

April 13, 2022

Mr. Jason A. Haught Chief Financial Officer West Virginia Public Employees Insurance Agency 601 57th Street, SE, Suite 2 Charleston, West Virginia 25304

Subject: GASB Statement No. 75 Actuarial Valuation as of June 30, 2020, for WV-RHBT

Submitted in this report are the results of the actuarial valuation of the liabilities associated with the employer financed postemployment benefits provided through the West Virginia Retiree Health Benefit Trust Fund (WV-RHBT). This program provides postretirement healthcare benefits to eligible retired members receiving pension benefits under the following retirement systems ("Retirement Systems") as administered by the West Virginia Consolidated Public Retirement Board (CPRB):

- Public Employees' Retirement System (PERS);
- Teachers' Retirement System (TRS);
- Teachers' Defined Contribution Retirement System (TDCRS);
- Great West (Plan G);
- West Virginia Death, Disability, and Retirement Fund (Troopers Plan A);
- West Virginia State Police Retirement System (Troopers Plan B);
- Deputy Sheriffs' Retirement System (DSRS);
- Emergency Medical Services Retirement System (EMSRS); and
- Judges' Retirement System (JRS).

The program also provides benefits to certain eligible members receiving pension benefits under the Teachers' Insurance and Annuity Association and College Retirement Equities Fund (TIAA-CREF).

This report was prepared at the request of WV-RHBT and is intended for use by WV-RHBT and those designated or approved by WV-RHBT. This report may be provided to other parties only in its entirety and only with the permission of WV-RHBT.

The actuarial valuation as of June 30, 2020, and measured as of June 30, 2021, was prepared for purposes of complying with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 75 for the plan sponsor's fiscal year June 30, 2022. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of the plan sponsor may produce significantly different results. The actuarial valuation was based upon:

- Census information as of June 30, 2020, provided by WV-RHBT, CPRB, and TIAA-CREF;
- Healthcare claims, premium and enrollment data provided by WV-RHBT;

Mr. Jason A. Haught West Virginia Public Employees Insurance Agency April 13, 2022 Page 2

- Substantive plan information provided by WV-RHBT;
- Retirement eligibility conditions for each respective retirement system found in CPRB actuarial valuation reports;
- Experience Study covering the period July 1, 2015, through June 30, 2020;
- Economic assumptions and other healthcare-related assumptions recommended by Gabriel, Roeder, Smith & Company and approved by the WV-RHBT including a discount rate of 6.65% and an ultimate trend rate assumption of 4.25%;
- Updated MAPD premium rates available as of June 1, 2021; and
- Entry age normal cost method and a 20-year closed level percent of pay amortization period as of June 30, 2017, with 17 years remaining as of June 30, 2020.

We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by WV-RHBT, CPRB, or TIAA-CREF. Authorization of the assumptions and methods applicable to this actuarial valuation was granted by WV-RHBT, and they are disclosed in the assumptions and methods section of this report.

The actuarial liabilities and actuarially determined contributions were developed in accordance with the requirements of GASB Statements No. 74 and 75, and are applicable only for financial reporting purposes. The unfunded actuarial accrued liability and Actuarially Determined Contributions (ADC) disclosed in this report should not be used to assess the level of plan assets needed to settle the plan's benefit obligations.

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, healthcare or demographic assumptions; changes in economic, healthcare or demographic assumptions; and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report does not reflect the recent and still developing impact of COVID-19, which is likely to influence healthcare claims experience, demographic experience and economic expectations, at least in the short term. We will continue to monitor these developments and their impact on healthcare and retirement programs.

This report was prepared using our proprietary valuation model and related software, which in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Please see the GASB Statement No. 74 actuarial valuation as of June 30, 2020, measured as of June 30, 2021, and applicable for the Plan's Fiscal Year End June 30, 2021, for additional information relating to: (i) other disclosure and reliance; (ii) actuarial assumptions and methods; (iii) principal plan provisions; (iv) projection of assets and liabilities; and (v) participant demographic data.



Mr. Jason A. Haught West Virginia Public Employees Insurance Agency April 13, 2022 Page 3

The signing actuaries are independent of the plan sponsor.

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of WV-RHBT as of the actuarial valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes. Alex Rivera and Jeff Tebeau are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.

Sincerely,

Gabriel, Roeder, Smith & Company

Alex Rivera, FSA, EA, MAAA, FCA

Senior Consultant

Jeffrey T. Tebeau, FSA, EA, MAAA, FCA

Consultant



West Virginia Retiree Health Benefit Trust Fund Statements of Fiduciary Net Position June 30, 2021 and 2020

	2021	2020
ASSETS		
Cash and cash equivalents	\$ 7,119,000	\$ 6,411,000
Equity position in investment pools	1,670,305,000	1,193,675,000
Contributions receivable - net of allowance for doubtful accounts	-	-
of \$177,000 and \$143,000, respectively	6,875,000	1,637,000
Due from the State - contributions	1,826,000	1,029,000
Due from the State - State appropriation (Contribution)	-	2,500,000
Other receivables	7,861,000	38,108,000
Total assets	1,693,986,000	1,243,360,000
DEFERRED OUTFLOWS OF RESOURCES		
Pension	249,000	112,000
Other Post-Employment Benefits	121,000	79,000
Total deferred outflows of resources	370,000	191,000
LIABILITIES		
Claims payable	8,613,000	9,244,000
Due to PEIA	1,722,000	6,457,000
Payables to managed care organizations	-	-
Other liabilities	10,663,000	2,973,000
Total liabilities	20,998,000	18,674,000
DEFERRED INFLOWS OF RESOURCES		
Pension	21,000	84,000
Other Post-Employment Benefits	313,000	151,000
Total deferred inflows of resources	334,000	235,000
NET POSITION		
Net position restricted for other postemployment benefits	\$1,673,024,000	\$1,224,642,000



West Virginia Retiree Health Benefit Trust Fund Statements of Changes in Fiduciary Net Position For the Years Ended June 30, 2021 and 2020

	2021	2020
Additions:		
Contributions:		
Employers	\$ 104,503,000	\$ 107,756,000
State appropriation (School Aid)	47,639,000	50,650,000
State appropriation (Contribution)	-	5,000,000
State appropriation (OPEB)	30,000,000	30,000,000
Total contributions	182,142,000	193,406,000
Retiree drug subsidy	825,000	643,000
Other Revenue	9,000	19,000
Interest and dividend income	98,000	1,350,000
Net appreciation in fair value of investments	381,533,000	28,571,000
Total additions	564,607,000	223,989,000
Deductions:		
Benefit payments, net	111,627,000	85,786,000
Administrative service fees	1,655,000	1,986,000
Other expenses	2,943,000	3,236,000
Total deductions	116,225,000	91,008,000
Net increase in net position	448,382,000	132,981,000
Net position restricted for other postemployment benefits: Net position, beginning of year	1,224,642,000	1,091,661,000
,	1,22 .,0 12,000	1,001,001,000
Net position, beginning of year, as restated	1,224,642,000	1,091,661,000
Net position, end of year	\$ 1,673,024,000	\$ 1,224,642,000



West Virginia Retiree Health Benefit Trust Fund Equity Position in Investment Management Pools June 30, 2021 and 2020

		June	e 30,	
		2021		2020
West Virginia Board of Treasury Investments (WVBTI)				
Money Market Pool	\$	58,540,954	\$	43,446,727
West Virginia Investment Management Board (WVIMB)				
Domestic Equity	\$	61,929,848	\$	275,409,721
Portable Alpha		368,871,650		-
International Equity Pool		275,088,815		198,283,960
International Non-Qualified Pool		101,668,751		73,847,713
Short-Term Fixed Income		-		80,000,492
Total Return Fixed Income Pool		160,741,571		100,929,831
Core Fixed Income Pool		69,018,325		43,025,913
Hedge Funds Pool		146,683,551		105,533,069
Private Markets		427,761,576		273,196,616
	\$	1,611,764,087	\$:	1,150,227,314
Grand Total	\$:	1,670,305,041	\$	1,193,674,041



Summary of Actuarial Valuation Results as of June 30, 2020

Discount Rate 6.65%

Ultimate Trend Pre-Medicare 4.25%

Ultimate Trend Post-Medicare 4.25%

		Loc	cal Agencies	PERS	Troopers Plan A	Troopers Plan B	TR	RS Pre-6/30/91	TR	S Post-6/30/91	ı	Retiree PERS	tiree 'RS	P	Retiree Public Safety		Total
A)	Present Value of Benefits i) Active ^a ii) Active SAL ^b iii) Retired iv) Waived Annuitants ^c v) Total	\$	61,606	\$ 208,087,411 8,197,930 - - 216,285,341	1,118,315 13,308 - - 1,131,623	21,996,562 385,925 - - 22,382,487	\$	100,818,055 11,404,817 - - 112,222,872		386,689,353 8,564,578 - - 395,253,931	\$	- \$ 420,813,248 3,731,092 424,544,340 \$	- 4,871,806 3,273,791 8,145,597	Ψ	16,798,695 184,580 16,983,275	•	801,424,798 28,628,164 982,483,749 7,189,463 1,819,726,174
B)	Actuarial Accrued Liability i) Active ^a ii) Active SAL ^b iii) Retired iv) Waived Annuitants ^c iii) Total	\$	68,616,087 56,391 - - 68,672,478	\$ 174,762,435 7,670,364 - - 182,432,799	1,087,732 13,063 - - 1,100,795	18,907,182 359,767 - - 19,266,949	\$	94,898,165 10,756,995 - - 105,655,160		292,083,350 7,449,003 - - 299,532,353		- \$ 420,813,248 3,731,092 424,544,340 \$	- 4,871,806 3,273,791 8,145,597	Ψ	16,798,695 184,580 16,983,275	\$	650,354,951 26,305,583 982,483,749 7,189,463 1,666,333,746
C)	Employer Normal Cost i) Fiscal Year Ending June 30, 2021 ii) Fiscal Year Ending June 30, 2022	\$	2,244,108 2,069,515	\$ 5,454,129 5,039,950	\$ 16,094 8,728	\$ 536,635 505,082	\$	1,642,903 1,360,183	\$	11,756,109 11,448,932	\$	- \$ -	-	\$	-	\$	21,649,978 20,432,390
D)	Employer Benefit Payments i) Fiscal Year Ending June 30, 2021 ii) Fiscal Year Ending June 30, 2022	\$	501,243 1,081,824	\$ 1,317,544 2,978,507	\$ 24,584 47,101	\$ 87,873 182,846	\$	1,555,970 3,485,977	\$	1,121,497 2,576,041	\$	68,314,313 \$ 45,031,118	6,180,650 9,625,201	\$	2,087,169 1,399,330	\$	151,190,843 106,407,945
E)	Covered Members i) Active ^d ii) Retired iii) Waived Annuitants iv) Total		3,932 - - - 3,932	9,156 - - - 9,156	18 - - 18	354 - - 354		3,366 - - 3,366		17,493 - - 17,493		- 19,638 6,263 25,901	23,237 5,409 28,646		394 241 635		34,319 43,269 11,913 89,501
F)	Payroll ^e i) Fiscal Year End 2021 ii) Fiscal Year End 2022		\$154,318,831 \$143,119,230	\$416,702,125 \$386,596,867	\$807,772 \$450,291	\$20,120,675 \$18,822,354		\$196,777,748 \$162,013,089		\$873,817,206 \$855,916,296		- \$ - \$	-	7	-	'	1,662,544,357 1,566,918,127

 $^{^{\}it a}$ Includes employer capped subsidy and Employee Assistance Program benefits.



 $^{^{\}it b}$ Includes employer paid premium under the Accrued Sick Annual Leave Program.

^c The actuarial valuation assumes 2.5% of waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there were 11,913 waived annuitants under age 75 and 5,013 waived annuitants over age 75.

 $^{^{\}it d}$ Excludes active members hired on or after July 1, 2010.

e Payroll excludes members hired on or after July 1, 2010, and is based on the payroll data provided as of June 30, 2020, projected to 2021 and 2022.

Executive Summary

	 2021
Actuarial Valuation Date	June 30, 2020
Measurement Date of the Net OPEB Liability	June 30, 2021
Employer's Fiscal Year End for GASB Statement No. 75	June 30, 2022
Membership	
Number of	
- Retirees and Beneficiaries	43,269
- Waived Annuitants ^a	11,913
- Active Members	34,319
- Total	89,501
Covered Payroll ^b	\$ 1,662,544,357
Net OPEB Liability	
Total OPEB Liability	\$ 1,643,289,292
Plan Fiduciary Net Position	 1,673,024,000
Net OPEB Liability	\$ (29,734,708)
Plan Fiduciary Net Position as a Percentage	
of Total OPEB Liability	101.81%
Net OPEB Liability as a Percentage	
of Covered Payroll	-1.79%
Development of the Single Discount Rate	
Single Discount Rate Beginning of Year	6.65%
Single Discount Rate End of Year	6.65%
Long-Term Expected Rate of Investment Return	6.65%
WVIMB Long-Term Expected Rate of Investment Return	7.00%
WVBTI Short-Term Expected Rate of Investment Return	2.50%
Long-Term Municipal Bond Rate Beginning of Year ^c	2.45%
Long-Term Municipal Bond Rate End of Year ^c	1.92%
Year WV-RHBT is Projected to be Fully Funded	2021
Total OPEB Expense for Plan Year End June 30, 2021, Applicable to Sponor's Fiscal Year End June 30, 2021	\$ (499,896,871)

Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses as of June 30, 2020

	eferred (Inflows) of Resources	Deferred Outflows of Resources			
Difference Between Expected and Actual Experience	\$ (204,827,705)	\$ -			
Changes in Assumptions	(629,200,355)	-			
Net Difference Between projected and Actual Earnings					
on OPEB Plan Investments	 (240,975,940)	 35,768,362			
Total	\$ (1,075,004,000)	\$ 35,768,362			

^a Represents eligible waived annuitants under age 75. It is assumed that 2.5% of these members will elect coverage.

^c Based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2020, and June 30, 2021. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.



^b Covered payroll excludes members hired on or after July 1, 2010, and is based on the payroll data provided as of the actuarial valuation date increased with one year of wage inflation.

Schedule of Changes in Net OPEB Liability under GASB Statement No. 75 Measured as of June 30, 2021 Applicable to Plan Sponsor's Fiscal Year End June 30, 2022

Measured for the Period Ending June 30, Applicable for Sponsor's Fiscal Year Ending June 30,		2021 2022				
A. Total OPEB Liability Applicable for the sponsor's fiscal year end June 30	. 2021					
Service Cost	\$	21,649,978				
Interest on the Total OPEB Liability	•	108,544,912				
Changes of Benefit Terms		, , , -				
Difference Between Expected and Actual Experience		(39,957,344)				
Changes of Assumptions		-				
Benefit Payments and Administrative Expenses		(113,282,000)				
Net Change in Total OPEB Liability	\$	(23,044,454)				
Total OPEB Liability – Beginning	\$ \$	1,666,333,746				
Total OPEB Liability – Ending	\$	1,643,289,292				
B. Plan Fiduciary Net Position		_				
Employer Contributions	\$	182,142,000				
Net Investment Income		381,631,000				
Benefit Payments and Administrative Expenses		(113,282,000)				
Operating Expenses		(2,943,000)				
Other		834,000				
Net Change in Plan Fiduciary Net Position	\$	448,382,000				
Plan Fiduciary Net Position – Beginning	\$ \$	1,224,642,000				
Plan Fiduciary Net Position – Ending	\$	1,673,024,000				
C. Net OPEB Liability	\$	(29,734,708)				
D. Plan Fiduciary Net Position as a Percentage						
of the Total OPEB Liability		101.81%				
E. Covered-Employee Payroll ^a	\$	1,662,544,357				
F. Net OPEB Liability as a Percentage						
of Covered-Employee Payroll		-1.79%				

^a Plan year end 2020 payroll based on plan year end 2020 pay.



Statement of OPEB Expense under GASB Statement No. 75 Measured as of June 30, 2021 Applicable to Plan Sponsor's Fiscal Year End June 30, 2022

A. Expense	
Service Cost	\$ 21,649,978
Interest on the Total OPEB Liability	108,544,912
Current-Period Benefit Changes	-
Employee Contributions	-
Projected Earnings on Plan Investments	(83,622,443)
OPEB Plan Operating Expenses	2,943,000
Other Changes in Plan Fiduciary Net Position	(834,000)
Recognition of Outflow/(Inflow) of Resources due to Liabilities	(121,514,528)
Recognition of Outflow/(Inflow) of Resources due to Assumption Changes	(367,790,037)
Recognition of Outflow/(Inflow) of Resources due to Assets	(59,273,753)
Total OPEB Expense	\$ (499,896,871)
B. Reconciliation of Net OPEB Liability	
Net OPEB Liability End of Prior Year	\$ 441,691,746
OPEB Expense	(499,896,871)
Employer Contributions	(182,142,000)
Change in Liability Experience Outflows/(Inflows) Recognized in Current Liabilities	81,557,184
Change in Assumption Changes Experience Outflows/(Inflows) Recognized in Current Liabilities	367,790,037
Change in Investment Experience Outflows/(Inflows) Recognized in Current Assets	 (238,734,804)



Net OPEB Liability End of Year

(29,734,708)

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active members expected to receive a plan benefit was approximately 295,577 years. Additionally, the total number of plan members expected to receive a plan benefit as of the actuarial valuation date was 77,886. As a result, the average of the expected remaining service lives for plan members expected to receive a plan benefit for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 3.795 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Measured as of June 30, 2021, Applicable to Plan Sponsor's Fiscal Year End June 30, 2022

A. Outflows and (Inflows) of Resources Recognized in Current and Future OPEB Expenses as of Plan Year End June 30, 2021

Experience (Gain)/Loss				Original Recognition Period/	Amou	unt Recognized in	Amou	ınt Recognized in		ferred (Inflows) e Recognized in		erred Outflows e Recognized in
		riginal Balance	Date Established	Amortization Factor	Past	OPEB Expenses	Curre	nt OPEB Expense	Futu	re OPEB Expenses	Future	e OPEB Expenses
1. Differences Between Expected and	\$	(39,957,344)	June 30, 2021	3.7950	\$	-	\$	(10,528,944)	\$	(29,428,400)	\$	-
Actual Non-Investment Experience		(204,502,688)	June 30, 2020	4.0482		(50,516,943)		(50,516,943)		(103,468,802)		-
		(222,869,315)	June 30, 2019	4.3013		(103,628,816)		(51,814,408)		(67,426,091)		-
		(32,789,568)	June 30, 2018	4.6370		(21,213,867)		(7,071,289)		(4,504,412)		-
		(10,450,977)	June 30, 2017	4.7140		(8,868,032)		(1,582,944)		-		-
	\$	(510,569,892)			\$	(184,227,658)	\$	(121,514,528)	\$	(204,827,705)	\$	-
2. Assumption Changes	\$	-	June 30, 2021	3.7950	\$	-	\$	-	\$	-	\$	-
		(1,028,295,411)	June 30, 2020	4.0482		(254,012,996)		(254,012,996)		(520, 269, 419)		-
		(236,043,521)	June 30, 2019	4.3013		(109,754,502)		(54,877,251)		(71,411,768)		-
		(273,118,328)	June 30, 2018	4.6370		(176,699,370)		(58,899,790)		(37,519,168)		-
		-	June 30, 2017	4.7140		-		-		-		-
	\$	(1,537,457,260)			\$	(540,466,868)	\$	(367,790,037)	\$	(629,200,355)	\$	-
3. Difference Between Expected	\$	(298,008,557)	June 30, 2021	5.0000	\$	-	\$	(59,601,711)	\$	(238,406,846)	\$	-
and Actual Investment Earnings		51,753,552	June 30, 2020	5.0000		10,350,710		10,350,710		-		31,052,132
		11,790,575	June 30, 2019	5.0000		4,716,230		2,358,115		-		4,716,230
		(12,845,466)	June 30, 2018	5.0000		(7,707,279)		(2,569,093)		(2,569,094)		-
		(49,058,870)	June 30, 2017	5.0000		(39,247,096)		(9,811,774)		-		-
	\$	(296,368,766)			\$	(31,887,435)	\$	(59,273,753)	\$	(240,975,940)	\$	35,768,362
4. Total	\$	(2,344,395,918)			\$	(756,581,962)	\$	(548,578,319)	\$	(1,075,004,000)	\$	35,768,362

B. Deferred Outflows and Deferred (Inflows) of Resources by Year to be Recognized in Future OPEB Expenses

_	Year Ending	n-Investment Experience	 Assumption Changes	Investment Experience	Deferred (Inflows)	Deferred Outflows	Deferred (Inflows)/Outflows		
	June 30, 2022	\$ (117,364,707)	\$ (346,409,415)	\$ (49,461,980)	\$ (525,944,927)	\$ 12,708,825	\$	(513,236,102)	
	June 30, 2023	\$ (76,657,570)	\$ (270,547,513)	\$ (46,892,886)	\$ (406,806,794)	\$ 12,708,825	\$	(394,097,969)	
	June 30, 2024	\$ (10,805,425)	\$ (12,243,427)	\$ (49,250,999)	\$ (82,650,563)	\$ 10,350,712	\$	(72,299,851)	
	June 30, 2025	\$ -	\$ -	\$ (59,601,713)	\$ (59,601,713)	\$ -	\$	(59,601,713)	
	Total	\$ (204,827,702)	\$ (629,200,355)	\$ (205,207,578)	\$ (1,075,003,997)	\$ 35,768,362	\$	(1,039,235,635)	

C. Change In Deferred Outflows/(Inflows) Recognized in Liability and Assets for Current Plan Year End

_	Year Ending		n-Investment Experience	 Assumption Changes	Investment Experience			
	June 30, 2021	\$	81,557,184	\$ 367,790,037	\$	(238,734,804)		

Numbers may not add due to rounding.



Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Fiscal Year Ending June 30,	2021		 2020	2019	2018			2017
Total OPEB Liabililty								
Service Cost	\$	21,649,978	\$ 43,991,277	\$ 48,069,657	\$	56,345,605	\$	66,067,781
Interest on the Total OPEB Liability		108,544,912	192,119,243	188,146,608		212,912,779		223,113,462
Changes of Benefit Terms		-	-	-		-		-
Difference between Expected and Actual Experience		(39,957,344)	(204,502,688)	(222,869,315)		(32,789,568)		(10,450,977)
Changes of Assumptions		-	(1,028,295,411)	(236,043,521)		(273,118,328)		-
Benefit Payments and Administrative Expenses		(113,282,000)	(87,772,000)	 (135,061,000)		(137,700,000)		(164,823,111)
Net Change in Total OPEB Liability		(23,044,454)	(1,084,459,579)	(357,757,571)		(174,349,512)		113,907,155
Total OPEB Liability - Beginning		1,666,333,746	2,750,793,325	3,108,550,896		3,282,900,408		3,168,993,253
Total OPEB Liability - Ending (a)	\$	1,643,289,292	\$ 1,666,333,746	\$ 2,750,793,325	\$	3,108,550,896	\$	3,282,900,408
Plan Fiduciary Net Position								
Employer Contributions	\$	182,142,000	\$ 193,406,000	\$ 206,028,000	\$	204,235,000	\$	205,314,875
Net Investment Income		381,631,000	29,921,000	59,498,000		74,048,000		99,447,152
Benefit Payments and Administrative Expenses		(113,282,000)	(87,772,000)	(135,061,000)		(137,700,000)		(164,823,111)
Operating Expenses		(2,943,000)	(3,236,000)	(2,825,000)		(3,055,000)		(2,252,765)
Other		834,000	662,000	906,000		1,572,000		557,162
Net Change in Plan Fiduciary Net Position		448,382,000	132,981,000	128,546,000		139,100,000		138,243,313
Plan Fiduciary Net Position - Beginning, as restated ^a		1,224,642,000	1,091,661,000	963,115,000		824,015,000		685,668,002
Plan Fiduciary Net Position - Ending (b)		1,673,024,000	1,224,642,000	1,091,661,000		963,115,000		823,911,315
Net OPEB Liability - Ending (a) - (b)	\$	(29,734,708)	\$ 441,691,746	\$ 1,659,132,325	\$	2,145,435,896	\$	2,458,989,093
Plan Fiduciary Net Position as a Percentage				 				
of Total OPEB Liability		101.81%	73.49%	39.69%		25.10%		25.10%
Covered-Employee Payroll ^b	\$	1,662,544,357	\$ 1,712,420,688	\$ 1,925,233,991	\$	2,050,634,331	\$	2,199,037,019
Net OPEB Liability as a Percentage								
of Covered-Employee Payroll		-1.79%	25.79%	86.18%		104.62%		111.82%

^a The Plan Fiduciary Net Position at the beginning of plan year 2018 was adjusted by \$103,685 to account for the cumulative effect of adoption of accounting principle.

Plan year end 2021 payroll based on projected closed group payroll from 2020 actuarial valuation.



^b Plan year end 2019 payroll based on plan year end 2018 payroll increased with wage inflation assumption of 4.0%.

Sensitivity of Net OPEB Liability

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 6.65%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percentage point higher or lower:

Sensitivity of Net OPEB Liability as of June 30, 2021 to the Single Discount Rate Assumption

Current Single Discount						
1% Decrease		Rate Assumption			1% Increase	
5.65%		6.65%			7.65%	
\$	159,559,746	\$	(29,734,708)	\$	(186,903,110)	

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percentage point higher or lower:

Sensitivity of Net OPEB Liability as of June 30, 2021 to the Healthcare Cost Trend Rate Assumption

Healthcare Cost					
1% Decrease		Tre	nd Rates Assumption	1% Increase	
\$	(219,545,277)	\$	(29,734,708) \$	201,476,232	



Schedule of Contributions Multiyear

	Actuarially		Contribution		Actual Contributior
FY Ending	Determined	Actual	Deficiency	Covered	as a % of
June 30,	Contribution	Contribution	(Excess)	Payroll	Covered Payroll
2016	236,031,058	170,643,926	65,387,132	2,114,458,672	8.07%
2017	224,710,406	205,314,875	19,395,531	2,199,037,019	9.34%
2018	202,909,666	204,235,000	(1,325,334)	2,050,634,331	9.96%
2019	168,736,509	206,238,000	(37,501,491)	1,925,233,991	10.71%
2020	164,599,978	193,406,000	(28,806,022)	1,712,420,688	11.29%
2021	58,962,339	182,142,000	(123,179,661)	1,662,544,357	10.96%



Notes to Schedule of Contributions

Valuation DateJune 30, 2020Measurement DateJune 30, 2021Plan Year EndJune 30, 2021

Methods and Assumptions Used to Develop Actuarially Determined Contribution:

Actuarial Cost Method Entry Age Normal

Amortization Method Level percentage of payroll, closed

Amortization Period 20-year closed period as of June 30, 2017

Asset Valuation Method Market value

Investment Rate of Return 6.65%, net of OPEB plan investment expense, including inflation

Inflation 2.25%

Wage Inflation 2.75% for PERS and TRS, 3.25% for Troopers

Salary Increases Rates based on 2015-2020 OPEB Experience Study and depend on pension plan

participation and attained age, and range from 2.75% to 5.18%, including

inflation. Rates were first applied to the 2020 valuation.

Retirement Age Rates based on 2015-2020 OPEB Experience Study and vary by pension plan

participation and age/service at retirment. Rates were first applied to the 2020

valuation.

Mortality Post-Retirement: Pub-2010 General Healthy Retiree Mortality Tables projected

with Scale MP-2019 for TRS. Pub-2010 General Employee Mortality Tables projected with Scale MP-2019 for PERS. Pub-2010 Public Safety Healthy Retiree Mortality Tables projected with Scale MP-2019 for Troopers A and B. Pre-

Retirement: Pub-2010 General Employee Mortality Tables projected with Scale MP-2019 for TRS. Pub-2010 Below-Median Income General Employee Mortality Tables projected with Scale MP-2019 for PERS. Pub-2010 Public Safety Employee

Mortality Tables projected with Scale MP-2019 for Troopers A and B.

Healthcare Cost Trend Rates Trend rate for pre-Medicare per capita costs of 7.0% for plan year end 2020,

decreasing by 0.5% for one year then by 0.25% each year thereafter, until ultimate trend rate of 4.25% is reached in plan year end 2032. Trend rate for Medicare per capita costs of -33.11% for plan year end 2022, 9.15% for plan year end 2023, decreasing ratably each year thereafter, until ultimate trend rate of

4.25% is reached in plan year end 2036.

Aging Factors Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"

Expenses Health administrative expenses are included in the development of the per

capita claims costs. Operating expenses are included as a component of the

annual expense.



Single Discount Rate

A Single Discount Rate of 6.65% was used to measure the total OPEB liability. This Single Discount Rate was based on the expected rate of return on OPEB plan investments of 6.65%. The projection of cash flows used to determine this Single Discount Rate assumed that employer contributions will be made in accordance with the prefunding and investment policies. See Appendix A for a projection supporting the development of the Single Discount Rate. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Summary of Membership Information

The following table provides a summary of the number of participants in the plan:

Members or Beneficiaries Currently Receiving Benefits	43,269
Waived Annuitants ^a	11,913
Active Plan Members	34,319
Total Plan Members	89,501

^a The actuarial valuation assumes 2.5% of eligible waived annuitants under the age of 75 will select retiree healthcare coverage on the valuation date. As of June 30, 2020, there were 11,913 waived annuitants under the age of 75 who were included in the actuarial valuation, and so approximately 298 were assumed to elect coverage as of June 30, 2020. Also, 5,013 waived annuitants over the age 75 were excluded from the actuarial valuation.

