

CITY OF PHILADELPHIA GAS WORKS RETIREMENT RESERVE FUND Financial Statements June 30, 2019 With Independent Auditor's Reports



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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors, City of Philadelphia Gas Works Retirement Reserve Fund:

Report on the Financial Statements

We have audited the accompanying financial statements of City of Philadelphia Gas Works Retirement Reserve Fund (the "Plan"), which comprise the statement of fiduciary net position as of June 30, 2019, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects the Plan's fiduciary net position as of June 30, 2019, and the respective changes in fiduciary net position therein for the year then ended, in accordance with accounting principles generally accepted in the United States of America.



Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the schedules of net pension liability, employer contributions as a percentage of covered payroll and investment returns, and notes to required supplementary information be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Government Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis for the Plan, that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements is required by the Government Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by the missing information.

Report on Other Legal and Regulatory Requirements

Withem Smith + Brown, PC

In accordance with *Government Auditing Standards*, we have also issued our report dated December 18, 2019 on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

December 18, 2019

City of Philadelphia Gas Works Retirement Reserve Fund Statement of Fiduciary Net Position June 30, 2019

Assets		
Cash and cash equivalents		
Cash	\$ 15,632,933	
U.S. Treasury bills	1,199,017	
Total cash and cash equivalents		\$ 16,831,950
Interest and dividend receivable		1,653,099
Investments, at fair value		1,000,000
Corporate bonds	80,786,801	
Common and preferred stock	372,039,970	
U.S. government securities	73,317,934	
Financial agreements	39,848	
Asset backed securities	9,094,992	
Municipal obligations	<u>2,468,695</u>	
Total investments		537,748,240
Receivables		
Advance to Philadelphia Gas Works		104
Due from brokers		10,363,870
		566,597,263
Liabilities		
Due to business		40 440 000
Due to brokers		13,148,323
Accounts payable		209,378
		13,357,701
Fiduciary net position restricted for pensions		\$ 553,239,562

City of Philadelphia Gas Works Retirement Reserve Fund Statement of Changes in Fiduciary Net Position Year Ended June 30, 2019

Additions	
Contributions Employer's contributions Employees' contributions	\$ 28,569,807 1,248,941 29,818,748
Investment income Interest Dividends Other investment income Net realized/unrealized gain	6,326,591 7,452,737 3,896 21,617,937 35,401,161
Investment expense	(1,141,543)
Net investment gain Total contributions and net investment gain	34,259,618 64,078,366
Deductions	
Administrative expenses paid Benefits paid	191,645 53,892,944
Change in fiduciary net position restricted for pensions	9,993,777
Fiduciary net position restricted for pensions Beginning of year	543,245,785
End of year	\$ 553,239,562

1. PLAN DESCRIPTION

The City of Philadelphia (the "City"), maintains two pension systems providing benefits for its employees and several of its component units: the City's pension system includes the Municipal Pension (the "Fund") and the Gas Works Plan (the "Plan"). Each pension system is a separate Public Employee Retirement System ("PERS") with a separate oversight body and is financially independent of the other. In each case, the City is required by the Philadelphia Home Rule Charter to maintain an actuarially sound pension and retirement system.

There are no component units of the Plan. In determining its oversight responsibility, the Plan considers financial interdependency, selection of governing authority, designation of management, ability to significantly influence operations, and accountability of fiscal matters.

The Plan consists of Philadelphia Gas Works ("PGW" or the "Company"), a component unit of the City and is included in the City's Comprehensive Annual Financial Report as a trust and agency fund.

The Plan is a single employer defined benefit PERS. The Plan provides pension benefits for all eligible employees of Philadelphia Gas Works, and other eligible class employees of Philadelphia Facilities Management Corporation ("PFMC") and Philadelphia Gas Commission ("PGC"). The Plan is administered by the Sinking Fund Commission of the City of Philadelphia (the "Commission"). Certain administrative aspects of the Plan are delegated to PGW. The Commission acts in a fiduciary matter with regards to the assets of the Plan. The Commission was established by the City Charter and consists of the Director of Finance, the City Controller and an experienced banker or investment banker appointed by the Mayor. Alternates for these members are allowed by written authorization of the Mayor.

As of the latest available actuarial valuation (June 30, 2019), the Plan's membership consisted of:

Active participants	\$	1,195
Retired participants		2,178
Vested terminated participants		317
Total Plan participants	_	3,690
Total payroll	\$	98,453,547
Average pay	\$	82,388

The Plan is currently open to all employees of PGW.

The Plan provides retirement benefits as well as death and disability benefits. Retirement benefits are vested after 5 years of credited service. Employees who retire at or after age 65 are entitled to receive an annual retirement benefit, payable monthly, in an amount equal to the greater of:

- 1.25% of the first \$6,600 of Final Average Earnings plus 1.75% of the excess of Final Average Earnings over \$6,600, times years of credited service, with a maximum of 60% of the highest annual earnings during the last 10 years of credited service, applicable to all participants; or,
- 2% of total earnings received during the period of credited service plus 22.5% of the first \$1,200 of such amount, applicable only to participants who were employees on or prior to March 24, 1967.

Final Average Earnings are the employees' average pay, over the highest five years of the last ten years of credited service. Employees with 15 years of credited service may retire at or after age 55 and receive a reduced retirement benefit. In addition, employees with 30 years of credited service are eligible to select early retirement with no reduction in benefits.

Contributions

In December 2011 the City of Philadelphia City Council approved Bill No. 110830 "An Ordinance" effecting PGW workers hired on or after May 21, 2011. The ordinance states, in part, that employees commencing employment on or after May 21, 2011 shall become a participant in the Plan only upon completion of an irrevocable written election to participate in the Plan. Such election must be made within thirty days after their employment commencement date, or if later, thirty days after the effective date of the ordinance. All such employees who elect to participate in the Plan are deemed contributing participants.

Contributing participants (Non-covered employees) in the Plan are required to make annual contributions totaling 6% of their compensation. Such contributions are made by means of periodic payroll deductions determined by the Company. Contributing participants are 100% vested in their employee contributions. All participants in the Plan, including contributing participants, have no vested interest in their accrued benefit from the Plan sponsor until they have 5 years of credited service, at which time they become 100% vested in their accrued benefit. Contributions from contributing participants for the Plan year ending June 30, 2019 totaled \$1,248,941.

In addition, newly hired employees who commence employment on or after May 21, 2011 who opt out of the Plan will enter into the newly formed Philadelphia Gas Works Employees' Defined Contribution Plan, a tax qualified defined contribution plan pursuant to Section 401(a) of the Internal Revenue Code of 1986 as amended. The defined-contribution plan provides for an employer contribution equal to 5.5% of applicable wages. Assets of this plan are not a part of the City of Philadelphia Gas Works Retirement Reserve Fund and are not reported on in these financial statements.

Funding Policy

The Plan's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. Level percentages of payroll employer contributions rates are determined using the Projected Unit Credit actuarial funding method. The most recent annual actuarial valuation is as of June 30, 2019 and the contribution rate as of percentage of payroll was 29.25%.

Benefit and contribution provisions are established by City ordinance and may be amended only as allowed by City ordinance. Benefits under the Plan are guaranteed by statute. In the event employer contributions are not sufficient to pay required benefits, the City's General fund must provide any shortfall.

Investments

The Commission maintains a Statement of Investment Guidelines ("Policy") consistent with the needs of the Plan. The latest Policy was approved by the Commission at its meeting on December 2, 2016. The Policy serves as the chief communication tool of the Commission with vendors and investment managers. The Policy defines the need for the Policy, the investment goals of the Plan, the asset allocation, the investment guidelines, including prohibited investments, as well as the objectives for each manager and benchmarks for each type of investment. Additionally, it defines the necessary communication and responsibilities of each party, including the Commission, the investment managers, the custodian and any consultants. The Policy can only be revised or changed by a vote by the Commission.

For a more complete description of the Policy, see the online version at: http://www.phila.gov/Treasurer/Documents/PGWPP.pdf.

The Pension Plan utilizes both equity and fixed-income investments consistent with the Policy as described above. As of June 30, 2019, the Plan had investments of approximately \$538 million, comprised of \$372 million in equities and \$166 million in fixed-income investments. The ratio of equities to fixed income is 69% to 31% which is in line with the Policy guidelines of 60-70% equities and 30-40% fixed income.

For the year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of investment expense was 6.73%.

The Commission employs third-party vendors to manage the assets of the Plan as well as perform other needed services. As of June 30, 2019, the Commission employed the following investment managers and vendors:

Manager	Mandate	Balance (Millions)
Equity Managers		
RhumbLine Asset Management	Domestic Large Cap Index	\$ 134.2
RhumbLine Asset Management	International Markets	36.4
PineBridge Investments	Domestic Large Cap Index	58.1
Northern Trust Company	Domestic Large Cap Index	25.9
Eagle Asset Management	Domestic Small Cap Growth	26.5
Acadian Asset Management	International Markets	36.0
Earnest Partners, LLC	International Markets	34.6
Vaughan Nelson	Domestic Small Cap Value	20.3
		<u>372.0</u>
Bond Managers		
Weaver Barksdale	Core	39.0
Logan Circle Partners	Core Plus	35.6
Logan Circle Partners	Investment Grade	14.0
Garcia Hamilton	Intermediate	31.8
Lazard Asset Management	Intermediate Plus	31.7
Sky Harbor Capital Management	High Yield	<u>13.6</u>
		<u> 165.7</u>
Total		<u>\$ 537.7</u>

At its quarterly meetings, the Commission, with the assistance of PFM Asset Management LLC monitors the performance of the investment managers over various periods of time, and will change a manager when the Commission deems it necessary. Each of the managers and other vendors (except for those marked 'fund') are contracted for a period of one year, with one-year extensions at the discretion of the Commission.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized as revenues when due, pursuant to formal commitments, as well as statutory or contractual requirements. The pension benefits are paid monthly and recorded as paid. As a result, there are no pension benefits payable at June 30, 2019.

Method Used to Value Investments

The Plan reports investments at their fair value in the statement of fiduciary net position. Unrealized gains and losses are included in the statement of changes in fiduciary net position. Securities traded on national or international exchanges are recorded at the last reported sales price at current exchange rates.

Investment income is recognized as earned. Gains and losses on sales and exchanges are recognized on the transaction date. Net realized gains on sales amounted to \$17,309,709 for the year ended June 30, 2019. Net unrealized gains for the year ended June 30, 2019 totaled \$4,308,228.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Due From and To Brokers

Due from brokers represents the value of investments sold by brokers prior to year-end, for which the settlement date of the sale occurred subsequent to year end. Similarly, due to brokers represents the value of investments purchased by brokers prior to year-end, for which the settlement date of the purchase occurred subsequent to year end.

Fair Value of Financial Instruments

The carrying values of financial instruments including interest and dividends receivable, due from brokers, accounts payable, and amounts due to PGW and brokers approximate their fair market value due to the relative short maturity of these instruments.

Investment Advisors

The Fund utilizes numerous investment advisors to manage debt and equity portfolios. The Sinking Fund Commission must approve all investment advisors.

Income Taxes

The Plan is not subject to Federal, state or local income taxes.

Trend Information

Historical trend information related to the Plan is presented in the Required Supplemental Information section. The information is presented to enable the reader to assess the progress made by the Plan in accumulating sufficient assets to pay pension benefits as they become due.

Related Parties

The Sinking Fund Commission is the trustee of the Plan. The City of Philadelphia Department of Finance provides bookkeeping services for the Plan. Philadelphia Gas Works makes monthly benefit payments to retirees on behalf of the Plan and incurs administrative expenses on behalf of the Plan. Benefits payments made by PGW and administrative costs incurred by PGW on behalf of the Plan amounted to \$53,892,944 and \$191,645, respectively for the year ended June 30, 2019.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at June 30, 2019, and the reported amounts of revenues and expenses during the year then ended. Actual results could differ from those estimates. Significant estimates include the valuation of investments without quoted prices in an active market for identical assets and the actuarial estimates for Plan future benefit obligations.

Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and those changes could materially affect the amounts reported in the statement of fiduciary net position.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

3. CASH DEPOSITS AND INVESTMENTS

The Plan is authorized to maintain a diversified portfolio in the following types of investments: U.S. Treasury or agency obligations, corporate debt and equity securities, and foreign debt and equity securities. City ordinances and sinking fund policies contain provisions which preclude the Plan from investing in organizations that conduct business in certain countries and industries and impose limitations on the amounts invested in certain types of securities.

Interest Rate Risk

Interest rate risk is the largest risk faced by an investor in the fixed income market. The price of a fixed income security generally moves in the opposite direction of the change in interest rates. Securities with long maturities are highly sensitive to interest rate changes. The Plan's fixed income investments are as follows:

	Total Fair Value		Below 1 Year		to 5 Years	5	to 10 Years	10 Years and Over
U.S. govt. treasuries	\$ 45,227,256	\$	1,844,246	\$	17,205,091	\$	21,954,808	\$ 4,223,111
U.S. govt. agencies	29,289,695		1,856,680		20,505,921		4,104,024	2,823,070
Municipal bonds	2,468,695		1,320,592		240,237		620,724	287,142
Corporate bonds	80,786,801		20,889,082		31,648,426		16,864,423	11,384,870
Asset backed securities	 9,094,992		1,563,002		3,939,210		2,688,143	 904,637
	\$ 166,867,439	\$	27,473,602	\$	73,538,885	\$	46,232,122	\$ 19,622,830

Custodial Credit Risk

In the event of counter-party failure, the Plan may not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities held by the counterparty or counterparty's trust department, are uninsured and are not registered in the name of the Plan. The Plan requires that all investments be clearly marked as to ownership, and to the extent possible, be registered in the name of the Plan. Certain investments may be held by the managers in the Plan's name.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The Fund's rated debt investments as of June 30, 2019 were rated by Standard and Poor ("S&P"), a nationally recognized statistical rating agency and are presented below using S&Ps rating scale:

S&P Credit Rating	U.S. Government Securities	U.S. Government Agency Securities	Municipal Bonds	Corporate Bonds	Asset-Backed Securities	Total
AAA	\$ -	\$ -	\$ -	\$ 147,355	\$ 6,140,136	\$ 6,287,491
AA+	45,227,256	26,896,672	-	870,374	393,597	73,387,899
AA	_	-	-	-	573,931	573,931
AA-	-	-	1,216,147	1,451,147	347,214	3,014,508
A+	-	-	-	4,188,093	126,933	4,315,026
Α	-	-	-	7,084,267	313,013	7,397,280
A-	-	-	424,482	17,623,303	394,663	18,442,448
BBB+	-	-	300,687	15,629,755	69,473	15,999,915
BBB	-	-	-	8,899,954	292,261	9,192,215
BBB-	-	-	527,379	6,998,443	-	7,525,822
BB+	-	-	-	2,907,510	29,866	2,937,376
BB	-	-	-	1,649,130	-	1,649,130
BB-	-	-	-	2,649,983	-	2,649,983
B+	-	-	-	1,993,368	-	1,993,368
В	-	-	-	2,007,971	-	2,007,971
B-	-	-	-	4,067,867	140,410	4,208,277
CCC+	-	-	-	1,202,705	-	1,202,705
CCC	-	-	-	1,309,676	14,865	1,324,541
CCC-	-	-	-	105,900	-	105,900
CC	-	-	-	-	-	-
D	-	-	-	-	28,685	28,685
NR/NA		2,393,023			229,945	2,622,968
	\$ 45,227,256	\$ 29,289,695	\$ 2,468,695	\$ 80,786,801	\$ 9,094,992	\$ 166,867,439

Concentration of Credit Risk

Concentration of credit risk is the risk of substantial loss if investments are concentrated in one issuer. As of June 30, 2019 no single investment, not guaranteed by the U.S. government exceeds 5% of the Plan's net fiduciary financial position.

4. DISCLOSURE ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS

The accounting pronouncement on fair value measurements establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access. Such inputs include quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Fair value is the amount that the Fund can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. Fixed income securities and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges or securities pricing services. Securities which are not traded on a national security exchange are valued by the respective fund manager or other third parties based on similar sales.

For private market investments where no readily ascertainable market value exists, management, in consultation with the general partner and investment advisors, has determined the fair values for the individual investments based upon the partnership's most recent available financial information. Some of the investment values provided in the report are estimates due to a lag in reporting for private market investments.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2019:

	_	Level 1	Level 2	 _evel 3	 Total
Corporate bonds	\$	-	\$ 80,786,801	\$ -	\$ 80,786,801
Common and preferred stock		346,140,905	25,897,459	1,606	372,039,970
U.S. government securities		44,028,237	29,289,697	-	73,317,934
Financial agreements		-	-	39,848	39,848
Asset backed securities		-	9,094,992	-	9,094,992
Municipal obligations			 2,468,695	 -	 2,468,695
	\$	390,169,142	\$ 147,537,644	\$ 41,454	\$ 537,748,240

5. ADVANCE FROM THE PHILADELPHIA GAS WORKS

Payments to beneficiaries are made by PGW through its payroll system. The amount due from PGW at June 30, 2019 of \$104 represents the cumulative shortfall of payments made to the retirees and administrative expenses incurred by PGW, over the sum of the Company's required contribution, and reimbursements received from the Plan. Such amount will be settled in the subsequent Plan year.

6. NET PENSION LIABILITY

The components of the net pension liability of the City of Philadelphia Gas Works Retirement Reserve Fund at June 30, 2019, were as follows (dollar amounts in thousands):

Total pension liability	\$ 800,485
Plan fiduciary net position	(553,240)
Net pension liability	\$ 247,245

Plan fiduciary net position as a percentage of the total pension liability

69.11%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2019 using the following actuarial assumptions:

Salary increases 4.5% for the current year and for subsequent

years

General inflation 2%

Investment rate of return 7.30%, net of pension plan investment

expense, including inflation

Mortality rates were based on the RP-2014 Combined Mortality Table for Males and Females with adjustments for mortality improvements based on Scale MP-2018.

Change in Assumptions

The total pension liability reflects a decrease of approximately \$1.8 million as a result of changes actuarial assumptions for the Plan year ended June 30, 2019. The mortality table was changed from RP-2014 mortality table generationally projected with Scale MP-2017 to the RP-2014 mortality table generationally projected with Scale MP-2018 to better reflect actual and future mortality experience.

Discount Rate

The discount rate used to measure the total pension liability was 7.30%. The projection of cash flows used to determine the discount rate assumed the contributions from Plan members will be made at the current contribution rate and that contributions from PGW will be made based on the current, actuarially determined funding policy. The long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount rate remains the same as the prior valuation period.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability. The net pension liability as of June 30, 2019 is calculated using the discount rate of 7.30%, as well as the Plan's net pension liability if it were calculated using a discount rate that is 1 % lower (6.30%) or 1% higher (8.30%) than the current rate (dollar amounts in thousands):

	1%	Decrease 6.30%	Cu	rrent Rate 7.30%	1% Increase 8.30%		
Total pension liability	\$	891,597	\$	800,485	\$	724,431	
Plan fiduciary net position		553,240		553,240		553,240	
Net pension liability	\$	338,357	\$	247,245	\$	171,191	

7. SUBSEQUENT EVENTS

The Plan has evaluated subsequent events occurring after the statement of fiduciary net position through the date of December 18, 2019 which is the date the financial statements were available to be issued.

Based on this evaluation the Plan has determined no subsequent event has occurred which requires disclosure in the financial statements.



City of Philadelphia Gas Works Retirement Reserve Fund Schedule of Net Pension Liability (Dollars in Thousands) June 30, 2019

Net pension liability for Plan year ended June 30, 2019 is reflected below (dollar amounts expressed in thousands). The 2014 Plan year is the first year this information has been made available. This information will be given prospectively for future Plan years.

	Actuarial Valuation									
	2019	2018		2017		2016		2015		2014
Total pension liability										
Service cost	\$ 6,554	\$ 6,103	\$	5,823	\$	5,400	\$	4,890	\$	8,924
Interest cost	57,240	55,718		55,443		55,903		52,377		47,098
Change in benefit terms	-	-		-		-		-		-
Differences between expected and actual experience	(12,089)	15,706		2,182		(8,841)		17,960		59,326
Changes in assumptions	(1,834)	(3,864)		(7,952)		26,748		44,877		-
Benefit payments	(53,893)	(52,627)		(51,376)	_	(50,447)	_	(46,917)		(42,913)
Net change in total pension liability	(4,022)	21,036		4,120		28,763		73,187		72,435
Total pension liability, beginning	804,507	783,471		779,351	_	750,588	_	677,401		604,966
Total pension liability, ending	\$ 800,485	\$ 804,507	\$	783,471	\$	779,351	\$	750,588	\$	677,401
Plan fiduciary net position										
Contributions - employer	28,570	29,143		27,918		21,123		21,106		24,934
Contributions - employee	1,249	1,078		852		602		393		239
Net investment income	34,260	44,310		61,002		2,872		24,472		75,303
Benefit payments	(53,893)	(52,627)		(51,376)		(50,446)		(46,917)		(42,913)
Administrative expense	(192)	(184)		(129)		(1,611)		(1,480)		(732)
Other				_	_		_			-
Net change in fiduciary net position	9,994	21,720		38,267		(27,460)		(2,426)		56,831
Plan fiduciary net position, beginning	543,246	521,526		483,259	_	510,719	_	513,145		456,314
Plan fiduciary net position, ending	\$ 553,240	\$ 543,246	\$	521,526	\$	483,259	\$	510,719	\$	513,145
Net pension liability, ending	\$ 247,245	\$ 261,261	\$	261,945	\$	296,092	\$	239,869	\$	164,256

Actuarial Valuation Date Year Ended June 30,	Total Pension Liability		E	Covered imployer iyroll (000)	Net Pension Liability as a Percentage of Payroll
2014	\$	677,401	\$	103,530	158.66%
2015	•	750,588	•	95,187	252.00%
2016		779,351		90,860	325.88%
2017		783,471		94,768	276.41%
2018		804,507		101,271	257.98%
2019		800,485		98,454	251.13%

City of Philadelphia Gas Works Retirement Reserve Fund Schedule of Employer Contributions as a Percentage of Covered Payroll and Investment Returns Ten Years Ended June 30, 2019

Employer Contributions as a Percentage of Covered Payroll

Year Ended June 30,	Annual Required Contribution (000)		Covered Payroll (000)		Contribution as a Percentage of Covered Payroll	
2040	Φ	22.000	Φ	100 105	04.770/	
2010	\$	23,099	\$	106,125	21.77%	
2011		22,936		106,308	21.58%	
2012		23,802		106,308	22.39%	
2013		23,673		105,985	22.34%	
2014		24,385		103,530	23.55%	
2015		21,526		95,187	22.61%	
2016		26,476		90,860	29.14%	
2017		29,260		94,768	30.88%	
2018		28,395		101,271	28.04%	
2019		28,797		98,454	29.25%	

Investment Returns

The 2014 Plan year is the first year this information has been made available. This information will be given prospectively for future Plan years.

_	2014	2015	2016	2017	2018	2019
Annual money-weighted rate of return, net of investment expense	16.76%	4.33%	0.58%	13.04%	8.89%	6.73%

City of Philadelphia Gas Works Retirement Reserve Fund Notes to Required Supplementary Information Year Ended June 30, 2019

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date June 30, 2019

Actuarial cost method Projected unit credit

Amortization method Contributions based on greater of 20-year level

dollar open amortization method and 30-year level

dollar closed amortization method

Asset valuation method Assets smoothed over a 5 year period

Salary increase 4.5% for current and subsequent years

General inflation 2%

Investment rate of return 7.30%

Cost of living N/A

Mortality rates RP-2014 static Mortality generationally projected

with Scale MP-2018

Discount Rate 7.30%



REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors, City of Philadelphia Gas Works Retirement Reserve Fund:

We have audited, in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of City of Philadelphia Gas Works Retirement Reserve Fund which comprise the statement of fiduciary net position as of June 30, 2019, and the related statement of changes in fiduciary net position for the year then ended and the related notes to the financial statements, and have issued our report dated December 18, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered City of Philadelphia Gas Works Retirement Reserve Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of City of Philadelphia Gas Works Retirement Reserve Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of City of Philadelphia Gas Works Retirement Reserve Fund's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we considered to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether City of Philadelphia Gas Works Retirement Reserve Fund's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.



The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

Withum Smith + Brown, PC

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

December 18, 2019