Service Salary Increase (%) 0 5.55% 5 5.31% 10 4.77% 15 4.42% 20 4.20% 25 3.99% 30 3.82% 35 3.62%	Discount Rate:	2021) and a yield	or index rate for 20-year,	tax exempt general obligation municipal bonds with an average rating of
	Salary Increases:	Service		
10 $4.77%$ 15 $4.42%$ 20 $4.20%$ 25 $3.99%$ 30 $3.82%$ 35 $3.62%$		0	5.55%	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5	5.31%	
20 4.20% 25 3.99% 30 3.82% 35 3.62%		10	4.77%	
25 3.99% 30 3.82% 35 3.62%		15	4.42%	
30 3.82% 35 3.62%		20	4.20%	
35 3.62%		25	3.99%	
		30	3.82%	
40+ 3.40%		35	3.62%	
		00	0.0270	



Mortality Rates:	Pre-retirement:	
	 Groups A/F 60% of PubG-2010 General Employee Headcount-Weighted Above Median, 40% of PubG General Employee Headcount-Weighted with generational projection using scale MP-201 	
	Group C PubS-2010 Public Safety Employee Headcount-Weighted with generational projection usi MP-2019	ing scale
	Group D* 70% of PubG-2010 General Employee Headcount-Weighted Above Median, 30% of PubG General Employee with generational projection using scale MP-2019	G-2010
	Healthy Post-retirement - Retirees:	
	 Groups A/F 109% of PubG-2010 General Healthy Retiree Headcount-Weighted with generational proj using scale MP-2019 	ection
	Group C 40% of PubS-2010 Public Safety Retiree Headcount-Weighted Above Median, 60% of Public Safety Retiree Headcount-Weighted with generational projection using scale MP-2	
	Group D PubG-2010 General Healthy Retiree Headcount-Weighted Above Median with generation projection using scale MP-2019	al
	Healthy Post-retirement - Spouses:	
	Groups A/F Pub-2010 Contingent Survivor Headcount-Weighted with generational projection using MI	P-2019
	Group C 40% of Pub-2010 Contingent Survivor Headcount-Weighted Above Median, 60% of Pub-2 Contingent Survivor Headcount-Weighted with generational projection using MP-2019	2010
	Group D Pub-2010 Contingent Survivor Headcount-Weighted Above Median with generational proj using MP-2019	ection
	Disabled Post-retirement:	
	 All Groups PubNS-2010 Non-Safety Disabled Retiree Headcount-Weighted Mortality Table with gene projection using scale MP-2019 	erational
	The tables with the generational projection to the ages of members as of the measurement date reasonably the mortality experience of the System as of the measurement date. The mortality tables were then adjuste future years using the generational projection to reflect future mortality improvement between the measurer date and those years.	d to

Separation from Service before Retirement (Due to Withdrawal and Disability): Representative values of the assumed annual rates of withdrawal and disability are as follows:

			Rate (%)			
	Withdrawa	al Groups A/I	D ¹		Disability ²	
Ulti	imate Rates	Incre	ease Factors			
Age	Male/Female	Service	Male/Female	Age	Groups A/D/F	Group C
25	4.9066%	1	4.000	25	0.0158%	0.0770%
30	3.9275%	3	2.500	30	0.0204%	0.0990%
35	3.2826%	5	1.900	35	0.0272%	0.1325%
40	3.0392%	7	1.600	40	0.0406%	0.1980%
45	2.6920%	9	1.300	45	0.0665%	0.3235%
50	2.2464%	_		50	0.1055%	0.5455%
55	1.8346%			55	0.1862%	0.9080%
60	3.9019%	_		60	0.3005%	1.4640%

¹ The Ultimate Rates are multiplied by the Increase Factors during the first 10 years of service.

² All DC disabilities are assumed to be "non-duty".

	Withdrawal Group C	
Service	Male	Female
0	10.800%	21.600%
1	6.480%	12.960%
2	5.400%	10.800%
3	3.456%	6.912%
4	3.456%	6.912%
5	3.456%	6.912%
6-19	3.240%	6.480%
20+	0.000%	0.000%



Separation from Service before			Withd	rawal Group F ¹		
Retirement (Due to Withdrawal and Disability) <i>(continued</i>):		nate Rates ars of Service	Increa	se Factors		ate Rates ² ars of Service
	Age	Male/Female	Service	Male/Female	Age	Male/Female
	25	6.3933%	1	2.800	25	4.2200%
	30	5.1207%	3	1.750	30	3.3800%
	35	4.2723%	5	1.350	35	2.8200%
	40	3.9542%	7	1.175	40	2.6100%
	45	3.5148%	9	1.150	45	2.3200%
	50	2.9240%			50	1.9300%
	55	2.4695%			55	1.6300%
	60	2.4695%		-	60	1.6300%
	•	lied by the Increase Fa e 0.00% for all Group F	•	•	ce.	

Segal 27

Retirement Rates:

Once eligible for a retirement benefit under the pension plan (Group A: age 65 with 5 years of service, age 62 with 20 years of service, or any age with 30 years of service; Group C: age 55 or age 50 with 20 years of service; Group D: age 55 with 5 years of service or any age with 30 years of service; Group F: age 62, age 55 with 5 years of service, or any age with 30 years of service; Group F* and DC: age 65, 87 points, or age 55 with 5 years of service), the following rates apply:

				Retireme	ent Group F/	F*/DC ¹	
		Age	Male	Female	Age	Male	Female
		40-52	20.00%	10.00%	63	17.50%	15.00%
		53	15.00%	10.00%	64	20.00%	15.00%
		54	15.00%	10.00%	65	22.50%	20.00%
		55	5.00%	5.00%	66	25.00%	30.00%
		56	5.00%	5.00%	67	25.00%	30.00%
		57	5.00%	5.00%	68	25.00%	30.00%
		58	5.00%	7.50%	69	25.00%	30.00%
		59	7.50%	7.50%	70+	100.00%	100.00%
		60	7.50%	7.50%			
		61	15.00%	12.50%			
		62	25.00%	25.00%			
		¹ All Group	A, C, and D memb	ers are assumed t	o retire when t	first eligible.	
		active vested mal Retirem		sumed to retire a	at a rate of 20	0% per year from	Early Retirement
Missing Participant Data:			r a given participa status for whom t			e average value o	of that item over all
Participation and Coverage Election:	participate ir pension ben Group F* an 100% of elig	n the plan. 70 efits. Deferre d DC Plan pa ible future re assumed to h	9% of terminated ed pension benefi articipants. tirees are assum	vested participar ts are assumed t ed to elect life in:	nts are assun to commence surance upor	ned to elect cove at age 50 for G n retirement. 75%	e coverage were as rage upon receivin roup C and age 55 6 of non-DC Plan c nt DC retirees is ba

35% of eligible future retirees covering a spouse are assumed to elect the Premium Reduction Option. No terminated vested participants were assumed to elect the Premium Reduction Option. Current retiree Premium Reduction Option status was based on the provided demographic data.



Dependents:	for which info employees ar health covera also opts for l	rmation is not availabl e assumed to be one ge at retirement, 70% nealth coverage at tha	e, male employees are as year younger than husba of males and 60% of fen	ssumed to be two years inds. Of those future reti nales were assumed to h s electing PRO are assu	re retirees and current spous older than wives and female rees who elect to continue the nave an eligible spouse who umed to elect coverage for the leath of retiree.
Per Capita Cost Development:	by Hickok & E and depende the valuation	Boardman. Premiums nt enrollment, separat year at assumed trend	for Total Choice and Sele ely for non-Medicare and	ect Care POS were weig Medicare. Premiums we were then applied to the	of January 1, 2022 calculate hted by actual active, retiree ere trended to the midpoint of weighted average cost to
Per Capita Health Costs:		table below for retiree	s and for spouses at sele		ding administrative fees, are are net of deductibles and
	other benefit	plan cost sharing prov	isions. Medical & Pres	scription Drug	
	other benefit				buse
	other benefit Age		Medical & Pres		ouse Female
	-	Ret	Medical & Pres	Spc	
	Age	Ret	Medical & Pres iree Female	Spo	Female
	Age 50	Ret Male \$13,410	Medical & Pres iree Female \$15,274	Spc 	Female \$12,264
	Age 50 55	Ret Male \$13,410 15,926	Medical & Pres tiree Female \$15,274 16,442	Male \$9,367 12,534	Female \$12,264 14,196
	Age 50 55 60	Ret Male \$13,410 15,926 18,913	Medical & Pres iree Female \$15,274 16,442 17,723	Spc Male \$9,367 12,534 16,779	Female \$12,264 14,196 16,465
	Age 50 55 60 64	Ret Male \$13,410 15,926 18,913 21,698	Medical & Pres iree Female \$15,274 16,442 17,723 18,801	Spc Male \$9,367 12,534 16,779 21,182	Female \$12,264 14,196 16,465 18,531

Administrative Expenses:

An additional administrative expense load of 10% is added to death benefit claims.



Health Care Cost Trend Rates:	Health care trend measures th future years. The rates shown shown for a particular plan yea	below are "net"	and are applied to th	e net per capita co	osts shown above. The trend
		Year Ending June 30	Rate Non-Medicare	(%) Medicare	
		2022			
			6.700	6.000	
		2023	6.475	5.860	
		2024	6.250	5.720	_
		2025	6.025	5.580	-
		2026	5.800	5.440	
		2027	5.575	5.300	_
		2028	5.350	5.160	
		2029	5.125	5.020	
		2030	4.900	4.880	
		2031	4.675	4.740	
		2032	4.500	4.600	
		2033+	4.500	4.500	
	The trend rate assumptions we using data sources such as the surveys prepared by the S&P Bureau of Labor Statistics.	e 2021 Segal H	ealth Trend Survey, i	nternal client result	ts, trends from other published
Retiree Contribution Increase Rate:	Retiree contributions were ass premiums effective January 1, POS were weighted by actual	2022, trended	o the measurement of	date. Premiums for	r Total Choice and Select Care
Health Care Reform Assumption:	The Plan is assumed to be in a Health Care and Education Re				

Models	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.
	The blended discount rate used for calculating Total OPEB Liability is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.
	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.
Assumption Changes since Prior Valuation:	The discount rate was increased from 2.23% to 2.41%. The valuation-year per capita health costs and retiree contribution rates were updated.

Exhibit III: Summary of Plan

This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

Eligibility:	Group A: Employees in active service as of June 30, 1981 and elected to continue to make contributions, or were hired between July 1, 1981 and June 30, 1984 and elected to enroll in Group A. Closed to new enrollment.
	 Retirement: Attainment of age 55 with 5 years of service or any age with 30 years of service.
	Group C: State police officers and public safety employees assigned to law enforcement duties.
	 Retirement: Attainment of age 55, age 50 with 20 years of service, or any age with 30 years of service.
	 Terminated Vested: Participants who terminate with 20 or more years of service can receive medical benefits upon receiving DB pension benefits.
	<u>Group D:</u> Supreme court justices, and superior and district court judges. Probate judges appointed prior to July 1, 1987 are also covered by this plan.
	 Retirement: Attainment of age 55 with 5 years of service or any age with 30 years of service.
	Group F: State employees hired after January 1, 1991 and before July 1, 2008
	 Retirement: Attainment of age 55 and 5 years of service or any age with 30 years of service.
	 Terminated Vested: Not eligible
	Group F*: State employees hired on or after July 1, 2008
	 Retirement: Attainment of age 55 and 5 years of service
	 Terminated Vested: 20 or more years of service can receive medical upon receiving DB pension benefits
	Defined Contribution (DC) Pension: Exempt state employees.
	 Retirement: Attainment of age 55 and 5 years of service
	 Terminated Vested: 20 or more years of service can receive medical upon receiving DC pension benefits
	Non-Duty Disability Medical Benefits: Not available to DC pension participants. 5 years of service for all other groups.
	Life Insurance Benefit: 20 or more years of continuous service (no terminated vested benefits for life insurance).
Benefit Types:	Medical and prescription drug coverage is provided for all retirees. Life insurance is provided for all retirees. Retirees pay the full cost for dental benefits.
Duration of Coverage:	Lifetime.
Spousal Benefits:	Same benefits as for retirees except no life insurance.
Spousal Coverage:	Lifetime.



Total Choice	Total Premiun
Retiree Under 65	
Retiree Only	\$1,110.73
Retiree & 1 dependent	\$2,221.47
Retiree & 2 or more dependents	\$3,054.51
Retiree & 1 Medicare dependent	\$1,505.92
Retiree & 1 Medicare dependent Dependent Declines EGWP	\$1,301.41
Retiree & 2 or more dependents with 1 Medicare dependent	\$2,001.53
Retiree & 2 or more dependents with 1 Medicare dependent Dependent Declines EGWP	\$1,797.02
Retiree & 2 or more dependents with dependents all Medicare	\$1,901.10
Retiree & 2 or more dependents with dependents all Medicare Dependent Decline EGWP	\$1,387.99
Retiree Over 65 or Medicare Eligible	
Retiree only – Medicare	\$395.18
Retiree only – Medicare Declines EGWP	\$190.66
Retiree & 1 dependent – both Medicare	\$790.37
Retiree & 1 dependent – both Medicare Retiree Declines EGWP	\$585.73
Retiree & 1 dependent – both Medicare Dependent Declines EGWP	\$585.73
Retiree & 1 dependent – both Medicare Both Decline EGWP	\$381.34
Retiree Medicare & 1 dependent not	\$1,505.92
Retiree Medicare & 1 dependent not Retiree Declines EGWP	\$1,301.41
Retiree Medicare & 2 or more dependents not	\$2,001.53
Retiree Medicare & 2 or more dependents not Retiree declines EGWP	\$1,797.02
Retiree Medicare & 2 or more dependents with 1 Medicare Dependent	\$1,285.98
Retiree Medicare & 2 or more dependents with 1 Medicare Dependent Dep. Declines EGWP	\$1,081.47
Retiree Medicare & 2 or more dependents w/ 1 Medicare Dependent Both Decline EGWP	\$876.95
Retiree Medicare & 2 dependents – all Medicare eligible	\$1,185.55

Select Care POS	Total Premiu
Retiree Under 65	
Retiree Only	\$929.60
Retiree & 1 dependent	\$1,859.19
Retiree & 2 or more dependent	\$2,556.39
Retiree & 1 Medicare dependent	\$1,249.52
Retiree & 1 Medicare dependent Dependent Declines EGWP	\$1,045.01
Retiree & 2 or more dependents with 1 Medicare dependent	\$1,664.32
Retiree & 2 or more dependents with 1 Medicare dependent Dependent Declines EGWP	\$1,459.81
Retiree & 2 or more dependents with dependents all Medicare	\$1,569.44
Retiree & 2 or more dependents with dependents all Medicare Dependents Decline EGWP	\$1,050.77
Retiree Over 65 or Medicare Eligible	
Retiree only – Medicare	\$319.92
Retiree only – Medicare Declines EGWP	\$115.41
Retiree & 1 dependent – both Medicare	\$639.83
Retiree & 1 dependent – both Medicare Retiree Declines EGWP	\$435.32
Retiree & 1 dependent – both Medicare Dependent Declines EGWP	\$435.32
Retiree & 1 dependent – both Medicare Both Decline EGWP	\$230.80
Retiree Medicare & I dependent not	\$1,249.52
Retiree Medicare & I dependent not Retiree Declines EGWP	\$1,045.01
Retiree Medicare & 2 or more dependents not	\$1,664.32
Retiree Medicare & 2 or more dependents not Retiree Declines EGWP	\$1,459.81
Retiree Medicare & 2 or more dependents with 1 Medicare dependent	\$1,054.63
Retiree Medicare & 2 or more dependents with 1 Medicare dependent Dep. Declines EGWP	\$850.11
Retiree Medicare & 2 or more dependents with 1 Medicare dependent Both Decline EGWP	\$645.60
Retiree Medicare & 2 Dependents – all Medicare eligible	\$959.76
Retiree Medicare & 2 Dependents – all Medicare eligible 1 Dependent Declines EGWP	\$906.41

Detine a Constribution of	Detine en el en evene el recent		-l	
Retiree Contributions:	Retirees and spouses pay premium costs in excess of the VSERS subsidy.			
			Subsidy	
		Groups A, C, D, F	80%	
		Group F* and Defined Contribution (hire	ed July 1, 2008 or later)	
		Less than 10 years of service	0%	
		10-14 years of service	40%	
		15-19 years of service	60%	
		20+ years of service	80%	
Premium Reduction Option:	option to reduce the VSERS su same VSERS subsidy for the s Reduction Option, spouses are	, F, or F* retiring on or after January 1, 200 ubsidy percentage during the retiree's life spouse's lifetime. If the retirees elects the j covered for the spouse's lifetime but pay Defined Contribution participants.	so that a surviving spouse joint and survivor pension	may continue to receive the option but not the Premium
Benefit Descriptions:	Medical	TotalChoice Plan	SelectCa	re POS Plan
			In-Network	Out-of-Network
	Annual deductible	\$300 per person, \$600 per family	None	\$500 per person, \$1,000 per family
	Maximum annual copay deductible is met)	<i>/s (after</i> \$750 per person, \$2,250 per family	\$2,000 per person, \$6,000 per family	\$2,000 per person, \$6,000 per family
	Coinsurance	80%	100%	70%
	Prescription Drugs			
	Annual deductible	\$50 pe	er person, \$150 per family	
	Coinsurance			
	Generic		10%	
	Preferred Brand		20%	
	Non-Preferred Bran	nd	40%	
	Annual maximum out-o		ber for generic and preferred member for non-preferred	
	Life Insurance			
		\$10,000 for retiree c	only	
Plan Changes since Prior Valuation:	None.			

Appendix A: Definition of Terms

Definitions of certain terms as they are used in Statement 74. The terms may have different meanings in other contexts.

Actuarially Determined Contribution:	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
Assumptions or Actuarial Assumptions:	The estimates on which the cost of the Plan is calculated including:
	 a) Investment return — the rate of investment yield that the Plan will earn over the long- term future;
	 b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
	c) Retirement rates — the rate or probability of retirement at a given age;
	 d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Covered Payroll:	The payroll of the employees that are provided OPEB benefits
Discount Rate:	The single rate of return, that when applied to all projected benefit payments results in an actuarial present value that is the sum of the following:
	 the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, and
	 the actuarial present value of projected benefit payments that are not included in (1) using a yield or index rate for 20 year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher
Entry Age Actuarial Cost Method:	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age
Healthcare Cost Trend Rates:	The rate of change in per capita health costs over time
Measurement Date:	The date at which the Net OPEB Liability is measured.
Net OPEB Liability:	The Total OPEB Liability less the Plan Fiduciary Net Position
Plan Fiduciary Net Position:	Market Value of Assets
Real Rate of Return:	The rate of return on an investment after removing inflation
Service Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.



Total OPEB Liability:	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.	
Valuation Date:	The date at which the actuarial valuation is performed	

Appendix B: Accounting Requirements

The Governmental Accounting Standards Board (GASB) issued Statement Number 74 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and Statement Number 75 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Under these statements, all state and local government entities that provide other post-employment benefits are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (i.e., a pay-as-you-go basis).

The statements cover postemployment benefits of medical, prescription drugs, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 3, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards prescribe an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee's career. The standards also prescribe a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 3. This amount is then discounted to determine the Total OPEB Liability. The Net OPEB Liability (NOL) is the difference between the Total OPEB Liability and market value of assets in the Plan, called the Plan Fiduciary Net Position.

Once the NOL is determined, the Annual OPEB Expense is determined as the change in NOL from the prior year with deferred recognition of certain elements. In addition, Required Supplementary Information (RSI) must be reported, including historical information about the Net OPEB Liability and the contributions made to the Plan. Appendix A of Section 3 contain a definition of terms as well as more information about GASB 74/75 concepts.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short-term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.