

May 18, 2021

Brooke Souder City of Harrisburg 10 N. Second St. Harrisburg, PA 17101

Re: City of Harrisburg Postemployment Benefits Plan

Dear Brooke:

I am attaching the actuarial valuation as of January 1, 2020, for the fiscal year ending December 31, 2020, which has been prepared in accordance with Governmental Accounting Standards Board Statement No. 75 (GASB 75).

GASB 75 Background

The purpose of GASB 75 is to have employers identify the promises they make with respect to postemployment benefits and to reasonably quantify their cost. In the most general sense, employers must attribute the future cash flow for postemployment benefits over the employee's working lifetime.

GASB 75 does not have any impact on your annual operating budget unless a decision is made to separately fund the liability. The key accounting figures are:

- The "OPEB Expense", which is the expense reported on the income statement.
- The "Net OPEB Liability", which is the liability reported on the year-end balance sheet.

Actuarial Valuation

The results presented in the actuarial valuation will be used in preparation of your financial statements. At the beginning of the actuarial valuation you will find a Summary of Plan Provisions outlining the benefits valued in the report, as well as a section describing the Actuarial Assumptions and Methods used. The GASB 75 reporting section will provide the following:

- Summary of key results
- Changes in the Net OPEB Liability from the prior year
- Deferred Outflows/Inflows of Resources and the sensitivity of the Net OPEB Liability under key assumption changes





- Development of OPEB Expense and disclosure of future recognition of Deferred Outflows/Inflows of Resources
- Detailed amortization schedule of Deferred Outflows/Inflows of Resources bases
- Schedule of Required Supplementary Information

Results

Pursuant to GASB 75, an actuarial valuation can be used over a two-year period. The figures in this report are reflected as of the measurement date for the fiscal year ending December 31, 2020 and are based on an actuarial valuation date or rolled forward from an actuarial valuation date. A new valuation should be performed if, between the actuarial valuation date and measurement date, material changes have occurred that affect the results of this valuation, including significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions.

The Deferred Outflows of Resources figure that is provided in this report includes an estimate of plan benefit payments. Additionally, the Net OPEB Liability and OPEB Expense figures also incorporate estimated plan benefit payments in their determinations. Your accountant will likely accept our estimate as the best available figure for the determination; however, you may reflect actual benefit payments rather than our estimate. In order to use actual benefit payments, we believe retiree claim experience would need to be tracked separately from active employee claim experience. You may not simply use premiums paid because the premiums do not reflect the hidden subsidy.

Please do not hesitate to contact me to discuss the report or any questions you or your accountant might have.

Yours sincerely,

David H. Killick, FSA, EA, MAAA Partner & Consulting Actuary

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Actuarial Valuation for Other Postemployment Benefits Accounting

As of January 1, 2020

City of Harrisburg Postemployment Benefits Plan

For purposes of Governmental Accounting Standards Board Statement No. 75 for Fiscal Year January 1, 2020 to December 31, 2020



Disclosure Statement

Summary of Plan Provisions

Actuarial Assumptions and Methods

Calculations for GASB No. 75 Reporting

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Disclosure Statement

Purpose

Actuarial computations under Governmental Accounting Standards Board Statement No. 75 (GASB No. 75) are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been performed in accordance with generally accepted actuarial principles and practices, and on a basis consistent with our understanding of GASB No. 75. In preparing this report, we have relied upon information furnished to us by City of Harrisburg. This information includes data pertaining to the Plan, as well as a description of the substantive plan. The information has been reviewed and determined to be reasonable and consistent; however, we have not audited the data or reviewed plan provisions for compliance with IRS or DOL regulations.

Determinations for purposes other than meeting the employer financial accounting requirements may be significantly different from the results reported herein. The funded status, measured by comparing the Accrued Liability against the Actuarial Value of Plan Assets, is not an appropriate measure for assessing the sufficiency of the plan assets to cover the estimated cost of settling the plan's benefit obligations upon plan termination nor is it appropriate for measuring the need for, or the amount of, future contributions. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan. The actuarial calculations contained in this report are not intended or written to be used, and cannot be used, for the purposes of avoiding penalties under the Internal Revenue Code.

This valuation involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of the valuation and on the pattern of sharing of costs between the employer and plan members to that point. Calculations reflect a long-term perspective, so methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Benefits Not Included

Defined contribution benefits and insured benefits under GASB No. 75 paragraph 11, pension benefits accounted for under GASB 68, and benefits for compensated absences under GASB 16 are not included in this valuation.

Multiple Year Reporting

Pursuant to GASB No. 75, an actuarial valuation can be used over a two-year period. The figures in this report are reflected as of the measurement date for the specified fiscal year and are based on an actuarial valuation date or rolled forward from an actuarial valuation date. Some figures have been determined based on estimated contributions for the period. These figures may need to be adjusted for actual contributions deposited to the trust or claims paid on behalf of plan benefits.

A new valuation should be performed if, between the actuarial valuation date and measurement date, material changes have occurred that affect the results of this valuation, including significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions. If roll forward procedures have been used, this report reflects any necessary adjustments to the interest rate as of the measurement date.

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Disclosure Statement

I am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this valuation.

David H. Killick, FSA, EA, MAAA Partner & Consulting Actuary

May 18, 2021

Date

DHK/MKR

GROUP	ELIGIBILITY	COVERAGE AND PREMIUM SHARING	DURATION
I. POLICE			
A) Retired prior to December 31, 1991	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: City pays full premium until member reaches Medicare age. Upon reaching Medicare age, member must pay full premium to continue coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, City pays full premium until spouse reaches Medicare age. Upon reaching Medicare age, spouse must pay full premium to continue coverage. 	Member and spouse are eligible for life.
B) Retire between January 1, 1992 and October 24, 2013	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for Medical, Prescription Drug, Dental and Vision. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, City pays full premium. 	Member and spouse are eligible for life.
C) Retire after October 24, 2013 and hired prior to October 23, 2013	Must be eligible for the Police Pension Plan benefits	Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for Medical, Prescription Drug, Dental and Vision less a percentage of the member's pension based on the table below until member reaches Medicare age. Single Coverage 2.00% 2 Person Coverage 3.00% 3 Person Coverage 4.00% 4+ Person Coverage 5.00% Upon reaching Medicare age, City will reimburse a maximum monthly amount specified in the table below for a Medicare Supplement Plan. Thru 12/31/2016 \$250 2022 \$310 2017 \$260 2023 \$320 2018 \$270 2024 \$330 2019 \$280 2025 \$340 2020 \$290 2026 and later \$350 2021 \$300 • Dependents: Spouse and family are covered.	Member and spouse are eligible until member reaches Medicare age. Life insurance and reimbursements for Medicare Supplement coverage will continue for member's life.

D) Hired after October 24, 2013	Must be eligible for the Police Pension Plan benefits	Officers are entitled to receive \$1,000 per year for 5 years upon retirement to be used towards the premium for post-retirement health care benefits.	Five years from date of retirement.
II. FIREFIGHTERS			
A) Retired prior to December 31, 1986 N/A – Already retired		 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: Member pays full premium Dependents: Spouse is covered. If retiree dies, spouse permitted to continue coverage. In such case, Spouse pays full premium. 	Member and spouse are eligible for life.
B) Retired between January 1, 1987 and December 31, 1992	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: City pays full premium for the retiree for Medical, Prescription Drug, Dental and Vision. Member must pay any additional premium for coverage of his or her spouse and eligible dependents. Dependents: Spouse is covered. If retiree dies, spouse permitted to continue coverage. Spouse pays 100% of premium. 	Member and spouse are eligible for life.
C) Retire between January 1, 1993 and April 22, 2014	Must be eligible for the Fire Pension Plan A or Plan B benefits	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for Medical, Prescription Drug, Dental and Vision. As member and spouse become eligible for Medicare, the City reimburses for Medicare Part B premium. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, City pays the full premium. If a firefighter dies in the line of duty, spouse and eligible dependents permitted to continue coverage. In such case, City pays the full premium. 	Member and spouse are eligible for life.
D) Retire after April 23,2014 and hired prior to April 22,2014	Must be eligible for the Fire Pension Plan A or Plan B benefits	Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for Medical, Prescription Drug, Dental and Vision less a percentage of the member's pension based on the table below until member reaches Medicare age. Single Coverage 2.00% 2 Person Coverage 3.00% 3 Person Coverage 4.00% 4+ Person Coverage 5.00%	Member and spouse are eligible until member reaches Medicare age. Life insurance and reimbursements for Medicare Supplement coverage will continue for member's life.

D) Continued		Upon reaching Medicare age, City will reimburse a maximum monthly amount specified in the table below for a Medicare Supplement Plan. Thru 12/31/2016 \$250 2022 \$310 2017 \$260 2023 \$320 2018 \$270 2024 \$330 2019 \$280 2025 \$340 2020 \$290 2026 and later \$350 2021 \$300 • Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, City pays the full premium. If a firefighter dies in the line of duty, spouse and eligible dependents permitted to continue coverage. In such case, City pays the full premium. Grandfathered Retirees: Four post April 23, 2014 retirees are receiving benefits under Section IIC.	
E) Hired after April 22, 2014 III. NON-UNIFORMED MANAGEMENT EMPLOYEES	N/A	Not eligible for any postretirement health care benefits.	N/A
A) Retired prior to August 4, 2002	N/A – Already retired	Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: Member pays full premium. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay the full premium. Grandfathered Retirees: One retiree does not pay any contributions for premium.	Member and spouse are eligible for life.

D) Deline effect Assessed 5, 00000	Maratha allesta for the Ni		Marshan and an area and all site of the
B) Retire after August 5, 2002 and Hired prior to January 31, 2008	Must be eligible for the Non- Uniformed Pension Plan benefits	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for Medical and Prescription Drug for retiree and spouse. Member must pay any additional premium for coverage of eligible dependents. Member must pay full premium for Dental and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, City pays the full Medical and Prescription Drug premium for the spouse. Spouse must pay any additional premium for coverage of eligible dependents. Special Benefits: Two retirees and one active employee are covered under the Police contract (Section IB). 	Member and spouse are eligible for life.
C) Retire after August 5, 2002 and Hired after February 1, 2008	Must be eligible for the Non- Uniformed Pension Plan benefits	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. City pays full premium for retiree for Medical. Member must pay any additional premium for coverage of his or her spouse and eligible dependents. Member must pay full premium for Prescription Drug, Dental, and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.
IV. NON-UNIFORMED UNION EMPLOYEES			
A) Retired prior to December 31, 1996	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: Member must pay full premium. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.
B) Retired between January 1, 1997 and December 31, 2001	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: City pays 50% of premium for single coverage. Member pays remaining 50% of premium, and for any coverage other than single coverage, member must pay any difference between the premiums. Member must pay full premium for Prescription Drug, Dental and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.

C) Retired between January 1, 2002 and May 30, 2007, except between January 1, 2004 and April 30, 2004	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: City pays 60% of premium for single coverage. Member pays remaining 40% of premium, and for any coverage other than single coverage, member must pay any difference between the premiums. Member must pay full premium for Prescription Drug, Dental and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.
D) Retired between January 1, 2004 and April 30,2004 (ERW)	N/A – Already retired	 Coverage: Medical, Prescription Drug, Dental and Vision Premium Sharing: City pays full Medical premium for retiree. Member must pay any additional premium for coverage of his or her spouse and eligible dependents. City pays 75% of premium for retiree for Prescription Drug. Member pays remaining 25% of Prescription Drug premium and for any additional premium for coverage of his or her spouse and eligible dependents. Member must pay full premium for Dental and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.
E) Retire between June 1, 2007 and September 18, 2013	Must be eligible for the Non- Uniformed Pension Plan benefits	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. If member has attained age 60 and completed 20 years of service, City pays 100% of Medical premium for single coverage. If member is disabled after completion of 20 years of service, attained age 55 and completed 20 years of service or attained age 65 and completed 15 years of service, City pays 60% of Medical premium for single coverage. Otherwise, member must pay 100% of Medical premium for single coverage. For any coverage other than single, member must pay any difference between the premiums. Member must pay full premium for Prescription Drug, Dental and Vision coverage. Dependents: Spouse and family are covered. If retiree dies, spouse and eligible dependents permitted to continue coverage. In such case, spouse and eligible dependents pay 100% of premium. 	Member and spouse are eligible for life.

F) Retire between September 19, 2013 and December 31, 2014 (Rule of 85 Window)	Must be eligible for the Non- Uniformed Pension Plan benefits and satisfy the Rule of 85 Window requirements as of December 31, 2013	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. If member has attained age 55 as of December 31, 2013, City pays full Medical premium for single coverage until member reaches Medicare age. If the member has not attained age 55 as of December 31, 2013, City pays 60% of Medical premium for single coverage until member reaches Medicare age. For any coverage other than single, member must pay any difference between the premiums. Member must pay full premium for Prescription Drug, Dental and Vision coverage. Upon reaching Medicare age, City will reimburse a maximum monthly amount specified in the table below for a Medicare Supplement Plan. Thru 12/31/2016 \$250 2022 \$310 2017 \$260 2023 \$320 2017 \$260 2023 \$320 2018 \$270 2024 \$330 2019 \$280 2025 \$340 2020 \$290 2026 and later \$350 2021 \$300 Dependents: Spouse and family are covered. 	Member and spouse are eligible until member reaches Medicare age. Life insurance and reimbursements for Medicare Supplement coverage will continue for member's life.
G) Retire after September 19, 2013 and hired prior to September 18, 2013	Must be eligible for the Non-Uniformed Pension Plan benefits Effective January 1, 2017 to December 31,2018 employees eligible under Rule of 80 by December 31,2018 are eligible to retire, however, those retiring under these early retirement provisions are not eligible to receive post-retirement healthcare unless eligible under normal provisions.	 Coverage: Medical, Prescription Drug, Dental, Vision and Life Premium Sharing: City pays full premium for Paid-Up Life insurance in the amount of \$5,000 for the member only. If member has attained age 60 and completed 20 years of service, City pays full Medical premium for single coverage less a percent of the member's final salary based on the table below until member reaches Medicare age. 2013 1.00% 2014 1.50% 2015 and later 2.00% If member is disabled after completion of 20 years of service, attained age 55 and completed 20 years of service or attained age 65 and completed 15 years of service, City pays 60% of Medical premium for single coverage until member reaches Medicare age. Otherwise, member must pay 100% of Medical premium for single coverage. For any coverage other than single, member must pay any difference between the premiums. Member must pay full premium for Prescription Drug, Dental and Vision coverage. Upon reaching Medicare age, City will reimburse a maximum monthly amount specified in the table below for a Medicare Supplement Plan. Thru 12/31/2016 \$250 2022 \$310 2017 \$260 2023 \$320 2018 \$270 2024 \$330 2019 \$280 2025 \$340 2020 \$290 2026 and later \$350 2021 \$300 Dependents: Spouse and family are covered. 	Member and spouse are eligible until member reaches Medicare age. Life insurance and reimbursements for Medicare Supplement coverage will continue for member's life.

H) Hired after September 19, 2013	N/A	Not eligible for any postretirement health care benefits.	N/A
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City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Actuarial Assumptions and Methods (1 of 3)

Discount Rate

3.26% Based on S&P Municipal Bond 20-Year High Grade Rate Index at January 1, 2020.

Salary

5.00%

Withdrawal

Police: Table D-1: Rates of withdrawal at selected ages:

Age	Rate	Age	Rate	Age	Rate
20	5.5000%	35	2.5000%	50	0.0000%
25	5.0000%	40	1.0000%	55	0.0000%
30	4.0000%	45	0.5000%	60	0.0000%

Firefighters and Non-Uniformed Employees: Rates of withdrawal very by years of service.

Firefig	hters	Non-Uniformed Employees			
Service	Service Rate		Rate		
Less than 1 year	13.0000%	Less than 1 year	20.0000%		
1 year	10.0000%	1 year	20.0000%		
2 years	7.0000%	2 years	15.0000%		
3 years	7.0000%	3 years	12.0000%		
4 years	6.0000%	4 - 5 years	7.0000%		
5 years	5.0000%	6 years	6.0000%		
6 years	4.0000%	7 - 9 years	5.0000%		
7+ years	3.0000%	10+ years	3.0000%		

Mortality

IRS 2017 Static Combined Mortality Table for Small Plans

Incorporated into the table are rates for annuitants projected 7 years and rates for non-annuitants projected 15 years using Scale AA to reflect mortality improvement.

Disability

SOA 1987 Group LTD Table - Males, 6-month elimination

Retirement

Police: Later of age 52 and completion of 20 years of service or age at the valuation date.

Firefighters and Non-Uniformed: Rates of retirement upon eligibility of normal retirement vary by age.

Firefi	ghters	Non-Uniforme	ed Employees
Age	Rate ¹	Age	Rate ¹
50	20.0000%	65	35.0000%
51-54	10.0000%	66-74	15.0000%
55	20.0000%	75+	100.0000%
56-57	25.0000%		
58-59	30.0000%		
60	40.0000%		
61-62	50.0000%		
63	60.0000%		
64	70.0000%		
65	80.0000%		
66+	100.0000%		

¹ Rates are adjusted by adding 5% (or 10% for ages 60-62) for the year in which the member is first eligible.

Percent of Eligible Retirees Electing Coverage in Plan

100% of Police, Firefighters, and Non-Uniformed Management employees are assumed to elect coverage upon retirement. 100% of Non-Uniformed Union employees who retire at age 60 or older after completion of 20 years of service are assumed to elect coverage. For all other Non-Uniformed Union employees, 75% are assumed to elect coverage upon retirement. 100% of vested former Police and Firefighters are assumed to elect coverage at age 52 and 100% of vested former Non-Uniformed Management and Union employees age 60 or older are assumed to elect coverage at age 65. For all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. 100% of all employees are assumed to elect life insurance coverage.

Percent of Eligible Retirees Who Smoke

50% of all employees are assumed to be smokers.

Percent Married at Retirement

65% of Police, Firefighters, and Non-Uniformed Management (hired prior to 1/31/08) employees are assumed to be married and have a spouse covered by the plan at retirement. 30% of Non-Uniformed Union employees and Non-Uniformed Management (hired after 2/1/08) employees are assumed to be married and have a spouse covered by the plan at retirement.

Spouse Age

Wives are assumed to be two years younger than their husbands.

Non-spouse Dependents

Non-spouse dependents are assumed to cease coverage upon attainment of age 26.

Per Capita Claims Cost

Making use of weighted averages for various plan designs, the per capita claims cost for medical and prescription drug is based on the expected portion of the group's overall cost attributed to individuals in the specified age and gender brackets. Dental, vision, and life insurance costs are assumed to equal premiums. The resulting costs are as follows:

	Medical ¹ Prescription Dru			
Age	Males	Females	Males	Females
15-24	\$2,336	\$5,258	\$448	\$1,010
25-29	\$2,810	\$7,013	\$540	\$1,346
30-34	\$3,179	\$7,113	\$610	\$1,366
35-39	\$3,853	\$7,387	\$740	\$1,418
40-44	\$4,708	\$7,956	\$904	\$1,527
45-49	\$6,045	\$8,730	\$1,161	\$1,676
50-54	\$8,006	\$9,867	\$1,537	\$1,894
55-59	\$9,751	\$10,324	\$1,872	\$1,982
60-64	\$12,724	\$11,860	\$2,443	\$2,277
65+	See no	te below	\$3,128	\$2,915

¹ For retirees, the medical claims costs above vary by factors ranging from 0.962 to 1.082 depending on the benefits plan the retiree is enrolled in. After attainment of age 65, medical claims costs are assumed to equal the premium of the Medicare Supplement Plan the member is enrolled in or will be enrolled in.

ConradSiegel

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Actuarial Assumptions and Methods (3 of 3)

Retiree Contributions

Retiree contributions are assumed to increase at the same rate as the Health Care Cost Trend Rate.

Health Care Cost Trend Rate

5.5% in 2020 through 2023. Rates gradually decrease from 5.4% in 2024 to 4.0% in 2075 and later based on the Society of Actuaries Long-Run Medical Cost Trend Model.

Actuarial Value of Assets

Equal to the Market Value of Assets

Actuarial Cost Method - Entry Age Normal

Under the Entry Age Normal Cost Method, the Normal Cost is the present value of benefits allocated to the year following the valuation date. Benefits are allocated on a level basis over the earnings of an individual between the date of hire and the assumed retirement age. The Accrued Liability as of the valuation date is the excess of the present value of future benefits over the present value of future Normal Cost. The Unfunded Accrued Liability is the excess of the Accrued Liability over the Actuarial Value of Assets. Actuarial gains and losses serve to reduce or increase the Unfunded Accrued Liability.

Participant Data

Based on census information as of January 1, 2020.

ConradSiegel

City of Harrisburg Postemployment Benefits Plan
Actuarial Valuation
as of January 1, 2020
for Purposes of Other Postemployment Benefits Accounting
for Fiscal Year January 1, 2020 to
December 31, 2020

Calculations for GASB No. 75 Reporting

Demographic Information	Police	Fire	efighters	No	n-Uniformed	Total
Active Participants	14	0	61		111	312
Vested Former Participants		2	0		37	39
Retired Participants	17	3	108		121	402
Total	31	5	169		269	753
Annual Payroll of Active Participants	\$9,362,3	74 9	\$4,231,023		\$5,868,274	\$19,461,671
Financial Information						
Total OPEB Liability	\$ 67,554,67	3 \$ 4	2,451,870	\$	23,436,400	\$ 133,442,943
Plan Fiduciary Net Position		0	0		0	0
Net OPEB Liability (Asset)	\$ 67,554,67	3 \$ 4	2,451,870	\$	23,436,400	\$ 133,442,943
Deferred Outflows of Resources	\$ 6,953,72	4 \$	4,755,128	\$	2,853,434	\$ 14,562,286
Deferred Inflows of Resources	\$ 11,159,46	9 \$	7,124,046	\$	4,462,349	\$ 22,745,864
Plan Fiduciary Net Position as a % of Total OPEB Liability	0.00%	(0.00%		0.00%	0.00%
Net OPEB Liability as a % of Covered-Employee Payroll	721.55%	10	03.35%		399.37%	685.67%
OPEB Expense	\$ (3,051,02	7) \$ (1,366,165)	\$	(923,238)	\$ (5,340,430)

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Changes in the Net OPEB Liability

	Police	Firefighters	Non-Uniformed	Total
otal OPEB Liability				
Fiscal Year Ending 12/31/2020				
Balance at 1/1/2019	\$ 65,384,379	\$ 42,202,464	\$ 23,094,132	\$ 130,680,975
Service Cost	1,117,650	578,480	364,277	2,060,407
Interest ²	2,372,492	1,523,227	836,585	4,732,304
Changes of Benefit Terms	13,656	0	0	13,656
Differences between Expected and				
Actual Experience ¹	(2,058,806)	(2,235,385)	(1,326,898)	(5,621,089)
Changes of Assumptions ¹	3,168,868	2,107,367	1,345,758	6,621,993
Benefit Payments ²	(2,443,566)	(1,724,283)	(877,454)	(5,045,303)
Other Changes	0	0	0	0
Net Changes	2,170,294	249,406	342,268	2,761,968
Balance at 1/1/2020	\$ 67,554,673	\$ 42,451,870	\$ 23,436,400	\$ 133,442,943

Changes of Assumptions

The discount rate changed from 3.64% to 3.26%. The trend assumption was updated.

Changes of Benefit Terms

Police officers hired after 10/24/2013 are eligible for \$1,000 per year for 5 years upon retirement to be used towards post-retirement health care premiums.

¹Each year's loss (or gain) is recognized over a closed period, using the average of the expected remaining service lives of all active and inactive employees that are currently receiving a benefit or may be eligible to receive a benefit in the future.

²These figures are based on estimated benefit payments. These amounts may be adjusted for actual benefit payments made during the year.

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Deferred Outflows/Inflows and Sensitivity

Deferred Outflows of Resources	Police	F	irefighters	No	on-Uniformed	Total
Differences between Expected and Actual Experience	\$ 0	\$	0	\$	0	\$ 0
Changes of Assumptions	4,309,799		2,941,192		1,955,221	9,206,212
Benefit Payments subsequent to the Measurement Date (1/1/2020)¹	2,643,925		1,813,936		898,213	5,356,074
Total Deferred Outflows	\$ 6,953,724	\$	4,755,128	\$	2,853,434	\$ 14,562,286
Deferred Inflows of Resources						
Differences between Expected and Actual Experience	\$ 9,237,709	\$	5,847,704	\$	3,673,654	\$ 18,759,067
Changes of Assumptions	1,921,760		1,276,342		788,695	3,986,797
Total Deferred Inflows	\$ 11,159,469	\$	7,124,046	\$	4,462,349	\$ 22,745,864

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of the Plan, as well as what the Plan's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

Net OPEB Liability (Asset)

Not of Eb Elability (Addet)				
1% Increase (4.26%)	\$ 60,534,295	\$ 37,831,066	\$ 20,512,893	\$ 118,878,254
Current Discount Rate (3.26%)	\$ 67,554,673	\$ 42,451,870	\$ 23,436,400	\$ 133,442,943
1% Decrease (2.26%)	\$ 75,996,025	\$ 48,070,503	\$ 27,057,046	\$ 151,123,574

Sensitivity of Net OPEB Liability to Changes in the Healthcare Cost Trend Rate

The following presents the net OPEB liability of the Plan, as well as what the Plan's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

Net OPEB Liability (Asset)

not of 25 Elability (1000t)				
1% Increase	\$ 75,854,862	\$ 48,199,494	\$ 26,966,633	\$ 151,020,989
Current Rates	\$ 67,554,673	\$ 42,451,870	\$ 23,436,400	\$ 133,442,943
1% Decrease	\$ 60,549,361	\$ 37,669,484	\$ 20,578,165	\$ 118,797,010

¹These figures are based on estimated benefit payments. These amounts may be adjusted for actual benefit payments made.

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 OPEB Expense and Future Recognition of Deferred Outflows and (Inflows)

OPEB Expense

	Police	Firefighters	Non-Uniformed	Total
Fiscal Year Ending 12/31/2020				
Service Cost	\$ 1,117,650	\$ 578,480	\$ 364,277	\$ 2,060,407
Interest on Total OPEB Liability	2,372,492	1,523,227	836,585	4,732,304
Changes of Benefit Terms	13,656	0	0	13,656
Contributions - Employee	0	0	0	0
Amortization of Deferred Outflows	2,408,480	1,676,771	1,147,765	5,233,016
Amortization of Deferred Inflows	(8,963,305)	(5,144,643)	(3,271,865)	(17,379,813)
Other Changes	0	0	0	0
Total OPEB Expense	\$ (3,051,027)	\$ (1,366,165)	\$ (923,238)	\$ (5,340,430)

Future Deferred Outflows and (Inflows) to be Recognized as OPEB Expense (Income)

Fiscal Year Ending				
December 31, 2021	\$ (6,554,827)	\$ (3,467,872)	\$ (2,124,096)	\$(12,146,795)
December 31, 2022	(738,866)	(663,776)	(390,576)	(1,793,218)
December 31, 2023	222,013	(25,604)	3,772	200,181
December 31, 2024	222,010	(25,602)	3,772	200,180
December 31, 2025	0	0	0	0
Thereafter	0	0	0	0

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Deferred Outflows and Inflows of Resources Bases

Deferred Outflows of Resources

Date	Initial Balance	Annual Recognition	Remaining Balance	Remaining Recognition Period	Type
January 1, 2018	15,634,469	3,908,617	3,908,618	1 years	Assumption Change
January 1, 2020	6,621,993	1,324,399	5,297,594	4 years	Assumption Change
Total		5,233,016	9,206,212		

Deferred Inflows of Resources

Date	Initial Balance	Annual Recognition	Remaining Balance	Remaining Recognition Period	Туре
January 1, 2018	57,048,787	14,262,197	14,262,196	1 years	Experience Change
January 1, 2019	7,973,593	1,993,398	3,986,797	2 years	Assumption Change
January 1, 2020	5,621,089	1,124,218	4,496,871	4 years	Experience Change
Total		17,379,813	22,745,864		

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2020 for Fiscal Year Ending December 31, 2020 Required Supplementary Information

Fiscal Year Ending ¹	2020		2019	2018
Total OPEB Liability				
Service Cost	\$ 2,060,407	\$	2,161,986	\$ 2,637,220
Interest	4,732,304		4,314,547	6,486,188
Changes of Benefit Terms	13,656		0	0
Differences between Expected				
and Actual Experience	(5,621,089)		0	(57,048,787)
Changes of Assumptions	6,621,993		(7,973,593)	15,634,469
Benefit Payments	(5,045,303)		(4,792,282)	(6,396,300)
Other Changes	 0		0	0
Net Change	2,761,968		(6,289,342)	(38,687,210)
Total OPEB Liability - Beginning	 130,680,975		136,970,317	175,657,527
Total OPEB Liability - Ending	\$ 133,442,943	\$	130,680,975	\$ 136,970,317
Covered-Employee Payroll	\$ 19,461,671	\$	16,987,810	\$ 16,987,810
Total OPEB Liability as a % of				
Covered-Employee Payroll	685.67%		769.26%	806.29%

¹This information is shown for the last 10 years, if available.