



Commonwealth of Pennsylvania
Retired Pennsylvania State Police Program
GASB Statement Nos. 74 and 75 Valuation Report

Measurement date of June 30, 2021

Prepared by Deloitte Consulting LLP

August 2021

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Actuarial Valuation Opinion

This report presents results of the actuarial valuation of the Commonwealth of Pennsylvania's Retired Pennsylvania State Police Program ("the Plan" or "RPSPP") measured as of June 30, 2021. In this report, we present disclosure information as of June 30, 2021 as required by Government Accounting Standards Board Statement Nos. 74 and 75 (GASB Nos. 74 and 75). In our opinion, this report is complete and accurate and represents fairly the actuarial position of the Plan for the purposes stated herein.

Actuarial information under GASB Nos. 74 and 75 is for purposes of fulfilling trust and employer financial accounting requirements. The results have been prepared on a basis consistent with our understanding of GASB Nos. 74 and 75 and are based upon assumptions prescribed by the Commonwealth of Pennsylvania. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

The Commonwealth of Pennsylvania provided the participant data, financial information and plan descriptions used in this valuation. The actuary has analyzed the data and other information provided for reasonableness but has not independently audited the data or other information provided. The actuary has no reason to believe the data or other information provided is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

In our opinion, all costs, liabilities, rates of interest, and other factors underlying these actuarial computations have been determined on the basis of actuarial assumptions and methods that are each reasonable (or consistent with authoritative guidance) for the purposes herein taking into account the experience of the Plan and future expectations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operations of the methodology used for these measurements (such as the additional cost or contribution requirements based on the Plan's funded status); and changes in program provisions or applicable law. Our scope for this actuarial valuation did not include analyzing the potential range of such future measurements, and we did not perform that analysis.

The undersigned with actuarial credentials collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

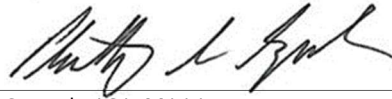
This report was prepared solely for the benefit and internal use of the plan sponsor. This report is not intended for the benefit of any other party and may not be relied upon by any third party for any purpose, and Deloitte Consulting accepts no responsibility or liability with respect to any party other than the plan sponsor.

To the best of our knowledge, no employee of the Deloitte U.S. Firms is an officer or director of the employer. In addition, we are not aware of any relationship between the Deloitte U.S. Firms and the employer that may impair or appear to impair the objectivity of the work detailed in this report.

DELOITTE CONSULTING LLP



Michael de Leon, FCA, ASA, EA, MAAA
Managing Director



Phillip Souzek, ASA, MAAA
Senior Manager



John Schubert, FCA, ASA, MAAA, CEBS
Specialist Leader

Executive Summary

Governmental Accounting Requirements and Report Purpose

The Governmental Accounting Standards Board released the Statement of Governmental Accounting Standards Nos. 74 and 75 in June 2015. GASB No. 74 establishes financial reporting requirements for OPEB plans that have assets accumulated in a trust or equivalent arrangement for the purpose of funding OPEB. GASB No. 75 details the reporting and disclosure requirements for employers with payables (OPEB liabilities) to employees of state and local governmental employers through defined benefit OPEB plans that are administered through trusts or equivalent arrangements. The Commonwealth of Pennsylvania adopted GASB No. 74 in the fiscal year ended June 30, 2017 and GASB No. 75 in the fiscal year ended June 30, 2018.

The purpose of this actuarial valuation report is to provide information for the Commonwealth's trust and employer financial reporting. The information provided herein will be used for the fiscal year ended June 30, 2021 GASB No. 74 disclosures and fiscal year ending June 30, 2022 GASB No. 75 disclosures (the Commonwealth has elected to use a measurement date as of the end of the prior fiscal year end for GASB No. 75).

Summary of Results

The key results for the measurement period ended June 30, 2021 are:

- Net OPEB Liability (NOL) is \$8.2 billion, 1832.7% of covered employee payroll.
- Plan Fiduciary Net Position (FNP) as a percentage of Total OPEB Liability (TOL) is 1.7%.
- OPEB Expense is \$0.4 billion.

Significant Changes from the Previous Actuarial Valuation

For the June 30, 2021 measurement, there was an increase in TOL of \$1.5 billion compared to the previous valuation, with the increase primarily due to the following:

- There was an expected \$0.2 billion increase in TOL due to the passage of time (service cost, interest, benefit payments, retiree contributions);
- There was a \$0.8 billion increase in TOL due to changes in actuarial assumptions, driven primarily by the mortality assumption update;
- The actual experience over the past year was different than expected, resulting in a \$0.5 billion increase in TOL. This experience loss was caused primarily by higher than expected increases in claims costs due to unfavorable self-insured claims experience.

Background and Comments

Overview of Plans

The Commonwealth sponsors the Retired Pennsylvania State Police Program (RPSPP) for eligible retirees and their dependents to receive subsidized health coverage for the retiree's lifetime.

Funding Policy

The Commonwealth created the OPEB Investment Pool, a Trust Equivalent Arrangement, during the fiscal year ended June 30, 2008. The Commonwealth plans to contribute \$1 million annually until assets cover the present value of future benefits, subject to annual evaluation.

RPSPP employer contribution requirements are established within collective bargaining agreements. During the fiscal year ended June 30, 2021, employing agencies contributed \$1,288 per biweekly pay period for each current RPSPP eligible active employee to the RPSPP Trust. RPSPP plan members are not required to make contributions. Employer contributions made to the RPSPP Trust, a Trust Equivalent Arrangement, are irrevocable. Plan assets are restricted for use for the provision and administration of RPSPP retirees' health benefits. Employers maintain no rights of ownership to the assets and the trust.

Health Care Reform

The Patient Protection and Affordable Care Act ("PPACA") was signed into law on March 23, 2010. The primary objective of the act is to increase the number of Americans with health insurance coverage. There are several provisions within PPACA with potentially significant short- and long-term cost implications for employers. The applicable provisions of PPACA were first accounted for in the July 1, 2010 valuation. On December 18, 2015, the Consolidated Appropriations Act, 2016 became law. This legislation delayed the effective date of the high cost plan excise tax from 2018 to 2020 and made it tax deductible. On January 22, 2018, the Federal Register Printing Savings Act further delayed the effective date from 2020 to 2022. On December 20, 2019, the excise tax and the health insurance provider fee for calendar years beginning after December 31, 2020 were repealed.

The provisions of PPACA considered are as follows:

- Prohibiting lifetime and annual limits on the dollar value of coverage for "essential health benefits"
- Increasing the dependent child age limit to age 26
- Elimination of cost sharing for in-network preventive services
- Reflecting manufacturer discounts available to certain Medicare beneficiaries receiving applicable covered Part D drugs (mostly brand) while in the coverage gap
- Out-of-pocket limit includes both medical and Rx expenses

The impact of applicable provisions was incorporated in the per capita claims costs summarized in the Actuarial Assumptions section of this report.

Actuarial Methods and Assumptions

The Commonwealth of Pennsylvania State Employees' Retirement System (SERS) performs experience studies periodically to determine reasonable and appropriate economic and demographic assumptions for purposes of valuing the defined benefit pension plan. The most recent SERS experience study covered the years 2015 through 2019 and was presented to the State Employees' Retirement Board in July 2020. The approved recommendations from that study were used to determine the assumptions for this valuation, where applicable. Consistent with prior valuations, these demographic assumptions assume beginning of year decrements (retirement, withdrawal, death, disability, etc.). In addition, Deloitte periodically reviews actuarial assumptions only applicable to the postemployment medical plan outside of the experience study, such as medical trend rates and age-graded medical rates.

One significant assumption where the recommendation of the experience study is not applicable to this retiree health benefit valuation is the discount rate. Since RPSPP has insufficient assets to meet next year's projected benefit payments, as prescribed by GASB Nos. 74 and 75, the discount rate will be based on the index rate for 20-year tax-exempt general obligation municipal bond index rate with an average rating of AA/Aa or higher as of the measurement date. The Commonwealth elected to determine the discount rate using the Bond Buyer 20-Bond General Obligation Index. The discount rate is 2.16% as of June 30, 2021 (2.21% as of June 30, 2020).

The treatment of Medicare Part D in this report is consistent with our understanding of the GASB technical bulletin 2006-1 issued in June 2006, which states that Medicare Part D subsidy payments should not be reflected under GASB No. 75.

The actuarial methods and assumptions are described in the Basis of the Valuation section of this report.

Summary of Actuarial Valuation

This section provides a summary of the actuarial valuation results for the plan. All information is provided as of the measurement date except for the census data. The valuation results as of the June 30, 2020 measurement date were based on December 31, 2019 census data, and valuation results as of the June 30, 2021 measurement date were based on December 31, 2020 census data. All liabilities are net of expected retiree contributions.

(All dollar amounts are in thousands)

Measurement Date	June 30, 2021	June 30, 2020
Total OPEB Liability	\$ 8,348,248	\$ 6,808,752
Plan Fiduciary Net Position	\$ 138,904	\$ 106,545
Net OPEB Liability	\$ 8,209,344	\$ 6,702,207
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability	1.7%	1.6%
Net OPEB Liability As A Percentage Of Covered Employee Payroll	1832.7%	1570.6%
Discount Rate	2.16%	2.21%
Participant Counts		
Active Participants	4,561	4,530
Retired Participants*	<u>5,360</u>	<u>5,303</u>
Total	9,921	9,833
Covered Employee Payroll	\$ 447,926	\$ 426,728

* Retired participants include retirees, disabled participants, and surviving family members.

GASB Nos. 74 and 75 Disclosures

GASB Nos. 74 and 75 requires disclosure of notes to the financial statements and required supplementary information that includes information shown in this section. The valuation results as of the June 30, 2020 measurement date were based on December 31, 2019 census data and employer contributions for the fiscal year ended June 30, 2020. The valuation results as of the June 30, 2021 measurement date were based on December 31, 2020 census data and employer contributions for the fiscal year ended June 30, 2021.

Schedule of Changes in Net OPEB Liability

(All dollar amounts are in thousands)

	Discount Rate	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Measurement Date of June 30, 2020	2.21%	\$ 6,808,752	\$ 106,545	\$ 6,702,207
Service Cost		212,753		212,753
Interest		153,410		153,410
Changes In Benefit Terms		-		-
Changes In Assumptions - Discount Rate		75,868		75,868
Changes In Assumptions - Others		763,786		763,786
Differences Between Expected And Actual Experience		494,350		494,350
Benefit Payments				
Insurance Premiums - Employer Paid	\$ (160,671)			
Insurance Premiums - Retiree Paid	(1,131)			
Total		(161,802)	(161,802)	-
GASB 75 Defined Employer Contributions	\$ 158,772		158,772	(158,772)
Contributions - Employee			-	-
Contributions - Retiree		1,131	1,131	-
Administrative Expenses			(661)	661
Net Investment Income				
Expected Investment Earnings	\$ 5,264			
Differences Between Projected And Actual Investment Earnings	29,655			
Total			34,919	(34,919)
Net Change		\$ 1,539,496	\$ 32,359	\$ 1,507,137
Measurement Date of June 30, 2021	2.16%	\$ 8,348,248	\$ 138,904	\$ 8,209,344
Measurement Date			June 30, 2021	June 30, 2020
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability			1.7%	1.6%
Covered Employee Payroll			\$ 447,926	\$ 426,728
Net OPEB Liability As A Percentage Of Covered Employee Payroll			1832.7%	1570.6%
Sensitivity of Liability to Changes in Discount Rate			\$ Change	% Change
A one percentage point change in discount rate would have the following effect on Total OPEB Liability as of June 30, 2021:				
One Percentage Increase (3.16%)			\$ (1,354,167)	-16%
One Percentage Decrease (1.16%)			\$ 1,758,053	21%
Net OPEB Liability at a one percentage point change in discount rate as of June 30, 2021 is as follows:				Net OPEB Liability
One Percentage Increase (3.16%)				\$ 6,855,177
One Percentage Decrease (1.16%)				\$ 9,967,397
Sensitivity of Liability to Changes in Trend Rate			\$ Change	% Change
A one percentage point change in trend rate would have the following effect on Total OPEB Liability as of June 30, 2021:				
One Percentage Increase (7.5% / 6.5% grading to 5.0%)			\$ 1,870,908	22%
One Percentage Decrease (5.5% / 4.5% grading to 3.0%)			\$ (1,423,659)	-17%
Net OPEB Liability at a one percentage point change in trend rate as of June 30, 2021 is as follows:				Net OPEB Liability
One Percentage Increase (7.5% / 6.5% grading to 5.0%)				\$ 10,080,252
One Percentage Decrease (5.5% / 4.5% grading to 3.0%)				\$ 6,785,685
Key Assumptions			June 30, 2021	June 30, 2020
Discount Rate			2.16%	2.21%
Investment Rate of Return			5.00%	5.00%
Inflation			2.50%	2.60%
Initial Medical Trend Rate			6.5% / 5.5%	6.3% / 5.2%
Ultimate Medical Trend Rate			4.0%	4.1%
Year Ultimate Trend Rate Reached			2075	2075

**Development of OPEB Expense for Fiscal Year Ending June 30, 2022
(Measurement Year June 30, 2021)**

(All dollar amounts are in thousands)

Components of OPEB Expense	Measurement Year Ended 06/30/2021	Measurement Year Ended 06/30/2020
Service Cost	\$ 212,753	\$ 150,941
Interest	153,410	205,461
Expected Investment Earnings	(5,264)	(5,154)
Contributions - Employee	-	-
Administrative Expenses	661	559
Changes In Benefit Terms	-	-
Recognition of Current Period Deferred Outflows and (Inflows)		
Changes in assumptions	132,647	169,176
Differences between expected and actual experience	78,096	(35,929)
Differences between expected and actual investment earnings	(5,931)	819
Recognition of Beginning Deferred Outflows	219,237	49,242
Recognition of Beginning Deferred Inflows	(381,090)	(345,160)
OPEB Expense	\$ 404,519	\$ 189,955
Assumptions Used to Determine OPEB Expense	Measurement Year Ended 06/30/2021	Measurement Year Ended 06/30/2020
Assumptions as of Measurement Date*	6/30/2020	6/30/2019
Discount Rate	2.21%	3.50%
Investment Rate of Return	5.00%	5.00%
Inflation	2.60%	2.60%
Initial Medical Trend Rate	6.3% / 5.2%	6.0% / 5.9%
Ultimate Medical Trend Rate	4.1%	4.1%
Year Ultimate Trend Rate Reached	2075	2075

* Per Q&A 4.114 and 4.115 of GASB Implementation Guide No. 2017-3, Service Cost and Interest are determined "based on the results of the actuarial valuation that determined the beginning net OPEB liability".

Schedule of Deferred Outflows and Deferred Inflows of Resources

(All dollar amounts are in thousands)

Measurement Date Established	Initial Amount	Deferred Outflows of Resources as of 06/30/2021	Deferred (Inflows) of Resources as of 06/30/2021*	Initial Years	Remaining Years	Outflows/(Inflows) Recognized in Measurement Year Ended 06/30/2021
Changes In Assumptions						
06/30/2017	\$ (803,662)	\$ -	\$ (99,932)	5.71	0.71	\$ (140,746)
06/30/2018	\$ (272,746)	\$ -	\$ (86,570)	5.86	1.86	\$ (46,544)
06/30/2019	\$ 296,435	\$ 148,709	\$ -	6.02	3.02	\$ 49,242
06/30/2020	\$ 1,018,439	\$ 680,087	\$ -	6.02	4.02	\$ 169,176
06/30/2021	\$ 839,654	\$ 707,007	\$ -	6.33	5.33	\$ 132,647
Total		\$ 1,535,803	\$ (186,502)			\$ 163,775
Differences Between Expected And Actual Plan Experience						
06/30/2018	\$ (202,655)	\$ -	\$ (64,323)	5.86	1.86	\$ (34,583)
06/30/2019	\$ (728,659)	\$ -	\$ (365,539)	6.02	3.02	\$ (121,040)
06/30/2020	\$ (216,290)	\$ -	\$ (144,432)	6.02	4.02	\$ (35,929)
06/30/2021	\$ 494,350	\$ 416,254	\$ -	6.33	5.33	\$ 78,096
Total		\$ 416,254	\$ (574,294)			\$ (113,456)
Net Difference Between Projected And Actual Earnings On Investments						
06/30/2017	\$ (7,006)	\$ -	\$ -	5.00	-	\$ (1,402)
06/30/2018	\$ (4,179)	\$ -	\$ (835)	5.00	1.00	\$ (836)
06/30/2019	\$ (48)	\$ -	\$ (18)	5.00	2.00	\$ (10)
06/30/2020	\$ 4,096	\$ 2,458	\$ -	5.00	3.00	\$ 819
06/30/2021	\$ (29,655)	\$ -	\$ (23,724)	5.00	4.00	\$ (5,931)
Total**		\$ 2,458	\$ (24,577)			\$ (7,360)
Contributions subsequent to measurement date***						
To be determined by each participating employer.						
Balance as of 06/30/2021 Measurement Date		\$ 1,954,515	\$ (785,373)			\$ 42,959
Deferred Outflows And Deferred (Inflows) Of Resources Will Be Recognized In Expense As Follows:						
Measurement Year Ending:						Outflows/(Inflows)
06/30/2022						\$ 85,176
06/30/2023						197,306
06/30/2024						267,081
06/30/2025						336,623
06/30/2026						213,410
Thereafter						69,546

* Deferred (Inflows) should be disclosed as positive numbers in the CAFR.

** Per GASB 75 Paragraph 43.b, Deferred outflows of resources and deferred inflows of resources arising from differences between projected and actual OPEB plan investment earnings in different measurement periods should be aggregated and reported as a net deferred outflow of resources related to OPEB or a net deferred inflow of resources related to OPEB. Therefore, a net deferred inflow of \$(22,119) is recognized as of 06/30/2021.

*** Reflects employer contributions made subsequent to 06/30/2021. This will be recognized as a reduction in Net OPEB Liability next year.

10-Year Schedule of Net OPEB Liability

(All dollar amounts are in thousands)

Measurement Year Ended	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c)	Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability (d)	Covered Employee Payroll (e)	Net OPEB Liability As A Percentage Of Covered Employee Payroll (f)
			(a)-(b)	(b)/(a)		(c)/(e)
June 30, 2016	\$6,746,387	\$82,532	\$6,663,855	1.2%	N/A	N/A
June 30, 2017	\$6,209,658	\$93,666	\$6,115,992	1.5%	\$386,602	1582.0%
June 30, 2018	\$5,981,598	\$96,357	\$5,885,241	1.6%	\$387,245	1519.8%
June 30, 2019	\$5,787,345	\$100,742	\$5,686,603	1.7%	\$408,648	1391.6%
June 30, 2020	\$6,808,752	\$106,545	\$6,702,207	1.6%	\$426,728	1570.6%
June 30, 2021	\$8,348,248	\$138,904	\$8,209,344	1.7%	\$447,926	1832.7%

Participating Employers Results

The RPSPP is a single-employer defined-benefit OPEB Plan that is established and sponsored by the Commonwealth. There are several employers, all fund types within the primary government, that participate in the RPSPP. The results for each participating employer was provided in a separate excel workbook.

Each fund type and business area's allocated share was determined based on their contractually required contribution towards RPSPP relative to the total population during the period ending on the measurement date. The employer contractually required contribution towards RPSPP is different from the GASB No. 75 defined employer contribution. Each fund type and business area's GASB No. 75 defined employer contribution was determined based on their respective allocated share of the total trust eligible employer contribution during the period ending on the measurement date.

Basis for the Valuation

Plan Participation Summary

The participant data used in the valuation was provided by the Commonwealth as of December 31, 2020. While the participant data was checked for reasonableness, the data was not audited, and the valuation results presented in this report are dependent upon the accuracy of the participant data provided. This section presents a summary of the basic participant information for the active and retired participants covered under the terms of the Plan.

<hr/>			
a. Active Participants			
Total Counts	4,561		
Average Age	37.92		
Average Service	11.50		
b. Retired Participants		Employees*	Spouses
Counts			
Under Age 65 Non-Medicare	2,855	2,416	
Over Age 65 Non-Medicare	409	61	
Under Age 65 Medicare	14	79	
Over age 65 Medicare	<u>2,082</u>	<u>1,696</u>	
Total Counts	5,360	4,252	
Average Age	65.31		
c. Total Participants**		9,921	
<hr/>			

* Employees include retirees and 114 surviving spouses

** Total participant count excludes dependent spouses

Plan Participation Summary (cont.)

Distribution of Service Groups by Age Groups									
Age Group	Retired Participant	Active Participants - Years of Service							Total
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
<20	-	-	-	-	-	-	-	-	-
20-24	-	108	-	-	-	-	-	-	108
25-29	1	631	201	-	-	-	-	-	832
30-34	2	321	607	92	-	-	-	-	1,020
35-39	2	100	248	406	115	2	-	-	871
40-44	9	18	61	176	284	68	-	-	607
45-49	180	-	12	58	177	355	31	-	633
50-54	1,182	-	-	19	82	232	73	12	418
55-59	938	-	-	-	10	26	14	19	69
60-64	555	-	-	-	-	1	-	2	3
65-69	276	-	-	-	-	-	-	-	-
70-74	806	-	-	-	-	-	-	-	-
75-79	850	-	-	-	-	-	-	-	-
80-84	370	-	-	-	-	-	-	-	-
85-89	124	-	-	-	-	-	-	-	-
90+	65	-	-	-	-	-	-	-	-
Total	5,360	1,178	1,129	751	668	684	118	33	4,561

Participant Reconciliation				
	<u>Active</u>	<u>Retirees</u>	<u>Beneficiaries</u>	<u>Total</u>
Beginning of Year (12/31/2019)	4,530	5,183	120	9,833
New Hire	197	0	0	197
Opt-In	0	0	0	0
New Retiree/Beneficiary	(159)	159	11	11
Death/Termination/Opt-Out	(7)	(96)	(17)	(120)
End of Year (12/31/2020)	4,561	5,246	114	9,921

Program Provisions Summary

This section summarizes overall eligibility provisions for postemployment medical coverage and the various plans offered by the Commonwealth.

Note that in some cases the benefit programs offered to retirees are different based on date of retirement. The provisions shown below summarize the plan designs for the most recent retirees. All older “grandfathered” plan designs are not shown in this document.

Eligibility

Permanent enlisted employees of the Pennsylvania State Police who retire from the state and meet one of the following eligibility criteria are eligible to receive RPSPP benefits

- Superannuation retirement (excluding vestees) – age 50 (age 55 for employees subject to Act 120 of 2010) with three years of service;
- Retirement with at least 25 years of service;
- Retirement with at least 20 but less than 25 years of service, with at least 10 years of enlisted service with State Police (Military time, civilian service and service with another agency are not considered service with the State Police);
- Disability retirement – no service requirement.

Covered Family Members

Spouses and dependents are eligible for postemployment medical coverage while the retiree is alive. The PPACA, signed into law on March 23, 2010, increased the dependent child age limit to age 26 and applied to the Commonwealth effective January 1, 2011.

Retiree Contribution

The Commonwealth pays the full cost of postemployment medical, dental, and Part B coverage while the retiree is alive.

Surviving spouses of deceased retirees may continue to participate in the plan (receive medical, Rx, and Part B coverage, but not dental) if they pay the full cost of the coverage.

Changes in Program Provisions

None.

Benefit Provisions Summary

Medical Plans

This section summarizes the various medical and prescription drug plans offered by the Commonwealth effective January 1, 2021.

Medical	Benefit Provisions	Eligibility
PPO	<p><u>In Network</u> Deductible None Out-of-Pocket Limit None Doctor Office Visits PCP: \$15 co-pay Specialist: \$25 co-pay Inpatient Covered in full Lifetime Maximum None</p> <p><u>Out of Network</u> Deductible \$250 Individual; \$750 Family Out-of-Pocket Limit \$1,500 Individual; \$3,000 Family Coinsurance 20% Inpatient 20% Lifetime Maximum None</p>	<p>Annuitants retired from the State Police and their eligible dependents. Retirees hired on or after April 21, 2005 may only enroll in the PPOBlue plan.</p>
Traditional Plan (Major Medical)	<p><u>Retired prior to 7/1/07</u> Deductible \$100 Individual \$300 Family Out-of-Pocket Limit (excluding deductible) \$380 Individual Coinsurance 20% Inpatient 20% Lifetime Maximum None</p> <p><u>Retired on or after 7/1/07 and before 1/12/2018</u> Deductible \$250 Individual \$750 Family Out-of-Pocket Limit \$380 Individual Coinsurance 20% Inpatient 20% Lifetime Maximum None</p> <p><u>Retired on or after 1/12/2018</u> Deductible \$250 Individual \$750 Family Out-of-Pocket Limit \$380 Individual Coinsurance 20% (0% after annual Out-of-Pocket Limit reached) Inpatient 20% (0% after annual Out-of-Pocket Limit reached) Lifetime Maximum None</p>	<p>Annuitants retired from the State Police and their eligible dependents</p>

Benefit Provisions Summary (cont.)

Medical Plans (cont.)

Traditional Plan (Facility Program)	Deductible Out-of-Pocket Limit Doctor Office Visits Inpatient Lifetime Maximum	None N/A Not Covered Covered in full N/A	Non-Medicare eligible annuitants retired from the State Police and their non-Medicare eligible dependents
Traditional Plan (Professional Program)	Deductible Out-of-Pocket Limit Doctor Office Visits Inpatient Lifetime Maximum	None N/A 100% (\$25 deductible post-1/12/2018 2018 Retirees) Not Covered N/A	Non-Medicare eligible annuitants retired from the State Police and their non-Medicare eligible dependents

Prescription Drug

The co-payments for all prescriptions covered by the plan are:

- Retail (30-day supply): \$10 Generic / \$20 Preferred* / \$30 Non-Preferred*
- Mail Order (90-day supply): \$20 Generic / \$30 Preferred* / \$50 Non-Preferred*

*Plus the cost difference between the brand and the generic, if one exists.

Medicare Part B Reimbursement

For employees hired on or after April 21, 1986, the Commonwealth reimburses the cost of Medicare Part B premium.

Employees hired before April 21, 1986 were not required to enroll in Medicare Part B.

Dental

The basic benefit provisions are:

- Basic diagnostic and preventive work, restorations, endodontics, periodontics, oral surgery and prosthodontics: 100% UCR
- Orthodontics: 70% UCR (dependents under age 19 only)
- Orthodontics lifetime maximum for dependent children: \$1,250

Actuarial Methods Summary

Actuarial Cost Method

The Actuarial Cost Method used to determine the Total OPEB Liability is the Entry Age Normal (EAN) method as prescribed by GASB Nos. 74 and 75. This method is in the family of future benefit cost methods, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.

The Normal Cost (or Service Cost) is the annual allocation required for each participant from entry date to the assumed retirement date so that the accumulated allocation at retirement is equal to the liability for the projected benefit. The projected benefits are based on estimates of future years of service and projected health benefit costs. The normal cost is developed as a level percent of compensation as prescribed by GASB Nos. 74 and 75.

The Present Value of Future Benefits is equal to the value of the projected benefit payable at retirement discounted back to the participant's current age. Discounts include such items as interest and mortality. The present value of future normal cost allocations is equal to the discounted value of the normal costs allocated from the participant's current age to retirement age.

The difference between the Present Value of Future Benefits and the Present Value of Future Normal Cost allocations represents the Total OPEB Liability at the participant's current age.

The Total OPEB Liability for participants currently receiving payments is calculated as the actuarial present value of future benefits expected to be paid. No normal cost is allocated for these participants.

Financial and Census Data

The Commonwealth of Pennsylvania provided the participant data, financial information and plan descriptions used in this valuation. The actuary has checked the data for reasonableness but has not independently audited the data. The actuary has no reason to believe the data is not complete and accurate and knows of no further information that is essential to the preparation of the actuarial valuation.

Plan Fiduciary Net Position

Market value of assets as of the measurement date.

Census Date

December 31, 2020 for June 30, 2021 measurements.

Measurement Date

June 30, 2021 for fiscal year ended June 30, 2021 trust financial statements (GASB No. 74) and for fiscal year ending June 30, 2022 participating employer financial statements (measurement date as of the end of the prior fiscal year end for GASB No. 75).

Changes in Methods

None.

Actuarial Assumptions Summary

Economic Assumptions

The economic assumptions were selected for consistency with SERS where applicable. The discount rate was selected based on the requirements prescribed in GASB Nos. 74 and 75.

Discount Rate	<p>2.16% as of June 30, 2021 2.21% as of June 30, 2020</p> <p>Since RPSPP has insufficient assets to meet next year's projected benefit payments, as prescribed by GASB Nos. 74 and 75, the discount rate will be based on the index rate for 20-year tax-exempt general obligation municipal bond index rate with an average rating of AA/Aa or higher as of the measurement date. The Commonwealth elected to determine the discount rate using the Bond Buyer 20-Bond General Obligation Index.</p>																																																																
Inflation¹	2.50%																																																																
Payroll Growth¹	2.80%																																																																
Salary Scale¹	<p>The career salary scale shown below includes average increases in the employee salary due to promotions and longevity growth. In addition to the career salary scale below, It is assumed that the salary schedules will increase by 2.80 percent per year.</p> <p><u>Career Salary Scale for Members</u></p> <table border="1"> <thead> <tr> <th>Completed Years of Service</th> <th>Annual Increase</th> <th>Completed Years of Service</th> <th>Annual Increase</th> </tr> </thead> <tbody> <tr><td>1</td><td>4.15%</td><td>16</td><td>1.25%</td></tr> <tr><td>2</td><td>3.25</td><td>17</td><td>1.20</td></tr> <tr><td>3</td><td>2.90</td><td>18</td><td>1.15</td></tr> <tr><td>4</td><td>2.70</td><td>19</td><td>1.15</td></tr> <tr><td>5</td><td>2.50</td><td>20</td><td>1.10</td></tr> <tr><td>6</td><td>2.35</td><td>21</td><td>1.00</td></tr> <tr><td>7</td><td>2.15</td><td>22</td><td>0.95</td></tr> <tr><td>8</td><td>2.10</td><td>23</td><td>0.90</td></tr> <tr><td>9</td><td>2.00</td><td>24</td><td>0.85</td></tr> <tr><td>10</td><td>1.60</td><td>25</td><td>0.80</td></tr> <tr><td>11</td><td>1.55</td><td>26</td><td>0.70</td></tr> <tr><td>12</td><td>1.45</td><td>27</td><td>0.60</td></tr> <tr><td>13</td><td>1.40</td><td>28</td><td>0.50</td></tr> <tr><td>14</td><td>1.35</td><td>29</td><td>0.50</td></tr> <tr><td>15</td><td>1.30</td><td>30+</td><td>0.50</td></tr> </tbody> </table>	Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase	1	4.15%	16	1.25%	2	3.25	17	1.20	3	2.90	18	1.15	4	2.70	19	1.15	5	2.50	20	1.10	6	2.35	21	1.00	7	2.15	22	0.95	8	2.10	23	0.90	9	2.00	24	0.85	10	1.60	25	0.80	11	1.55	26	0.70	12	1.45	27	0.60	13	1.40	28	0.50	14	1.35	29	0.50	15	1.30	30+	0.50
Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase																																																														
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¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those disclosed in the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020.

Actuarial Assumptions Summary (cont.)

Demographic Assumptions

The demographic assumptions were selected for consistency with SERS where applicable. The retiree health specific assumptions were selected based on recent experience.

Mortality	<p>Pre-Retirement Mortality: Pub-2010 General Employee Headcount Weighted Mortality Tables, adjusted for mortality improvements using projection scale MP-2020.</p> <p>Post Retirement Mortality: Healthy Participants: Pub-2010 General Healthy Retiree Headcount Weighted Mortality Tables, with rates set forward one year for females, and adjusted for mortality improvements using projection scale MP-2020. Disabled Participants: Pub-2010 Non-Safety Disabled Retiree Headcount Weighted Mortality Tables, with rates set forward two years for males and females, and adjusted for mortality improvements using projection scale MP-2020.</p>																								
Disability Incidence¹	<p>Pre-Retirement Disability:</p> <table border="1"> <thead> <tr> <th>Age</th> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>0.01%</td> <td>0.02%</td> </tr> <tr> <td>30</td> <td>0.03</td> <td>0.05</td> </tr> <tr> <td>35</td> <td>0.06</td> <td>0.08</td> </tr> <tr> <td>40</td> <td>0.09</td> <td>0.16</td> </tr> <tr> <td>45</td> <td>0.20</td> <td>0.26</td> </tr> <tr> <td>50</td> <td>0.33</td> <td>0.40</td> </tr> <tr> <td>55</td> <td>0.44</td> <td>0.50</td> </tr> </tbody> </table>	Age	Male	Female	25	0.01%	0.02%	30	0.03	0.05	35	0.06	0.08	40	0.09	0.16	45	0.20	0.26	50	0.33	0.40	55	0.44	0.50
Age	Male	Female																							
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Withdrawal¹	<table border="1"> <thead> <tr> <th>Years of Service</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>9.0%</td> </tr> <tr> <td>1</td> <td>5.0</td> </tr> <tr> <td>2</td> <td>3.0</td> </tr> <tr> <td>3</td> <td>3.0</td> </tr> <tr> <td>4</td> <td>2.0</td> </tr> <tr> <td>5</td> <td>2.0</td> </tr> <tr> <td>6</td> <td>1.0</td> </tr> <tr> <td>7</td> <td>0.6</td> </tr> <tr> <td>8</td> <td>0.6</td> </tr> <tr> <td>9</td> <td>0.6</td> </tr> <tr> <td>10+</td> <td>0.3</td> </tr> </tbody> </table>	Years of Service	Rate	0	9.0%	1	5.0	2	3.0	3	3.0	4	2.0	5	2.0	6	1.0	7	0.6	8	0.6	9	0.6	10+	0.3
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Actuarial Assumptions Summary (cont.)

<p>Early Retirement¹ (based on early retirement as defined by SERS; retirement prior to OPEB eligibility, as described above in the Program Provisions Summary section, will receive no postemployment health benefit)</p>	<p>1.5% at each age</p>																																												
<p>Normal Retirement¹ (based on normal retirement as defined by SERS; retirement prior to OPEB eligibility, as described above in the Program Provisions Summary section, will receive no postemployment health benefit)</p>	<p>State Police with less than 19 years of service</p> <table border="1"> <thead> <tr> <th>Age</th> <th>Rate</th> <th>Age</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>49</td> <td>10.0%</td> <td>62 - 64</td> <td>20.0%</td> </tr> <tr> <td>50</td> <td>15.0</td> <td>65</td> <td>23.0</td> </tr> <tr> <td>51 - 54</td> <td>10.0</td> <td>66</td> <td>30.0</td> </tr> <tr> <td>55</td> <td>12.0</td> <td>67 - 68</td> <td>25.0</td> </tr> <tr> <td>56 - 58</td> <td>10.0</td> <td>69 - 79</td> <td>20.0</td> </tr> <tr> <td>59</td> <td>12.0</td> <td>80</td> <td>100.0</td> </tr> <tr> <td>60 - 61</td> <td>16.0</td> <td></td> <td></td> </tr> </tbody> </table> <p>State Police with at least 19 years of service</p> <table border="1"> <thead> <tr> <th>Years of Service</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>19* - 23</td> <td>7.5%</td> </tr> <tr> <td>24* - 25</td> <td>60.0</td> </tr> <tr> <td>26 - 35</td> <td>25.0</td> </tr> <tr> <td>36 - 39</td> <td>40.0</td> </tr> <tr> <td>40+</td> <td>100.0</td> </tr> </tbody> </table> <p>* State Police with 19 and 24 years of service at the beginning of the year are assumed to retire at the point they reach 20 and 25 years respectively during the year and to receive the Fraternal Order of Police (FOP) award.</p>	Age	Rate	Age	Rate	49	10.0%	62 - 64	20.0%	50	15.0	65	23.0	51 - 54	10.0	66	30.0	55	12.0	67 - 68	25.0	56 - 58	10.0	69 - 79	20.0	59	12.0	80	100.0	60 - 61	16.0			Years of Service	Rate	19* - 23	7.5%	24* - 25	60.0	26 - 35	25.0	36 - 39	40.0	40+	100.0
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<p>Spouse Age Difference²</p>	<p>Females are assumed to be 2 years younger than males.</p>																																												
<p>Participation Rate</p>	<p>All eligible employees are required to participate in the active health plan and are assumed to elect coverage at retirement. Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.</p>																																												
<p>Coverage Level Election Rates</p>	<p>Employees are assumed to maintain their current coverage election when they retire. Current retirees are assumed to continue their current coverage election.</p>																																												
<p>Surviving Spouse Continuing Coverage</p>	<p>45% of spouses are assumed to elect to continue coverage after the retiree's death.</p>																																												

¹ For consistency with the pension plan of which these participants are members, these assumptions are based on those disclosed in the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020.

² For consistency with the pension plan of which these participants are members, this assumption is based on the assumption disclosed in the Commonwealth of Pennsylvania SERS Actuarial Valuation Report as of December 31, 2019.

Actuarial Assumptions Summary (cont.)

Benefit Assumptions

Per Capita Claims Costs

The per capita claims costs used in the valuation were developed from fully insured premiums, self-insured claims experience and projected administrative expenses that represent the expected claims costs and administrative expenses for 2021, including an adjustment to premiums to remove anticipated vaccination costs.

The first-year per capita claims costs below are on a “net basis” – they reflect plan costs after reduction from the total benefit costs of the member cost-sharing (deductibles, coinsurance, co-pays, provider savings, Medicare, etc.). These claims were blended based on the prior year enrollment mix by plan (see Coverage section below), separately for the non-Medicare eligible and Medicare eligible population and inclusive of dental benefits, resulting in an average claims cost per member.

Medical Plan Costs

Average medical claims costs were developed based on 2021 retiree rates and age-graded using the retiree age and gender distribution, separately for the non-Medicare eligible and Medicare eligible population. These age-graded claims are the basis for projecting the gross cost for each individual, before member contributions for coverage. The aging factors are based on the Society of Actuaries age-curve study “Health Care Costs—From Birth to Death.” Future year per capita costs were projected by applying trend assumptions to the first-year costs.

Since the medical portion of the claims costs table below is specific to the experience of the Commonwealth’s retirees (i.e., not blended with active employees) separately for non-Medicare and Medicare, there is no implicit subsidy. However, age-graded claims were developed to project the increases in costs related to aging for retirees, spouses, and surviving spouses.

For Non-Medicare eligible retirees hired on or after April 21, 2005, the Non-Medicare medical portion of the curve below is multiplied by a factor of .923 to reflect a difference in participation rates.

Dental Plan Costs

Average Dental claims costs were developed based on 2021 premiums and age-graded using the total covered population, so the age-graded rates for a retiree-only group would composite to a higher cost appropriate for that relatively older group, resulting in an implicit subsidy. These age-graded claims are the basis for projecting the gross cost for each individual for coverage. The aging factors were derived from a study of active and retired member dental costs by age performed for the January 1, 2021 valuation. Future year per capita costs were projected by applying trend assumptions to the first-year costs.

Costs for child coverage were developed for all members, based on retiree claims data from 2019-2020. The age-graded rates were loaded to reflect this child coverage.

The table below shows total annual per capita claims costs, inclusive of dental benefits, separately for the non-Medicare eligible and Medicare eligible population.

2021 Annual Per Capita Claims Costs				
Age	Non-Medicare Eligible	Medicare Part A Eligible	Medicare Part A & B Eligible	
45	\$ 10,920	\$ 20,877	\$ 10,385	
50	13,276	20,930	10,439	
55	16,281	20,972	10,480	
60	19,982	21,144	10,653	
64	23,693	21,184	10,692	
65	24,741	21,184	10,692	
70	29,712	22,470	11,655	
75	35,017	24,030	12,335	
80	40,450	25,274	12,729	
85	45,840	26,322	12,908	
90	50,670	26,791	12,862	
95	53,169	25,758	12,255	

Expenses

Per Capita Claims Costs were developed to include administrative expenses.

Actuarial Assumptions Summary (cont.)

Trend Rates	The trend rates illustrated below are used to project age-graded claims and flat rates into future years. Trend rates were developed based on the most recently published SOA-Getzen trend rate model, version 2021_b (previously version 2020_b). The short-term trend assumptions were based on a review of the Commonwealth's historical trend rates for both medical and dental benefits, during the years 2017 through 2019 and emerging experience, along with industry surveys, separately for non-Medicare and Medicare benefits. The Commonwealth's experience along with industry surveys were used to predict short-term future per capita cost increases. The most recently published SOA-Getzen model was then used to determine the trend rates beginning in 2025 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy.	
	Year	January 1, 2021 Assumption
	Non-Medicare Benefits	Medicare Benefits
2021	6.5%*	5.5%
2022	6.3%	5.4%
2023	6.1%	5.3%
2024	5.9%	5.2%
2025	5.8%	5.2%
2030	5.2%	
2040	5.2%	
2050	5.2%	
2060	4.8%	
2070	4.4%	
2075+	4.0%	

*2021 non-Medicare trend is reduced by 1.8% to remove the temporary deferred care load built into 2021 rates due to COVID-19.

Medicare Eligibility

Current non-Medicare eligible retirees and spouses (if covered) over age 65 are assumed to remain non-Medicare eligible.

Current Medicare eligible retirees and spouses under age 65 are assumed to remain Medicare eligible.

Current Medicare eligible retirees hired before April 21, 1986 are assumed to be eligible for Medicare Part A only.

Current non-Medicare eligible retirees under age 65 and hired before April 21, 1986 and all actives hired before April 21, 1986 are assumed to be split with 70% eligible for Medicare Part A only and 30% not eligible for Medicare. This is based on recent experience, which shows that 70% of pre-1986 hires are able to gain Medicare eligibility through a spouse or prior employment.

Current Medicare eligible spouses (if covered) are assumed to be eligible for Part B based on spousal Part B data provided by the Commonwealth.

Current non-Medicare eligible spouses (if covered) are assumed to have the same Medicare Part B status as the retiree.

All other retirees are assumed to be non-Medicare eligible prior to age 65 and Medicare eligible at age 65, unless their spouse is over age 65 and non-Medicare eligible.

Actuarial Assumptions Summary (cont.)

<p>Coverage</p>	<p>Current retirees are assumed to remain in their currently elected plan, as summarized below.</p> <p>Current employees are assumed to enroll at retirement in the same proportion as the prior year retiree mix. These proportions are established separately for non-Medicare and Medicare coverage.</p> <p>Retirees hired on or after April 21, 2005 may only enroll in the PPOBlue plan.</p> <p>The table below shows the prior year enrollment percentage by plan.</p> <table border="1"> <thead> <tr> <th>Non-Medicare</th> <th>Adult Member Enrollment</th> </tr> </thead> <tbody> <tr> <td>Traditional</td> <td>25.2%</td> </tr> <tr> <td>PPO</td> <td>74.8%</td> </tr> <tr> <th>Medicare</th> <th>Adult Member Enrollment</th> </tr> <tr> <td>Traditional with Part A</td> <td>41.8%</td> </tr> <tr> <td>Traditional with Part A&B</td> <td>46.7%</td> </tr> <tr> <td>PPO with Part A</td> <td>11.5%</td> </tr> <tr> <td>PPO with Part A&B</td> <td>0.0%</td> </tr> </tbody> </table>	Non-Medicare	Adult Member Enrollment	Traditional	25.2%	PPO	74.8%	Medicare	Adult Member Enrollment	Traditional with Part A	41.8%	Traditional with Part A&B	46.7%	PPO with Part A	11.5%	PPO with Part A&B	0.0%
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<p>Changes in Assumptions</p>	<ul style="list-style-type: none"> • The discount rate was decreased from 2.21% to 2.16%. • Per capita claims costs were updated based on changes in the underlying claims and benefit provisions. • Dental per capita claim cost age-grading was updated to be based on the Commonwealth's dental experience. • The trend rates were updated based on the SOA-Getzen trend rate model version 2021_b. The short-term trend assumptions were based on a review of the Commonwealth's historical trend rates during the years 2017 through 2019 and emerging experience, along with industry surveys, separately for non-Medicare and Medicare benefits and inclusive of dental benefits. • The withdrawal, disability incidence, early retirement, and normal retirement rate assumptions were updated based on the assumptions from the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020. • The salary scale, inflation rate (decreased from 2.60% to 2.50%), and payroll growth rate (decreased from 2.90% to 2.80%) assumptions were updated based on the assumptions from the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020. • The mortality assumptions for annuitants, survivors, and disabled participants were updated based on the assumptions from the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020, with the exception of using the Headcount-Weighted instead of the Amount-Weighted Mortality Tables, and Scale MP-2020 to project for mortality improvements rather than Scale MP-2019. • The mortality assumption for active employees was updated to Pub-2010 General Employees Headcount-Weighted Mortality Tables, and adjusted for mortality improvements using projection scale MP-2020. 																
<p>Model Use</p>	<p>Actuarial Standard of Practice No. 56 – Modeling requires disclosure of certain information regarding the actuary's use of models when issuing actuarial reports for work performed on or after October 1, 2020. For this valuation, the liability calculations were determined using industry-leading defined benefit valuation software developed and maintained by a third-party vendor. The model was designed specifically for the measurement of defined benefit pension and postretirement medical plan liabilities and the actuary has updated the applicable parameters for the specific plan provisions and assumptions selected for this valuation.</p> <p>The medical inflation trend rate assumptions were set using the Getzen Model of Long-Run Medical Cost Trends ("Getzen Model"), which adds transparency to the economic assumptions behind medical and prescription drug trends. The Getzen Model is an excel based projection of expected growth rates in medical premiums and expenditures from 2025 to 2100. Development of the model was sponsored by the Society of Actuaries, and it is used primarily in the estimation of reportable liabilities for retiree health benefits in accordance with FASB and GASB standards. It projects medical care cost increases and the health share of GDP for the next 80 years using linked formulas and assumptions developed by the author, Professor Thomas Getzen, with the assistance of a Society of Actuaries project oversight group.</p>																

Rationale for Assumptions

<p>Discount Rate</p>	<p>GASB 74 and 75 require that the discount rate be based on the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. This valuation report will serve as the basis for the Commonwealth's trust and employer financial reporting disclosure requirements under GASB Nos. 74 and 75. Accordingly, the discount rate used to determine the June 30, 2021 benefit obligation is based on the 20-year Bond Buyer GO Index.</p>
<p>Inflation, Payroll Growth, Salary Scale, Disability Incidence, Withdrawal, Early and Normal Retirement</p>	<p>Assumptions updated to be consistent with assumptions recommended by the Commonwealth of Pennsylvania SERS 2015-2019 experience study and adopted by the Board in July 2020.</p>
<p>Mortality</p>	<p>The annuitant, survivor, and disabled participant base mortality table is consistent with the Commonwealth of Pennsylvania SERS 2015-2019 experience study, with the exception of using a headcount-weighted instead of an amount-weighted mortality table.</p> <p>The PUB-2010 tables were released by the Retirement Plans Experience Committee ("RPEC") of the Society of Actuaries ("SOA") in January 2019. The PUB-2010 tables represent a complete benchmark of U.S. public pension plan mortality experience. The plan does not have fully credible pre-retirement mortality experience, so the Pub-2010 General Employees Headcount-Weighted Mortality Tables were used for the pre-retirement mortality assumption.</p> <p>Beginning in 2015, the SOA RPEC has released an annual update to the mortality improvement scale, with each of these scales reflecting an additional year of Social Security Administration ("SSA") data. Scale MP-2020 was used for this valuation as the most recently available mortality improvement scale from the SOA.</p>

Glossary

Brief explanations of terms used in this report:

Annual OPEB Expense

The change in Net OPEB Liability less the change in the Deferred Outflows of Resources plus the change in the Deferred Inflows of Resources.

Collective deferred outflows of resources and deferred inflows of resources related to OPEB

Deferred outflows of resources and deferred inflows of resources related to OPEB arising from certain changes in the collective net OPEB liability or collective total OPEB liability.

Covered Employee Payroll

Annual compensation paid (or expected to be paid) to active employees covered by an OPEB plan, in aggregate.

Implicit Rate Subsidy

Many post-employment health plans charge the same premium rates for all participants in a non-Medicare plan regardless of their age. This single premium rate is called a blended premium rate because it blends the expected claims of both active and retired participants. Retirees are generally older than the average participant in a non-Medicare plan, which means they are expected to generate higher claims than the average participant of the plan; therefore, they are receiving a subsidy even if they pay 100% of the blended premium rate because they would be paying less in premiums than their expected claims costs. This subsidy is referred to as the "Implicit Rate Subsidy".

Net OPEB liability (NOL)

The liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is administered through a trust that meets the criteria of the GASB Statements.

Normal Cost or Service Cost

The portion of the Total Present Value of Future Benefits attributed to employee service during the current fiscal year by the actuarial cost method. These terms are used interchangeably.

Other Postemployment Benefits (OPEB)

Retiree health care benefits and post-employment benefits provided separately from a pension plan (excluding termination offers and benefits).

Fiduciary Net Position (FNP)

Set equal to the market value of assets as of the measurement date

Present Value of Future Benefits (PVFB)

The value, as of the valuation date, of the projected benefits payable to all members for their accrued service and their expected future service, discounted to reflect the time value (present value) of money and adjusted for the probabilities of retirement, withdrawal, death and disability.

Total OPEB liability (TOL)

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service in conformity with the GASB Statements. The total OPEB liability is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan that is not administered through a trust that meets the criteria of the GASB Statements.