# Deloitte.



# **Commonwealth of Pennsylvania Retired Employees Health Program**

GASB Statement Nos. 74 and 75 Valuation Report

Measurement date of June 30, 2020

# Contents

Actuarial Valuation Opinion	1
Executive Summary	2
Background and Comments	3
Summary of Actuarial Valuation Results	5
GASB Nos. 74 and 75 Disclosures	6
Participating Employers Results	11
Basis for the Valuation	12
Plan Participation Summary	12
Program Provisions Summary	14
Actuarial Methods	
Actuarial Assumptions	19
Rationale for Assumptions	
Glossary	29

# **Actuarial Valuation Opinion**

This report presents results of the actuarial valuation of the Commonwealth of Pennsylvania's Retired Employees Health Program ("the Plan" or "REHP") measured as of June 30, 2020. In this report, we present disclosure information measured as of June 30, 2020 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

to I for

John Schubert, FCA, ASA, MAAA

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, 2020 GASB No. 74 disclosures and fiscal year ending June 30, 2021 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, 2020 are:

- Net OPEB Liability (NOL) is \$12.3 billion, 301.7% of covered employee payroll.
- Plan Fiduciary Net Position (FNP) as a percentage of Total OPEB Liability (TOL) is 3.7%.
- OPEB Expense/(Income) is \$(1.2) billion.

### Significant Changes from the Previous Actuarial Valuation

For the June 30, 2020 measurement, there was an increase in TOL of \$2.0 billion compared to the previous valuation, with the increase primarily due to the following:

- There was an expected \$0.4 billion increase in TOL due to the passage of time (service cost, interest, benefit payments, retiree contributions);
- There was a \$1.6 billion increase in TOL due to changes in actuarial assumptions, driven primarily by the
  decrease in discount rate from 3.50% to 2.21%, and an update to trend rates to reflect plan experience from
  2017 to 2019, partially offset by the discontinuation of the ACA Health Insurer Fee and Excise Tax;
- The actual experience over the past year was very close to expected, resulting in a negligible change to TOL.

# **Background and Comments**

#### **Overview of Plan**

The Commonwealth sponsors the Retired Employees Health Program (REHP) 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 \$50 million annually until assets cover the present value of future benefits, subject to annual evaluation.

During the fiscal year ended June 30, 2020, employing agencies and certain plan members contributed \$230 per biweekly pay period for each current REHP eligible active employee during fiscal year ended June 30, 2020 to the REHP Trust. Certain employing agencies contribute under a separate payment arrangement. Employer contributions made to the REHP Trust, a Trust Equivalent Arrangement, are irrevocable. Plan assets are restricted for use for the provision and administration of REHP 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 were 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 2011 through 2015 and was presented to the State Employees' Retirement Board in March 2016. The approved recommendations from that study were used to determine the assumptions for this valuation, where applicable. The inflation assumption was selected by the SERS Board during an April of 2017 meeting based on a review of actual plan experience and the prevalent economic outlook. 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 REHP 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 2.21% as of June 30, 2020 (3.50% as of June 30, 2019).

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 REHP in total. All information is provided as of the measurement date except for the census data. The valuation results as of the June 30, 2019 measurement date were based on December 31, 2018 census data, and valuation results as of the June 30, 2020 measurement date were based on December 31, 2019 census data. All liabilities are net of expected retiree contributions.

Measurement Date	June 30, 2020		June 30, 2019	
Total OPEB Liability	\$	12,788,546	\$	10,821,333
Plan Fiduciary Net Position	\$	469,053	\$	407,480
Net OPEB Liability	\$	12,319,493	\$	10,413,853
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability		3.7%		3.8%
Net OPEB Liability As A Percentage Of Covered Employee Payroll		301.7%		260.8%
Discount Rate		2.21%		3.50%
Participant Counts				
Active Participants		69,070		69,477
Retired Participants*		64,509		64,516
Total		133,579		133,993
Covered Employee Payroll	\$	4,083,699	\$	3,992,729

<sup>\*</sup> 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, 2019 measurement date were based on December 31, 2018 census data and employer contributions for the fiscal year ended June 30, 2019. 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.

For reporting purposes, the associated liabilities, expenses and other disclosure items are reported for different covered populations:

- Most primary government agencies and component units contribute at the retiree health assessment rate.
- One primary government agency and three component units participate under separate contribution
  arrangements. The agency and the component units contribute the actual fiscal year benefit payments
  attributable to their respective retirees.
  - 1. Health Care Cost Containment (FT = 001; BA = 43)
  - 2. PHEAA (FT = 079; BA = AA)
  - 3. Philadelphia Regional Port Authority (FT = 140; BA = 88)
  - 4. Port of Pittsburgh Commission (FT = 141; BA = 88)
- The primary results are presented for REHP in total.

# **Schedule of Changes in Net OPEB Liability**

, , , , , , ,		unts are in ti		Total OPEB	Pla	n Fiduciary Net		
	[	Discount		Liability		Position	Net	<b>OPEB Liability</b>
		Rate		(a)		(b)		(a)-(b)
Measurement Date of June 30, 2019		3.50%	\$	10,821,333	\$	407,480	\$	10,413,853
Service Cost				353,220				353,220
Interest				384,165				384,165
Changes In Benefit Terms				-				-
Changes In Assumptions - Discount Rate				1,812,118				1,812,118
Changes In Assumptions - Others				(194,948)				(194,948
Differences Between Expected And Actual Experience				12,936				12,936
Benefit Payments								,
Insurance Premiums - Employer Paid	\$	(400,278)						
Insurance Premiums - Retiree Paid	4	(48,531)						
		(40,551)		(440,000)		(440,000)		
Total	_	455 405		(448,809)		(448,809)		-
GASB 75 Defined Employer Contributions	\$	465,137				465,137		(465,137
Contributions - Employee						-		-
Contributions - Retiree				48,531		48,531		-
Administrative Expenses						(5,707)		5,707
Net Investment Income								
Expected Investment Earnings	\$	21,835						
Differences Between Projected And Actual Investment Earnings	_	(19,414)						
Total						2,421		(2,421
Net Change			\$	1,967,213	\$	61,573	\$	1,905,640
Measurement Date of June 30, 2020		2.21%	\$	12,788,546	\$	469,053	\$	12,319,493
Measurement Date						une 30, 2020		une 30, 2019
Plan Fiduciary Net Position As A Percentage Of Total OPEB Liability						3.7%		3.8%
Covered Employee Payroll						\$4,083,699	\$	3,992,729
Net OPEB Liability As A Percentage Of Covered Employee Payroll						301.7%		260.8%
Sensitivity of Liability to Changes in Discount Rate	—					\$ Change		% Change
A one percentage point change in discount rate would have the fo	llow	ing effect o	n To	otal OPEB Liabili	ty as			70 Change
One Percentage Increase (3.21%)		J			\$	(1,446,990)		-11%
One Percentage Decrease (1.21%)					\$	1,738,282		14%
		٠						
Net OPEB Liability at a one percentage point change in discount ra	ite a	is of June 30	, 20	020 is as follows:			Net \$	OPEB Liability
One Percentage Increase (3.21%)								10,872,503
One Percentage Decrease (1.21%)							\$	14,057,775
Sensitivity of Liability to Changes in Trend Rate						\$ Change		% Change
A one percentage point change in trend rate would have the follow	wing	effect on T	otal	l OPEB Liability a	s of J	une 30, 2020:		
One Percentage Increase (7.6% / 7.1% grading to 5.1%)					\$	2,310,017		189
One Percentage Decrease (5.6% / 5.1% grading to 3.1%)					\$	(1,848,677)		-14%
Net OPEB Liability at a one percentage point change in trend rate	25 U	flung 30-20	าวก	is as follows:			Net	OPEB Liability
One Percentage Increase (7.6% / 7.1% grading to 5.1%)	u3 0	1 julie 30, 20	120	13 d3 10110W3.			\$	14,629,510
One Percentage Decrease (5.6% / 5.1% grading to 3.1%)							\$	10,470,816
Key Assumptions					J	une 30, 2020	J	une 30, 2019
Discount Rate						2.21% 5.00%		3.50% 5.00%
								J.UU 70
Investment Rate of Return Inflation								
Inflation Infilation Acte of Return Initial Medical Trend Rate						2.60%		2.60%
Inflation								

# Development of OPEB Expense for Fiscal Year Ending June 30, 2021 (Measurement Year June 30, 2020)

	Meas	Measurement Year		
Components of OPEB Expense	Ende	d 06/30/2020	Ended 06/30/2019	
Service Cost	\$	353,220	\$	398,501
Interest		384,165		586,939
Expected Investment Earnings		(21,835)		(17,985)
Contributions - Employee		-		-
Administrative Expenses		5,707		5,562
Changes In Benefit Terms		-		-
Recognition of Current Period Deferred Outflows and (Inflows)				
Changes in assumptions		281,737		70,284
Differences between expected and actual experience		2,254		(885,461)
Differences between expected and actual investment earnings		3,883		(659)
Recognition of Beginning Deferred Outflows		70,284		-
Recognition of Beginning Deferred Inflows		(2,329,150)		(1,443,046)
OPEB Expense	\$	(1,249,735)	\$	(1,285,865)

	Measurement Year	Measurement Year
Assumptions Used to Determine OPEB Expense	Ended 06/30/2020	Ended 06/30/2019
Assumptions as of Measurement Date*	6/30/2019	6/30/2018
Discount Rate	3.50%	3.87%
Investment Rate of Return	5.00%	5.00%
Inflation	2.60%	2.60%
Initial Medical Trend Rate	6.0% / 5.9%	6.2% / 5.9%
Ultimate Medical Trend Rate	4.1%	4.1%
Year Ultimate Trend Rate Reached	2075	2075

<sup>\*</sup> 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**

Measurement Date Established	Ini	tial Amount	Res	Deferred outflows of cources as of	Defe of R	erred (Inflows) esources as of 6/30/2020*	Initial Years	Remaining Years	Me	tflows/(Inflows) Recognized in asurement Year aded 06/30/2020
Date Established		tiai Amount		0/30/2020		0/30/2020	ilitiai rears	Kemaning rears	LII	ueu 00/30/2020
Changes In Assumptions										
06/30/2017	\$	(2,228,187)	\$	-	\$	(679,341)	5.08 - 8.54	1.08 - 4.54	\$	(387,199)
06/30/2018		(576,855)		-		(275,364)	5.74	2.74		(100,497)
06/30/2019		403,428		262,860		-	5.74	3.74		70,284
06/30/2020		1,617,170		1,335,433		-	5.74	4.74		281,737
Tota	l		\$	1,598,293	\$	(954,705)			\$	(135,675)
Differences Between Expected	l And A	Actual Plan Exper	ience	2						
06/30/2017	\$	-		-		-	0.00	0.00	\$	-
06/30/2018		(5,445,495)		-		(2,599,416)	5.74	2.74		(948,693)
06/30/2019		(5,082,545)		-		(3,311,623)	5.74	3.74		(885,461)
06/30/2020		12,936		10,682		-	5.74	4.74		2,254
Tota			\$	10,682	\$	(5,911,039)			\$	(1,831,900)
Net Difference Between Projec	ted A	nd Actual Farning	os Or	Investments						
06/30/2017	\$	(20,568)	55 0.	-		(4,112)	5.00	1.00	\$	(4,114)
06/30/2018	•	(12,635)		_		(5,054)	5.00	2.00	•	(2,527)
06/30/2019		(3,298)		_		(1,980)	5.00	3.00		(659)
06/30/2020		19,414		15,531		-	5.00	4.00		3,883
Total**		-,	\$	15,531	\$	(11,146)			\$	(3,417)
Contributions subsequent to r	neacii	rement date***								
Contributions subsequent to 1	ricasa	rement date	To b	e determined l	oy eac	:h participating er	mployer.			
Balance as of 06/30/2020 Me	asure	ment Date	\$	1,624,506	\$	(6,876,890)			\$	(1,970,992)
Deferred Outflows And Defe	rred (	Inflows) Of Reso	ource	es Will Be Reco	ognize	ed In Expense As	Follows:			
Measurement Yea	Endir	ag.							011	tflows/(Inflows)
06/30/2021	Liidii	15.							\$	(1,970,990)
06/30/2021									*	(1,856,202)
06/30/2023										(1,310,531)
06/30/2024										(321,500)
06/30/2025										206,839
Thereafter										200,039

<sup>\*</sup> Deferred (Inflows) should be disclosed as positive numbers in the CAFR.

<sup>\*\*</sup> 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 outflow of \$4,385 is recognized as of 06/30/2020.

<sup>\*\*\*</sup> Reflects employer contributions made subsequent to 06/30/2020. This will be recognized as a reduction in Net OPEB Liability next year.

## **10-Year Schedule of Net OPEB Liability**

				Plan Fiduciary Net		
Measurement Year Ended	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (c)	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	\$21,910,888	\$200,596	\$21,710,292	0.9%	N/A	A N/A
June 30, 2017	\$20,336,764	\$282,429	\$20,054,335	1.4%	\$3,902,336	513.9%
June 30, 2018	\$15,015,975	\$333,848	\$14,682,127	2.2%	\$3,911,464	375.4%
June 30, 2019	\$10,821,333	\$407,480	\$10,413,853	3.8%	\$3,992,729	260.8%
June 30, 2020	\$12,788,546	\$469,053	\$12,319,493	3.7%	\$4,083,699	301.7%

# Participating Employers Results

The REHP is a single-employer defined-benefit OPEB Plan that is established and sponsored by the Commonwealth. In addition to the Commonwealth agencies, there are several component units that have elected to participate in the REHP. Both GASB 74 and GASB 75 consider a primary government and its component units to be one employer. Hence, if a defined-benefit OPEB plan is used to provide OPEB to the employees of only one employer, the OPEB plan should be classified for financial reporting as a single-employer defined benefit OPEB plan. GASB 75, paragraph 24 requires the Commonwealth as the financial reporting entity to follow the single-employer reporting and disclosure requirements identified in GASB 75, paragraphs 47-58. Further, GASB 75, paragraph 24 requires the component units to follow the cost-sharing employer reporting and disclosure requirements identified in GASB 75, paragraphs 59-98. To satisfy the component unit reporting requirements, a proportionate share was determined for each Commonwealth agency and component unit. For the entities that contribute at the same employer health assessment rate, the proportionate share is based on current year contractually required contributions. For the one Commonwealth agency and three component units that participated under contribution terms unique to their agencies, the proportionate share is based on their subset demographics' Total OPEB Liability.

# Basis for the Valuation

# **Plan Participation Summary**

The participant data used in the valuation was provided by the Commonwealth as of December 31, 2019. 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.

a.	Active Participants		
	Total Counts	69,070	
	Average Age	47.07	
	Average Service	12.69	
	Detice d Destinic and	F	<b>C</b>
b.	Retired Participants	Employees*	Spouses
	Counts		
	Under Age 65 Non-Medicare	12,761	11,070
	Under Age 65 Medicare	2,961	1,159
	Over age 65 Non-Medicare	15	11
	Over age 65 Medicare	48,772	21,223
	Total Counts	64,509	33,463
			·
	Average Age	71.36	
c.	Total Participants**	133,579	
d.	Inactive Participants Entitled To But		
	Not Yet Receiving Benefits***	17,425	

<sup>\*</sup> Employees include retirees and 2,811 surviving spouses with minimal liability

<sup>\*\*</sup> Total participant count excludes dependent spouses

<sup>\*\*\*</sup> These retirees who currently elect to waive coverage are assumed to remain uncovered in the future; therefore, they are excluded from the valuation.

# Plan Participation Summary (cont.)

Distribution of Service Groups by Age Groups									
Age Group	Retired Participant	Active Participants - Years of Service							
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
<20	-	15	-	-	-	-	-	-	15
20-24	-	786	18	-	-	-	-	-	804
25-29	1	3,676	955	23	-	-	-	-	4,654
30-34	22	3,285	2,691	964	35	-	-	-	6,975
35-39	64	2,275	2,071	2,593	960	44	-	-	7,943
40-44	121	1,917	1,602	2,091	2,079	726	52	-	8,467
45-49	410	1,700	1,498	1,932	2,058	1,885	1,004	73	10,150
50-54	1,656	1,529	1,412	1,770	1,840	1,542	1,604	852	10,549
55-59	4,056	1,319	1,372	1,735	1,868	1,399	1,229	1,560	10,482
60-64	9,392	754	1,068	1,298	1,454	729	514	619	6,436
65-69	14,323	138	367	495	474	224	121	195	2,014
70-74	14,345	17	65	107	118	59	28	74	468
75-79	8,625	2	6	18	23	10	10	20	89
80-84	5,366	-	2	3	2	6	1	2	16
85-89	3,601	-	-	1	1	1	-	5	8
90+	2,527	-	-	-	-	-	-	-	-
Total	64,509	17,413	13,127	13,030	10,912	6,625	4,563	3,400	69,070

Participant Reconciliation							
	<u>Active</u>	<u>Retirees</u>	<b>Beneficiaries</b>	<u>Total</u>			
Beginning of Year (12/31/2018)	69,477	61,823	2,693	133,993			
New Hire	4,719	0	0	4,719			
Opt-In	1,143	0	0	1,143			
New Retiree/Beneficiary	(2,503)	2,503	440	440			
Death/Termination/Opt-Out	(3,766)	(2,628)	<u>(322)</u>	<u>(6,716)</u>			
End of Year (12/31/2019)	69,070	61,698	2,811	133,579			

## **Program Provisions Summary**

This section summarizes overall eligibility provisions for retiree health coverage, the various plans offered by the Commonwealth.

### **Eligibility**

Eligible employees who retire from the state and meet one of the following eligibility criteria are eligible to receive REHP benefits

- 25 or more years of service;
- 20 or more years of service and superannuation age Age 50 for Park Rangers, Capitol Police and certain enforcement officers or 60 for general employees (age 55 or 65 for employees subject to Act 120 of 2010);
- Disability retirement requires five years of service (no service requirement for enforcement officers).

### **Covered Family Members**

Spouses and dependents are eligible for subsidized 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\***

Retirement before July 1, 2005: Commonwealth pays full cost.

Retirement after June 30, 2005 and before July 1, 2007: retiree contributions are 1% of final annual salary.

Retirement on or after July 1, 2007 and before July 1, 2011: retiree contributions are 3% for non-Medicare and 1.5% for Medicare of either final gross annual base salary or final average salary, whichever is less.

Retirement on or after July 1, 2011: retiree contributions are 3% of final average salary for non-Medicare and 1.5% of final average salary for Medicare.

Hired on or after August 1, 2003: In addition to the retiree contributions above, non-Medicare retirees who elect the Choice PPO plan are required to pay the incremental cost between the Choice PPO plan and the least expensive plan (LEP) in county of residence through monthly pension deductions (PPO buy-up).

Surviving spouses of deceased retirees may continue to participate in the plan if they pay the full cost of the coverage.

\* Certain bargaining units may have different retiree contribution arrangements

# **Program Provisions Summary (cont.)**

# **Medical Plans**

The following tables list the medical plans offered to retirees and provide the basic benefit provisions.

Medical	Benef	Eligibility	
	<u>In Network</u>		Non-Medicare
	Deductible	\$1,500 individual, \$3,000 family	eligible annuitants
	Out-of-Pocket Limit (including	\$8,150 individual, \$16,300 family	retired from the
	deductibles and co-pays)		Commonwealth and
	Doctor Office Visits	PCP: \$20 co-pay	their eligible
		Specialist: \$45 co-pay	dependents.
	Inpatient	Covered in full (after deductible)	
	Lifetime Maximum	None	
Basic PPO	Out of Network		
	Deductible	\$3,000 individual, \$6,000 family	
	Out-of-Pocket Limit (including	\$8,150 individual, \$16,300 family	
	deductibles)		
	Doctor Office Visits	PCP: 30% coinsurance (after deductible)	
		Specialist: 30% coinsurance (after	
		deductible)	
	Inpatient	30% coinsurance (after deductible)	
	Lifetime Maximum	None	
	<u>In Network</u>		Non-Medicare
	Deductible	\$400 individual, \$800 family	eligible annuitants
	Out-of-Pocket Limit (including	\$8,150 individual, \$16,300 family	retired from the
	deductibles and co-pays)		Commonwealth and
	Doctor Office Visits	PCP: \$20 co-pay	their eligible
		Specialist: \$45 co-pay	dependents.
	Inpatient	Covered in full (after deductible)	
	Lifetime Maximum	None	
Choice PPO	Out of Network		
	Deductible	\$800 individual, \$1,600 family	
	Out-of-Pocket Limit (including	\$8,150 individual, \$16,300 family	
	deductibles)		
	Doctor Office Visits	PCP: 30% coinsurance (after deductible)	
		Specialist: 30% coinsurance (after	
		deductible)	
	Inpatient	30% coinsurance (after deductible)	
	Lifetime Maximum	None	

# **Program Provisions Summary (cont.)**

Medical	Benef	Eligibility	
	<u>In Network</u>		Non-Medicare
	Deductible	None	eligible annuitants
	Out-of-Pocket Limit (including	\$8,150 individual, \$16,300 family	retired from the
	deductible and co-pays)		Commonwealth and
Custom HMO	Doctor Office Visits	PCP: \$5 co-pay	their eligible
		Specialist: \$10 co-pay (Referral	dependents living
		Required)	within the HMO
	Inpatient	Covered in full	service area.
	Lifetime Maximum	None	
	In and Out-of-Network		Medicare eligible
	Deductible	Annual Medicare Part B deductible	annuitants retired
Modisaro Onon	Out-of-Pocket Limit (including	\$2,500 per person	from the
Medicare Open-	deductible)		Commonwealth and
Access PPO	Doctor Office Visits	PCP: \$20 co-pay (after deductible)	their eligible
		Specialist: \$30 co-pay (after deductible)	dependents.
	Inpatient	Covered in full (after deductible)	
	Lifetime Maximum	None	

# **Program Provisions Summary (cont.)**

## **Prescription Drug**

#### **Non-Medicare:**

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

Prescriptions at a Network Pharmacy (30-day supply): \$15 Generic / \$40 Preferred\* / \$80 Non-Preferred\*

Mail Order or Retail Maintenance at a CVS Pharmacy (90-day supply): \$22.50 Generic / \$60 Preferred\* / \$120 Non-Preferred\*

Retail Maintenance at a Rite Aid Pharmacy (90-day supply): \$30 Generic / \$80 Preferred\* / \$160 Non-Preferred\*

\*Plus an additional out-of-pocket cost for the difference between brand and generic, if one exists.

#### **Medicare:**

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

Prescriptions at a Network Pharmacy (30-day supply): \$12 Generic / \$30 Preferred\* / \$60 Non-Preferred\*

Mail Order or Retail Maintenance at a CVS Pharmacy (90-day supply): \$18 Generic / \$45 Preferred\* / \$90 Non-Preferred\*

Non-Preferred Retail Network (up to a 90-day supply): \$24 Generic / \$60 Preferred\* / \$120 Non-Preferred\*

\*Plus an additional out-of-pocket cost for the difference between brand and generic, if one exists.

## **Changes in Program Provisions**

None.

### **Actuarial Methods**

#### **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, 2019 for June 30, 2020 measurements.

#### **Measurement Date**

June 30, 2020 for fiscal year ended June 30, 2020 trust financial statements (GASB No. 74) and for fiscal year ending June 30, 2021 participating employer financial statements (measurement date as of the end of the prior fiscal year end for GASB No. 75).

## **Method Changes Since Prior Valuation**

None

# **Actuarial Assumptions**

## **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	2.21% as of June 30, 2020							
	3.50% as of June 30, 20	3.50% as of June 30, 2019						
	Nos. 74 and 75, the dismunicipal bond index	scount rate wil rate with an av	l be based on the index overage rating of AA/Aa oo	rate for 20-year higher as of th	ments, as prescribed by GASB r tax-exempt general obligation ne measurement date. The er 20-Bond General Obligation			
Inflation <sup>1</sup>	2.60%							
Payroll Growth <sup>1</sup>	2.90%							
	0 , 0	lles will increas general salary	e by 2.90 percent per ye		year. In addition, it is assumed elow does not include the			
	Completed Years	Annual	Completed Years of	Annual				
	of Service	Increase	Service	Increase				
	1	6.00%	16	2.10%				
	2	4.50	17	2.05				
	3	4.00	18	2.00				
	4	3.75	19	1.95				
	5	3.50	20	1.90				
	6	3.25	21	1.85				
	7	3.00	22	1.75				
	8	2.90	23	1.65				
	9	2.80	24	1.55				
	10	2.70	25	1.45				
	11	2.60	26	1.25				
	12	2.50	27	1.05				
	13	2.40	28	0.90				
	14	2.30	29	0.85				
	15	2.20	30+	0.80				

<sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

## **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<sup>1</sup>

#### **Pre-Retirement Mortality:**

Age	Male	Female
20	0.04%	0.02%
25	0.04	0.02
30	0.05	0.02
35	0.06	0.03
40	0.09	0.04
45	0.13	0.06
50	0.24	0.09
55	0.29	0.14
60	0.35	0.24

#### **Post Retirement Mortality:**

Healthy Participants: The RP-2000 Male and Female Combined Healthy Mortality Tables projected (using Projection Scale AA) to 2016 for males and to 2020 for females, and then further adjusted to ensure sufficient margin improvement in certain age ranges. Each table includes a margin for future improvement in life expectancy.

Disabled Participants: The RP-2000 Male and Female Disabled Retiree Mortality Tables projected (using Projection Scale AA) to 2021 for males and to 2017 for females. Each table includes a margin for future improvement in life expectancy.

#### Disability Incidence<sup>1</sup>

#### **Pre-Retirement Disability:**

Age	Male	Female
25	0.02%	0.04%
30	0.06	0.09
35	0.11	0.14
40	0.17	0.19
45	0.30	0.30
50	0.42	0.45
55	0.55	0.57

<sup>&</sup>lt;sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

#### Withdrawal<sup>1</sup>

#### **General employees\*:**

	Male			Female				
	Years of Service			Years of Service				
Age	0	5	9	14	0	5	9	14
20	24.2%	N/A	N/A	N/A	28.4%	N/A	N/A	N/A
25	18.5	3.0%	2.1%	N/A	22.4	3.7%	2.3%	N/A
30	16.4	3.0	2.1	1.0%	19.2	3.3	2.3	1.7%
35	15.6	2.4	1.3	1.0	15.0	3.2	2.3	1.2
40	15.0	2.4	1.3	1.0	13.4	3.2	1.2	1.0
45	14.4	2.4	0.7	1.1	13.1	2.7	1.2	1.0
50	14.4	2.6	0.7	1.1	13.1	2.7	1.5	1.0
55	14.4	1.9	0.8	0.8	13.1	1.8	1.0	1.6

<sup>\*</sup> For the one primary government agency and three component units with separate contribution arrangements, the assumption is increased by a factor of 2.0 for one year of service or less and increased by 10 percentage points years of service 2 through 9. This assumption was determined based on an analysis of data covering the period from January 1, 2015 to January 1, 2018.

#### **Hazardous Duty employees:**

Years of Service	Rate
0	9.0%
1	4.0
2	3.0
3	3.0
4	2.0
5	1.0
6	1.0
7	0.5
8	0.5
9	0.5
10+	0.2

<sup>&</sup>lt;sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

Early Retirement<sup>1</sup>
(based on early
retirement as defined
by SERS; retirement
prior to OPEB eligibility,
as described above in
the Program Provisions
Summary section, will
not receive other
postemployment
benefit)

#### **General employees:**

#### Hired prior to January 1, 2011:

	5 - 14 Years of Credited Service		15 or More Years of Credited Service		
Age	Male	Female	Male	Female	
25	2.0%	3.7%	N/A	N/A	
30	1.6	1.9	N/A	N/A	
35	1.6	1.9	1.0%	1.2%	
40	1.6	1.9	1.0	1.2	
45	1.4	1.9	1.0	1.6	
50	1.4	1.9	2.0	2.0	
55	1.4	1.9	6.0	6.0	

#### Hired on or after January 1, 2011:

Age	10 or More Years of Credited Service	
35	1.5%	
40	1.5	
45	1.5	
50	2.0	
55	5.5	
60	5.5	
61	6.0	
62	20.0	
63	10.0	
64	15.0	

#### **Hazardous Duty employees:**

1.4% at each age

<sup>&</sup>lt;sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

Normal Retirement<sup>1</sup>
(based on normal retirement as defined by SERS; retirement prior to OPEB eligibility, as described above in the Program Provisions Summary section, will not receive other postemployment benefit)

#### General employees: Hired prior to January 1, 2011:

Age	Male	Female
53	20.0%	23.0%
54 – 55	23.0	23.0
56 - 57	24.0	23.0
58	27.0	23.0
59	30.0	25.0
60	25.0	25.0
61	20.0	20.0
62	25.0	25.0
63 - 64	20.0	20.0
65 – 66	25.0	25.0
67 - 70	23.0	23.0
71 - 79	20.0	20.0
80	100.0	100.0

#### Hired on or after January 1, 2011:

Age	Rate	
55	15.0%	
56	16.0	
57	17.0	
58	18.0	
59	19.0	
60	20.0	
61	20.0	
62	25.0	
63	20.0	
64	20.0	
65	25.0	
66 – 79	20.0	
80	100.0	

#### **Hazardous Duty employees:**

Age	Rate
50 - 59	10.0%
60 - 64	10.0
65	27.0
66 – 79	32.0
80	100.0

<sup>&</sup>lt;sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

Spouse Age Difference <sup>1</sup>	Females are assumed to be 2 years younger than males.
Participation Rate	100% of employees who currently participate in the active health plan are assumed to elect coverage at retirement.
	Employees who are eligible for but currently opt out of active health coverage are excluded from the valuation.
	Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.
Coverage Level Election	Employees are assumed to maintain their current coverage election when they retire.
Rates	Current retirees are assumed to continue their current coverage election.
Surviving Spouse Continuing Coverage	45% of spouses are assumed to elect to continue coverage after the retiree's death.

-

<sup>&</sup>lt;sup>1</sup> For consistency with the pension plan of which these participants are members, these assumptions are based on those used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016.

## **Benefit Assumptions**

#### Per Capita Claims Costs

The per capita claims costs used in the valuation were developed from 2020 fully insured premiums, self-insured claims experience, and projected administrative expenses that represent the expected claims costs and administrative expenses for 2020.

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 current enrollment mix by plan (see Coverage section below), separately for the non-Medicare eligible and Medicare eligible population, resulting in an average claims cost per member.

Average claims costs were age-graded using the retiree age and gender distribution, separately for the non-Medicare eligible and Medicare eligible population. These age-graded claims costs 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 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 August 1, 2003, the curve below is multiplied by a factor of 0.994 to reflect a difference in participation rates

#### 2020 Annual Per Capita Claims Costs

Age	 Non-Medicare Eligible		Medicare Eligible		
45	\$ 7,975	\$	1,757		
50	9,727		1,757		
55	11,982		1,757		
60	14,667		1,757		
64	17,460		1,757		
65	18,258		1,757		
70	21,947		1,937		
75	26,004		2,089		
80	30,232		2,201		
85	34,367		2,249		
90	38,042		2,239		
95	40,192		2,178		

**Expenses** 

Per Capita Claims Costs were developed to include administrative expenses.

#### 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 2020\_b (previously version 2019\_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. 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 2024 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, 2020 Assumption	
	Non-Medicare Benefits	Medicare Benefits
2020	6.6%	6.1%
2021	6.5%	6.0%
2022	6.4%	5.9%
2023	6.3%	5.7%
2024	6.1%	5.6%
2030	5.3%	
2040	5.3%	
2050	5.3%	
2060	4.9%	
2070	4.5%	
2075+	4.1%	

#### **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 (if covered) under age 65 are assumed to remain Medicare eligible.

All other retirees and spouses (if covered) 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.

### Coverage

Current retirees are assumed to remain in their currently elected plan, as summarized below.

Current employees are assumed to enroll at retirement in the same proportion as the current retiree mix. These proportions are established separately by non-Medicare/Medicare coverage and Non-Medicare further by participants hired before/on or after August 1, 2003 to reflect enrollment when PPO buy up applies. The table below shows the enrollment percentage by plan.

Medicare-eligible retirees were automatically enrolled in the Aetna Medicare Advantage plan on January 1, 2020.

Non-Medicare	Adult Member Enrollment (Pre-03)	Adult Member Enrollment (Post-03)
Highmark Basic PPO	16.1%	24.0%
Aetna Choice PPO	71.6%	58.3%
Aetna HMO SE Region	0.5%	0.1%
Aetna HMO Central Region	2.1%	4.2%
Aetna HMO Western Region	2.1%	4.0%
Geisinger HMO NE Region	7.6%	9.4%
Medicare	Adult Member Enrollment	
Aetna Medicare Advantage	100.0%	

# Changes in Assumptions

- The discount rate was decreased from 3.50% to 2.21%.
- Per capita claims costs were updated based on changes in the underlying claims and benefit provisions.
- The trend rates were updated based on the SOA-Getzen trend rate model version 2020\_b, the impact of the discontinuation of the ACA Health Insurer Fee and Excise Tax. 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.

# **Rationale for Assumptions**

Discount Rate	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, 2020 benefit obligation is based on the 20-year Bond Buyer GO Index.
Inflation, Payroll Growth, Salary Scale, Mortality, Disability Incidence, Withdrawal, Early and Normal Retirement	Consistent with the assumptions used for the SERS Actuarial Valuation Report as of December 31, 2019 and experience study presented to the Board in March 2016. The inflation assumption was selected by the SERS Board during an April of 2017 meeting based on a review of actual plan experience and the prevalent economic outlook.

## **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.