Conrad Siegel

February 17, 2020

Mr. Bruce Weber City of Harrisburg 10 N. Second St. Harrisburg, PA 17101

Re: City of Harrisburg Postemployment Benefits Plan

Dear Bruce:

I am attaching the actuarial valuation as of January 1, 2018, for the fiscal year ending December 31, 2019, 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



Conrad Siegel

Mr. Bruce Weber February 17, 2020 Page 2

- 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

The figures in this report are reflected as of the measurement date for the fiscal year ending December 31, 2019 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.

With best regards,

Yours sincerely,

Dard & Kielie

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



Actuarial Valuation for Other Postemployment Benefits Accounting

As of January 1, 2018

City of Harrisburg Postemployment Benefits Plan

For purposes of Governmental Accounting Standards Board Statement No. 75 for Fiscal Year January 1, 2019 to December 31, 2019

Conrad Siegel

Disclosure Statement

Summary of Plan Provisions

Actuarial Assumptions and Methods

Calculations for GASB No. 75 Reporting

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, 2018 for Fiscal Year Ending December 31, 2019 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.

Dard H Kielie

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

February 17, 2020 Date

DHK/ENM

Conrad Siegel

| GROUP | ELIGIBILITY | COVERAGE AND PREMIUM SHARING | DURATION |
|--|--|--|---|
| <u>I. POLICE</u> | | | |
| 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. Grandfathered Retirees: Two retirees do not pay any contributions for premium after Medicare age. | Member and spouse are eligible for life. |
| B) Retire between January 1, 1992 and September 18, 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 September 19, 2013 and hired prior to September 18, 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 \$277 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 September 19, 2013 | N/A | Not eligible for any postretirement health care benefits. | N/A |
|--|---|---|---|
| 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\$2502022\$3102017\$2602023\$3202018\$2702024\$3302019\$2802025\$3402020\$2902026 and later\$3502021\$300* | |
|--|-----------------------|--|--|
| E) Hired after April 23, 2014 | N/A | Not eligible for any postretirement health care benefits. | N/A |
| III. NON-UNIFORMED MANAGEMENT EMPLOYEES | | | |
| 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. | Member and spouse are eligible for life. |

| | | | 1 |
|---|--|--|--|
| 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. | 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 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 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 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. Upon 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 \$2770 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 |
|-----------------------------------|-----|---|-----|
|-----------------------------------|-----|---|-----|

Discount Rate

3.64% Based on S&P Municipal Bond 20-Year High Grade Rate Index at January 1, 2019.

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 | phters | Non-Uniformed Employees | | |
|------------------|----------|-------------------------|----------|--|
| Service | Rate | Service | 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. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are assumed to elect coverage at age 65. In all other Non-Uniformed Union vested former members, 75% are as

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 | | Prescrip | tion Drug |
|-------|----------------------|----------|----------|-----------|
| Age | Males | Females | Males | Females |
| 15-24 | \$2,111 | \$4,753 | \$295 | \$665 |
| 25-29 | \$2,540 | \$6,339 | \$355 | \$886 |
| 30-34 | \$2,873 | \$6,430 | \$402 | \$899 |
| 35-39 | \$3,483 | \$6,678 | \$487 | \$934 |
| 40-44 | \$4,256 | \$7,192 | \$595 | \$1,006 |
| 45-49 | \$5,464 | \$7,892 | \$764 | \$1,103 |
| 50-54 | \$7,237 | \$8,919 | \$1,012 | \$1,247 |
| 55-59 | \$8,815 | \$9,333 | \$1,232 | \$1,305 |
| 60-64 | \$11,502 | \$10,721 | \$1,608 | \$1,499 |
| 65+ | See not | te below | \$2,059 | \$1,919 |

¹ For retirees, the medical claims costs above vary by factors ranging from 0.961 to 1.093 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.

Retiree Contributions

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

Health Care Cost Trend Rate

6.0% in 2018, and 5.5% in 2019 through 2021. Rates gradually decrease from 5.4% in 2022 to 3.8% 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, 2018.

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2018 for Purposes of Other Postemployment Benefits Accounting for Fiscal Year January 1, 2019 to December 31, 2019

Calculations for GASB No. 75 Reporting

| emographic Information | Police | Firefighters | Non-Uniformed | Total |
|--------------------------------------|-------------|--------------|---------------|--------------|
| Active Participants | 93 | 66 | 124 | 283 |
| Vested Former Participants | 3 | 1 | 39 | 43 |
| Retired Participants | 174 | 107 | 118 | 399 |
| Total | 270 | 174 | 281 | 725 |
| nnual Payroll of Active Participants | \$6,652,810 | \$4,218,372 | \$6,116,628 | \$16,987,810 |

| Financial Information | | | | |
|----------------------------------|-------------------|----------------|------------------|-------------------|
| | | • | | |
| Total OPEB Liability | \$ 65,384,379 | \$ 42,202,464 | \$ 23,094,132 | \$ 130,680,975 |
| Plan Fiduciary Net Position | 0 | 0 | 0 | 0 |
| Net OPEB Liability (Asset) | \$ 65,384,379 | \$ 42,202,464 | \$ 23,094,132 | \$ 130,680,975 |
| Deferred Outflows of Resources | \$ 5,992,977 | \$ 4,234,879 | \$ 2,634,682 | \$ 12,862,538 |
| Deferred Inflows of Resources | \$ 18,063,968 | \$ 10,033,304 | \$ 6,407,316 | \$ 34,504,588 |
| 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 | 982.81% | 1000.44% | 377.56% | 769.26% |
| OPEB Expense | \$ (3.451.203) | \$ (1.445.003) | \$ (974.239) | \$ (5,870,445) |
| OPEB Expense | \$ (3,451,203) | \$ (1,445,003) | \$ (974,239) | \$ (5,870,445 |

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2018 for Fiscal Year Ending December 31, 2019 Changes in the Net OPEB Liability

| | Police | Firefighters | Non-Uniformed | Total |
|--|---------------|---------------|---------------|----------------|
| Fotal OPEB Liability | | | | |
| Fiscal Year Ending 12/31/2019 | | | | |
| Balance at 1/1/2018 | \$ 68,241,976 | \$ 44,392,666 | \$ 24,335,675 | \$ 136,970,317 |
| Service Cost | 1,172,198 | 603,374 | 386,414 | 2,161,986 |
| Interest ² | 2,153,437 | 1,393,891 | 767,219 | 4,314,547 |
| Changes of Benefit Terms | 0 | 0 | 0 | 0 |
| Differences between Expected and Actual Experience ¹ | 0 | 0 | 0 | 0 |
| Changes of Assumptions ¹ | (3,843,522) | (2,552,682) | (1,577,389) | (7,973,593) |
| Benefit Payments ² | (2,339,710) | (1,634,785) | (817,787) | (4,792,282) |
| Other Changes | 0 | 0 | 0 | 0 |
| Net Changes | (2,857,597) | (2,190,202) | (1,241,543) | (6,289,342) |
| Balance at 1/1/2019 | \$ 65,384,379 | \$ 42,202,464 | \$ 23,094,132 | \$ 130,680,975 |

Changes of Assumptions

The discount rate changed from 3.16% to 3.64%.

Changes of Benefit Terms

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, 2018 for Fiscal Year Ending December 31, 2019 Deferred Outflows/Inflows and Sensitivity

| Deferred Outflows of Resources | Police | F | irefighters | No | n-Uniformed | Total |
|---|------------------|----|-------------|----|-------------|------------------|
| Differences between Expected and Actual Experience | \$ 0 | \$ | 0 | \$ | 0 | \$ 0 |
| Changes of Assumptions | 3,549,411 | | 2,510,596 | | 1,757,228 | 7,817,235 |
| Benefit Payments subsequent to the Measurement Date (1/1/2019) ¹ | 2,443,566 | | 1,724,283 | | 877,454 | 5,045,303 |
| Total Deferred Outflows | \$ 5,992,977 | \$ | 4,234,879 | \$ | 2,634,682 | \$ 12,862,538 |
| Deferred Inflows of Resources | | | | | | |
| Differences between Expected and Actual Experience | \$ 15,181,327 | \$ | 8,118,792 | \$ | 5,224,274 | \$ 28,524,393 |
| Changes of Assumptions | 2,882,641 | | 1,914,512 | | 1,183,042 | 5,980,195 |
| Total Deferred Inflows | \$ 18,063,968 | \$ | 10,033,304 | \$ | 6,407,316 | \$ 34,504,588 |

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) | | | | |
|-------------------------------|---------------|---------------|------------------|-------------------|
| 1% Increase (4.64%) | \$ 58,398,167 | \$ 37,581,527 | \$ 20,268,521 | \$ 116,248,215 |
| Current Discount Rate (3.64%) | \$ 65,384,379 | \$ 42,202,464 | \$ 23,094,132 | \$ 130,680,975 |
| 1% Decrease (2.64%) | \$ 73,814,250 | \$ 47,809,574 | \$ 26,572,515 | \$ 148,196,339 |

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) | | | | |
|----------------------------|---------------|---------------|------------------|-------------------|
| 1% Increase | \$ 74,410,944 | \$ 48,341,734 | \$ 26,669,613 | \$ 149,422,291 |
| Current Rates | \$ 65,384,379 | \$ 42,202,464 | \$ 23,094,132 | \$ 130,680,975 |
| 1% Decrease | \$ 57,826,198 | \$ 37,102,477 | \$ 20,205,585 | \$ 115,134,260 |

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

OPEB Expense

| | Police | Firefighters | Non-Uniformed | Total |
|-----------------------------------|----------------|----------------|---------------|----------------|
| Fiscal Year Ending 12/31/2019 | | | | |
| Service Cost | \$ 1,172,198 | \$ 603,374 | \$ 386,414 | \$ 2,161,986 |
| Interest on Total OPEB Liability | 2,153,437 | 1,393,891 | 767,219 | 4,314,547 |
| Changes of Benefit Terms | 0 | 0 | 0 | 0 |
| Contributions - Employee | 0 | 0 | 0 | 0 |
| Amortization of Deferred Outflows | 1,774,706 | 1,255,298 | 878,613 | 3,908,617 |
| Amortization of Deferred Inflows | (8,551,544) | (4,697,566) | (3,006,485) | (16,255,595) |
| Other Changes | 0 | 0 | 0 | 0 |
| Total OPEB Expense | \$ (3,451,203) | \$ (1,445,003) | \$ (974,239) | \$ (5,870,445) |

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

| Fiscal Year Ending | | | | |
|--------------------|----------------|----------------|----------------|----------------|
| December 31, 2020 | \$ (6,776,838) | \$ (3,442,268) | \$ (2,127,872) | \$(12,346,978) |
| December 31, 2021 | (6,776,840) | (3,442,268) | (2,127,868) | (12,346,976) |
| December 31, 2022 | (960,879) | (638,172) | (394,348) | (1,993,399) |
| December 31, 2023 | 0 | 0 | 0 | 0 |
| December 31, 2024 | 0 | 0 | 0 | 0 |
| Thereafter | 0 | 0 | 0 | 0 |

City of Harrisburg Postemployment Benefits Plan Actuarial Valuation as of January 1, 2018 for Fiscal Year Ending December 31, 2019 Deferred Outflows and Inflows of Resources Bases

Deferred Outflows of Resources

| Date | Initial Balance | Annual Recognition | Remaining Balance | Remaining Recognition Period | Туре |
|-----------------|-----------------|-----------------------|----------------------|------------------------------------|-------------------|
| January 1, 2018 | 15,634,469 | 3,908,617 | 7,817,235 | 2 years | Assumption Change |
| Total | | 3,908,617 | 7,817,235 | | |

Deferred Inflows of Resources

| Date | Initial Balance | Annual Recognition | Remaining Balance | Remaining Recognition Period | Туре |
|-----------------|-----------------|-----------------------|----------------------|------------------------------------|-------------------|
| January 1, 2018 | 57,048,787 | 14,262,197 | 28,524,393 | 2 years | Experience Change |
| January 1, 2019 | 7,973,593 | 1,993,398 | 5,980,195 | 3 years | Assumption Change |
| Total | | 16,255,595 | 34,504,588 | | |

| Fiscal Year Ending ¹ | 2019 | 2018 |
|--|-------------------|-------------------|
| Total OPEB Liability | | |
| Service Cost | \$ 2,161,986 | \$ 2,637,220 |
| Interest | 4,314,547 | 6,486,188 |
| Changes of Benefit Terms | 0 | 0 |
| Differences between Expected and Actual Experience | 0 | (57,048,787) |
| Changes of Assumptions | (7,973,593) | 15,634,469 |
| Benefit Payments | (4,792,282) | (6,396,300) |
| Other Changes | 0 | 0 |
| Net Change | (6,289,342) | (38,687,210) |
| Total OPEB Liability - Beginning | 136,970,317 | 175,657,527 |
| Total OPEB Liability - Ending | \$ 130,680,975 | \$ 136,970,317 |
| Covered-Employee Payroll | \$ 16,987,810 | \$ 16,987,810 |
| Total OPEB Liability as a % of Covered-Employee Payroll | 769.26% | 806.29% |

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