City of Philadelphia
Philadelphia Water Department
Financial Statements
Fiscal Years Ended June 30, 2019 and 2018

CITY OF PHILADELPHIA WATER DEPARTMENT

YEAR ENDED JUNE 30, 2019 AND 2018

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The City of Philadelphia Water Department Management Discussion and Analysis

The Philadelphia Water Department is one of the City's ten operating departments and its activities are accounted for under a dedicated Water Fund established pursuant to the Philadelphia Home Rule Charter. Pursuant to the Charter, the Water Department has the power and duty to operate, maintain, repair, and improve the City's water system (the "Water System"), the City's wastewater system (the "Wastewater System") and, together, the "Water and Wastewater Systems" (or the "Combined System").

The Water Department's primary mission is to plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high-quality drinking water, to provide an adequate and reliable water supply for all household, commercial, and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater effectively.

The Water Department serves the City of Philadelphia and also provides wastewater services to ten bulk customers and water services to one bulk water customer. The Water Department operates three drinking water plants which have the capacity to treat and deliver about 546 million gallons per day of top quality drinking water that meets or exceeds all federal, state, and local regulations. Additionally, it operates three water pollution control plants that have the capacity to treat over 1 billion gallons of wastewater per day at a level that meets or exceeds federal and state standards.

The operations and activities of the Water Department are accounted for with a separate set of balancing accounts that comprise the assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses. The activity of the Water Department is grouped in the financial statements into the broad category referred to as an enterprise fund (the "Water Fund"). The Water Fund is comprised of the funds and accounts established by the City under its Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended (the "General Ordinance").

2019 Financial Highlights

The Water Fund met its required coverage ratios for the year with a revenue bond coverage ratio of 1.33, a coverage ratio of 1.18 for total debt service and certain other transfers and expenditures, and a net operating revenue bond coverage ratio of 1.31 prior to the inclusion of the transfer from the Rate Stabilization Fund.

At the end of the current fiscal year, the Water Fund's net position totaled $822 million resulting from an excess of its assets and deferred outflows of resources over its liabilities and deferred inflows of resources; its unrestricted net position showed a deficit of $373 million. This deficiency will have to be funded from resources generated in future years.

The Water Fund's net position showed a $35 million increase during the current fiscal year compared with the prior fiscal year.

Overview of the Financial Statements

This section serves as an introduction to the Basic Financial Statements. It represents management's examination and analysis of the Water Fund's financial condition and performance.

The Financial Statements report information about the Water Fund using the Full Accrual Accounting method as used by similar business activities in the private sector. The Water Fund's basic financial statements include the Statements of Net Position, Statements of Revenues, Expenses, and Changes in Net Position, Statements of Cash Flows, and Notes to the Financial Statements.

The financial statements are prepared in accordance with accounting principles promulgated by the Governmental Accounting Standards Board ("GASB").

> **Statement of Net Position:** The statement of net position presents the financial position of the Water Fund. It presents information on the assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference between them reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Water Fund is improving or deteriorating.

> **Statement of Revenues, Expenses, and Changes in Net Position:** The statement of revenues, expenses, and changes in net position presents information showing how the net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Revenues are recognized when earned, not when they are received. Expenses are recognized when incurred, not when they are paid. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g. salaries and wages payable).

> **Statement of Cash Flows:** The statement of cash flows presents information on the effects changes in assets, liabilities, and operations have on cash during the course of the fiscal year.

The Water Fund's financial statements can be found following the Management Discussion and Analysis. The notes provide additional information that is essential to a full understanding of the data provided in the Water Fund financial statements. In addition to the basic financial statements and accompanying notes, government accounting standards require presentation of required supplementary information ("RSI"). Following the RSI, the Fund has presented other supplementary information ("OSI").

Please see the Comprehensive Annual Financial Report of the City of Philadelphia for complete financial information for the City and its component units, which can be found at http://www.phila.gov/investor/CAFR.html.

Financial Analysis

Net Position

A three year condensed summary of the Water Fund's net position as of June 30 of each year follows:

Condensed Statement of Net Position
(Thousands of Dollars)
June 30

	2019	2018 *	2017
Assets:			
Current Assets	$ 284,260	$ 267,446	$ 258,444
Capital Assets	2,655,300	2,487,889	2,318,410
Restricted Assets	749,096	685,404	887,924
Total Assets	3,688,656	3,440,739	3,464,778
Deferred Outflows of Resources	69,542	84,100	94,211
Total Assets and Deferred Outflows	3,758,198	3,524,839	3,558,989
Liabilities:			
Current Liabilities *	240,323	223,523	240,464
Bonds Payable	2,070,390	1,890,590	2,022,636
Other Noncurrent Liabilities *	609,514	615,952	483,646
Total Liabilities	2,920,227	2,730,065	2,746,746
Deferred Inflows of Resources	15,887	8,133	2,144
Total Liabilities and Deferred Inflows	2,936,114	2,738,198	2,748,890
Net Position:			
Net Investment in Capital Assets	649,536	687,482	542,042
Restricted	545,506	478,940	511,113
Unrestricted Deficit	(372,958)	(379,781)	(243,056)
Total Net Position, as Restated	$ 822,084	$ 786,641	$ 810,099

* The fiscal year 2018 current portion of compensated absences has been reclassified from Other Noncurrent Liabilities to Current Liabilities.

The Water Fund's net position at June 30, 2019 was approximately $822 million, a $35.4 million or 4.5% increase from June 30, 2018. Total assets and deferred outflows of resources increased by $233.3 million, or 6.6%, to $3.8 billion, and total liabilities and deferred inflows of resources increased $197.9 million, or 7.2%, to $2.9 billion.

The following is a discussion of the more significant changes in assets and deferred outflows of resources, liabilities and deferred inflows of resources, and net position in fiscal year 2019:

- Current assets increased by $16.8 million to $284.3 million, or 6.3%, due to increases in Equity in Treasurer's account and accounts receivable.

- Restricted assets increased by $63.7 million to $749.1 million, or 9.3%, due to increases in the Water Capital Fund.

- Deferred outflows of resources decreased by $14.6 million to $69.5 million, or 17.3%, due to deferred outflows of resources related to unamortized loss on refunded debt and the Water Fund's net pension liability which was partially offset by Net OPEB liability.
- Current liabilities increased by $16.8 million to $240.3 million, or 7.5%, primarily due increases construction contracts payable and accrued expenses.
- Bonds payable increased by $179.8 million to $2.1 billion, or 9.5%, primarily due to additional debt issuance.
- Other noncurrent liabilities decreased by $6.4 million to $609.5 million, or 1.0%, primarily due to minor changes net pension and OBEP liability.
- Deferred inflows of resources increased by $7.8 million due to deferred inflows of resources related to the net other postemployment benefits.
- The Water Fund's net position increased by $35.4 million to $822.1 million, or 4.5%, as a result of fiscal year 2019 operations and prior period adjustments.
- Net investment in capital assets decreased by $37.9 million, or 5.5%, to $649.5 million.
- Unrestricted net position deficit decreased by $6.8 million, or 1.8%, to a deficit of $373.0 million. The unrestricted component of net position represents the net amount of total assets, deferred outflows of resources, total liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or restricted components of net position.

Changes in Net Position

A condensed summary of the Water Fund's Statement of Revenues, Expenses, and Changes in Net Position for the years ended June 30 is presented as follows:

Condensed Statement of Revenues, Expenses, and Changes in Net Position
(Thousands of Dollars)
Year Ended June 30

	2019	2018	2017
Operating Revenues:			
Charges for Goods and Services	$723,373	$ 713,730	$ 702,059
Miscellaneous Operating Revenues	13,001	12,642	12,607
Operating Grants	698	570	1,283
Total Operating Revenues	746,072	726,942	715,949
Operating Expenses:			
Operating Expenses excluding Depreciation and Amortization	455,611	439,972	413,339
Depreciation and Amortization	124,315	101,847	105,208
Total Operating Expenses	579,926	541,819	518,547
Operating Income	166,146	185,123	197,402
Nonoperating Revenues (Expenses):			
Federal, State and Local Grants	-	1,647	-
Interest Income	24,054	10,865	7,626
Debt Service – Interest	(74,742)	(70,136)	(66,295)
Other Expenses	(31,110)	(19,117)	(16,909)
Total Nonoperating Revenues (Expenses)	(81,798)	(76,741)	(75,578)
Increase in Net Position before Transfers	84,348	108,382	121,824
Transfers Out	(39,917)	(33,280)	(28,483)
Capital Contributions	481	9,372	1,077
Change in Net Position	44,912	84,474	94,418
Net Position – Beginning of Period, Before Restatement	786,641	810,099	765,104
Cumulative Effect of Change in Accounting Principle - Adoption of GASB 75 and Reclassification of Expense	(9,469)	(107,932)	(49,423)
Net Position – Beginning of Period, as Restated*	777,172	702,167	715,681
Net Position – End of Period	$822,084	$ 786,641	$ 810,099

*For more information on the restatement, see Note III. 11. to the financial statements.

- Operating revenues increased by $19.1 million to $746.1 million due to an increase in charges for goods and services.
- Operating expenses increased by $38.1 million to $579.9 million due primarily to increases in personal services, purchase of services, depreciation and materials and supplies partially offset by a reduction in employee benefits, indemnities and taxes.
- Nonoperating expenses increased by $5.1 million to $81.8 million. The increase in non-operating expenses is due primarily to the debt service interest expense and other expense increases of $16.6 million, partially offset by the $13.2 million increase in interest income.

Capital Assets and Debt Administration

Capital Assets

Investment in capital assets, net of accumulated depreciation, amounted to $2.7 billion as of June 30, 2019. This represented an increase of $167.4 million, or 6.7% over the previous year's total of $2.5 billion. Capital assets consist primarily of land, infrastructure, construction in progress, buildings, and equipment. Infrastructure consists of water and wastewater transmission and distribution lines. The following is a summary of capital assets as of June 30:

Capital Asset Activity
(Thousands of Dollars)
June 30

	2019	2018	2017
Land	$ 5,919	$ 5,919	$ 5,919
Construction in Progress	666,130	523,417	354,702
Infrastructure	2,677,405	2,601,207	2,544,238
Buildings and Equipment	1,753,974	1,730,817	1,766,014
Accumulated Depreciation	(2,448,128)	(2,373,471)	(2,352,463)
Total Capital Assets, net	$2,655,300	$2,487,889	$ 2,318,410

The capital assets of 2019, 2018 and 2017 were restated for reclassifications. For more information on the 2019 restatement, see Note III. 11. to the financial statements.

Long-Term Debt

As of June 30, 2019, the Water Fund had $2.7 billion of noncurrent liabilities outstanding. This was an increase of $173.4 million from the prior fiscal year. The following is a summary of the noncurrent liability outstanding as of June 30:

Noncurrent Liability Activity
(Thousands of Dollars)
June 30

	2019	2018	2017
Revenue Bonds - Net	$2,070,390	$1,890,590	$2,022,636
Derivative Instrument	-	3	356
Other Noncurrent Liabilities *	41,938	40,283	39,057
Net OPEB Liability	137,036	139,806	-
Net Pension Obligation	430,540	435,860	444,233
Total Noncurrent Liabilities	$2,679,904	$2,506,542	$2,506,282

* The fiscal year 2018 current portion of compensated absences has been reclassified from Other Noncurrent Liabilities to Other Current Liabilities.

The following details activity of debt during fiscal years 2019 and 2018:

	(Thousands of Dollars)	
	2019	2018
Long Term Bonds Outstanding	$ 2,004,181	$ 1,824,507
Current Portion	(105,372)	(102,581)
	1,898,809	1,721,926
Unamortized Bond Premium	171,581	168,643
Unamortized Swaption	-	21
Bond Payable (Net)	$ 2,070,390	$ 1,890,590

More detailed information concerning long-term debt activity and capital asset activity is disclosed in Note III. 6. and Note III. 5., respectively, of the financial statements.

Budgetary Highlights

Please see the supplementary Budgetary Comparison Schedule located in the Required Supplementary Information section.

Requests for Information

This financial report is designed to provide a general overview of the City of Philadelphia Water Department's finances for all interested parties. Questions concerning any of the information provided in this report, or requests for additional information, should be addressed to the Philadelphia Water Department, Finance Division, Attention Deputy Commissioner of Finance, 5th Floor, 1101 Market Street, Jefferson Tower, Philadelphia, Pennsylvania 19107.

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENTS OF FUND NET POSITION, JUNE 30, 2019 AND 2018

(amounts in thousands)

ASSETS	**2019**	**2018**
Current Assets:		
Cash on Deposit and on Hand	$ 30	$ 30
Equity in Treasurer's Account	112,784	102,997
Due from Other Governments	-	1,500
Accounts Receivable	167,854	158,767
Allowance for Doubtful Accounts	(12,378)	(11,489)
Inventories	15,787	15,502
Other Assets	183	139
Total Current Assets	284,260	267,446
Noncurrent Assets:		
Restricted Assets:		
Equity in Treasurer's Account	545,013	484,011
Sinking Funds and Reserves	201,367	199,833
Receivables	2,716	1,560
Total Restricted Assets	749,096	685,404
Capital Assets:		
Land	5,919	5,919
Infrastructure	2,677,405	2,601,207
Construction in Progress	666,130	523,417
Buildings and Equipment	1,753,974	1,730,817
Less: Accumulated Depreciation	(2,448,128)	(2,373,471)
Total Capital Assets, Net	2,655,300	2,487,889
Total Noncurrent Assets	3,404,396	3,173,293
Total Assets	**3,688,656**	**3,440,739**
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred Outflow - Fin. Instruments	-	3
Deferred Outflow - Net Pension Liability	15,957	24,543
Deferred Outflow - Net OPEB Liability	10,989	7,240
Unamortized Loss - Refunded Debt	42,596	52,314
Total Deferred Outflows	**69,542**	**84,100**
LIABILITIES		
Current Liabilities:		
Vouchers Payable	7,090	5,788
Accounts Payable	12,619	10,758
Due to Other Funds	4,709	5,299
Salaries & Wages Payable	3,547	4,580
Construction Contracts Payable	58,190	48,729
Due to Other Components Units	292	1,668
Accrued Expenses	34,653	30,046
Funds Held in Escrow	1,667	1,667
Unearned Revenue	10,738	11,193
Bonds Payable - Current	105,372	102,581
Other Current Liabilities *	1,446	1,214
Total Current Liabilities	240,323	223,523
Derivative Instrument Liability	-	3
Net OPEB Liability	137,036	139,806
Net Pension Liability	430,540	435,860
Noncurrent Liabilities:		
Bonds Payable	1,898,809	1,721,912
Unamortized Premium/(Discount and Loss)	171,581	168,678
Other Noncurrent Liabilities *	41,938	40,283
Total Noncurrent Liabilities	2,112,328	1,930,873
Total Liabilities	**2,920,227**	**2,730,065**
DEFERRED INFLOWS OF RESOURCES:		
Deferred Inflows - Net Pension Liability	542	1,336
Deferred Inflows - Net OPEB Liability	15,345	6,797
Total Deferred Inflows	**15,887**	**8,133**
NET POSITION		
Net Investment in Capital Assets	649,536	687,482
Restricted For:		
Capital Projects	163,690	99,230
Debt Service	201,367	200,225
Rate Stabilization	180,449	179,485
Unrestricted	(372,958)	(379,781)
Total Net Position	**$ 822,084**	**$ 786,641**

* The fiscal year 2018 current portion of compensated absences has been reclassified from Other Noncurrent Liabilities to Other Current Liabilities.

The notes to the financial statements are an integral part of these statements.

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
FOR FISCAL YEAR ENDED JUNE 30, 2019 AND 2018

(amounts in thousands)

	2019	2018
Operating Revenues:		
Charges for Goods and Services	$ 732,373	$ 713,730
Operating Grants	698	570
Miscellaneous Operating Revenues	13,001	12,642
Total Operating Revenues	746,072	726,942
Operating Expenses:		
Personal Services	142,914	139,566
Purchase of Services	128,587	111,777
Materials and Supplies	38,709	37,471
Employee Benefits	141,799	144,815
Indemnities and Taxes	3,602	6,343
Depreciation	124,315	101,847
Total Operating Expenses	579,926	541,819
Operating Income (Loss)	166,146	185,123
Non-Operating Revenues (Expenses):		
Federal, State, & Local Grants	-	1,647
Interest Income	24,054	10,865
Debt Service - Interest	(74,742)	(70,136)
Other Revenue (Expenses)	(31,110)	(19,117)
Total Non-Operating Revenue (Expenses)	(81,798)	(76,741)
Income (Loss) Before Contributions & Transfers	84,348	108,382
Transfers In/(Out)	(39,917)	(33,280)
Capital Contributions	481	9,372
Change in Net Position	44,912	84,474
Net Position - July 1	786,641	810,099
Reclassification of Expense	(9,469)	(107,932)
Net Position Adjusted - July 1	777,172	702,167
Net Position - June 30	**$ 822,084**	**$ 786,641**

The notes to the financial statements are an integral part of these statements.

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENTS OF CASH FLOWS
FOR FISCAL YEAR ENDED JUNE 30, 2019 AND 2018

(amounts in thousands)

	2019	2018
Cash Flows from Operating Activities		
Receipts from Customers	$ 736,722	$ 728,606
Payments to Suppliers	(169,084)	(155,723)
Payments to Employees	(276,673)	(270,613)
Claims Paid	(3,816)	(6,343)
Net Cash Provided (Used)	**287,149**	**295,927**
Cash Flows from Non-Capital Financing Activities		
Operating Grants Received	2,198	716
Operating Subsidies and Transfers to Other Funds	(37,378)	(33,301)
Net Cash Provided (Used)	**(35,180)**	**(32,585)**
Cash Flows from Capital & Related Financing Activities		
Proceeds from Debt Issuance	301,500	1,784
Acquisition and Construction of Capital Assets	(309,552)	(231,545)
Interest Paid on Debt Instruments	(88,073)	(85,749)
Principal Paid on Debt Instruments	(102,554)	(132,202)
Other Receipts (Payments)	664	296
Net Cash Provided (Used)	**(198,015)**	**(447,416)**
Cash Flows from Investing Activities		
Interest and Dividends on Investments	16,836	8,136
Net Cash Provided (Used)	16,836	8,136
Net Increase (Decrease) in Cash & Cash Equivalents	70,790	(175,938)
Cash and Cash Equivalents, July 1	587,038	762,976
Cash and Cash Equivalents, June 30	**$ 657,828**	**$ 587,038**
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	166,146	185,123
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	124,315	101,847
Change in Assets and Liabilities:		
Receivables, Net	(8,896)	(663)
Inventories	(284)	(731)
Accounts and Other Payables	(66)	2,673
Accrued Expenses	6,388	6,399
Unearned Revenue	(454)	1,279
Net Cash Provided by operating activities	**$ 287,149**	**$ 295,927**

The notes to the financial statements are an integral part of these statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Water Department have been prepared in conformity with generally accepted accounting principles ("GAAP") as applied to governmental units. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the Water Department's accounting policies are described below.

1. REPORTING ENTITY

The City of Philadelphia was founded in 1682 and was merged with the county in 1854. Since 1951 the City has been governed largely under the Philadelphia Home Rule Charter. However, in some matters, including the issuance of short-term and long-term debt, the City is governed by the laws of the Commonwealth of Pennsylvania.

The operations and activities of the Water Department are accounted for with a separate set of balancing accounts that comprise the assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses. The activity of the Water Department is grouped in the financial statements into the broad category referred to as an enterprise fund (the "Water Fund"). The Water Fund is comprised of the funds and accounts established by the City under its Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended (the "General Ordinance"),

2. FINANCIAL STATEMENTS

The Water Fund's financial statements (i.e., the Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and Statement of Cash Flows) report information of all Water Fund activities.

The Statement of Revenues, Expenses and Changes in Net Position demonstrates the degree to which direct operating expenses are offset by operating revenues.

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS

The Water Fund, reported by the City as a major proprietary fund, accounts for the activities related to the operation of the City's water delivery and sewage systems. The Water Fund's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred regardless of the timing of related cash flows. Grants and similar items are recognized as revenues as soon as all eligibility requirements imposed by the provider have been met.

Operating revenues and expenses are distinguished from nonoperating items in the Statement of Revenues, Expenses and Changes in Net Position. Operating revenues

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's ongoing operations. The principal operating revenues of the Water Fund are charges for water and sewer service. When calculating user fees charged to customers, the Water Department includes a component for the repayment of principal on the Water Department's outstanding debt.

The Water Fund distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Fund's ongoing operations. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then unrestricted resources as they are needed.

The Water Fund's activities are used to account for operations (1) that are financed and operated in a manner similar to private business enterprises – where the intent of the government body is that costs (expenses, including depreciation) of providing goods and services to the general public on a continuous basis be recovered primarily through user charges or (2) where the government body has decided that periodic determination of revenues earned, expenses occurred, and/or net income is appropriate for capital maintenance, public policy, management's control of accountability, and other purposes.

The activities of the Water Fund are segregated as follows:

- The Revenue Fund is used to account for the operations of the water and wastewater systems.
- The Revenue Bond Sinking Fund is used to account for the payment of interest of the outstanding revenue bonds.
- The Debt Reserve Fund account of the sinking fund is funded from the proceeds of each series of Water and Wastewater Revenue Bonds; provided, however, that if the Supplemental Ordinance authorizing a series of Water and Wastewater Revenue Bonds shall so authorize, the deposit to the Debt Reserve Account in respect of such Water and Wastewater Revenue Bonds may be accumulated from project revenues over a period of not more than three fiscal years after the issuance and delivery of such Water and Wastewater Revenue

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

Bonds. The moneys and investments in the Debt Reserve Account are held and maintained in an amount equal at all times to the Debt Reserve Requirement. If at any time the moneys in the Debt Service Account of the Sinking Fund shall be insufficient to pay as and when due the principal of (and premium, if any) or interest on any Water and Wastewater Revenue Bonds or other obligations payable from the Debt Service Account (including obligations arising in connection with Qualified Swap Agreements and Credit Facilities), the fiscal agent is required to pay over from the Debt Reserve Account the amount of such deficiency for deposit in the Debt Service Account. With respect to any issue of Water and Wastewater Revenue Bonds, in lieu of the required deposit into the Debt Reserve Account, the City may cause to be deposited into the Debt Reserve Account a surety bond, an insurance policy or an irrevocable letter of credit meeting the requirements of the General Ordinance and the Bond Committee Determination relating to such issue.

The Debt Reserve Account Amendment authorizes (i) the Director of Finance to apply moneys currently on deposit in the Debt Reserve Account to purchase a surety bond or insurance policy complying with the terms of the General Ordinance (described below), (ii) the transfer of the resulting excess moneys in the Debt Reserve Fund to the Revenue Fund and from there, upon compliance with the provisions of the General Ordinance to a new account in the Residual Fund called the Special Water Infrastructure Account and (iii) the application of the moneys deposited in the Special Water Infrastructure Account to the cost of certain renewals, replacements and improvements to the water and wastewater systems described in the Debt Reserve Account Amendment.

- The Rate Stabilization Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain assets to be drawn down to offset future deficits (and corresponding rate increase requirements) in the Water Fund.

  During Fiscal 2019, the Fund had the following activity:

Balance at July 1, 2018	$179,403,369
Transfer to Revenue Fund	(4,321,032)
Interest Earnings	5,367,028
Balance at June 30, 2019	$180,449,365

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

During Fiscal 2018, the Fund had the following activity:

Balance at July 1, 2017	$202,108,361
Transfer to Revenue Fund	(24,629,566)
Interest Earnings	1,924,574
Balance at June 30, 2018	$179,403,369

- The Residual Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The Residual Fund is the last Fund into which Project Revenues are transferred from the Revenue Fund. Money in the Residual Fund may be used to pay Operating Expenses or debt service, or other purpose to support the System. In addition, money in the Residual Fund is used transfer to the annual payment to the City's general fund of an amount equal to the lesser of (i) the interest earnings for the Fiscal Year on the Debt Reserve Account and Subordinated Bond Fund (less amounts subject to rebate) and (ii) $4.994 million.

During Fiscal 2019, the Fund had the following activity:

Balance at July 1, 2018	$15,440,795
Transfer from Debt Service Reserve	4,094,824
Transfer to General Fund	(4,094,824)
Investment Earnings	440,453
Balance at June 30, 2019	$15,881,248

During Fiscal 2018, the Fund had the following activity:

Balance at July 1, 2017	$15,285,705
Transfer from Debt Service Reserve	1,627,838
Transfer to General Fund	(1,627,838)
Investment Earnings	155,090
Balance at June 30, 2018	$15,440,795

4. DEPOSITS AND INVESTMENTS

The Water Fund's deposits and investments are held in segregated operating and capital accounts due to either legal requirements or operational needs. Sinking funds and reserves are maintained in segregated investment accounts to comply with reserve and other requirements of the bond covenants.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

4. DEPOSITS AND INVESTMENTS (continued)

All highly liquid investments (except for Repurchase Agreements) with a maturity of three months or less when purchased are considered to be cash equivalents.

The Water Fund reports investments at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price. The fair value of real estate investments is based on independent appraisals. Investments which do not have an established market are reported at estimated fair value.

Statutes authorize the City to invest in obligations of the Treasury, agencies, and instruments of the United States, repurchase agreements, collateralized certificates of deposit, bank acceptance or mortgage obligations, certain corporate bonds, and money market funds. The Pension Trust Fund is also authorized to invest in corporate bonds rated AA or better by Moody's Bond Ratings, common stocks, and real estate.

5. INVENTORIES

The materials and supplies inventories are valued at moving average cost.

6. CAPITAL ASSETS

Capital assets, which include property, plant, equipment and infrastructure assets, are defined by the City as assets with an initial individual cost of more than $5,000 and an estimated useful life in excess of three years. Capital assets are recorded at cost. Costs recorded do not include interest incurred as a result of financing asset acquisition or construction. Assets acquired by gift or bequest are recorded at their acquisition price at the date of the gift. Upon sale or retirement, the cost of the assets and the related accumulated depreciation, if any, are removed from the accounts. Maintenance and repair costs are charged to operations.

The Water Fund uses "substantially complete" as the determining basis for transferring Construction in Process to one or more of the major asset classes.

Cost of construction includes all direct contract costs plus overhead costs. Overhead costs include direct and indirect engineering costs and interest incurred during the construction period for projects financed with bond proceeds. Interest is capitalized on proprietary fund assets acquired with tax-exempt debt. The amount of interest to be capitalized is calculated by offsetting interest expense incurred from the date of the borrowing until completion of the project with interest on invested proceeds over the

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

6. CAPITAL ASSETS (continued)

same period. Capitalization of interest during construction for Fiscal Year 2019 was $10.5 million and for Fiscal Year 2018 was $7.4 million.

Depreciation on the capital assets is provided on the straight-line method over their estimated useful lives: buildings - 20 to 40 years; equipment and storage facilities - 3 to 25 years; and transmission and distribution lines - 50 years.

7. BONDS AND RELATED PREMIUMS, DISCOUNTS & ISSUANCE COSTS

Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. In FY13, GASB Statement No. 65 was implemented resulting in bond issuance costs being recognized as an expense and reported in the period incurred.

8. INSURANCE

The City, except for the Airport and certain other properties, is self-insured for most fire and casualty losses to its structures and equipment and provides statutory workers' compensation and unemployment benefits to its employees. The City is self-insured for medical benefits provided to employees in the City administered health plan.

9. RECEIVABLES AND PAYABLES

Activities between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year are referred to as due to/from other funds.

Accounts receivable included in current assets consists of billed and unbilled fees, which have been earned but not collected as of June 30, 2019 and 2018. Credit balance accounts have been included in unearned revenue in the statement of net position. The allowance for doubtful accounts is management's estimate of the amount of accounts receivable which will be deemed to be uncollectible and is based upon specific identification. Unpaid accounts are referred to the City's Law Department if deemed uncollectible. Accounts are written off when recommended by the Law Department.

As of June 30, 2019 and 2018, the allowance for doubtful accounts was $12,378,155 and $11,489,296, respectively.

10. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION

In accordance with GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, the Water Fund reports deferred outflows of resources in the Statement of Financial Position in a separate section following Assets. Similarly, the Water Fund reports deferred inflows of resources in the Statement of Net Position in a separate section following Liabilities.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

10. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION (continued)

Deferred outflows of resources represents consumption of net position that applies to a future period(s) and will not be recognized as an expense until that time. Deferred inflows of resources represents an acquisition of net position that applies to future periods and will not be recognized as revenue until that time.

On the full accrual basis of accounting, the Water Fund has three items that qualify for reporting as deferred outflows of resources and deferred inflows of resources:

- Derivative instruments are reported for the changes in fair value.
- Deferred refunding results from the difference in the refunding of debt and its reacquisition price.
- Deferred pension and OPEB transactions are recognized as expenses or revenues in a future period. Deferred outflows and inflows of resources related to pensions are discussed in Note IV. 1 and OPEB is discussed in Note IV.3.

11. COMPENSATED ABSENCES

It is the City's policy to allow employees to accumulate earned but unused vacation benefits. Vacation pay is accrued when earned in the financial statements. Sick leave balances are not accrued in the financial statements because sick leave rights are non-vesting.

The Water Fund's employees' total vacation time accrued under Other Current Liabilities in Fiscal Years 2019 and 2018 was $1.4 million and $1.2 million, respectively. The long-term portion reported in Other Noncurrent Liabilities on the Statement of Net Position in Fiscal Years 2019 and 2018 was $13.0 million and $10.9 million, respectively.

12. CLAIMS AND JUDGMENTS

Pending claims and judgments are recorded as expenses in the financial statements when the City solicitor has deemed that a probable loss to the Water Fund has occurred.

13. UNEARNED REVENUE

GASB Statement No. 65 prohibits the usage of the term "deferred" on any line items other than deferred inflows or outflows. Therefore, the term "Deferred Revenue" has been replaced by "Unearned Revenue". Unearned revenues in the Water Fund's financial statements represents revenue received in advance of being earned. Unearned revenues relate principally to overpaid water and sewer bills.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

14. NEW ACCOUNTING STANDARDS

Effective July 1, 2017, the City adopted **GASB issued Statement No. 75**, **Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions**. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). This Statement replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. It establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement was effective for fiscal year 2018. The City's adoption of Statement No. 75 resulted in a prior period adjustment and affects the reporting of net OPEB liabilities, deferred inflows of resources, deferred outflows of resources, and the recognition of OPEB expense in accordance with the provisions of the Statement in the Water Fund's financial statements.

In November 2016, **GASB issued Statement No. 83**, **Certain Asset Retirement Obligations**. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. The requirements of this Statement were effective for reporting periods beginning after June 15, 2018. The adoption of this Statement on July 1, 2018 did not result in any significant changes to the Water Fund's financial statements.

In January 2017, **GASB issued Statement No. 84**, **Fiduciary Activities**. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement. The Water Fund is required to adopt the provisions of GASB Statement No. 84 for its fiscal year 2020 financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

14. NEW ACCOUNTING STANDARDS (continued)

In March 2017, **GASB issued Statement No. 85, Omnibus 2017.** The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The requirements of this Statement were effective for reporting periods beginning after June 15, 2017. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In May 2017, **GASB issued Statement No. 86, Certain Debt Extinguishment Issues.** The objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources - resources other than the proceeds of refunding debt - are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In June 2017, **GASB issued Statement No. 87, Leases.** The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)
14. NEW ACCOUNTING STANDARDS (continued)

In April 2018, **GASB issued Statement No. 88**, **Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements.** The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In June 2018, **GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period.** The objectives of this Statement are to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and to simplify accounting for interest cost incurred before the end of a construction period. This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles. The requirements of this Statement are

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)
14. NEW ACCOUNTING STANDARDS (continued)

effective for reporting periods beginning after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

In August 2018**, GASB issued Statement No. 90, Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61).** The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value. For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit. This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

In May 2019, **GASB issued Statement No. 91, Conduit Debt Obligations**. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuers; establishing standards for accounting and financial reporting of additional commitments and voluntary

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

14. NEW ACCOUNTING STANDARDS (continued)

commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required debt disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

In January 2020, **GASB issued Statement No. 92, Omnibus 2020**. The primary objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following: GASB Statement No. 87, intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension or other postemployment benefit (OPEB) plans, the applicability of Statements No. 73, No. 68, and No. 74 to reporting assets accumulated for postemployment benefits, the applicability of Statement No. 84 to postemployment benefit arrangements, the measurement of liabilities and assets (if any) related to asset retirement obligations (AROs) in a government acquisition, reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers, reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature, and terminology used to refer to derivative instruments. This Statement is effective on two dates: the requirements related to the effective date of Statement No. 87, reinsurance recoveries, and terminology used to refer to derivative instruments are effective upon issuance, and the other requirements are effective for fiscal years beginning after June 15, 2020. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

15. RESTRICTED ASSETS

Restricted assets represent revenues set aside for liquidation of specific obligations as described in Note IV. 13.

16. PAYMENT TO THE CITY

In accordance with an agreement between the Finance Director and the Water Department, the Finance Director may transfer to the City's General Fund up to a limit of $4,994,000 in any fiscal year in "excess interest earnings" as defined under the General Ordinance. In Fiscal Years 2019 and 2018, excess interest earnings of $4,094,824 and $1,627,838, respectively, were transferred from the Residual Fund to the General Fund of the City.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

17. TRANSFERS FOR LONG TERM CONTRACTS

In addition to the transfer of funds to the General Fund of the City, the Water Fund had operating expenses of $32,272,755 and $29,573,198 and capital expenses of $2,897,056 and $2,079,339 in Fiscal Years 2019 and 2018, respectively, payable to the Philadelphia Municipal Authority ("PMA") under the long-term contracts described in Note IV.11 A, B, C and D.

18. ACCOUNTING 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, deferred outflows of resources, liabilities, deferred inflows of resources and net position and disclosures at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

II. LEGAL COMPLIANCE

1. BUDGETARY INFORMATION

The City's budgetary process accounts for certain transactions on a basis other than U.S. generally accepted accounting principles (GAAP). In accordance with the Philadelphia Home Rule Charter, the City has formally established budgetary accounting control for its operating and capital improvement funds.

One of the City's operating funds is the Water Fund. Included in the Water Fund is the Water Residual Fund. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as personal services; purchase of services; materials and supplies; equipment; contributions and indemnities; debt service; payments to other funds; and advances and other miscellaneous payments. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have council approval. Appropriations that are not expended or encumbered at year end are lapsed. Comparisons of budget to actual activity at the legal level of compliance are located in the Water Fund's *Budgetary Comparison Schedule (Legally Enacted Basis) – Water Operating Fund.*

During the year, classification adjustments and supplementary appropriations were necessary for City funds. Therefore, budgeted appropriation amounts presented are as originally passed and as amended by the City Council. As part of the amendment process, budget estimates of City related revenues are adjusted and submitted to City Council for review. Changes in revenue estimates are submitted in support of testimony with regard to the appropriation adjustments and do not need City Council approval. Revenue estimates are presented as originally passed and as amended.

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS

1. DEPOSITS AND INVESTMENTS

Deposits

State statutes require banks to collateralize City deposits at amounts equal to or in excess of the City's balance. Such collateral is to be held by the Federal Reserve Bank or the trust department of a commercial bank other than the pledging bank. At year end, the Water Fund's bank balances were $177.8 million and $164.3 million for 2019 and 2018, respectively.

Investments

The City has established a comprehensive investment policy that covers the Water Fund. The City's investments include all operating, capital, debt service, and debt service reserve accounts of each of the City's General Fund, Water Fund, and Aviation

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

Division. All City investments must be in compliance with applicable provisions of the City Code and City bond resolutions, as well as the City's Investment Policy. The City's Investment Policy is meant to supplement the applicable provisions of the City Code and City bond resolutions, and is reviewed and adopted by the City's Investment Committee. The City's Investment Committee consists of the Director of Finance, the City Treasurer, and a representative from the Water Department, Aviation Division, and the Philadelphia Gas Works.

As of June 30, 2019, the fair values of the Water Fund's investments consist of the following:

(Thousands of Dollars)

Classifications		Fair Value	Percent of Total
U.S. Government Securities	$	231,156	35.01%
U.S. Government Agency Securities		317,547	48.10%
Corporate Bonds		69,179	10.48%
Other Bonds and Investments		42,313	6.41%
	$	660,195	100.00%

As of June 30, 2018, the fair values of the Water Fund's investments consist of the following:

(Thousands of Dollars)

Classifications		Fair Value	Percent of Total
U.S. Government Securities	$	415,826	69.10%
U.S. Government Agency Securities		127,988	21.27%
Corporate Bonds		43,459	7.22%
Other Bonds and Investments		14,499	2.41%
	$	601,772	100.00%

Water Fund Investments - Credit Risk

The City's policy to limit credit risks by limiting the type of allowable investment, as well as the maximum percent of the portfolio for each type of investment.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

The Water Fund's investment in U.S. Government Securities (35.0%) or U.S. Government Agency obligations (48.1%) are allowable investments up to 100% of the portfolio. The U.S. Government Agency obligations must be rated AAA by Standard & Poor's Corp. (S&P) or Aaa by Moody's Investor Services. All U.S. Government Securities meet the criteria.

The Water Fund's investment in corporate bonds (10.5%) is limited to 25% of the portfolio, and had a S&P rating of AAA to AA or Moody's rating of Aa2 or better. All corporate investments meet the criteria.

Short Term Investment Pools are rated AAA by S&P and Aaa by Moody's Investor Services. The Short Term Investment Pools' amortized cost-based net asset value per share/unit is the same as the value of the pool shares. Cash accounts are swept nightly and idle cash invested in money market funds (short term investment pools).

The City limits its foreign currency risk by investing in certificates of deposit and banker's acceptances issued or endorsed by non-domestic banks that are denominated in U.S. dollars providing that the banking institution has assets of not less than $100 million and has a Thompson's Bank Watch Service "Peer Group Rating" not lower than II. At the end of the fiscal year, the City did not have any investments of that nature.

To minimize custodial credit risk, the City's policy is to select custodian banks that are members of the Federal Reserve System to hold its investments. Delivery of the applicable investment documents to the City's custodian is required for all investments.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

As of June 30, 2019, the fixed income investments of the Water Fund had the following ratings by Moody's or S&P:

Classifications	Credit Quality Rating	Percent of Investment Type
U.S Government Securities	Aaa	100%
U.S. Government Agency Securities	Aaa	100%
U.S. Government Agency Securities	AA	0%
Corporate Bonds	Aaa	24%
Corporate Bonds	Aa1	17%
Corporate Bonds	Aa2	45%
Corporate Bonds	Aa3	11%
Corporate Bonds	A1	4%
Other Bonds and Investments	Aa1	18%
Other Bonds and Investments	Aa2	68%
Other Bonds and Investments	Aaa	14%

As of June 30, 2018, the fixed income investments of the Water Fund had the following ratings by Moody's or S&P:

Classifications	Credit Quality Rating	Percent of Investment Type
U.S Government Securities	Aaa	100%
U.S. Government Agency Securities	Aaa	100%
Corporate Bonds	Aaa	50%
Corporate Bonds	Aa1	18%
Corporate Bonds	Aa2	32%
Other Bonds and Investments	Aa2	80%
Other Bonds and Investments	Aa3	20%

Interest Rate Risk

The City's investment portfolio is managed to accomplish preservation of principal, maintenance of liquidity, and to maximize the return on investments. To limit its exposure to fair value losses from rising interest rates, the City's investment policy limits fixed income investments to maturities of no longer than two years, except in Sinking Fund Reserve portfolios.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

As of June 30, 2019, the maturities of the Water Fund's fixed income investments were as follows:

(Thousands of Dollars)

Classifications	Less Than 1 Year	1 – 2 Years
U.S. Government Securities	$ 139,385	$ 91,771
U.S. Government Agency Securities	203,669	113,878
Corporate Bonds	42,316	26,863
Other Bonds and Investments	28,229	14,084
Grand Total	$ 413,599	$ 246,596

As of June 30, 2018, the maturities of the Water Fund's investments were as follows:

(Thousands of Dollars)

Classifications	Less Than 1 Year	1 – 2 Years
U.S. Government Securities	$ 315,600	$ 100,226
U.S. Government Agency Securities	89,405	38,583
Corporate Bonds	14,899	28,560
Other Bonds and Investments	11,612	2,887
Grand Total	$ 431,516	$ 170,256

Fair Value Measurement

The City measures and records its investments using fair value measurement guidelines established by U.S. generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability.
- Level 3: Unobservable inputs for assets or liabilities.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

The Water Fund has the following recurring fair value measurements as of June 30, 2019:

- U.S. Government Securities of $231.2 million are valued using quoted prices for identical securities traded in active markets (Level 1).
- U.S. Agency Securities of $317.5 million are valued using quoted prices from identical securities that are traded in active markets when sufficient activity exists (Level 2).
- Corporate Bonds of $69.2 million and other bonds and investments of $42.3 million are valued using quoted prices for similar securities in active markets and via matrix pricing models (Level 2).

Municipal Pension Fund

See Footnote IV. 1. E. PENSION PLANS Cash Deposits, Investments and Securities Lending

2. SECURITIES LENDING

A. GOVERNMENTAL FUNDS

The City Treasurer is prohibited from lending or selling City-owned securities with an agreement to buy them back after a stated period of time (City of Philadelphia – Investment Policy Section VI. Investment Restrictions).

B. PENSION TRUST FUNDS

The Board of Directors of the Municipal Pension Fund has authorized management of the Fund to participate in securities lending transactions.

See Footnote IV. 1. E. PENSION PLANS Cash Deposits, Investments and Securities Lending.

3. AMOUNTS HELD BY FISCAL AGENT

Under Section 4.02 of the General Bond Ordinance, which authorizes the issuance of Water and Wastewater Revenue Bonds, the City pledges and assigns to the Fiscal Agent, for the security and payment of all Water and Wastewater Revenue Bonds issued under the General Ordinance, a lien on and security interest in all Project Revenues and amounts on deposit in or standing to the credit of the: 1) Revenue Fund; 2) Sinking Fund et.al.; 3) Subordinated Bond Fund; 4) Rate Stabilization Fund;

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

3. AMOUNTS HELD BY FISCAL AGENT (continued)

5) Residual Fund; and 6) Construction Fund and all of the accounts established therein. The Fiscal Agent shall hold and apply the security interest so granted in trust for the holders of Water and Wastewater Revenue Bonds, excluding Subordinate Bonds, without preference, priority, or distinction; provided however, that the pledge of General Bond Ordinance may also be for the benefit of a credit facility and qualified swap, or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price and interest on any series of Water and Wastewater Revenue Bonds (other than subordinated bonds), on an equal and ratable basis with Water and Wastewater Revenue Bonds, to the extent provided by any Supplemental Ordinance or Determination. The purpose for the debt secured by the pledge can be found in Note III. 6. to the financial statements.

The following chart displays information related to the pledge as of June 30, 2019:

	Water and Wastewater Revenue Bonds
Pledged Revenue Required for Principal and Interest Payments	$3,545.4 million
Term of Pledge	2054
Percentage of Revenue Pledged	100%
Current Year Pledged Revenue	$746 million
Current Year Principal and Interest Paid	$180.1 million
Current Year Transfers to Escrow	$0

The following chart displays information related to the pledge as of June 30, 2018:

	Water and Wastewater Revenue Bonds
Pledged Revenue Required for Principal and Interest Payments	$3,076.4 million
Term of Pledge	2053
Percentage of Revenue Pledged	100%
Current Year Pledged Revenue	$726 million
Current Year Principal and Interest Paid	$218.5 million
Current Year Transfers to Escrow	$19.0 million

4. INTERFUND PAYABLES

A. Primary Government

Interfund receivable and payable balances among Water and City Funds at year-end are the result of the time lag between the dates that interfund goods and services are

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

4. INTERFUND PAYABLES (continued)

provided, the date the transactions are recorded in the accounting system and the date payments between funds are made. All balances are expected to be settled during the subsequent year.

Interfund receivable and payable balances at June 30, 2019 are as follows:

(Amounts in Thousands)

	Interfund Receivables Due to:				
		Nonmajor Governmental			
	General	Special Revenue	Pension Fund	Other Funds	Total
Interfund Payables Due From:					
General	$ -	$ -	$ 91,750	$ 699	$ 92,449
Grants Revenue Fund	-	-	-	-	-
Water and Sewer Fund	-	4,709	-	-	4,709
Nonmajor Special Revenue Funds	11,752	38	-	-	11,805
Total	$ 11,752	$ 4,747	$ 91,750	$ 699	$ 108,963

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

5. CAPITAL ASSET ACTIVITY

Capital asset activity for the years ended June 30, 2019 and 2018 was as follows:

	Beginning Balance*	Additions	Dispositions	Ending Balance
Fiscal Year Ended June 30, 2019				
Capital Assets Not Being Depreciated				
Land	$ 5,919,160	$ -	$ -	$ 5,919,160
Construction in Progress	490,566,238	309,591,733	(134,027,736)	666,130,235
Total Capital Assets Not Being Depreciated	$ 496,485,398	$ 309,591,733	$ (134,027,736)	$ 672,049,395
Capital Assets Being Depreciated				
Buildings and related improvements	1,612,058,303	41,056,544	(21,325,849)	1,631,788,998
Intangible Assets	19,775,929	1,994,173	-	21,770,102
Equipment	106,551,462	17,973,499	(2,340,104)	122,184,857
Infrastructure	2,564,951,533	91,353,857	(670,000)	2,655,635,390
Total Capital Assets Being Depreciated	$ 4,303,337,227	$ 152,378,073	$ (24,335,953)	$ 4,431,379,347
Less Accumulated Depreciation For:				
Buildings and related improvements	(997,551,194)	(43,549,637)	12,753,331	(1,028,347,500)
Intangible Assets	(12,670,129)	(1,272,042)	-	(13,942,171)
Equipment	(80,511,334)	(8,792,797)	253,927	(89,050,204)
Infrastructure	(1,247,304,362)	(69,496,833)	12,620	(1,316,788,575)
Total Accumulated Depreciation	(2,338,037,019)	(123,111,309)	13,019,878	(2,448,128,450)
Total Capital Assets, Being Depreciated, Net	1,965,300,208	29,266,764	(11,316,075)	1,983,250,897
Total Capital Assets	$ 2,461,785,606	$ 338,858,497	$ (145,343,811)	$ 2,655,300,292

	Beginning Balance*	Additions	Dispositions	Ending Balance
Fiscal Year Ended June 30, 2018				
Capital Assets Not Being Depreciated				
Land	$ 5,919,160	$ -	$ -	$ 5,919,160
Construction in Progress	354,701,381	235,026,430	(66,310,882)	523,416,929
Total Capital Assets Not Being Depreciated	$ 360,620,541	$ 235,026,430	$ (66,310,882)	$ 529,336,089
Capital Assets Being Depreciated				
Buildings and related improvements	1,671,398,354	14,039,700	(61,172,379)	1,624,265,675
Intangible Assets	17,707,314	2,068,615	-	19,775,929
Equipment	94,615,621	35,855,956	(23,920,115)	106,551,462
Infrastructure	2,526,530,734	68,318,550	(13,417,979)	2,581,431,305
Total Capital Assets Being Depreciated	$ 4,310,252,023	$ 120,282,821	$ (98,510,473)	$ 4,332,024,371
Less Accumulated Depreciation For:				
Buildings and related improvements	(1,018,241,212)	(41,459,825)	53,778,475	(1,005,922,562)
Intangible Assets	(11,886,095)	(1,510,786)	726,752	(12,670,129)
Equipment	(77,451,232)	(6,727,767)	3,641,163	(80,537,836)
Infrastructure	(1,244,884,162)	(52,148,359)	22,691,645	(1,274,340,876)
Total Accumulated Depreciation	(2,352,462,701)	(101,846,737)	80,838,035	(2,373,471,403)
Total Capital Assets, Being Depreciated, Net	1,957,789,322	18,436,084	(17,672,438)	1,958,552,968
Total Capital Assets	$ 2,318,409,863	$ 253,462,514	$ (83,983,320)	$ 2,487,889,057

*Fiscal years 2019 and 2018 beginning balances have been restated; see Note III. 11. for additional information.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

5. CAPITAL ASSET ACTIVITY (continued)

Impaired Assets

Government Accounting Standards Board (GASB) Statement 42 requires the disclosure of the impairment of any major capital assets. Over the years, there have been a number of the Water Fund's assets that were either damaged or destroyed, were abandoned or became functionally obsolete.

No asset impairments occurred during fiscal years 2019 and 2018.

6. DEBT PAYABLE

(1) Governmental Debt Payable

A summary of changes in long-term debt obligations as of June 30, 2019 follows:

(In Thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Amounts Due Within One Year
Water and Sewer Revenue Bonds	$ 1,696,535	$ 345,270	$ (159,010)	$ 1,882,795	$ 97,220
Pennvest Loans	127,972	1,500	(8,086)	121,386	8,152
Unamortized Bond Premium	168,678	19,582	(16,679)	171,581	-
Derivative Instrument Liability	3	-	(3)	-	-
Net Pension Liability	435,860	3,266	(8,586)	430,540	-
Net OPEB Liability	139,806	-	(2,770)	137,036	-
Other Liabilities:					
Accrued Worker's Compensation	23,738	-	(214)	23,524	-
Accrued Legal Claims	5,614	-	(213)	5,401	-
Compensated Absences *	12,144	4,489	(2,174)	14,459	1,446
Total	$ 2,610,350	$ 374,107	$ (197,735)	$ 2,786,722	$ 106,818

* The fiscal year 2018 current portion of compensated absences has been reclassified from Other Noncurrent Liabilities to Current Liabilities.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

A summary of changes in long-term debt obligations as of June 30, 2018 follows:

(In Thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Amounts Due Within One Year
Water and Sewer Revenue Bonds	$ 1,862,120	$ 174,110	$ (339,695)	$ 1,696,535	$ 94,465
Pennvest Loans	134,796	1,784	(8,608)	127,972	8,116
Unamortized Bond Premium **	155,569	30,223	(17,114)	168,678	-
Derivative Instrument Liability	356	-	(353)	3	-
Net Pension Liability	444,233	4,766	(13,139)	435,860	-
Net OPEB Liability **	-	146,603	(6,797)	139,806	-
Other Liabilities:					
Accrued Worker's Compensation	21,553	2,185	-	23,738	-
Accrued Legal Claims	6,050	-	(436)	5,614	-
Compensated Absences *	11,454	2,730	(2,040)	12,144	1,214
Total	$ 2,636,131	$ 362,401	$ (388,182)	$ 2,610,350	$ 103,795

* The fiscal year 2018 current portion of compensated absences has been reclassified from Other Noncurrent Liabilities to Current Liabilities.

** 2018 Additions amounts have been adjusted for prior period adjustments; see Note III. 11. for additional information.

An analysis of debt service requirements to maturity on the long-term obligations follows:

(In Millions of USD)

Year Ended June 30:	Principal Requirements	Interest Requirements	Total Debt Service Requirements
2020	$ 105.4	$ 91.8	$ 197.2
2021	87.9	87.4	175.3
2022	81.7	83.4	165.1
2023	79.2	79.9	159.1
2024	53.1	76.5	129.6
2025 - 2029	289.2	348.1	637.3
2030 - 2034	292.9	283.5	576.4
2035 - 2039	303.4	218.1	521.5
2040 - 2044	364.4	134.6	499.0
2045 - 2049	197.8	58.3	256.1
2050 - 2053	149.2	17.8	167.0
	$ 2,004.2	$ 1,479.4	$ 3,483.6

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Pertinent information regarding long-term debt obligations outstanding is presented below:

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2019	June 30, 2018
1997	$78,500,000	Water and Wastewater Revenue Bonds, Variable Rate Series of 1997B, issued for various capital projects, to fund the Debt Reserve Account, and to pay the costs of issuance related to the bond issue at a variable rate.	$45,400,000	$49,400,000
1999	6,700,000	Pennsylvania Infrastructure Investment Authority Loan of 1999, issued for various capital projects. The bonds bear rates of 1.41% - 2.73%.	-	74,618
2005	83,665,000	Water and Wastewater Revenue Refunding Bonds, Variable Rate Series of 2005B, issued to defease a portion of the Series of 1995 Bonds, and to pay the costs of issuance related to the bonds. The bonds bear rates at a variable rate.	-	165,000
2009	140,000,000	Water and Wastewater Revenue Bonds, Series of 2009A, issued for various capital projects, issued to fund the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 4% - 5.75%.	-	4,615,000
2009	31,216,779	Pennsylvania Infrastructure Investment Authority Loan of 2009 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	18,229,377	19,409,742
2009	49,157,776	Pennsylvania Infrastructure Investment Authority Loan of 2009 (C), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	31,537,115	33,624,172
2009	75,744,096	Pennsylvania Infrastructure Investment Authority Loan of 2009 (D), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	49,233,978	52,615,521

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2019	June 30, 2018
2010	$28,500,000	Pennsylvania Infrastructure Investment Authority Loan of 2010 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	$22,385,626	$ 22,248,264
2010	396,460.000	Water and Wastewater Revenue Refunding Bonds, Series of 2010A, issued to defease the Series of 2003 Bonds, issued for funding a payment to terminate the Series of 2003 Swap Agreement, funding the required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 2.00% - 5.00%.	-	35,760,000
2010	185,000,000	Water and Wastewater Revenue Bonds, Series of 2010C, issued for funding a payment to terminate the Series of 2007 Swap Agreement, fund the required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 3.00% - 5.00%.	7,350,000	61,970,000
2011	184,855,000	Water and Wastewater Revenue Bonds, Series of 2011A, and Water and Wastewater Revenue Refunding Bonds, Series of 2011B, issued for partially defeasing the Series of 2001A and Series of 2007A Bonds, for various capital projects, for funding of capitalized interest, for financing any required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the cost of issuance. The bonds bear rates of 4.00% - 5.00%.	155,750,000	172,015,000
2012	70,370,000	Water and Wastewater Revenue Refunding Bonds, Series of 2012, issued for defeasing the Series of 2001A and 2001B Bonds and to pay the cost of issuance. The bonds bear rates of 1.00% - 5.00%.	34,400,000	38,785,000

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2019	June 30, 2018
2013	$170,000,000	Water and Wastewater Revenue Bonds, Series of 2013A, issued to finance capital improvements, finance a deposit to the Debt Reserve Account, and to pay the cost of issuance. The bonds bear rates of 3.00% to 5.125%.	$159,725,000	$ 163,150,000
2014	123,170,000	Water and Wastewater Revenue Bonds, Series of 2014A, issued to advance refund a portion of the Series of 2005A Bonds, to finance capital improvements, finance a deposit to the Debt Reserve Account, and to pay the cost of issuance. The bonds bear rates of 3.00% to 5.00%.	104,500,000	110,975,000
2015	417,560,000	Water and Wastewater Revenue Bonds, Series of 2015A and 2015B, issued to finance capital improvements, finance a deposit to the Debt Reserve Account, current refund a portion of the Series of 2005 A Bonds, advance refund a portion of the Series of 2007A Bonds, and pay the cost of issuance The bonds bear rates of 3.45% to 5.00%.	417,560,000	417,560,000
2016	192,680,000	Water and Wastewater Revenue Refunding Bonds, Series 2016A issued to finance (i) the advance refunding of portions of the City's outstanding (a) Water and Wastewater Revenue Refunding Bonds, Series 2007A, (b) Water and Wastewater Revenue Bonds, Series 2009A, and (c) Water and Wastewater Revenue Bonds, Series 2010C, and (ii) the costs of issuance relating to the bonds. The bonds bear rates of 3.00% to 5.00%.	181,770,000	191,070,000

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2019	June 30, 2018
2017	$279,865,000	Water and Wastewater Revenue Bonds, Series 2017A issued to finance (i) capital improvements to the City's Water and Wastewater Systems, (ii) a deposit to the Debt Reserve Account of the Sinking Fund and (iii) the costs of issuance relating to the Bonds. The bonds bear interest rates of 5.00% to 5.25%.	$259,865,000	$279,865,000
2017	174,110,000	Water and Wastewater Revenue Refunding Bonds, Series 2017B issued to finance (i) the refunding of portions of the City's outstanding (a) Water and Wastewater Revenue Refunding Bonds, Series 2007B, (b) portions of Water and Wastewater Revenue Bonds, Series 2010C, and (c) portions of Water and Wastewater Revenue Bonds, Series 2012, and (ii) the costs of issuance relating to the bonds. The bonds bear interest rates of 2.00% to 5.00%.	171,205,000	171,205,000
2018	276,935,000	Water and Wastewater Revenue Bonds, Series 2018A issued to provide funds which, together with other available funds of the City, will be used to finance (i) capital improvements to the City's Water and Wastewater Systems and (ii) the costs of issuance relating to the bonds. The bonds bear an interest rate of 5.00%.	276,935,000	-
2019	68,335,000	Waste and Wastewater Revenue Refunding Bonds, Series 2019A, issued to finance (i) the refunding of all or a portion of the City's outstanding Water and Wastewater Revenue Bonds, Series 2010C and portions of Water and Wastewater Revenue Refunding Bonds, Series 2011B and Series 2012 and (ii) for the costs of issuance relating to the bonds. The Bonds bear interest rates of 2.826% to 4.099%. The transaction resulted in a total savings of $3.9 million over the next 22 years; the economic gain was $2.9 million.	68,335,000	-
		Totals	$2,004,181,096	$1,824,507,317

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

(2) Pennvest Loans

In July 2010, the Water Department received approval from the Pennsylvania Infrastructure Investment Authority ("PENNVEST") for the Green Infrastructure Project (Series 2010B) bringing the total financing from PENNVEST to $214.9 million. During fiscal year 2019 and 2018, PENNVEST drawdowns totaled $1,500,000 and $1,783,849, respectively, which represent an increase in bond issuances. The funding is through low interest loans evidenced by and payables secured on a parity basis with water and wastewater revenue bonds which bear interest of 1.193% during the construction period and for the first five years of amortization (interest only payments are due during the construction period up to three years) and 2.107% for the remaining fifteen years.

Individual loan information, by series of bonds, as of June 30, 2019 is as follows:

Date	Series	Maximum Loan Amount	Amount Received through 6/30/19	Current Balance Outstanding 6/30/19
October 2009	2009B	$ 42,886,030	$31,216,779	$18,229,377
October 2009	2009C	57,268,193	49,157,776	31,537,115
March 2010	2009D	84,759,263	75,744,096	49,233,978
July 2010	2010B	30,000,000	30,000,000	22,385,626
	Totals	$214,913,486	$186,118,651	$121,386,096

Individual loan information, by series of bonds, as of June 30, 2018 is as follows:

Date	Series	Maximum Loan Amount	Amount Received through 6/30/18	Current Balance Outstanding 6/30/18
October 2009	2009B	$ 42,886,030	$ 31,216,779	$19,409,742
October 2009	2009C	57,268,193	49,157,776	33,624,172
March 2010	2009D	84,759,263	75,744,096	52,615,521
July 2010	2010B	30,000,000	28,500,000	22,248,264
	Totals	$214,913,486	$184,618,651	$127,897,699

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

The purposes of the loans are:

a. 2009B – Water Plant Improvements
b. 2009C – Water Main Replacements
c. 2009D – Sewer Projects
d. 2010B – Green Infrastructure Project

(3) Defeased Debt

As of the current fiscal year-end, the Water Fund defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on the old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the Water Fund's financial statements. As of June 30, 2019 and 2018, $148.7 million and $211.0 million of bonds outstanding are considered defeased, respectively.

(4) Arbitrage Liability

The City has its Water and Wastewater Revenue Bonds subject to federal arbitrage requirements. Federal tax legislation requires that the accumulated net excess of interest income on the proceeds of these issues over interest expense paid on the bonds be paid to the federal government at the end of a five-year period. At June 30, 2019 and 2018, the City had no arbitrage liability.

(5) Derivative Instrument

Beginning in fiscal year 2010, the City adopted the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. The fair value balances and notional amounts of the derivative instrument outstanding at June 30, 2019 and 2018 follow:

City of Philadelphia, 2005 Water & Sewer Swap

Objective: In December 2002, the City entered into a swaption that provided the City with an up-front payment of $4.0 million. As a synthetic refunding of all or a portion of its 1995 Bonds, this payment approximated the present value savings, as of December 2002, of a refunding on May 4, 2005. The swaption gave Citigroup (formerly of Salomon Brothers Holding Company, Inc.), the option to enter into an interest rate swap to receive fixed amounts and pay variable amounts.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

Terms: Citigroup exercised its option to enter into a swap May 4, 2005, and the swap commenced on that date. Under the terms of the swap, the City pays a fixed rate of 4.53% and receives a variable payment computed as the actual bond rate or the alternatively, 68.5% of one-month LIBOR, in the event the average rate on the Bonds as a percentage of the average of one-month LIBOR has exceeded 68.5% for a period of more than 180 days. Citigroup is currently paying 68.5% of one-month LIBOR under the swap. The payments are based on an amortizing notional schedule (with an initial notional amount of $86.1 million), and when added to an assumption for remarketing, liquidity costs and cost of issuance expected to approximate the debt service of the refunded bonds at the time the swaption was entered into.

In May 2013, the City and Water Department converted the original variable rate bonds associated with the swap to an index-based rate, terminating the existing letter of credit in the process.

As of June 29, 2018, the swap had a notional amount of $165,000 and the associated variable-rate bond had a $165,000 principal amount. The bonds' variable-rate coupons are based on the same index as the receipt on the swap. The bonds matured on August 1, 2018 and the related swap agreement terminated on August 1, 2018.

Fair value: As of June 29, 2018, the swap had a negative fair value of $2,676. This means that the Water Department would have had to pay this amount if the swap terminated. The fair value reflects the effect of non-performance risk, which includes credit risk. The fair value of the swap was measured using the income approach and is categorized within Level 2 of the fair value hierarchy.

Risk: As of June 29, 2018, the City is not exposed to credit risk because the swap had a negative fair value. Should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. Since the City is now receiving 68.5% of one-month LIBOR and paying 68.5% of one-month LIBOR plus a fixed spread, the City is no longer exposed to basis risk or tax risk. The swap includes an additional termination event based on credit ratings. The swap may be terminated by the City if the ratings of Citigroup or its Credit Support Provider fall below A3 and A-, or by Citigroup if the rating of the City's water and wastewater revenue bonds falls below A3 or A-. There are 30-day cure periods to these termination events. However, because the City's swap payments are insured by Assured Guaranty Municipal Corporation (formerly FSA), no termination event based on the City's water and wastewater revenue bond ratings can occur as long as Assured is rated at least A or A2.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

As of June 29, 2018, rates were as follows:

Terms	Rates	
Interest Rate Swap		
Fixed payment to Citi	Fixed	4.53000%
Variable rate payment from Citi	68.5% of 1-month LIBOR	-1.43182%
Net interest rate swap payments		3.09818%
Variable rate note coupon payments	68.5% of 1-month LIBOR + fixed spread	1.43182% *
Synthetic interest rate on bonds		4.53000%

**Excludes fixed spread, which is similar to the City's expected Letter of Credit costs on a comparable variable rate bond*

7. PENSION SERVICE AGREEMENT

In Fiscal 1999, the Philadelphia Authority for Industrial Development issued $1.3 billion in Pension Funding Bonds. These bonds were issued pursuant to the provisions of the Pennsylvania Economic Development Financing Law and the Municipal Pension Plan Funding Standard and Recovery Act (Act 205). The bonds are special and limited obligations of PAID. The City entered into a Service Agreement with PAID agreeing to make yearly payments equal to the debt service on the bonds. PAID assigned its interest in the service agreement to the parties providing the financing and in accordance with GASB Interpretation #2, PAID treats this as conduit debt and does not include conduit debt transactions in its financial statements. The Pension Service Agreement of $1.4 billion is reflected in the City's financial statements in Other Long-Term Obligations. The net proceeds of the bond sale of $1.3 billion were deposited with the Municipal Pension Fund. The deposit of the proceeds reduced the Unfunded Actuarial Accrued Liability by that same amount. The deposit resulted in reductions to the City's actuarially determined pension plan payments. The fiscal year 2019 Pension Funding Bonds liability of $772.3 million is reflected in the City's financial statements as another Long-Term Obligation.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

8. LEASE COMMITMENTS AND LEASED ASSETS

The Water Fund enters into various operating leases to finance the purchase of photocopier and computer equipment. Leases are defined by the Financial Accounting Standard Board in Statement 13, Accounting for Leases. The assets acquired through the leases are shown as equipment within the Capital Asset Note (See Note III. 5.).

9. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Code and Pennsylvania laws in effect at June 30, 2014, the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. In accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, the City does not include the assets or activity of the plan in its financial statements.

10. NET POSITION POLICIES

GASB requires the classification of net position into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

Net Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings, net of unspent bond proceeds that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included.

Restricted – This component of net position consists of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets. The restrictions would be imposed by external parties including creditors, grantors, contributors, or laws or regulations of other governments and restrictions imposed by law through constitutional provisions or enabling legislation.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

10. NET POSITION POLICIES (continued)

Unrestricted – This component of net position consists of the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then unrestricted resources, as needed.

11. PRIOR PERIOD ADJUSTMENTS

For the year ended June 30, 2019, the Water Fund's beginning Net Position decreased by $9.5 million as a result of the following:

(1) The net effect of ($0.9) million for projects that were completed in fiscal year 2018 and prior but not transferred to fixed assets until fiscal year 2019.

(2) The net effect of ($8.6) million for adjustments to depreciation expenses due to changes in estimated useful lives and calculation adjustments.

The effect of the adjustments is reflected as a decrease in the Water Fund's Net Position as of July 1, 2018 in the June 30, 2019 Statement of Revenues, Expenses and Changes in Net Position.

For the year ended June 30, 2018, the Water Fund's beginning Net Position decreased by ($107.9) million as a result of the following:

(1) increase in the OPEB liability by $136.8 million due to the implementation of GASB Statement No. 75,

(2) recognized ($4.2) million of the federal subsidy portion of various projects placed in service in the previous year,

(3) the net effect of ($19.5) million due to a calculation adjustment of accumulated depreciation,

(4) the net effect of ($6.3) million for projects previously expensed that should have been included in capital assets and duplicate projects that should have been removed, and

(5) adjustment of amortization of the bond discount/premium of $1.1 million to coincide with the debt manager's schedule.

The effect of the adjustments is reflected as a decrease to the Water Fund's Net Position as of July 1, 2017 in the June 30, 2018 Statement of Revenues, Expenses and Changes in Net Position.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

12. INTERFUND TRANSACTIONS

During the course of normal operations, the City has numerous transactions between funds. These transactions are recorded as operating transfers and are reported as transfers in the Water Fund. Some of the more significant transfers are: the PICA administrative fund collects a portion of the wage tax paid by City residents and transfer funds that are not needed for debt service and administrative costs to the general fund. Also, the general fund and the PICA administrative fund make transfers to the debt service funds for principal and interest payments.

Transfers between fund types during the fiscal year 2019 were:

(Amounts in Thousands of USD)

	Transfers To:				
	Govermental	Non Major Governmental			
Transfers From:	General	Special Revenue	Debt Service	Capital Improvement	Total
General Fund	$ -	$ 41,045	$ 177,005	$ 101,843	$ 319,893
Grants Revenue Fund	31,429	1,171	3,394	-	35,994
Non major Special Rev. Fds	493,551	-	35,576	500	529,627
Permanent Funds	-	119	-	-	119
Water Fund	4,095	35,822	-	-	39,917
Total	$ 529,075	$ 78,157	$ 215,975	$ 102,343	$ 925,550

IV. OTHER INFORMATION

1. CITY PENSION PLANS

The City maintains two single employer defined benefit plans for its employees and several of its component units. The two plans maintained by the City are the City Plan and the Philadelphia Gas Works (the "PGW") Plan. In addition to the City, the three other quasi-governmental agencies that participate in the City Plan are the Philadelphia Parking Authority (the "PPA"), the Philadelphia Municipal Authority (the "PMA"), and the Philadelphia Housing Development Corporation (the "PHDC").

Effective with Fiscal Year 2015, the City implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27*. This statement revises existing standards for measuring and reporting pension liabilities for pension plans. GASB Statement No. 68 defines a single employer as the primary government and its component units. All three quasi-governmental agencies that participate in the City Plan were determined to be component units of the City. Therefore the City Plan meets the definition of a single employer plan.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

1. CITY PENSION PLANS (continued)

The note disclosures and Required Supplementary Information required by GASB Statement No. 68 are presented in separately issued audited financial statements of the City Plan and PGW plan. Copies of these financial statements may be obtained by contacting the Director of Finance of the City of Philadelphia.

A. PENSION FUND DESCRIPTION

Plan Administration. The Philadelphia Board of Pensions and Retirement (the "Board") administers the City of Philadelphia Municipal Pension Fund (the "Pension Fund"), a single employer defined benefit pension plan with a small but increasing defined contribution component, which provides pensions for all officers and employees of the City, as well as those of three quasi-governmental agencies (per applicable enabling legislation and contractual agreements). The Board was established by section 2-308 of the 1952 Philadelphia Home Rule Charter. Its actions in administering the Retirement System are governed by Title 22 of the Philadelphia Code.

The Board consists of nine voting members – four elected by the active members within the civil service, and the City's Controller, Solicitor, Managing Director, Personnel Director, and Director of Finance, who serves as the Chair.

Plan Membership. At July 1, 2018, the date of the most recent actuarial valuation, pension plan membership consisted of the following:

Actives	28,845
Terminated Vested	1,074
Disabled	3,890
Retirees	22,275
Beneficiaries	8,547
DROP	1,944
Total City Members	66,575
Annual Salaries	$ 1,805,400,096
Average Salary per Active Member	$ 62,590
Annual Retirement Allowances	$ 761,946,574
Average Retirement Allowance	$ 21,951

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
A. PENSION FUND DESCRIPTION (continued)

Contributions.

Per Title 22 of the Philadelphia Code, members contribute to the Fund at various rates based on bargaining unit, uniform/non-uniform/elected/exempt status, and entry date into the Fund. Beginning July 1, 2017, members contributed at one of the following rates:

Employee Contribution Rates

For the Period of July 1, 2018 to June 30, 2019

	Municipal (1)	Elected (2)	Police	Fire
Plan 67	7.00%	N/A	6.00%	6.00%
Plan 67 – 50% of Aggregate Normal Cost (3)	6.32%	N/A	N/A	N/A
Plan 87	3.08%	9.62%	6.84%	6.84%
Plan 87 – 50% of Aggregate Normal Cost (4)	3.47%	N/A	N/A	N/A
Plan 87 – Accelerated Vesting (5)	3.60%	11.72%	N/A	N/A
Plan 87 Prime (6)	4.08%	10.62%	7.84%	7.84%
Plan 87 Prime – Accelerated Vesting	4.60%	12.72%	N/A	N/A
Plan ‘10	2.21%	N/A	5.50%	5.50%
Plan ’10 – Accelerated Vesting	3.87%	N/A	N/A	N/A
Plan ’16 (7)	3.87%	N/A	N/A	N/A

1- For the Municipal Plan 67 members who participate in the Social Security System, employee contributions are 4.75% of compensation up to the social security wage base and 6% above it.
2- The employee contribution rate is based upon the normal cost of $474,193 under Plan 87 Elected, normal cost or $256,466 under Plan 87 Municipal and current annual payroll of $3,418,294.
3- Effective November 2014 guards represented by DC 33 contributions at 50% of the aggregate Normal Cost of all members in Plan J.
4- This represents 50% of aggregate Normal Cost for all members in Plan Y.
5- Member rates for Municipal Plan 87 (Y5) members eligible to vest in 5 years and Elected Officials (L8) eligible to be vested in 8 years instead of 10.
6- Plan 87 Prime refers to new hires who have the option to elect Plan 10 but have elected to stay in Plan 87.
7- Beginning January 1, 2019, all Municipal groups (except elected officials) will participate in Plan 16.

Employer contributions are made by the City throughout each fiscal year (which ends June 30) and by three (3) quasi-governmental agencies on a quarterly basis. These contributions, determined by an annual actuarial valuation report (“AVR”),

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

A. PENSION FUND DESCRIPTION (continued)

when combined with plan member contributions, are expected to finance the cost of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability.

Within the AVR, three contribution amounts are determined based upon two different sets of rules for determining the way the unfunded actuarial liability is funded.

The first method is defined in accordance with Act 205 and defines the Minimum Municipal Obligation (“MMO”), which is the City’s minimum required contribution under Pennsylvania state law.

The second method is in accordance with the City’s Funding Policy, which predates the Act 205 rules and calls for contributions that are greater than the MMO until the initial unfunded liability determined in 1984 is fully funded.

The third method currently followed by the City, the Revenue Recognition Policy (RRP), calls for additional revenue to be contributed each year to the fund in excess of the MMO. There are three sources of additional revenue that will be received by the Fund: 1) a portion of the sales tax according to the State Legislation, 2) additional tiered member contributions based on salary level for all municipal employees, and 3) additional member contributions from the current and future uniform members in Plan 87.

Under all funding methods, there are two components: the normal cost and the amortized unfunded actuarial liability. The actuarial unfunded liability is the amount of the unfunded actuarial liability that is paid each year based upon the given or defined amortization periods. The amortization periods are the same under the MMO and RRP, but different under the City’s Funding Policy.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

A. PENSION FUND DESCRIPTION (continued)

Funding Policy:

The initial July 1, 1985 unfunded actuarial liability ("UAL") is amortized over 34 years ended June 30, 2019 with payments increasing at 3.3% per year, the assumed payroll growth. Other charges in the actuarial liability are amortized in level-dollar payments as follows:

- Actuarial gains and losses – 20 years beginning July 1, 2009. Prior gains and losses were amortized over 15 years.
- Assumptions changes – 15 years beginning July 1, 2010. Prior to July 1, 2010, assumption changes were amortized over 20 years.
- Plan changes for active members – 10 years.
- Plan changes for inactive members – 1 year.
- Plan changes mandated by the State – 20 years.

In fiscal year 2019, the City and other employers' contributions of $797.8 million was less than the actuarially determined employer contribution (ADEC) of $874.7 million. In the event that the City contributes less than the funding policy, an experience loss will be created that will be amortized in accordance with funding policy over a closed 20-year period.

The Schedule of Employer Contributions (based on the City's Funding Policy) is included as Required Supplemental Information and provides a 10-year presentation of employer contributions.

Minimum Municipal Obligation (MMO):

For the purposes of the MMO under Act 205 reflecting the fresh start amortization schedule, the July 1, 2009 UAL was "fresh started" to be amortized over 30 years ending June 30, 2039. This is a level dollar amortization of the UAL. All future amortization periods will follow the City's Funding Policies as outlined above.

In fiscal year 2019, the City and other employers' contributions of $797.8 million exceeded the Minimum Municipal Obligation of $668.3.

The Schedule of Employer Contributions (based on the MMO Funding Policy) is included as Required Supplemental Information and provides a 10-year presentation of the employer contributions.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

A. PENSION FUND DESCRIPTION (continued)

Revenue Recognition Policy (RRP)

Revenue Recognition Policy is similar to the MMO except that the assets used to determine the unfunded liability do not include portion of sales tax revenue, tiered member contributions from the municipal employees, and additional uniform members' contributions. These sources of income are contributed over and above the City's contribution of the MMO and will be in addition to the MMO. Therefore, under this funding method, the additional revenue amounts are separately tracked and accumulated in a notional account which is then subtracted from the assets before calculating the contribution amounts due under the Minimum Municipal Obligation (MMO) methodology. The Pension Fund accumulates these amounts in a notional account and deducts them from the Actuarial Asset Value before the MMO is determined. These amounts are accumulated at the Actuarial Asset Value return rates to preserve the new funding methodology objective.

In fiscal year 2019, the City and other employers' contributions of $797.8 million exceeded the contribution under the Revenue Recognition Policy of $680.8 million.

The Schedule of Employer Contributions (based on the RRP Funding Policy) is included as Required Supplementary Information and provides a 10-year presentation of the employer contributions.

B. BENEFITS

The Pension Fund provides retirement, disability, and death benefits according to the provisions of Title 22 of the Philadelphia Code. These provisions prescribe retirement benefit calculations, vesting thresholds, and minimum retirement ages, that vary based on bargaining unit, uniform/non-uniform status, and entry date into the System.

Non-uniform employees may retire at either age 55 with up to 80% of average final compensation ("AFC") or age 60 with up to either 100% or 25% of AFC, depending on entry date into the Fund. Uniform employees may retire at either age 45 with up to 100% of AFC or age 50 with up to either 100% or 35% of AFC, depending on entry date into the Pension Fund. Survivorship selections may result in an actuarial reduction to the calculated benefit.

Members may qualify for service-connected disability benefits regardless of length of service. Service-connected disability benefits are equal to 70% of a member's final rate of pay, and are payable immediately without an actuarial reduction. These applications require approval by the Board. Eligibility to apply for non-service-connected disability benefits varies by bargaining unit and uniform/non-uniform

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

B. BENEFITS (continued)

status. Non-service connected disability benefits are determined in the same manner as retirement benefits, and are payable immediately.

Service-connected death benefits are payable to:

1) surviving spouse/life partner at 60% of final rate of pay plus up to 2 children under age 18 at 10% each of final rate of pay (maximum payout: 80%);

2) if no surviving spouse/life partner, up to 3 children under age 18 at 25% each of final rate of pay (maximum payout 75%); or

3) if no surviving spouse/life partner or children under age 18, up to 2 surviving parents at 15% each of final rate of pay (maximum payout 30%).

Non-service-connected deaths are payable as a lump sum payment, unless the deceased was either vested or had reached minimum retirement age for their plan, in which case the beneficiary(s) may instead select a lifetime monthly benefit, payable immediately with an actuarial reduction.

A Pension Adjustment Fund ("PAF") is funded with 50% of the excess earnings that are between 1% and 6% above the actuarial assumed earnings rate. Each year within sixty days of the end of the fiscal year, by majority vote of its members, the Board of Directors of the Fund (the "Board") shall consider whether sufficient funds have accumulated in the PAF to support an enhanced benefit distribution (which may include, but is not limited to, a lump sum bonus payment, monthly pension payment increases, ad-hoc cost-of-living adjustments, continuous cost-of-living adjustments, or some other form of increase in benefits as determined by the Board) to retirees, their beneficiaries and their survivors. As of July 1, 2018, the date of the most recent actuarial valuation, there was $1,160,247 in the PAF, and the Board voted to make PAF distributions of $822 during the fiscal year ended June 30, 2019.

The Pension Fund includes a Deferred Retirement Option Plan (DROP Plan). The DROP Plan allows a participant to declare that they will retire within 4 years. During the 4-year period, the City will make no further contributions for the participant. The participant would continue to work and to receive their salary; however, any increases would not be counted towards their pension benefit. During the 4-year period the individual participates in the DROP Plan, their pension benefits will be paid into an escrow account in the participant's name. After the 4-year period, the participant would begin to receive their pension benefits and the amount that has been accumulated in the escrow account in a lump sum payment. The balance in the DROP Plan as of June 30, 2019 is $156.8 million.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

C. INVESTMENTS

The Pension Board's Investment Policy Statement provides, in part:

The overall investment objectives and goals should be achieved by use of a diversified portfolio, with safety of principal a primary emphasis. The portfolio policy should employ flexibility by prudent diversification into various asset classes based upon the relative expected risk-reward relationship of the asset classes and the expected correlation of their returns.

The Pension Fund seeks an annual total rate of return of not less than 7.55% over a full market cycle. It is anticipated that this return standard should enable the Fund to meet its actuarially assumed earnings projection (currently 7.55%) over a market cycle. The investment return assumption was reduced by the Board from 7.60% to 7.55%. The Pension Fund's investment program will pursue its aforestated total rate of return by a combination of income and appreciation, relying upon neither exclusively in evaluating a prospective investment for the Pension Fund.

All investments are made only upon recommendation of the Pension Fund's Investment Committee and approval by a majority of the Pension Board. In order to document and communicate the objectives, restrictions, and guidelines for the Fund's investment staff and investments, a continuously updated Investment Policy Statement will be maintained. The Investment Policy Statement is updated (and re-affirmed) each year at the January Board meeting.

The following was the Board's approved asset allocation policy as of June 30, 2019:

Asset Class	Target Allocation
Broad Fixed Income	10.0%
Global Fixed Income	2.0%
Emerging Market Debt	2.0%
U.S. Large-Cap Core	22.0%
U.S. Mid-Cap Core	3.0%
U.S. Small-Cap Core	5.0%
ACWI ex-U.S.	15.0%
Non-U.S. Small Cap	6.0%
Emerging Markets	4.0%
Public REITs	1.0%
Real Estate Core	11.0%
Real Estate-Mezzanine	1.0%
Real Estate-Opportunistic	1.0%
Infrastructure	5.0%
Private Equity	10.0%
Private Debt	2.0%
Total	100.0%

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

C. INVESTMENTS (continued)

Money Weighted Rate of Return: For the year ended June 30, 2019, the annual money-weighted return on pension plan investments, net of pension plan investment expense, was 6.48%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

D. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

Financial statements of the Pension Fund are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds of contributions are recognized when due and payable in accordance with the terms of the Pension Fund.

Methods Used to Value Investments

The Pension Fund's investments are reported at fair value. Fair value is the amount that the Pension 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 exchange or security 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 which include private equity, private debt, venture capital, hedge funds and equity real estate 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.

Futures contracts, foreign exchange contracts, and options are marked-to-market daily with changes in market value recognized as part of net appreciation/depreciation in the fair value of investments. Initial margin requirements for such financial instruments are provided by investment securities pledged as collateral or by cash.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

D. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Investment expenses consist of investment manager fees and investment consultant fees related to the traditional investments only, and not those fees related to the alternative investments. Unsettled investment sales are reported as Accrued Interest and Other Receivable, and unsettled investment purchases are included in Accrued Expenses and Other Liabilities.

Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

Income Taxes

The Pension Fund qualifies under Section 401(a) of the Internal Revenue Code (IRC) and is exempt from income taxation as allowed by Section 501(a) of the IRC.

Related Parties

The City's Department of Finance provides cash receipt and cash disbursement services to the Pension Fund. The City Solicitor's office provides legal services to the Pension Fund. Other administrative services are also provided by the City.

Use of Estimates in Preparing Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties

The Pension Fund 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 that such changes could materially affect the amounts reported in the Pension Fund’s Statement of Fiduciary Net Position.

Contributions are calculated 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 estimation and assumption process, it is at least reasonably possible that changes in these statements and assumptions in the near term would be material to the financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

V. OTHER INFORMATION (continued)

D. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Administrative Expenses

Administrative expenses of the Pension Fund are paid for by the Pension Fund.

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING

Legal Provisions

The Pension Fund is authorized to invest in "prudent investments," including obligations of the U.S. Treasury, agencies and instrumentalities of the United States, investment grade corporate bonds, common stock, real estate, private market, etc. City ordinances contain provisions which preclude the Pension Fund from investing in organizations that conduct business in certain countries and also impose limitations on the amounts invested in certain types of securities.

Custodial Credit Risk

Custodial credit risk for Deposits is the risk that in the event of a bank failure, the Pension Fund's deposits may not be returned to them. The Pension Fund's cash deposits are held in two banks as of June 30, 2019. Amounts are insured up to $250,000 per bank by the Federal Deposit Insurance Corporation (FDIC). Deposits in excess of the FDIC limit are collateralized with securities held by the pledging financial institution's trust department or agent in the Pension Fund's name. The Pension Fund classifies Money Market funds held by the custodian institution as cash equivalents. The Pension Fund also classifies Treasury Bills as cash equivalents if the date of maturity is three months or less from the acquisition date. Custodial credit risk for investments is the risk that in the event of counter-party failure, the Pension Fund 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 Pension Fund. The Pension Fund requires that all investments be clearly marked as to ownership, and to the extent possible, be registered in the name of the Pension Fund. Certain investments may be held by the managers in the Pension Fund's name.

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.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Duration is a measure of the approximate sensitivity of a bond's value to interest rate changes. The higher the duration, the greater the changes in fair value when interest rates change. The Pension Fund measures interest rate risk using segmented time distribution, which shows the total fair value of investments maturing during a given period.

The table below details the exposure to interest rate changes based upon maturity dates of the fixed income securities at June 30, 2019:

2019 (in Thousands)	Total Fair Value	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years
Asset Backed Securities	$ 23,677	$ 1,774	$ 7,187	$ 4,982	$ 9,734
CDO	483	483	-	-	-
CMO/REMIC	7,992	2,317	25	239	5,411
Commercial Mortgage Backed Securities	19,779	6,376	393	1,250	11,760
Corporate Bonds	345,432	123,575	73,751	102,850	45,256
Government Bonds	364,123	78,583	82,906	127,614	75,020
Mortgage Backed Securities	73,379	482	386	6,037	66,474
Municipal Bonds	12,995	-	454	6,088	6,453
Total Interest Risk of Debt Securities	$ 847,860	$ 213,590	$ 165,102	$ 249,060	$ 220,108

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, the Pension Fund has no single issuer that exceeds 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Credit Risk

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The Pension Fund is subject to credit risk on $847.9 million of directly owned fixed income. The Pension Fund's directly owned rated debt investments as of June 30, 2019 were rated by Standard & Poor's, a nationally recognized statistical rating agency and are presented below using Standard & Poor's rating scale:

		Credit Rating									
2019 (in Thousands)	Total Fair Value	AAA	AA	A	BBB	BB	B	CCC	C	D	NR
Asset Backed Securities	$ 23,677	$ 6,335	$ 2,159	$ 3,088	$ -	$ -	$ -	$ -	$-	$ -	$ 9,648
CDO	483	483	-	-	-	-	-	-	-	-	-
CMO/REMIC	7,992	853	4,485	165	45	31	333	-	-	-	2,080
Commercial Mortgage Backed Securities	19,779	6,859	11,137	437	4	-	243	-	-	91	1,008
Corporate Bonds	345,432	1,034	4,242	105,606	104,442	52,587	50,363	13,925	147	269	12,817
Government Bonds	364,123	9,230	250,385	46,054	23,780	17,774	10,109	5,307	-	891	593
Mortgage Backed Securities	73,379	-	73,379	-	-	-	-	-	-	-	-
Municipal Bonds	12,995	-	7,999	3,278	852	866	-	-	-	-	-
Total Credit Risk of Debt Securities	$847,860	$24,794	$353,786	$157,987	$132,211	$71,258	$61,048	$19,232	$147	$1,251	$26,146

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Foreign Currency Risk

The Pension Fund's exposure to foreign currency risk derives from its position in foreign currency-denominated cash and investments in fixed income, equities, and derivatives. The foreign currency investment in equity securities is 41.4% of the total investment in equities.

The Fund's exposure to foreign currency risk at June 30, 2019 was as follows (expressed in thousands):

Currency	Cash	Fixed Income	Equities	Derivatives	Total
Euro (EUR)	$ 1,792	$ 552	$ 329,463	$ 35	$ 331,842
Japanese Yen (JPY)	677	31	257,817	7	258,532
Pound Sterling (GBP)	452	1,038	184,595	21	186,106
Canadian Dollar (CAD)	333	560	128,992	13	129,898
Hong Kong Dollar (HKD)	248	-	107,630	-	107,878
Australian Dollar (AUD)	187	7,176	78,382	(2)	85,743
Swiss Franc (CHF)	729	-	85,679	(2)	86,406
South Korean Won (KRW)	-	-	35,058	(5)	35,053
Mexican Peso (MXN)	32	21,678	6,133	(1)	27,842
South African Rand (ZAR)	-	8,335	13,094	(248)	21,181
Swedish Krona (SEK)	337	-	26,222	185	26,744
Brazilian Real (BRL)	4	9,703	16,917	6	26,630
Malaysian Ringgit (MYR)	-	8,920	5,846	-	14,766
Danish Krone (DKK)	268	-	16,347	-	16,615
Indonesian Rupiah (IDR)	12	7,828	6,017	6	13,863
Polish Zloty (PLN)	18	9,427	3,159	8	12,612
Singapore Dollar (SGD)	299	-	13,183	-	13,482
Norwegian Krone (NOK)	172	-	8,745	297	9,214
Thai Baht (THB)	2	-	7,428	-	7,430
New Turkish Lira (TRY)	6	-	1,233	-	1,239
Chilean Peso (CLP)	69	862	2,198	1	3,130
Philippine Peso (PHP)	-	-	4,210	-	4,210
All Others	2,769	11,806	13,451	135	28,161
	$ 8,406	$ 87,916	$ 1,351,799	$ 456	$ 1,448,577

Derivatives

The Pension Fund may invest in derivatives as permitted by guidelines established by the Pension Board. Pursuant to such authority, the Pension Fund may invest in foreign currency forward contracts, options, futures (S&P Fund) and swaps. No derivatives were purchased with borrowed funds.

Derivatives are generally used to provide market exposure in the equity portfolio and to hedge against foreign currency risk and changes in interest rates, improve

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

yield and adjust the duration of the Pension Fund's fixed income portfolio. These securities are subject to changes in value due to changes in interest rates or currency valuations. Credit risk for derivatives results from the same considerations as other counterparty risk assumed by the Pension Fund, which is the risk that the counterparty might be unable to meet its obligations.

Derivative instruments such as swaps, options, futures and forwards are often complex financial arrangements used by governments to manage specific risks or to make investments. By entering into these arrangements, governments receive and make payments based on market prices without actually entering into the related financial or commodity transactions. Derivative instruments associated with changing financial and commodity prices result in changing cash flows and fair values that can be used as effective risk management or investment tools. Derivative instruments, however, also can expose governments to significant risks and liabilities.

The Pension Fund enters into a variety of financial contracts, which include options, futures, forwards and swap agreements to gain exposure to certain sectors of the equity and fixed income markets; collateralized mortgage obligations (CMOs); other forward contracts, and U.S. treasury strips. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. The Pension Fund is exposed to credit risk in the event of non-performance by counterparties to financial instruments. The Pension Fund generally enters into transactions only with high quality institutions. Legal risk is mitigated through selection of executing brokers and review of all documentation. The Pension Fund is exposed to market risk, the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed in accordance with risk limits set by senior management, through buying or selling instruments or entering into offsetting positions. The notional or contractual amounts of derivatives indicate the extent of the Pension Fund's involvement in the various types and uses of derivative financial instruments and do not measure the Pension Fund's exposure to credit or market risks and do not necessarily represent amounts exchanged by the parties. The amounts exchanged are determined by reference to the notional amounts and the other terms of the derivatives.

Derivative Instruments

The following table summarizes aggregate notional or contractual amounts for the Pension Fund's derivative financial instruments at June 30, 2019 in addition to the fair value and change in the fair value of derivatives.

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

List of Derivatives Aggregated by Investment Type

Classification	Change in Fair Value		Fair Value at June 30, 2019		Notional
Investment Derivatives					
Forwards Currency Contracts	Net Appreciation (Depreciation) in Investments	$ 2,210,016	Investments	$ 414,656	$ 190,108,181
Futures	Net Appreciation (Depreciation) in Investments	559,088	Investments	400,772	231
Grand Totals		$ 2,769,104		$ 815,428	$ 190,108,412

A Derivatives Policy Statement identifies and allows common derivative investments and strategies, which are consistent with the Investment Policy Statement of the City of Philadelphia Municipal Pension Fund. The guidelines identify transaction-level and portfolio-level risk control procedures and documentation requirements. Managers are required to measure and monitor exposure to counterparty credit risk. All counterparties must have credit ratings available from nationally recognized rating institutions such as Moody, Fitch, and S&P. The details of other risks and financial instruments in which the Fund involves are described below.

Credit risk:

The Pension Fund is exposed to credit risk on hedging derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, it is the Pension Fund’s policy to require counterparty collateral posting provisions in its non-exchange-traded hedging derivative instruments. These terms require full collateralization of the fair value of hedging derivative instruments in asset positions (net of the effect of applicable netting arrangements) should the counterparty’s credit rating fall below AA as issued by Fitch Ratings and Standard & Poor’s or Aa as issued by Moody’s Investors Service. Collateral posted is to be in the form of U.S. Treasury securities held by a third-party custodian. The City has never failed to access collateral when required.

It is the Pension Fund’s policy to enter into netting arrangements whenever it has entered into more than one derivative instrument transaction with counterparty. Under the terms of these arrangements, should one party become insolvent or

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

otherwise default on its obligations, close-out netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions' fair values so that a single sum will be owed by, or owed to, the non-defaulting party.

Swap agreements:

These derivative instruments provide for periodic payments at predetermined future dates between parties based on the change in value of underlying securities, indexes or interest rates. Under fixed interest rate type swap arrangements, the Pension Fund receives the fixed interest rate on certain equity or debt securities or indexes in exchange for a fixed charge. There were not any total received fixed interest Swaps during 2019. On its pay-variable, received-fixed interest rate swap, as LIBOR increases, the Fund's net payment on the swap increases. Alternatively, on its pay-fixed, receive-variable interest rate swap, as LIBOR or the SIFMA swap index decreases, the Pension Fund's net payment on the swap increases.

Futures contracts:

These derivative instruments are types of contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specific financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that counterparty will not pay and generally requires margin payments to minimize such risk. In addition, the Pension Fund enters into short sales, sales of securities it does not presently own, to neutralize the market risk of certain equity positions. Initial margin requirements on futures contracts and collateral for short sales are provided by investment securities pledged as collateral and by cash held by various brokers. Although the Pension Fund has the right to access individual pledged securities, it must maintain the amount pledged by substituting other securities for those accessed. The realized loss from Futures contracts was ($313,449).

Forward contracts:

The Pension Fund is exposed to basis risk on its forward contracts because the expected funds purchase being hedged will price based on a pricing point different than the pricing point at which the forward contract is expected to settle. The realized loss from forward contracts was ($5,334,716).

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Termination risk:

The Pension Fund or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. In addition, the Pension Fund is exposed to termination risk on its receive-fixed interest rate swap. The Pension Fund is exposed to termination risk on its rate cap because the counterparty has the option to terminate the contract if the SIFMA swap index exceeds 12%. If at the time of termination, a hedging derivative instrument is in a liability position, the City would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Rollover risk:

The Pension Fund is exposed to rollover risk on hedging derivative instruments that are hedges of debt that mature or may be terminated prior to the maturity of the hedged debt. When these hedging derivative instruments terminate, or in the case of a termination option, if the counterparty exercises its option, the Pension Fund will be re-exposed to the risks being hedged by the hedging derivative instrument.

Fair Value Measurement

The Municipal Pension Fund has the following recurring fair value measurement as of June 30, 2019 (expressed in thousands):

		Fair Value Measurements Using		
	June 30, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
U.S. Treasury Securities	$ 221,658	$ -	$ 221,658	$ -
Agency Bonds	22,252	-	22,252	-
Asset Backed Securities	23,677	-	23,677	-
Collateralized Debt Obligation	483	-	483	-
Corporate Bonds	345,432	-	345,432	-
Government Bonds	114,354	-	114,354	-
Mortgage Backed Securities	101,150	-	101,150	-
Municipal Bonds	12,995	-	12,995	-
Sovereign Debt	5,859	-	5,859	-
Mutual Funds	988	988	-	-
Equity	3,263,263	3,258,778	1,577	2,908
Total Investments by Fair Value Level	4,112,111	3,259,766	849,437	2,908
Investments Measured at the Net Asset Value (NAV)				
Credit Distressed Hedge Fund	$ 1,824			
Equity Long/Short Hedge funds	27,278			
Real Estate	638,690			
Private Equity	495,502			
Fixed Income Hedge Funds	79,321			
Total Investments Measured at the NAV	1,242,615			
Total Investments Measured at Fair Value	$ 5,354,726			
Investment Derivative Instruments				
Equity Index Futures (Assets)	$ 412	$ 412	$ -	
Currency Futures (Assets)	2	2	-	
Currency Futures (Liabilities)	(13)	(13)	-	
Forw ard Currency Contracts (Assets)	919	-	919	
Forw ard Currency Contracts (Liabilities)	(504)	-	(504)	
Total Investment Derivative instruments	$ 816	$ 401	$ 415	

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Equity securities classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Corporate bonds and Equities in Level 3 are valued using discounted cash flow techniques.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Derivative instruments classified in Level 2 are valued using a market approach that considers benchmark for foreign exchange rates.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the following table (expressed in thousands):

			Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investment Measured at the Net Asset Value (NAV)					
Credit Distressed Hedge Fund	$	1,824	$ -	Quarterly	90 days
Equity Long/Short Hedge funds		27,278	-	Quarterly	90 days' notice
Real Estate		638,690	7,303	N/A	N/A
Private Equity		495,502	278,529	N/A	N/A
Fixed Income Hedge Funds		79,321	-	Quarterly	90-120 days
Total Investments Measured at the NAV	$	1,242,615			

1. Credit distressed hedge funds: The Funds seek to identify and exploit event driven opportunities both on the long and short side in the stressed and distressed corporate debt markets. Investments are generally driven by fundamental, value-oriented analysis and specific credit events. The Funds maintain the flexibility to invest globally and across capital structures of stressed and distressed companies. Investments generally target secondary U.S. credit opportunities across all tranches of a company's debt capital structure. The Funds may also invest opportunistically in certain equities, long and short. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. Investment can be redeemed with a 90 days' notice.

2. Equity long/short hedge funds: This Fund will typically hold 0-50 long positions and 10-15 short positions in U.S. common stocks. Management has the ability to shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position. The Fund mitigates market risk by utilizing short positions. In periods of extreme volatility, the Fund may hold a significant portion of its assets in cash.

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

The fair values of the investments in this type have been determined using the NAV per share of the investments. Investment can be redeemed with a 90 days' notice.

3. Real estate funds: This type includes funds that invest in U.S. and Non-U.S. commercial and residential real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. However, the individual investments that will be sold have not yet been determined. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Once it has been determined which investments will be sold and whether those investments will be sold individually or in a group, the investments will be sold in an auction process. The investee fund's management is required to approve of the buyer before the sale of the investments can be completed. It is expected that the underlying assets of the funds will be liquidated over the next seven to 10 years.

4. Private equity funds: The primary goal of these Funds is to generate returns for investors that exceed private equity industry benchmarks and are commensurate with asset class risk through the construction of a portfolio of opportunistic, highly performing private equity investments. Investments that fund may undertake include early-stage venture capital, later-stage growth financings, leveraged buyouts of medium and large-sized companies, mezzanine investments, PIPES and investments in companies that are being taken private. These investments can never be redeemed with the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. If these investments were held, it is expected that the underlying assets of the fund would be liquidated over five to 10 years. The fair values of the investments in this type have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. Once a buyer has been identified, the investee fund's management is required to approve of the buyer before the sale of the investments can be completed.

5. Fixed Income funds: The primary goal of these Funds is to create alpha by sourcing proprietary opportunities, avoiding capital loss, buying securities below their intrinsic value and selling securities above their intrinsic value.

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Firms look for opportunities that are currently mispriced, based on fundamentals or potentially an event that may improve the price of the holding.

Securities Lending Program

The Pension Fund, pursuant to a Securities Lending Authorization Agreement, has authorized J.P. Morgan Bank and Trust Company (J.P. Morgan) to act as the Pension Fund’s agent in lending the Pension Fund’s securities to approved borrowers. J.P. Morgan, as agent, enters into Securities Loan Agreements with borrowers.

During the fiscal year, J.P. Morgan lent, on behalf of the Pension Fund, certain securities of the Pension Fund held by J.P. Morgan Chase Bank, N.A. as custodian and received cash or other collateral including securities issued or guaranteed by the United States, U.K., and Eurozone governments. J.P. Morgan does not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 102% or 105% of the market value of the loaned securities.

Pursuant to the Securities Lending Authorization Agreement, J.P. Morgan had an obligation to indemnify the Pension Fund in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default of the borrower.

During the fiscal year, the Pension Fund and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested in a separately managed account based upon the investment guidelines established by the Fund. As of June 30, 2019, the weighted average maturity was 48 days and the final maturity was 351 days. Because the securities lending transactions were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral received from the borrower.

On June 30, 2019, the Pension Fund had no credit risk exposure to borrowers because all borrowers were required to deliver collateral for each loan.

As of June 30, 2019, the fair value of securities on loan was $356.9 million. Associated collateral totaling $381.4 million was comprised of cash which was invested in a separately managed account based upon the investment guidelines established by the Pension Fund. As of June 30, 2019, the invested cash collateral was $381.4 million and is valued at amortized cost.

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)

F. INVESTMENT ADVISORS

The Pension Fund utilizes investment advisors to manage long-term debt, real estate, private market, and equity portfolios. To be eligible for consideration, investments must meet criteria set forth in governing laws and regulations.

G. NET PENSION LIABILITY

The components of the net pension liability as of June 30, 2019 were as follows:

Total Pension Liability	$ 11,774,268,695
Plan Fiduciary Net Position	5,688,383,351
Net Pension Liability	$ 6,085,885,344

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability is 48.3%.

The Water Fund's portion of the net pension liability was $430,539,779 and $435,860,389 as of June 30, 2019 and 2018, respectively.

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2018 and was rolled forward to June 30, 2019. The June 30, 2018 actuarial valuation used the following actuarial assumptions, applied to all periods including the measurement period:

Actuarial Cost Method: Entry Age Normal
Investment Rate of Return: 7.55% compounded annually, net of expenses
Salary Increases: Age Based Table

The investment return assumption was changed from 7.60% from the prior year valuation to 7.55% for the current year valuation.

To recognize the expense of the benefits payable under the Pension Adjustment Fund, the actuarial liabilities have been increased by 0.54%. This estimate is based on the statistical average expected value of the benefits.

Mortality Rates: For Municipal and Elected Officials, 127% and 119% for males and females, respectively, of the RP-2014 Healthy Annuitant Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017. For Uniform, 115% of the RP-2014 Blue Collar Healthy Annuitant Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

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IV. OTHER INFORMATION (continued)

G. NET PENSION LIABILITY (continued)

The measurement date for the net pension liability (NPL) is June 30, 2019. Measurements are based on the fair value of assets as of June 30, 2019 and the total pension liability (TPL) as of the valuation date, July 1, 2018, updated to June 30, 2019. The roll-forward procedure included the addition of service cost and interest cost offset by actual benefit payments. During the measurement year, the collective NPL decreased by approximately $83 million. The service cost and interest cost increased the collective NPL by the approximately $1.04 billion while contributions plus investment income offset by administrative expenses decreased the collective NPL by approximately $1.19 billion.

There was a benefit change to increase the pay cap from $50,000 to $65,000 for DC 33 Municipal members participating in the Stacked Hybrid Plan 16 which increased the TPL by approximately $0.4 million. There was an actuarial experience loss during the year of approximately $11 million.

In addition, the Board adopted an assumption change to decrease the expected long-term return on assets from 7.60% to 7.55% which increased the TPL by approximately $53 million.

Long-term expected rate of return:

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)
G. NET PENSION LIABILITY (continued)

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 are summarized in the following table: (See pension plan's investment policy: http://www.phila.gov/pensions/PDF/ips.pdf.)

Fixed Income	Long-Term Expected Real Rate of Return	Benchmark Index
Broad Fixed Income	2.80 %	Bloomberg Barclays U.S. Aggregate TR
Int. Government	2.20 %	Bloomberg Barclays U.S. Govt TR
High Yield	4.50 %	Bloomberg Barclays U.S. High Yield TR
Global Aggregate	1.70 %	Bloomberg Barclays U.S. Global Aggregate TR
Bank Loans	4.90 %	Credit Suisse Leveraged Loans
Emerging Market Debt	6.30 %	JP Morgan EMBI Global TR
Equities		
Broad U.S. Equity	7.30 %	Russell 3000
Global Equity	7.40 %	MSCI ACWI
Broad Non-U.S. Equity	7.60 %	MSCI EAFE
Emerging Market	8.60 %	MSCI Emerging Markets
Hedge Fund		
Hedge Funds	5.00 %	HFRI Fund of Funds Composite Index
Real Estate		
Real Estate – Core	7.60 %	NCREIF Fund Index
Public REITs	7.10 %	NAREIT
Opportunistic Real Estate	11.70 %	NCREIF Property Index
Real Asset		
MLPs	7.60 %	Alerian MLP Index
Global Infrastructure	7.50 %	Dow Jones Brookfield Global Infrastructure Index
Private Equity		
Private Equity	11.10 %	Cambridge Associates
Private Debt	10.00 %	Cambridge Associates
Cash		
TIPS	3.80 %	Bloomberg Barclays US TIPS TR
91 Day T-Bills	1.20 %	

The above table reflects the expected real rate of return for each major asset class. The expected inflation rate is projected at 2.0% for the same time period.

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)

G. NET PENSION LIABILITY (continued)

Discount Rate: The discount rate used to measure the total pension liability was 7.55%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the participating governmental entity contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods on projected benefit payment to determine the total pension liability.

Sensitivity of the net pension liability: The following presents the net pension liability of the Fund, calculated using the discount rate of 7.55%, as well as what the Fund's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	1% Decrease 6.55%	Discount Rate 7.55%	1% Increase 8.55%
Total Pension Liability	$ 12,984,587,892	$ 11,774,268,695	$ 10,743,736,185
Plan Fiduciary Net Position	5,688,383,351	5,688,383,351	5,688,383,351
Collective Net Pension Liability	$ 7,296,204,541	$ 6,085,885,344	$ 5,055,352,834
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	43.8%	48.3%	52.9%

H. GUARANTEE OF BENEFITS

Benefits under the Pension fund are guaranteed by statute. In the event that employee contributions do no equal required benefits, the City's General Fund must provide any shortfall.

I. PARTICIPATION IN THE PENSION FUND

The trustees for the Pension Fund are also members of the Fund and as such, are subject to the provisions of the Fund as described in the notes to these financial statements.

J. SUBSEQUENT EVENTS

Management evaluated subsequent events as of the date the financial statements were available to be issued. Management noted no items which would require disclosure in the financial statements.

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Changes in Collective Net Pension Liability: The following table shows the changes in total pension liability (TPL), the plan fiduciary net position (i.e., fair value of the System assets) (FNP), and the net pension liability (NPL) during the measurement period ended on June 30, 2019.

Change in Collective Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) - (b)**
Balances at 6/30/2018	$ 11,510,667,823	$ 5,341,285,527	$ 6,169,382,296
Changes for the year:			
Service cost	183,755,848		$ 183,755,848
Interest	857,348,582		857,348,582
Changes of benefits	378,455		378,455
Differences between expected and actual experience	11,097,845		11,097,845
Changes of assumptions	53,488,769		53,488,769
Contributions - employer		797,805,518	(797,805,518)
Contributions - member		99,179,683	(99,179,683)
Net investment income		303,735,946	(303,735,946)
Benefit payments	(842,468,627)	(842,468,627)	0
Administrative expense		(11,154,696)	11,154,696
Net Changes	263,600,872	347,097,824	(83,496,952)
Balances at 6/30/2019	$ 11,774,268,695	$ 5,688,383,351	$ 6,085,885,344

Employer's Proportionate Shares: GASB 68 requires that the proportionate share for each employer be determined based upon the "employer's projected long-term contribution effort to the pension…as compared to the total long-term contribution effort of all employers." In addition to the City, three quasi-governmental agencies currently participate in the system, PHDC, PPA, and PMA. The method of allocation is based on the ratio of quasi-agency contributions in proportion to total contributions of the plan.

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IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Pension amounts by employer: The following schedule presents the pension amounts for each participating employer: Philadelphia Parking Authority (PPA), Philadelphia Municipal Authority (PMA), Philadelphia Housing Development Corporation (PHDC), and the City of Philadelphia (City):

Schedule of Pension Amounts by Employer

	For the year ended	PPA	PMA	PHDC	City	Total
Collective pension expenses		$ 16,393,565	$ 411,899	$ 1,482,835	$ 805,508,932	$ 823,797,231
Change in proportion		(6,798,067)	320,838	(1,134,625)	7,611,853	-
Contribution difference		6,372,084	67,422	488,547	(6,928,052)	-
Employer pension expense		15,967,582	800,159	836,757	806,192,733	823,797,231
Net pension liability	6/30/18	132,024,781	2,467,753	11,721,826	6,023,167,936	6,169,382,296
Net pension liability	6/30/19	121,109,118	3,042,943	10,954,594	5,950,778,689	6,085,885,344
Change in net pension liablility		(10,915,663)	575,190	(767,232)	(72,389,247)	(83,496,952)
Deferred outflows	6/30/18	27,191,684	511,556	2,071,464	352,592,300	382,367,004
Deferred outflows	6/30/18	14,583,914	712,752	1,237,713	235,767,146	252,301,525
Change in deferred outflows		(12,607,770)	201,196	(833,751)	(116,825,154)	(130,065,479)
Deferred inflows	6/30/18	(38,017,115)	(171,458)	(4,180,348)	(22,243,931)	(64,612,852)
Deferred inflows	6/30/19	(29,582,073)	(93,147)	(2,918,062)	(11,442,756)	(44,036,038)
Change in deferred inflows		8,435,042	78,311	1,262,286	10,801,175	20,576,814
Employer contributions		22,710,517	504,477	2,032,524	772,558,000	797,805,518
Employer pension expense		15,967,582	800,159	836,757	806,192,733	823,797,231

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Reconciliation of Net Pension Liability

The following table reconciles the Collective Net Pension Liability to the amount reported in the Statement of Net Position included in the City of Philadelphia's Comprehensive Annual Financial Report:

Reconciliation of Collective Net Pension Liability to the Primary Government Net Pension Liability

(Amounts in thousands of USD)

Municipal Pension Fund	Proportionate Share of NPL	Discretely Presented Component Units	City and Blended Component Units
City	5,950,779	-	5,950,779
PPA	121,109	121,109	-
PMA	3,043	-	3,043
PHDC (1)	10,955	10,955	-
Collective Net Pension Liability	6,085,885	132,064	5,953,822
State Pension Fund			
PICA			1,553
City's Primary Government Net Pension Liability (Exhibit I)			5,955,375

(1) PHDC does not appear in the Component Unit Financial Statements (Exhibit XI Statement of Net Position and Exhibit XII Statement of Activities) due to immaterially.

Deferred Outflows by Employer

The following table summarizes the deferred outflows allocated to each employer for experience, assumption changes, investment returns, and contribution differences:

Schedule of Employer's Deferred Outflows

	PPA	PMA	PHDC	CITY	Total
Proportionate Shares	1.99%	0.05%	0.18%	97.78%	100.00%
Experience	$ 981,399	$ 24,658	$ 88,770	$ 48,221,693	$ 49,316,520
Assumption changes	2,162,374	54,331	195,592	106,249,723	108,662,020
Investment return	1,000,710	25,143	90,517	49,170,578	50,286,948
Proportion change	-	468,130	-	32,125,152	32,593,282
Contribution difference	10,439,431	140,490	862,834	-	11,442,755
	$ 14,583,914	$ 712,752	$ 1,237,713	$ 235,767,146	$ 252,301,525

The Water Fund's proportionate share of Deferred Outflows of Resources related to the pension plan as of June 30, 2019 and 2018 was $15,956,997 and $24,543,646, respectively.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Deferred Inflows by Employer

The following table summarizes the deferred inflows allocated to each employer for experience, assumptions changes, investment return, and contribution differences:

Schedule of Employer's Deferred Inflows

	PPA	PMA	PHDC	CITY	Total
Proportionate Shares	1.99%	0.05%	0.18%	97.78%	100.00%
Experience	$ -	$ -	$ -	$ -	$ -
Assumption changes	-	-	-	-	-
Investment return	-	-	-	-	-
Proportion change	(29,582,073)	(93,147)	(2,918,062)	-	(32,593,282)
Contribution difference	-	-	-	(11,442,756)	(11,442,756)
	$ (29,582,073)	$ (93,147)	$ (2,918,062)	$ (11,442,756)	$ (44,036,038)

The Water Fund's proportionate share of Deferred Inflows of Resources related to the pension plan as of June 30, 2019 and 2018 was $542,404 and $1,336,290, respectively.

Recognition of Deferred Outflows and Inflows by Employer

The following table shows the net amount of deferred outflows and inflows to be recognized by each participating employer in each of the next five years and the total thereafter:

Schedule of Employer's Recognition of Deferred Outflows and Inflows

For Year Ending	PPA	PMA	PHDC	CITY	Total
2020	$ (9,642,669)	$ 167,382	$ (1,215,146)	$ 157,346,952	$ 146,656,519
2021	(5,654,225)	148,894	(567,059)	13,609,122	7,536,732
2022	17,131	148,343	38,966	20,186,609	20,391,049
2023	281,605	154,988	62,888	33,181,707	33,681,188
2024	-	-	-	-	-
Thereafter	-	-	-	-	-
	$ (14,998,158)	$ 619,607	$ (1,680,351)	$ 224,324,390	$ 208,265,488

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

2. ACCUMULATED UNPAID SICK LEAVE

Employees are credited with varying amounts of sick leave according to type of employee and/or length of service. Employees may accumulate unused sick leave to predetermined balances. Employees (upon retirement only) are paid varying amounts ranging from 25% to 60% of unused sick time, not to exceed predetermined amounts. Employees, who separate for any reason other than indicated above, forfeit their entire sick leave. The City budgets for and charges the cost of sick leave as it is taken.

3. OTHER POSTEMPLOYMENT BENEFITS (OPEB)

Plan Description: The City of Philadelphia self-administers a single employer, defined benefit plan that provides OPEB for all eligible retirees. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

Benefits Provided: The City of Philadelphia subsidizes health care for five years from the time of coverage election for eligible retirees. Certain union represented employees may defer their coverage until a later date, but the amount that the City pays for their health care is limited to the amount that the City would have paid at the date of their retirement. The City also provides lifetime insurance coverage for all eligible retirees. Firefighters are entitled to $7,500 coverage and all other employees receive $6,000 in coverage. The plan does not issue stand-alone financial statements, and the accounting for the plan is reported within the financial statements of the City of Philadelphia.

Funding Policy: The City's funding policy is to pay the net expected benefits for the current retirees. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by union contracts and is self-insured for non-union employees. The City's contributions are estimated to be about $96.9 million for fiscal year ended June 30, 2019.

Employees covered by benefit terms: At July 1, 2018, the following employees were covered by the benefit terms:

Medical Coverage:	
Inactive employees or beneficiaries currently receiving medical coverage	3,572
DROPS with medical coverage	1,944
Inactive employees entitled to, but not yet receiving medical coverage	444
Active employees	28,845
Total	34,805
Life Insurance Coverage	
Inactive employees or beneficiaries currently receiving life insurance coverag	27,798
Active employees	28,845
Total	56,643

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Total OPEB Liability: The City's total OPEB liability of $1,823,900,000 was measured as of June 30, 2018 and was determined by an actuarial valuation as of that date. The Water Fund's proportionate share of the OPEB liability as of June 30, 2019 was $137,036,000.

Actuarial assumptions and other inputs: The total OPEB liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified.

Measurement Date: June 30, 2017 and June 30, 2018; reporting dates June 30, 2018 and June 30, 2019.

Discount Rate: The discount rate as of June 30, 2018 is 3.87%, which is the 20-year bond buyer index rate as of June 28, 2018. The discount rate that was used for June 30, 2017 liability calculation is 3.58%, which is the 20-year bond buyer index rate as of June 29, 2017.

Salary Increase Rate:

Age	Municipal and Elected Officials	Uniformed
<20	20.00%	20.00%
20 - 24	18.00%	11.00%
25 - 29	10.00%	7.00%
30 - 34	7.00%	5.00%
35 - 39	5.75%	4.25%
40 - 44	5.00%	4.00%
45 - 49	4.60%	3.50%
50 - 54	4.35%	3.30%
55 - 59	4.10%	3.00%
60 - 64	3.85%	3.00%
65 +	3.50%	2.75%

Per Person Cost Trends: The trend rates represent the annual rate of increase in employer claim payments, employer premiums (including those paid to union-sponsored plans), and retiree contributions.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

To Year	Medical		Rx		Medical /Rx Combined	
Beginning July 1	Pre Medicare	Medicare Eligible	Pre Medicare	Medicare Eligible	Pre Medicare	Medicare Eligible
2019	8.00%	6.00%	9.00%	8.00%	8.20%	6.40%
2020	7.50%	5.75%	8.75%	7.75%	7.75%	6.15%
2021	7.00%	5.50%	8.50%	7.50%	7.30%	5.90%
2022	6.50%	5.25%	8.25%	7.25%	6.85%	5.65%
2023	6.28%	5.24%	7.74%	6.91%	6.57%	5.57%
2024	6.06%	5.23%	7.23%	6.56%	6.29%	5.49%
2025	5.84%	5.22%	6.72%	6.22%	6.02%	5.42%
2026	5.62%	5.21%	6.21%	5.87%	5.74%	5.34%
2027	5.40%	5.19%	5.69%	5.53%	5.46%	5.26%
2028	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%
2029	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%
2030	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%
2031	4.87%	4.87%	4.87%	4.87%	4.87%	4.87%
2032	4.68%	4.68%	4.68%	4.68%	4.68%	4.68%
2033	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%
2034	4.47%	4.47%	4.47%	4.47%	4.47%	4.47%
2035	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%
2036	4.35%	4.35%	4.35%	4.35%	4.35%	4.35%
2037	4.31%	4.31%	4.31%	4.31%	4.31%	4.31%
2038	4.19%	4.19%	4.19%	4.19%	4.19%	4.19%
2039	4.06%	4.06%	4.06%	4.06%	4.06%	4.06%
2040 +	3.94%	3.94%	3.94%	3.94%	3.94%	3.94%

Dental and vision costs are assumed to increase at 3% per year.

Retirees Share of Benefit Related Costs:

Percent of Retirees Electing Coverage

Participation rate for medical coverage
- 85% of future retirees from Non-Represented groups are assumed to elect post-retirement medical covers.
- 100% of future retirees from represented groups (DC 33, DC 47, Fire, and Police) are assumed to elect post-retirement medical coverage.
- 100% of DROP participants are assumed to continue in DROP for the remainder of their DROP period (maximum four years) and then retire with a medical benefit.

Participation rate for life insurance
- 95% of current and future retired firefighters who participated in the pension plan are assumed to be covered by City-provided life insurance.
- 87% of all other current and future retired pension plan participants are assumed to be covered by City-provided life insurance.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Mortality Rates:

It is assumed deaths of active municipal and elected members, 110% and 115%, for males and females, respectively, follows RP-2014 Employee Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

It is assumed deaths of active uniformed members follow 85% of the RP-2014 Blue Collar Employee Table projected from base year of 2006 to 2021 using mortality improvements scale MP-2017.

For municipal and elected members, 127% and 119% for males and females, respectively, the rate of post-retirement and post-disability mortality follow RP-2014 Healthy Annuitant Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

For uniformed members, the rate of post-retirement and post-disability mortality follow 115% of the RP-2014 Blue Collar Healthy Annuitant Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

For municipal and elected members, the rate of post-disability mortality follows 95% of the RP-2014 Disabled Retiree Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

For uniformed members, the rate of post-disability mortality follows 80% of the RP-2014 Disabled Retiree Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

Change in the Total OPEB Liability:

The table below shows the changes in the Total OPEB Liability (TOL), the plan fiduciary net position (i.e., the fair value of Plan assets) (FNP), and the Net OPEB Liability (NOL) during the measurement period ended on June 30, 2018.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Change in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
Balances at 6/30/2017	$ 1,861,600,000	$ 0	$ 1,861,600,000
Changes for the year:			
Service cost	81,800,000		81,800,000
Interest	67,900,000		67,900,000
Changes of benefits	0		0
Differences between expected/actual	56,800,000		56,800,000
Changes of assumptions	(147,800,000)		(147,800,000)
Contributions - employer		96,400,000	(96,400,000)
Contributions - non employer		0	0
Contributions - member		0	0
Net investment income		0	0
Benefit payments	(96,400,000)	(96,400,000)	0
Administrative expense		0	0
Net changes	(37,700,000)	0	(37,700,000)
Balances at 6/30/2018	$ 1,823,900,000	$ 0	$ 1,823,900,000

During the measurement year, the NOL decreased by approximately $37.7 million. The service cost and interest cost increased the NOL by approximately $149.7 million while contributions decreased the NOL by approximately $96.4 million. The employer contribution of $96.4 million is based on a blend of actual contributions and estimated contributions based on the prior report. Because a portion of the contribution is estimated, this was reviewed by the City for reasonability.

There was a loss of $56.8 million due to experience. This is due to the change in population between the June 30, 2016 valuation and the June 30, 2018 valuation.

There were no benefit changes during the measurement period.

There were assumption changes, such as the change in the 20-year bond buyer index rate, the change in the medical claims and trend assumptions, and the change in the demographic assumptions, that resulted in a gain in the liability by $147.8 million.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Sensitivity of the total OPEB liability to changes in the discount rate:

The following represents the total OPEB liability (TOL) of the City, as well as what the City's total liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.87%) or 1-percentage-point higher (4.87%) than the current discount rate:

Changes in the discount rate affect the measurement of the TOL. Lower discount rates produce a higher TOL and higher discount rates produce a lower TOL. The table below shows the sensitivity of the NOL to the discount rate.

Sensitivity of Net OPEB Liability to Changes in Discount Rate

	1% Decrease 2.87%	Discount Rate 3.87%	1% Increase 4.87%
Total OPEB Liability	$ 1,972,700,000	$ 1,823,900,000	$ 1,688,600,000
Plan Fiduciary Net Position	-	-	-
Net OPEB Liability	$ 1,972,700,000	$ 1,823,900,000	$ 1,688,600,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.0%	0.0%	0.0%

A one percent decrease in the discount rate increases the TOL and NOL by approximately 8%. A one percent increase in the discount rate decreases the TOL and NOL by approximately 7%.

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates.
The following represents the total OPEB liability of the City, as well as what the City's total 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 discount rate:

Changes in healthcare trends affect the measurement of the TOL. Lower healthcare trends produce a lower TOL and higher healthcare trends produce a higher TOL. The table below shows the sensitivity of the NOL to the healthcare trends.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Sensitivity of Net OPEB Liability to Changes in Healthcare Cost Trend Rates	1% Decrease	Healthcare Trend	1% Increase
Total OPEB Liability	$ 1,659,800,000	$ 1,823,900,000	$ 2,016,100,000
Plan Fiduciary Net Position	-	-	-
Net OPEB Liability	$ 1,659,800,000	$ 1,823,900,000	$ 2,016,100,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.0%	0.0%	0.0%

A one percent decrease in the healthcare trends decreases the TOL and NOL by approximately 9%. A one percent increase in the healthcare trend rate increases the TOL and NOL by approximately 11%.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB.

For the year ended June 30, 2019, the City recognized OPEB expense of $124,500,000. The table below shows the development of OPEB expense.

Calculation of OPEB Expense		
Fiscal Year Ending	**June 30, 2019**	**June 30, 2018**
Measurement Year Ending	**June 30, 2018**	**June 30, 2017**
Change in Net OPEB Liability	$ (37,700,000)	$ (75,000,000)
Change in Deferred Outflows	(50,500,000)	0
Change in Deferred Inflows	116,300,000	90,500,000
Non Employer Contributions	-	
Employer Contributions	96,400,000	114,800,000
OPEB Expense	**$ 124,500,000**	**$ 130,300,000**
OPEB Expense as % of Payroll	**6.90%**	**7.47%**
Operating Expenses		
Service cost	$ 81,800,000	$ 89,300,000
Employee contributions	-	-
Administrative expenses	-	-
Total	$ 81,800,000	$ 89,300,000
Financing Expenses		
Interest cost	$ 67,900,000	$ 56,100,000
Expected return on assets	-	-
Total	$ 67,900,000	$ 56,100,000
Changes		
Benefit changes	$ 0	$ 0
Recognition of assumption changes	(31,500,000)	(15,100,000)
Recognition of liability gains and losses	6,300,000	0
Recognition of investment gains and losses	-	0
Total	$ (25,200,000)	$ (15,100,000)
OPEB Expense	**$ 124,500,000**	**$ 130,300,000**

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

At June 30, 2019, the City reported deferred outflows of resources and deferred inflow of resources related to OPEB from the following sources:

Schedule of Deferred Inflows and Outflows of Resources as of June 30, 2019 Projected Fiscal Year End June 30, 2018 Measurement Date

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 50,500,000	$ 0
Changes in assumptions	0	206,800,000
Net difference between projected and actual earnings on OPEB plan investments	0	0
Contributions subsequent to the measurement date	96,900,000	0
Total	**$ 147,400,000**	**$ 206,800,000**

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Year ended June 30:	
2020	(25,200,000)
2021	(25,200,000)
2022	(25,200,000)
2023	(25,200,000)
2024	(25,100,000)
Thereafter	$ (30,400,000)

The subsequent contributions after the measurement date are reflected as a deferred outflow of resources, but this is not subject to a deferred recognition period in the OPEB expense. Instead, this will be fully recognized in the OPEB expense for the fiscal year ending June 30, 2020.

At June 30, 2019, the Water Fund reported deferred outflows of resources and deferred inflow of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	$ 3,712,000	$ 15,345,000
Contributions subsequent to measurement date	7,277,000	-
Total	$ 10,989,000	$ 15,345,000

Amounts reported as deferred outflows and inflows of resources will be recognized in OPEB expense over a six-year period in the amount of ($2,326,600) per year.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
3. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)

Required Supplementary Information: The schedule below shows the changes in NOL and related ratios required by GASB.

Schedule of Changes in Net OPEB Liability and Related Ratios				
Measurement Year Ending		**6/30/2018**		**6/30/2017**
Total OPEB Liability				
Service cost (BOY)	$	81,800,000	$	89,300,000
Interest (includes interest on service cost)		67,900,000		56,100,000
Changes of benefit terms		0		0
Differences between expected and actual experience		56,800,000		0
Changes of assumptions		(147,800,000)		(105,600,000)
Benefit payments, including refunds of member contributions		(96,400,000)		(114,800,000)
Net change in total OPEB liability	$	**(37,700,000)**	$	**(75,000,000)**
Total OPEB liability - beginning		**1,861,600,000**		**1,936,600,000**
Total OPEB liability - ending	$	**1,823,900,000**	$	**1,861,600,000**
Plan fiduciary net position				
Contributions - employer	$	96,400,000	$	114,800,000
Contributions - non-employer		-		-
Contributions - member		-		-
Net investment income		-		-
Benefit payments, including refunds of member contributions		(96,400,000)		(114,800,000)
Administrative expense		-		-
Net change in plan fiduciary net position	$	-	$	-
Plan fiduciary net position - beginning		-		-
Plan fiduciary net position - ending	$	-	$	-
Net OPEB liability - ending	$	**1,823,900,000**	$	**1,861,600,000**
Plan fiduciary net position as a percentage of the total OPEB liability		0.00%		0.00%
Covered payroll	$	1,805,400,000	$	1,744,700,000
Net OPEB liability as a percentage of covered payroll		101.02%		106.70%

The Plan is not currently being pre-funded so there is no actuarially determined contribution shown below. The actuarially determined contribution is a target or recommended contribution to the OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contributions for the reporting period was adopted. The Actuarial Required Contribution (ARC) determined under GASB 45 is not a recommended contribution under Actuarial Standards of Practice, and thus is not shown below. If the Plan decides to pre-fund the liabilities; the actuary will provide an appropriate actuarially determined contribution.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

4. PENNSYLVANIA INTERGOVERNMENTAL COOPERATION AUTHORITY (PICA)

PICA, a body corporate and politic, was organized in June 1991 and exists under and by virtue of the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (the Act). Pursuant to the Act, PICA was established to provide financial assistance to cities of the first class. The City currently is the only city of the first class in the Commonwealth of Pennsylvania. Under the Act, PICA is administered by a governing Board consisting of five voting members and two ex officio non-voting members. The Governor of Pennsylvania, the President Pro Tempore of the Pennsylvania Senate, the Minority Leader of the Pennsylvania Senate, the Speaker of the Pennsylvania House of Representatives and the Minority Leader of the Pennsylvania House of Representatives each appoints one voting member to the Board.

The Act provides that, upon PICA's approval of a request of the City to PICA for financial assistance, PICA shall have certain financial and oversight functions. First, PICA shall have the power to issue bonds and grant or lend the proceeds thereof to the City. Second, PICA also shall have the power, in its oversight capacity, to exercise certain advisory and review powers with respect to the City's financial affairs, including the power to review and approve five-year financial plans prepared at least annually by the City and to certify noncompliance by the City with its current five-year financial plan (which certification would require the Secretary of the Budget of the Commonwealth of Pennsylvania to cause certain Commonwealth payments due to the City to be withheld).

PICA bonds are payable from the proceeds of a PICA tax on the wages and income earned by City residents. The City has reduced the amount of wage and earnings tax that it levies on City residents by an amount equal to the PICA tax so that the total tax remains the same. PICA returns to the City any portion of the tax not required to meet their debt service and operating expenses. In Fiscal 2019, this transfer amounted to $494.0 million.

5. RELATED PARTY TRANSACTIONS

The City is associated, through representation on the respective Board of Directors, with several local governmental organizations and certain quasi-governmental organizations created under the laws of the Commonwealth of Pennsylvania. These organizations are separate legal entities having governmental character and sufficient autonomy in the management of their own affairs to distinguish them as separate independent governmental entities.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

5. RELATED PARTY TRANSACTIONS (continued)

A list of such related party organizations and a description of significant transactions with the City, where applicable, is as follows:

A. SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY (SEPTA)

During the year the City provided an operating subsidy of $84.61 million to SEPTA.

B. OTHER ORGANIZATIONS

The City provides varying levels of subsidy and other support payments which totaled $99.86 million during the year to the following organizations:

- Philadelphia Health Management Corporation
- Philadelphia Industrial Development Corporation
- Fund for Philadelphia Incorporated

6. RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The City (except for Aviation Fund operations, the Municipal Authority, and PICA) is self-insured for fire damage, casualty losses, public liability, Workers' Compensation and Unemployment Compensation. The Aviation Fund is self-insured for Workers' Compensation and Unemployment Compensation and insured through insurance carriers for other coverage. The City is self-insured for medical benefits provided to employees in the Fraternal Order of Police, its city-administered health plan, the International Association of Fire Fighters, and District Council 47.

The City covers all claim settlements and judgments, except for those discussed above, out of the resources of the fund associated with the claim. Claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. These losses include: an estimate of claims that have been incurred but not reported; the effects of specific, incremental claims adjustment expenditures, salvage, and subrogation; and unallocated claims adjustment expenditures.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
6. RISK MANAGEMENT (continued)

At June 30, the amount of these liabilities was $354.2 million for the Primary Government. This liability is the City's best estimate based on available information. Changes in the reported liability since June 30, 2016 resulted from the following:

(Amounts in Millions of USD)

	Beginning Liability	Current Year Claims & Changes In Estimates	Claim Payments	Ending Liability
Fiscal 2017	350.3	243.9	(229.1)	365.1
Fiscal 2018	365.1	199.3	(211.4)	353.0
Fiscal 2019	353.0	207.9	(217.0)	343.9

The City's Unemployment Compensation and Workers' Compensation coverages are provided through its General Fund. Unemployment Compensation and Workers' Compensation coverages are funded by a pro rata charge to the various funds. Payments for the year were $3.5 million for Unemployment Compensation claims and $69.85 million for Workers' Compensation claims.

The City's estimated outstanding workers' compensation liabilities are $261.4 million discounted at 3.5%. On an undiscounted basis, these liabilities total $344.5 million. These liabilities include provisions for indemnity, medical and allocated loss adjustment expense (ALAE). Excluding the ALAE, the respective liabilities for indemnity and medical payments relating to workers' compensation total $239.7 million (discounted) and $318.2 million (undiscounted). The Water Fund's accrued liability for workers' compensation was $23.5 million and $23.7 million at June 30, 2019 and 2018, respectively.

During the last five (5) fiscal years, no claim settlements have exceeded the level of insurance coverage for operations using third party carriers. None of the City's insured losses have been settled with the purchase of annuity contracts.

7. CONTINGENCIES

Generally, claims against the City are payable out of the General Fund, except claims against the City Water Department, City Aviation Division, or Component Units which are paid out of their respective funds and only secondarily out of the General Fund which is then reimbursed for the expenditure. Unless specifically noted otherwise, all claims hereinafter discussed are payable out of the General Fund or the individual

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

7. CONTINGENCIES (continued)

Enterprise Fund. The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act", established a $500,000 aggregate limitation on damages arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation has been upheld by the United States Supreme Court. There is no such limitation under federal law.

Various claims have been asserted against the City and in some cases lawsuits have been instituted. Many of these claims are reduced to judgment or otherwise settled in a manner requiring payment by the Water Fund. The aggregate estimate of loss deemed to be probable as of June 30, 2019 and 2018 is approximately $5.4 million and $5.6 million, respectively. This amount has been included on the Statement of Net Position under Other Long-Term Liabilities.

The City's aggregate estimate of loss deemed to be probable is approximately $320.5 million. Of this amount, $36.13 million is charged to the current operations of the Enterprise Funds. The remaining $284.44 million pertaining to the General Fund is reflected in the City's Government Wide Statements

In addition to the above, there are certain lawsuits against the City for which an additional loss is reasonably possible. These lawsuits relate to General Fund and Enterprise Fund operations. The aggregate estimate of the amount of loss from these lawsuits in which some amount of loss is reasonably possible is approximately $76.1 million from the General Fund, $8.0 million from the Water Fund and $4.2 million from the Aviation Fund. This represents the best estimate of the entire current inventory of such litigation and pre-suits as of February 10, 2020.

8. SUBSEQUENT EVENTS

In preparing the accompanying financial statements, the Water Fund has reviewed events that occurred subsequent to June 30, 2019 through and including February 25, 2020. The following events are described below:

- In February 2019, the City Bond Committee approved the terms and provisions of its Water and Wastewater Revenue Refunding Bonds Series 2020 (Forward Delivery) to allow for the issuance in October 2020 of $127.7 million of the

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

8. SUBSEQUENT EVENTS

Series 2020 Bonds to refund all of the outstanding Series 2011A Bonds in the amount of $135.0 million and to pay the costs of issuing the Series 2020 Bonds. The total proceeds of the Series 2020 Bonds will be $138.6 million (which includes a premium of $10.9 million). The interest rates of the bonds to be refunded will range from 4.500% to 5.000%. The interest rates of the newly issued bonds will be 5.000%.

In August 2019, the City issued $250.7 million Water and Wastewater Revenue Bonds Series 2019B ("2019B"). The 2019B bonds were issued at an interest rate of 5.000%. The 2019B bonds were issued for the purpose of providing funds which, together with the other available funds of the City, will be used to finance (i) capital improvements of the City's Water and Wastewater systems, (ii) a deposit to the Debt Reserve Account of the Sinking Fund, and (iii) the costs of issuance relating to the Bonds.

9. ACCOUNTS RECEIVABLE

Balances of accounts receivable and allowance for doubtful accounts consisted of the following:

FISCAL YEAR ENDED JUNE 30, 2019

Accounts Receivable	
Billed in the Last Twelve Months	$158,151,911
Billed in 15-year Cycle Billing	3,522,122
Penalties on Receivables	11,000,836
Other Receivables	500,840
Subtotal	173,175,709
Bad Debt Written Off	5,321,610
Total	$167,854,099
Allowance for Doubtful Accounts	$ 12,378,155

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

9. ACCOUNTS RECEIVABLE (continued)

FISCAL YEAR ENDED JUNE 30, 2018	
Accounts Receivable	
Billed in the Last Twelve Months	$ 147,590,216
Billed in 15-year Cycle Billing	5,484,328
Penalties on Receivables	8,113,183
Other Receivables	4,053,616
Subtotal	165,241,343
Bad Debt Written Off	6,474,206
Total	$ 158,767,137
Allowance for Doubtful Accounts	$ 11,489,296

10. ACCOUNTING FOR THE NEW RIVER CITY PROJECT FUNDS – WATER SINKING FUND RESERVE SUBSTITUTION

Pursuant to the Water Department's General Bond Ordinance, the Sinking Fund Reserve provides a reserve against default of the payment of principal and interest on Water Revenue Bonds when due.

The New River City Ordinance dated January 23, 2007 (Bill No 060005) authorized the purchase and deposit of a surety bond that meets the requirements of the General Ordinance to replace $67,000,000 of the Sinking Fund Reserve Balance. The $67,000,000 was used as follows:

Cost of the surety bond	$ 2,010,000
Legal and financial services	290,000
Management fees	375,000
Costs of certain water and sewer infrastructure components of the New River City Program	64,325,000
Total	$ 67,000,000

The prepaid surety bond was recorded as an asset in the Sinking Fund Reserve and amortized over the lives of the outstanding bonds. The prepaid surety bond was fully amortized as of June 30, 2019.

In connection with the New River City Program, the City executed a program agreement with Philadelphia Authority for Industrial Development ("PAID") to provide program management and oversight for the program. To date, twelve projects totaling $83,697,833 have been executed (disbursements were limited to the $64,325,000). As of June 30, 2016, all projects were completed and all of the project

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

10. ACCOUNTING FOR THE NEW RIVER CITY PROJECT FUNDS – WATER SINKING FUND RESERVE SUBSTITUTION

funds have been disbursed. The transfer of the water and sewer utilities at Philadelphia Naval Business Center from PAID to the Water Department, including the projects outlined above, occurred in November, 2009.

11. LONG TERM AGREEMENTS

The City has entered into several long term agreements with third parties through the Philadelphia Municipal Authority as follows:

A. Automatic Meter Reading

In 1997, the City, through the PMA, entered into a long-term contract with ITRON for the replacement of residential water meters with new meters equipped with radio transmitter devices and for services and materials required to implement, operate and maintain the Water Department's Automatic Meter Reading ("AMR") System. The agreement with ITRON expired in September 2019.

The Water Department made payments, which are an operating expense of the Water Department, to ITRON for Fiscal Year 2018 of $2,052,000 for meter reading services and $1,880,000 for new water meters. Payments for Fiscal Year 2019 were $3,067,183 for meter reading services and $2,426,770 for new water meters.

B. Biosolids Treatment and Utilization

In 2008, the City entered into a long-term contract and lease with the Philadelphia Municipal Authority (the "PMA") for the PMA to operate the Water Department's existing Biosolids Recycling Center (the "BRC"). The PMA and Philadelphia Biosolids Services, LLC ("PBS") entered into a Service Agreement (the "PBS Service Contract"), pursuant to which PBS designed and built, and currently operates, a facility at the BRC to heat dry and dispose of biosolids captured during wastewater treatment. The PMA is required to make annual payments to PBS for operating the BRC. Pursuant to a Service Agreement between the PMA and the City (the "City Service Contract"), the City assumed all of PMA's obligations under the PBS Service Contract. The obligations under the City Service Contract constitute operating expenses of the Water Department. In Fiscal Years 2018 and 2019, the City paid to PMA, from revenues generated by the Water Department, $21,782,487 and $19,494,403, respectively. The City Service Contract contains adjusters for the Consumer Price Index, Producer Price Index, and fluctuations in fuel prices, among others; thus, expenditures under the City Service Contract may vary over time. The contract expires on October 13, 2028, and contains the possibility of a five-year renewal term at the option of the City. In addition to facilitating compliance with various state

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
11. LONG TERM AGREEMENTS (continued)

and federal environmental regulations, including the Clean Air Act, the PBS Service Contract has produced cost savings for the Water Department.

C. Northeast Water Pollution Control Plant Digester Gas Cogeneration Facility

In 2011, the City entered into a long-term contract and lease with the PMA for the PMA to arrange the construction, financing, maintenance and sublease of a digester gas cogeneration facility at the Northeast Water Pollution Control Plant. The PMA entered into a lease (the "Lease") with BAL Green Biogas I, LLC, a special purpose entity of Bank of America (the "Lessor"), which requires the PMA to make certain lease payments to the Lessor. Pursuant to a sublease dated December 23, 2011 (the "Sublease"), the City assumed all of the PMA's obligations under the Lease. The obligations under this contract constitute operating expenses of the Water Department. In Fiscal Year 2018 and Fiscal Year 2019, the City paid to the Lessor from revenues generated from the Water Department, $5,937,935 and $6,701,044 respectively. The Sublease expires on September 25, 2029, unless renewed by PMA for an additional term of eighteen months.

D. Advanced Meter Reading Infrastructure

In February 2019, the City, through PMA, entered into a contract with Sensus USA Inc. ("Sensus") for the delivery of an advanced metering infrastructure ("AMI") system for water meter reading, including installation, operation and maintenance of the AMI system. The transition from AMR vendor ITRON to Sensus was completed in September 2019 and Sensus has taken over ITRON's meter reading services. The Water Department expects installation of the AMI system and communications network to take approximately 12 months. The deployment phase, during which AMR equipment will be replaced with AMI units, is expected to take approximately 24 months. The costs for installation and deployment are included in the Water Capital Improvement Program. After the initial installation and deployment phase, the AMI operations and maintenance term of the contract will begin for a term of 20 years, with the option to renew for additional one-year terms for a period of three years. Payments to Sensus constitute operating expenses of the Water Department. In Fiscal Year 2019, the Water Department paid $3,010,125 for services and $470,285 for equipment.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)

11. LONG TERM AGREEMENTS (continued)

E. Laurel Street Combined Sewer Overflow

In 2011, the City entered into an Amended and Restated Development and Tax and Claim Settlement Agreement (the "Sugarhouse Agreement") with Sugarhouse HSP Gaming, L.P. ("HSP"). Under the terms of the Sugarhouse Agreement, HSP is required to fund the development and expansion of the Laurel Street Combined Sewer Overflow Project. As compensation for the development and expansion of the project, HSP has been allotted a five-year credit against real estate taxes and settlement payments otherwise due to the City. The amount of the credit corresponds to the amount expended by HSP on the Laurel Street Combined Sewer Overflow Project.

The Laurel Street Combined Sewer Overflow Project is a capital asset of the Water Department, and the credit awarded to HSP is a capital expenditure of the Water Department payable to the City. The Water Department paid the City $3,514,421 for Fiscal Year 2016. The Water Department paid the City $7,028,842 in Fiscal Year 2017, which sum included its payment obligations for both Fiscal Years 2017 and 2018 combined. The Water Department's final payment obligation under the terms of the Sugarhouse Agreement occurred during Fiscal Year 2019 for $652,752.

12. COMBINED SEWER OVERFLOW PROGRAM

The PaDEP and the City signed the Consent Order and Agreement ("COA") on June 1, 2011 that allowed the City to officially to embark on the implementation of its strategy known as the Green City, Clean Waters Program to use green and traditional infrastructure investments to substantially mitigate combined sewer overflows ("CSOs") and enhance the quality of local waterways over 25 years.

The Water Department anticipates that over the next 17 years, compliance with the COA will significantly increase capital and operating expenditures related to its Combined Sewer Overflow Program. Moreover, any resulting changes to the COA as a result of the EPA's information request could further increase the costs of compliance. Looking ahead to the 10th-year milestone, the Water Department continues to review program cost and delivery in an effort to optimize the program while satisfying the necessary regulatory requirements. As of the most recent projections, the total cost of the 25-year program is approximately $4.5 billion, of which approximately $3.5 billion are capital related costs and $1 billion are operation and maintenance costs.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
12. COMBINED SEWER OVERFLOW PROGRAM (continued)

In its current form, the COA adopts the presumption approach to the management of CSOs. The goal under the presumption approach is to eliminate and remove by 2036 (year 25 of the COA) the mass of pollutants that otherwise would be removed by the capture of 85% by volume city-wide of the combined sewage otherwise collected in the City's combined sewer system during precipitation events. To ensure this ultimate goal is met, the COA requires interim milestones at the end of the fifth, tenth, fifteenth and twentieth years. The interim milestones require the City to achieve specific targets in four categories: (1) Total Greened Acres; (2) Overflow Reduction Volume; (3) Miles of Interceptor Lined; and (4) Wastewater Treatment Plant Upgrades: Design and Construction. The COA includes financial protections in the event that the costs of complying with the COA exceed the Water Department's projections. Should the costs of complying with the COA increase to the extent that the wastewater component of a customer's bill exceeds 2.27% of median household income, the City may petition the PaDEP for an extension of time to satisfy the requirements of the COA so that the financial burden does not become excessive on ratepayers. The COA also includes significant penalties for non-compliance with the various 5-year milestone targets. Penalties start at $25,000 per month for each violation (for the first 6 months) and increase up to $100,000 monthly for uncured violations of 13 months or more.

The City allocated $76 million for capital COA Expenditures in the budgets for both Fiscal Years 2018 and 2019. Since July 1, 2011 through and including June 30, 2019, the Water Department's capital spending for COA projects is approximately $165 million. During the same period, the Water Department has spent $254 million from its operating budget.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

IV. OTHER INFORMATION (continued)
13. RESTRICTED ASSETS

Assets whose use is limited to a specific purpose have been classified as “restricted” in the Statement of Fund Net Position.

Restricted assets as of June 30, 2019, comprised the following:

	(Thousands of Dollars) Cash and Investments	Accrued Interest
Amounts Reserved for:		
Capital Projects	$ 349,402	$ 1,031
Rate Stabilization	179,793	656
Residual	15,818	63
Sinking Fund	268	1
Sinking Fund Reserve	201,099	965
Total	$ 746,380	$ 2,716

Restricted assets as of June 30, 2018, comprised the following:

	(Thousands of Dollars) Cash and Investments	Accrued Interest
Amounts Reserved for:		
Capital Projects	$ 450,667	$ 318
Rate Stabilization	201,759	349
Residual	15,262	23
Sinking Fund	823	-
Sinking Fund Reserve	218,277	446
Total	$ 886,788	$ 1,136

Required Supplementary Information

CITY OF PHILADELPHIA WATER DEPARTMENT
BUDGETARY COMPARISON SCHEDULE
Water Operating Fund
For the Fiscal Year Ended June 30, 2019
(Legally Enacted Basis) **(Thousands of Dollars)**

Revenues	Budgeted Amounts			Final Budget to Actual Positive (Negative)
	Original	Final	Actual	
Locally Generated Non-Tax Revenue	$ 700,211	$ 700,211	$ 705,202	$ 4,991
Revenue from Other Governments	1,000	1,000	698	(302)
Revenue from Other Funds	113,497	113,497	39,967	(73,530)
Total Revenues	**$ 814,708**	**$ 814,708**	**$ 745,867**	**$ (68,841)**
Expenditures and Encumbrances				
Personal Services	143,902	146,108	137,277	8,831
Pension Contributions	77,985	78,877	78,876	1
Other Employee Benefits	60,156	60,212	54,893	5,319
Sub-Total Employee Compensation	282,043	285,197	271,046	14,151
Purchase of Services	206,610	206,610	186,892	19,718
Materials and Supplies	52,367	52,293	45,542	6,751
Equipment	10,520	10,595	7,366	3,229
Contributions, Indemnities and Taxes	9,176	9,176	3,816	5,360
Debt Service	212,992	212,992	190,909	22,083
Payments to Other Funds	71,000	71,000	70,717	283
Advances and Other Miscellaneous Payments	-	-	-	-
Total Expenditures and Encumbrances	844,708	847,863	776,288	71,575
Operating Surplus (Deficit) for the Year	**$ (30,000)**	**$ (33,155)**	**$ (30,421)**	**$ 2,734**
Fund Balance Available, July 1, 2018	-	-	-	-
Operations in Respect to Prior Fiscal Years				
Commitments Cancelled - Net	30,000	30,000	30,421	421
Prior Period Adjustments	-	-	-	-
Adjusted Fund Balance, July 1, 2018	30,000	30,000	30,421	421
Fund Balance Available, June 30, 2019	**$ -**	**$ (3,155)**	**$ -**	**$ 3,155**

City of Philadelphia
Required Supplementary Information
Other Post Employment Benefits (OPEB) and Pension Plans

City of Philadelphia - Schedule of Changes in Net OPEB Liability and Related Ratios *(Amounts of USD)*

	FYE 2018	FYE 2017
Total OPEB Liability		
Service Cost (BOY)	81,800,000	89,300,000
Interest (includes interest on service cost)	67,900,000	56,100,000
Changes of benefit terms	0	-
Differences between expected and actual experience	56,800,000	-
Changes of assumptions	(147,800,000)	(105,600,000)
Benefit payments, including refunds of member contributions	(96,400,000)	(114,800,000)
Net change in total OPEB liability	**(37,700,000)**	**(75,000,000)**
Total OPEB liability - beginning	1,861,600,000	1,936,600,000
Total OPEB liability - ending	**1,823,900,000**	**1,861,600,000**
Plan fiduciary net position		
Contributions - employer	96,400,000	114,800,000
Contributions - non-employer	-	-
Contributions - member	-	-
Net investment income	-	-
Benefit payments, including refunds of member contributions	(96,400,000)	(114,800,000)
Administrative expense	-	-
Net change in plan fiduciary net position	-	-
Plan fiduciary net position - beginning	-	-
Plan fiduciary net position - ending	-	-
Net OPEB liability - ending	**1,823,900,000**	**1,861,600,000**
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%	0.00%
Covered-employee payroll	1,805,400,000	1,864,800,000
Net OPEB liability as a percentage of covered-employee payroll	101.02%	99.83%

City of Philadelphia - Municipal Pension Plan - Schedule of Changes in Net Pension Liability *(Amounts of USD)*

	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015
Total Pension Liability					
Service Cost (MOY)	183,755,848	164,137,303	157,607,110	148,370,075	143,556,347
Interest (includes interest on service cost)	857,348,582	843,171,926	823,959,345	802,450,569	791,298,503
Changes of benefit terms	378,455	4,064,886	-	-	-
Differences between expected and actual experience	11,097,845	28,937,167	103,878,650	151,918,733	34,909,464
Changes of assumptions	53,488,769	106,021,273	51,441,475	85,147,737	48,146,352
Benefit payments, including refunds of member contributions	(842,468,627)	(828,266,043)	(821,495,227)	(889,343,124)	(881,464,964)
Net change in total pension liability	**263,600,872**	**318,066,512**	**315,391,353**	**298,543,990**	**136,445,702**
Total Pension liability - beginning	11,510,667,823	11,192,601,311	10,877,209,958	10,578,665,968	**10,442,220,266**
Total Pension liability - ending	**11,774,268,695**	**11,510,667,823**	**11,192,601,311**	**10,877,209,958**	**10,578,665,968**
Plan fiduciary net position					
Contributions - employer	797,805,518	781,984,326	706,236,698	660,246,511	577,195,412
Contributions - member	99,179,683	83,288,635	73,607,359	67,055,003	58,657,817
Net investment income	303,735,946	440,326,787	566,624,580	(145,681,480)	13,838,367
Benefit payments, including refunds of member contributions	(842,468,627)	(828,266,043)	(821,495,227)	(889,343,124)	(881,666,036)
Administrative expense	(11,154,696)	(10,123,004)	(8,873,657)	(8,553,837)	(10,478,541)
Net change in plan fiduciary net position	347,097,824	467,210,701	516,099,753	**(316,276,927)**	**(242,452,981)**
Plan fiduciary net position - beginning	5,341,285,527	4,874,074,826	4,357,975,073	4,674,252,416	**4,916,705,397**
Plan fiduciary net position - ending	**5,688,383,351**	**5,341,285,527**	**4,874,074,826**	**4,357,975,073**	**4,674,252,416**
Net pension liability - ending	**6,085,885,344**	**6,169,382,296**	**6,318,526,485**	**6,519,234,885**	**5,904,413,552**
Plan fiduciary net position as a percentage of the total pension liability	48.31%	46.40%	43.55%	40.07%	44.19%
Covered payroll	1,816,114,249	1,805,400,096	1,744,728,288	1,676,548,962	1,597,848,869
Net pension liability as a percentage of covered payroll	335.10%	341.72%	362.15%	388.85%	369.52%

This schedule represents the other postemployment benefits and pension plans of the City of Philadelphia. The Water Department is a department of the City of Philadelphia.

City of Philadelphia
Required Supplementary Information
Other Post Employment Benefits (OPEB) and Pension Plans

City of Philadelphia Schedule of Collective Contributions (Based on Minimum Municipal Obligations)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010
Actuarially determined Contribution	668,281	661,257	629,620	594,975	556,030	523,368	727,604	534,039	463,375	297,446
Contributions in Relation to the Actuarially Determined Contribution	797,806	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556
Contribution Deficiency/(Excess)	(129,525)	(120,727)	(76,617)	(65,272)	(21,165)	(29,811)	(54,219)	(21,651)	(6,780)	(15,110)
Covered Payroll	1,816,114	1,805,400	1,744,728	1,676,549	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151
Contributions as a Percentage of Covered Payroll	43.93%	43.31%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%

City of Philadelphia Schedule of Collective Contributions (Based on Revenue Recognition Policy)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010
Actuarially determined Contribution	680,808	662,139	629,620	594,975	556,030	523,368	727,604	534,039	463,375	297,446
Contributions in Relation to the Actuarially Determined Contribution	797,806	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556
Contribution Deficiency/(Excess)	(116,998)	(119,845)	(76,617)	(65,272)	(21,165)	(29,811)	(54,219)	(21,651)	(6,780)	(15,110)
Covered Payroll	1,816,114	1,805,400	1,744,728	1,676,549	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151
Contributions as a Percentage of Covered Payroll	43.93%	43.31%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%

City of Philadelphia Schedule of Collective Contributions (Based on Funding Policy)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010
Actuarially determined Contribution	874,706	871,802	881,356	846,283	798,043	823,885	738,010	722,491	715,544	581,123
Contributions in Relation to the Actuarially Determined Contribution	797,806	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556
Contribution Deficiency/(Excess)	76,900	89,818	175,119	186,036	220,847	270,706	(43,813)	166,801	245,389	268,567
Covered Payroll	1,816,114	1,805,400	1,744,728	1,676,549	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151
Contributions as a Percentage of Covered Payroll	43.93%	43.31%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%

Notes to Schedule

Valuation Date	7/1/2017
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation two years prior to the beginning of the plan year.

Key Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry Age
Asset valuation method	Ten-year smoothed market
Amortization method	Gain/Losses are amortized over closed 20-year periods, assumption changes over 15years, benefit changes for actives over 10 years, benefit changes for inactive members over 1 year, and plan changes mandated by state over 20 years. Under the City's Funding policy, the initial July 1, 1985 unfunded actuarial liability (UAL) is amortized over 34 years ending June 30, 2019, with payments increasing 3.3% per year, the assumed payroll growth. Under the MMO Funding Policy, the July 1, 2009 unfunded actuarial liability (UAL) was "fresh started", to be amortized over 30 years, ending June 30, 2039. This is level dollar amortization of the UAL. Under the RRP Funding Policy, sales tax revenue and additional member contributions are dedicated to fund the unfunded liability instead of reducing the City's obligation such that this revenue is in addition to the MMO would be without these additional assets.
Discount rate	7.65%
Amortization growth rate	3.30%
Salary increases	Age based salary scale
Mortality	Sex distinct RP-2000 Combined Mortality with adjustments and improvements using Scale AA

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2019 can be found in the July 1, 2017 actuarial valuation.

This schedule represents other postemployment benefits and pension plans of the City of Philadelphia. The Water Department is a department of the City of Philadelphia.

Other Supplementary Information

CITY OF PHILADELPHIA WATER DEPARTMENT
BONDED DEBT
WATER AND WASTEWATER REVENUE BONDS
AS OF DECEMBER 1, 2019

Year End	Principal Requirements	Interest Requirements	Total Debt Service
06/30/2020	105,371,757	100,769,789	206,141,546
06/30/2021	87,860,183	100,005,730	187,865,913
06/30/2022	81,692,298	96,022,380	177,714,678
06/30/2023	79,228,182	92,489,913	171,718,095
06/30/2024	62,682,914	88,829,014	151,511,928
06/30/2025	65,526,576	86,136,331	151,662,907
06/30/2026	69,404,251	83,281,693	152,685,945
06/30/2027	72,466,026	80,279,618	152,745,644
06/30/2028	59,966,987	77,506,884	137,473,871
06/30/2029	65,357,224	74,808,097	140,165,320
06/30/2030	60,611,827	71,958,513	132,570,340
06/30/2031	63,470,889	69,176,635	132,647,523
06/30/2032	63,390,629	66,324,772	129,715,401
06/30/2033	52,377,971	63,983,151	116,361,122
06/30/2034	53,093,383	61,490,351	114,583,735
06/30/2035	55,125,000	58,999,060	114,124,060
06/30/2036	59,055,000	56,468,905	115,523,905
06/30/2037	60,010,000	53,706,299	113,716,299
06/30/2038	63,000,000	50,707,880	113,707,880
06/30/2039	66,160,000	47,555,520	113,715,520
06/30/2040	69,475,000	44,240,817	113,715,817
06/30/2041	78,135,000	41,026,191	119,161,191
06/30/2042	74,515,000	36,788,075	111,303,075
06/30/2043	78,335,000	32,967,256	111,302,256
06/30/2044	76,270,000	28,642,625	104,912,625
06/30/2045	69,135,000	25,007,500	94,142,500
06/30/2046	72,685,000	21,462,000	94,147,000
06/30/2047	40,465,000	18,633,250	59,098,250
06/30/2048	42,545,000	16,558,000	59,103,000
06/30/2049	44,735,000	14,364,906	59,099,906
06/30/2050	47,055,000	12,047,381	59,102,381
06/30/2051	49,490,000	9,609,781	59,099,781
06/30/2052	52,050,000	7,046,044	59,096,044
06/30/2053	54,750,000	4,349,675	59,099,675
06/30/2054	38,000,000	2,017,500	40,017,500
06/30/2055	21,350,000	533,750	21,883,750
Total	**2,254,841,097**	**1,795,795,287**	**4,050,636,384**

(1) Interest on the Series 1997B bonds assumes a rate of 1.154589%, the average interest rate of the bonds during the period 24 consecutive calendar months preceding the date of calculation per the Ordinance.

(2) Totals may not add due to rounding.

CITY OF PHILADELPHIA WATER DEPARTMENT
SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEARS ENDED
JUNE 30, 2019, 2018, AND 2017 (Legally Enacted Basis)

(amounts in thousands)

LINE NO.		YEAR ENDED JUNE 30, 2019	2018	2017
1.	Total Revenue	741,546	750,070	720,645
2.	Net Operating Expense	(522,415)	(506,184)	(480,257)
2a	Liquidated Encumbrances (Commitments Cancelled which reduces operating expenses)	30,421	32,413	24,550
3.	Transfer (To) From Rate Stabilization Fund	4,321	24,630	4,563
4.	**Net Revenues**	**253,873**	**300,929**	**269,501**
5.	Revenue Bonds Outstanding	(190,869)	(218,483)	(206,142)
6.	Transfer to Escrow Account to Redeem Bonds	-	(19,000)	(11,000)
6a	Other (Adjustment between Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses and Net Operating Expenses due to timing differences)	(39)	235	1,244
7.	Pennvest Loan	-	-	-
8.	**Total Debt Service**	**(190,908)**	**(237,248)**	**(215,898)**
9.	**Net Revenue after Debt Service**	**62,965**	**63,681**	**53,603**
10.	Transfer to General Fund	-	-	-
11.	Transfer to Capital Fund	(24,879)	(34,776)	(22,302)
12.	Transfer to Residual Fund	(38,086)	(28,905)	(31,301)
13.	**Total Transfers**	**(62,965)**	**(63,681)**	**(53,603)**
14.	**Net Operating Balance for Current Year**	**$ -**	**$ -**	**$ -**

The rate covenant contained in the General Ordinance requires the City to establish rates and charges for the use of the Water and Wastewater Systems to yield Net Revenues, as defined therein, in each fiscal year sufficient to meet three coverage tests:

COVERAGE A: Net Revenues must equal at least 120% of the Debt Service Requirements payable in such fiscal year (excluding debt service due on any Subordinated Bonds).

COVERAGE B: Net Revenues must equal at least 100% of : (i) the Debt Service Requirements (including Debt Service Requirements in respect of Subordinated Bonds) payable is such fiscal year; (ii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iii) debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable is such fiscal year; (iv) debt service on Interim Debt payable in such fiscal year; and (v) the Capital Account Deposit Amount for such fiscal year, less amounts transferred from the Residual Fund to the Capital Account during such fiscal year.

COVERAGE C: Net Revenues (excluding amounts transferred from the Rate Stabilization Fund into the Revenue Fund during, or as of the end of, such fiscal year) must equal at least equal to 90% of the Debt Service Requirements (excluding debt service on any Subordinated Bonds) payable in such fiscal year.

To ensure compliance with the rate covenant, the General Ordinance requires that the City review its rates, rents, fees, and charges at least annually.

COVERAGE A:

	2019	2018	2017
Line 4	**$ 253,873**	**$ 300,929**	**$ 269,501**
/ Line 5	**$ 190,869**	**$ 218,483**	**$ 206,142**
= COVERAGE A:	**1.33**	**1.38**	**1.31**

COVERAGE B:

Line 4	**$ 253,873**	**$ 300,929**	**$ 269,501**
/ Line 5 + Line 11	**$ 215,748**	**$ 253,259**	**$ 228,444**
= COVERAGE B:	**1.18**	**1.19**	**1.18**

COVERAGE C:

Line 4 - Line 3	**$ 249,552**	**$ 276,299**	**$ 264,938**
/ Line 5	**$ 190,869**	**$ 218,483**	**$ 206,142**
= COVERAGE C:	**1.31**	**1.26**	**1.29**

CITY OF PHILADELPHIA WATER DEPARTMENT
HISTORICAL OPERATING RESULTS FOR FISCAL YEARS ENDED JUNE 30, 2019, 2018, AND 2017
JUNE 30, 2019

(Thousands of Dollars)

	Year Ended June 30,		
	2019	2018	2017
Operating Revenues:			
Sales to General Customers	$ 639,028	$ 635,072	$ 615,886
Wholesale Wastewater Revenues	$ 39,515	$ 37,428	$ 34,652
Services to General and Aviation Fund	$ 35,245	$ 33,490	$ 33,364
Private Fire Connections	$ 3,598	$ 3,169	$ 2,872
Industrial Sewer Surcharge	$ 4,699	$ 5,628	$ 5,911
Other Operating Revenue	$ 8,130	$ 7,208	$ 7,122
Operating Grants	$ 698	$ 569	$ 1,408
Total Operating Revenue	**$ 730,913**	**$ 722,564**	**$ 701,215**
Non-Operating Revenues			
Interest Earnings on Investments [1]	$ 3,725	$ 1,506	$ 920
Other Non-Operating Revenues	$ 6,908	$ 26,000	$ 18,511
Total Non-Operating Revenues	**$ 10,633**	**$ 27,506**	**$ 19,431**
Total Revenues [2]	**$ 741,546**	**$ 750,070**	**$ 720,646**
Operating Expenses [3]	**$ 522,415**	**$ 506,184**	**$ 480,257**
Less: Liquidated Encumbrances (Commitments Cancelled which reduces operating expenses)	$ 30,421	$ 32,413	$ 24,550
Net Operating Expenses	**$ 491,994**	**$ 473,771**	**$ 455,707**
Adjustment: Debt Service and Net Operating Expenses due to timing differences	**$ -**	**$ -**	**$ -**
Excess of Total Operating Revenues over Net Operating Expenses (*Line 9 - Line 17*)	**$ 238,919**	**$ 248,793**	**$ 245,508**
Excess of Total Revenues over Net Operating Expenses (*Line 14 - Line* 17)	**$ 249,552**	**$ 276,299**	**$ 264,939**
Interest Expense:			
Revenue Bonds	$ 88,314	$ 86,294	$ 80,294
Total Interest Expense	**$ 88,314**	**$ 86,294**	**$ 80,294**
Excess of Total Revenues over Net Operating and Interest Expenses (*Line 20 - Line 23*)	**$ 161,238**	**$ 190,005**	**$ 184,645**
Add: Unencumbered Funds Available for Appropriation at Beginning of Fiscal Year	$ -	$ -	$ -
Add: Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses and Net Operating Expenses due to timing differences	$ (39)	$ 235	$ 1,244
Deduct: Principal Paid on Bonded Indebtedness During Fiscal Year	$ 102,555	$ 132,189	$ 125,848
Deduct: Transfer to Escrow Account to Redeem Bonds	$ -	$ 19,000	$ 11,000
Net UnappliedRevenues (Line 24 + Line 25 + Line 26- Line 27 - Line 28)	**$ 58,644**	**$ 39,051**	**$ 49,041**
Deduct: Funds Transferred to Residual Fund (Further Transfer to Capital Account)	$ 38,086	$ 28,905	$ 31,301
Deduct: Funds Transferred to Capital Account (Required Transfer of 1% NPPE)	$ 24,879	$ 34,776	$ 22,302
Transfer (TO)/FROM The Rate Stabilization Fund	$ 4,321	$ 24,630	$ 4,562
Debt Service Coverage Ratio:			
Net Revenues [4]/Total Debt Service and Other Transfers (Line 14-Line17+Line32)/ (Line23+27+Line55)	1.18	1.19	1.18
Net Revenues [4]/Revenue Bond Debt Service (Line 14-Line17+Line32)/ (Line23+27)	1.33	1.38	1.31

1) Only includes interest earnings credited to the Revenue Fund pursuant to the GBO

2) Calculated to include Project Revenues, as defined in the GBO, plus interest earnings from line 10

3) Operating Expenses excludes, pursuant to the GBO, depreciation, amortization, interest and sinking fund charges

4) As defined in GBO

CITY OF PHILADELPHIA WATER DEPARTMENT
WHOLESALE WATER AND WASTEWATER
CUSTOMER REVENUES AND CONTRACT TERMS
FISCAL YEAR ENDED JUNE 30, 2019

		Total Revenue	% Total Revenue *	Contract End Date	COA % **
Wastewater					
Bucks County Water & Sewer Authority (BCWSA)	$	9,370,113.27	1.26%	3/31/2038	N/A
BCWSA - Springfield Township - Erdenheim (1)		2,094,415	0.28%	6/30/2023	0.79%
BCWSA - Bensalem (1)		1,402,274	0.19%	6/30/2023	N/A
BCWSA - Springfield Township - Wyndmoor (1) (2)		363,734	0.05%	6/30/2023	N/A
BCWSA Total		**13,230,536**	**1.78%**		0.79%
Delcora (3)		10,080,694	1.35%	4/1/2028	9.44%
Cheltenham Township		4,103,126	0.55%	6/30/2025	2.43%
Lower Southampton Township		4,007,035	0.54%	6/30/2024	0.96%
Upper Darby Township		2,841,010	0.38%	8/8/2023	N/A
Lower Merion Township		2,545,596	0.34%	N/A	N/A
Abington Township		1,811,341	0.24%	6/30/2023	0.58%
Lower Moreland Township		896,097	0.12%	6/30/2025	0.36%
Other Municipal Revenue		-	0.00%		
Sub-total		**39,515,436**	**5.30%**		**14.56%**
Water					
Aqua Pennsylvania		3,589,560	0.48%	3/1/2026	N/A
Sub-total		**3,589,560**	**0.48%**		
Total Wholesale Revenues	**$**	**43,104,996.18**	**5.78%**		

Note: The Water Department includes capital charges within operation and maintenance charges for all customers except Bensalem, Lower Merion, and Upper Darby.

* The % of Total Revenue is the yearly revenue received by the Township divided by the total yearly revenue of the Water Operating Fund. The FY 2019 total is $745,330,463.

** Consent Order Agreement % (COA) is the Township's share of expenses for the Long Term Control Plan to mitigate combined sewer overflows (CSOs).

(1) Bucks County Water and Sewer Authority purchased the wastewater collection and disposal system of Springfield Township in December 2015 and purchased the wastewater collection system of Bensalem in September 1999.

(2) The total amount of the COA for Springfield Township – Wyndmoor is contained in the Springfield Township – Erdenheim amount.

(3) Delcora allocated capital is based on assets placed in service on or after July 4, 2011.

CITY OF PHILADELPHIA WATER DEPARTMENT
TOP 10 CUSTOMERS
FISCAL YEAR ENDED JUNE 30, 2019

	Customer	Revenue ($)	% Total Revenue **
1	City of Philadelphia*	$ 24,496,079	3.29%
2	Philadelphia Housing Authority	11,516,190	1.55%
3	School District of Philadelphia	6,178,537	0.83%
4	Veolia Energy Philadelphia	5,932,224	0.80%
5	University of Pennsylvania	4,982,622	0.67%
6	SEPTA	4,477,079	0.60%
7	AdvanSix Inc (1)	4,007,613	0.54%
8	Federal Government	3,700,472	0.50%
9	Temple University	3,157,123	0.42%
10	University of Pennsylvania Health System	2,508,615	0.34%
	TOTALS	**$ 70,956,552**	**9.52%**

*The total above for the City of Philadelphia includes, among others, charges for water and wastewater services, which include stormwater services as follows: (i) $20,103,201.88 – General Fund and (ii) $4,392,877.37 – Aviation Fund.

** The % of Total Revenue is the yearly revenue received by the Customer divided by the total yearly revenue of the Water Operating Fund. The FY 2019 total is $745,330,463.

(1) Based on the best information available as of June 30, 2017 AdvanSix was just outside PWD's top 10 customers. For FY2018, their usage increased and revenues were $4,398,889.

CITY OF PHILADELPHIA WATER DEPARTMENT
INCENTIVE AND ASSISTANCE PROGRAMS
FISCAL YEAR ENDING JUNE 30, 2019

Program	Program Type	2019	2018	2017
SMIP[1] and GARP[2][3]	Operating Expense	$ 30,433,976	$ 21,484,429	$ 18,354,069
Phase in Program (CAP)[4]	Bill Reductions	2,003,238	2,011,096	2,531,367
Stormwater Credits[4]	Bill Reductions	17,988,320	16,038,856	13,819,758
Community Gardens	Bill Reductions	9,966	14,320	-
Tiered Assistance Program	Bill Reductions	8,992,124	2,927,221	-
Total		**$ 59,427,624**	**$ 42,475,922**	**$ 34,705,194**

(1) Stormwater Management Incentives Program.
(2) Grant and Greened Acres Retrofit Program.
(3) In Fiscal Year 2017, 2018 and 2019, SMIP and GARP were partially funded with grants.
(4) Amounts are credits against certain customers' bills.

CITY OF PHILADELPHIA WATER DEPARTMENT
RECONCILIATION OF LEGALLY ENACTED AND GAAP BASIS OPERATING REVENUES AND EXPENSES
JUNE 30, 2019

	(Thousands of Dollars)
Legal Basis of Accounting Revenues	
Legal Basis Revenues	$ 745,867
GAAP Adjustments	
Reverse Fiscal Year 2018 Accounts Receivable Accrual	(38,509)
Record Fiscal Year 2019 Accounts Receivable Accrual	39,445
Accounts Receivable Adjustment	(40)
Allowance for Doubtful Accounts Adjustment	7,757
Reclassification of Interest Income to Nonoperating Revenue	(8,447)
Total GAAP Adjustments	206
Total GAAP Basis Operating Revenues	$ 746,073
Legal Basis of Accounting Expenses	
Legal Basis Expenses, Transfers and Debt Service	$ 776,288
GAAP Adjustments	
Expense in Fiscal Year 2019, included in Fiscal Year 2018 for Legal Basis	45,200
Encumbrances in Fiscal Year 2019, included in Fiscal Year 2018 for Legal Basis	(86,388)
Depreciation on Capital Assets, not included for Legal Basis	124,315
Payments among Water Department Funds, netted for GAAP Basis	(70,717)
Accrual of Probable Indemnities and Worker's Compensation Expenses	(427)
Reclassification of Transfers Out to Nonoperating Expenses	(29,573)
Allocation of Interfund Activity - Payment to General Fund	7,099
Allocation of Accrued Expenses	2,721
Change in Inventory Balance as of June 30, 2019	(284)
Elimination of Legal Basis Adjustments	(284)
Net Pension Expense, included in GAAP Basis	2,472
OPEB Expense, included in GAAP Basis	2,029
Removal of Debt Service Principal Payments and Transfers to the Escrow	(190,789)
Net Adjustments from Capitalization of Capital Assets	(7,005)
Removal of Legal Basis Compensated Absences Expense and Increase in Compensated Absence Liability	1,914
Amortization of Prepaid Surety Bond Insurance	55
Transfer of Expenditures Charged to FD 270 in Error	3,000
Total GAAP Adjustments	(196,662)
Total GAAP Basis Operating Expenses	**$ 579,626**

City of Philadelphia
Philadelphia Water Department
Financial Statements
Fiscal Years Ended June 30, 2018 and 2017

CITY OF PHILADELPHIA WATER DEPARTMENT

YEAR ENDED JUNE 30, 2018 AND 2017

TABLE OF CONTENTS

The City of Philadelphia Water Department Management Discussion and Analysis

The Philadelphia Water Department is one of the City's ten operating departments and its activities are accounted for under a dedicated Water Fund established pursuant to the Philadelphia Home Rule Charter. Pursuant to the Charter, the Water Department has the power and duty to operate, maintain, repair, and improve the City's water system (the "Water System") and the City's wastewater system (the "Wastewater System") and, together with the Water System, the "Water and Wastewater Systems" (or the "Combined System").

The Water Department's primary mission is to plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high-quality drinking water, to provide an adequate and reliable water supply for all household, commercial, and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater effectively.

The Water Department serves the City of Philadelphia and also provides wastewater services to ten wholesale customers and water services to one wholesale water customer. The Water Department operates three drinking water plants which have the capacity to treat and deliver about 522 million gallons per day of top quality drinking water that meets or exceeds all federal, state, and local regulations. Additionally, it operates three water pollution control plants that have the capacity to treat over 1 billion gallons of wastewater per day at a level that meets or exceeds federal and state standards.

The operations and activities of the Water Department are accounted for with a separate set of balancing accounts that comprise the assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses. The activity of the Water Department is grouped in the financial statements into the broad category referred to as an enterprise fund (the "Water Fund"). The Water Fund is comprised of the funds and accounts established by the City under its Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended (the "General Ordinance"),

2018 Financial Highlights

The Water Fund met its required coverage ratios for the year with a revenue bond coverage ratio of 1.38, a coverage ratio of 1.19 for total debt service and certain other transfers and expenditures, and a net operating revenue bond coverage ratio of 1.26 prior to the inclusion of the transfer from the Rate Stabilization Fund.

At the end of the current fiscal year, the Water Fund's net position totaled $787 million resulting from an excess of its assets and deferred outflows of resources over its liabilities and deferred inflows of resources; its unrestricted net position showed a deficit of $380 million. This deficiency will have to be funded from resources generated in future years.

The Water Fund's net position showed a $23 million decrease during the current fiscal year compared with the prior fiscal year. Net position was reduced by $108 million due to (1) adoption of GASB 75 related to the Water Fund's proportionate share of the other postemployment benefit (OPEB) plan and (2) capital assets reclassifications.

Overview of the Financial Statements

This section serves as an introduction to the Basic Financial Statements. It represents management's examination and analysis of the Water Fund's financial condition and performance.

The Financial Statements report information about the Water Fund using the Full Accrual Accounting method as used by similar business activities in the private sector. The Water Fund's basic financial statements include the statements of net position, statements of revenues, expenses, and changes in net position, statements of cash flows, and notes to the financial statements.

The financial statements are prepared in accordance with accounting principles promulgated by the Governmental Accounting Standards Board ("GASB").

> **Statement of Net Position:** The statement of net position presents the financial position of the Water Fund. It presents information on the assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference between them reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Water Fund is improving or deteriorating.
>
> **Statement of Revenues, Expenses, and Changes in Net Position:** The statement of revenues, expenses, and changes in net position presents information showing how the net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Revenues are recognized when earned, not when they are received. Expenses are recognized when incurred, not when they are paid. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods (e.g. salaries and wages payable).
>
> **Statement of Cash Flows:** The statement of cash flows presents information on the effects changes in assets, liabilities, and operations have on cash during the course of the fiscal year.

The Water Fund's financial statements can be found following the Management Discussion and Analysis. The notes provide additional information that is essential to a full understanding of the data provided in the Water Fund financial statements. In addition to the basic financial statements and accompanying notes, government accounting standards require presentation of required supplementary information ("RSI"). Following the RSI, the Fund has presented other supplementary information ("OSI").

Please see the Comprehensive Annual Financial Report of the City of Philadelphia for complete financial information for the City and its component units, which can be found at http://www.phila.gov/investor/CAFR.html.

Financial Analysis

Net Position

A three year condensed summary of the Water Fund's net position as of June 30 of each year follows:

Condensed Statement of Net Position
(Thousands of Dollars)
June 30

	2018	2017	2016
Assets:			
Current Assets	$ 267,446	$ 258,444	$ 233,821
Capital Assets	2,487,889	2,318,410	2,230,233
Restricted Assets	685,404	887,924	772,376
Total Assets	3,440,739	3,464,778	3,236,430
Deferred Outflows of Resources	84,100	94,211	108,809
Total Assets and Deferred Outflows	3,524,839	3,558,989	3,345,239
Liabilities:			
Current Liabilities	222,309	240,464	238,542
Bonds Payable	1,890,590	2,022,636	1,842,386
Other Noncurrent Liabilities	617,166	483,646	496,344
Total Liabilities	2,730,065	2,746,746	2,577,272
Deferred Inflows of Resources	8,133	2,144	2,863
Total Liabilities and Deferred Inflows	2,738,198	2,748,890	2,580,135
Net Position:			
Net Investment in Capital Assets	687,482	542,042	523,367
Restricted	478,940	511,113	499,916
Unrestricted Deficit	(379,781)	(243,056)	(258,179)
Total Net Position, as Restated	$ 786,641	$ 810,099	$ 765,104

The Water Fund's net position at June 30, 2018 was approximately $787 million, a $23.5 million or 2.9% decrease from June 30, 2017. Total assets and deferred outflows of resources decreased by $34.2 million, or 1.00%, to $3.5 billion, and total liabilities and deferred inflows of resources decreased $10.7 million, or 0.40%, to $2.7 billion.

The following is a discussion of the more significant changes in assets and deferred outflows of resources, liabilities and deferred inflows of resources, and net position in fiscal year 2018:

- Current assets increased by $9.0 million to $267.4 million, or 3.5%, due to increases in Equity in Treasurer's account due from other governments, and inventories.
- Restricted assets decreased by $202.5 million to $685.4 million, or 22.8%, due to decreases in the Water Capital Fund.
- Deferred outflows of resources decreased by $10.1 million to $84.1 million, or 10.7%, due to deferred outflows of resources related to the Water Fund's net pension liability which was partially offset by Net OPEB liability.

- Current liabilities decreased by $18.2 million to $222.3 million, or 7.5%, primarily due decreases in the current portion of long-term obligations, partially offset by increase in salaries and wages payable, and construction contracts payable.
- Bonds payable decreased by $132.0 million to $1.9 billion, or 6.5%, primarily due to the refunding.
- Other noncurrent liabilities increased by $133.5 million to $617.2 million, or 27.6%, primarily due to the new liability related other postemployment benefits.
- Deferred inflows of resources increased by $5.9 million due to deferred inflows of resources related to the net other postemployment benefits.
- The Water Fund's net position decreased by $23.5 million to $786.6 million, or 2.9%, as a result of fiscal year 2018 operations and prior period adjustments.
- Net investment in capital assets increased by $145.4 million, or 26.8%, to $687.5 million.
- Unrestricted net position deficit increased by $137 million, or 56.3%, to a deficit of $380 million. The unrestricted component of net position represents the net amount of total assets, deferred outflows of resources, total liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or restricted components of net position. The $137 million change is primarily due to a prior period adjustment (see Note III. 11.) of $108 million, which relates to adoption of the GASB No. 75 OPEB Statement and items that were capitalized and should have been expensed in prior years.

Changes in Net Position

A condensed summary of the Water Fund's Statement of Revenues, Expenses, and Changes in Net Position for the years ended June 30 is presented as follows:

Condensed Statement of Revenues, Expenses, and Changes in Net Position
(Thousands of Dollars)
Year Ended June 30

	2018	2017	2016
Operating Revenues:			
Charges for Goods and Services	$ 713,730	$ 702,059	$ 659,583
Miscellaneous Operating Revenues	12,642	12,607	10,367
Operating Grants	570	1,283	870
Total Operating Revenues	726,942	715,949	670,820
Operating Expenses:			
Operating Expenses excluding Depreciation and Amortization	439,972	413,339	382,272
Depreciation and Amortization	101,847	105,208	101,711
Total Operating Expenses	541,819	518,547	483,983
Operating Income	185,123	197,402	186,837
Nonoperating Revenues (Expenses):			
Federal, State and Local Grants	1,647	-	250
Interest Income	10,865	7,626	5,600
Debt Service – Interest	(70,136)	(66,295)	(82,659)
Other Expenses	(19,117)	(16,909)	(2,339)
Total Nonoperating Revenues (Expenses)	(76,741)	(75,578)	(79,148)
Increase in Net Position before Transfers	108,382	121,824	107,689
Transfers Out	(33,280)	(28,483)	(31,622)
Capital Contributions	9,372	1,077	1,506
Change in Net Position	84,474	94,418	77,573
Net Position – Beginning of Period, Before Restatement	810,099	765,104	709,579
Cumulative Effect of Change in Accounting Principle Adoption of GASB 75 and Reclassification of Expense	(107,932)	(49,423)	(22,048)
Net Position – Beginning of Period, as Restated*	702,167	715,681	687,531
Net Position – Ending of Period	$ 786,641	$ 810,099	$ 765,104

*For more information on the restatement, see Note III. 11. to the financial statements.

- Operating revenues increased by $11.0 million to $726.9 million due to an increase in charges for goods and services.
- Operating expenses increased by $23.3 million to $541.8 million due primarily to increases in employee benefits, personal services, purchase of services and materials and supplies partially offset by a reduction in depreciation and indemnities and taxes.
- Nonoperating expenses increased by $1.2 million to $76.7 million. The increase in non-operating expenses is due primarily to the debt service interest expense and other expense increases of $6 million, partially offset by the $4.9 million increase in other revenues and interest income.

Capital Assets and Debt Administration

Capital Assets

Investment in capital assets, net of accumulated depreciation, amounted to $2.5 billion as of June 30, 2018. This represented an increase of $169.5 million, or 7.3% over the previous year's total of $2.3 billion. Capital assets consist primarily of land, infrastructure, construction in progress, buildings, and equipment. Infrastructure consists of water and wastewater transmission and distribution lines. The following is a summary of capital assets as of June 30:

Capital Asset Activity
(Thousands of Dollars)
June 30

	2018	2017	2016
Land	$ 5,919	$ 5,919	$ 5,919
Construction in Progress	523,417	354,702	296,254
Infrastructure	2,601,207	2,544,238	2,466,451
Buildings and Equipment	1,730,817	1,766,014	1,768,387
Accumulated Depreciation	(2,373,471)	(2,352,463)	(2,306,778)
Total Capital Assets, net	$2,487,889	$2,318,410	$ 2,230,233

The capital assets of 2018, 2017 and 2016 were restated for reclassifications. For more information on the 2018 restatement, see Note III. 11. to the financial statements.

Long-Term Debt

As of June 30, 2018, the Water Fund had $2.5 billion of non-current liabilities outstanding. This was nearly equal to the previous year. The following is a summary of the non-current liability outstanding as of June 30:

Non-Current Liability Activity
(Thousands of Dollars)
June 30

	2018	2017	2016
Revenue Bonds - Net	$1,890,590	$2,022,636	$1,842,386
Derivative Instrument	3	356	1,508
Other Noncurrent Liabilities	41,497	39,057	38,995
Net OPEB Liability	139,806	-	-
Net Pension Obligation	435,860	444,233	455,841
Total Noncurrent Liabilities	$2,507,756	$2,506,282	$2,338,730

The following details activity of debt during fiscal year 2018:

	(Thousands of Dollars)
Long Term Bonds Outstanding	$1,824,507
Current Portion	(102,581)
	1,721,926
Unamortized Bond Premium	168,642
Unamortized Swaption	21
Bond Payable (Net) as of 6/30/2018	$1,890,590

More detailed information concerning long-term debt activity and capital asset activity is disclosed in Note III. 6. and Note III. 5., respectively, of the financial statements.

Budgetary Highlights

Please see the supplementary Budgetary Comparison Schedule located in the Required Supplementary Information section.

Requests for Information

This financial report is designed to provide a general overview of the City of Philadelphia Water Department's finances for all interested parties. Questions concerning any of the information provided in this report, or requests for additional information, should be addressed to the Philadelphia Water Department, Finance Division, Attention Deputy Commissioner of Finance, 5th Floor, 1101 Market Street, Philadelphia, Pennsylvania 19107.

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENTS OF FUND NET POSITION, JUNE 30, 2018 AND 2017

(amounts in thousands)

	2018	2017
ASSETS		
Current Assets:		
Cash on Deposit and on Hand	$ 30	$ 30
Equity in Treasurer's Account	102,997	95,258
Due from Other Governments	1,500	-
Accounts Receivable	158,767	161,306
Allowance for Doubtful Accounts	(11,489)	(13,058)
Inventories	15,502	14,772
Other Assets	139	136
Total Current Assets	267,446	258,444
Noncurrent Assets:		
Restricted Assets:		
Equity in Treasurer's Account	484,011	667,688
Sinking Funds and Reserves	199,833	219,100
Grants for Capital Purposes	-	-
Receivables	1,560	1,136
Total Restricted Assets	685,404	887,924
Capital Assets:		
Land	5,919	5,919
Infrastructure	2,601,207	2,544,238
Construction in Progress	523,417	354,702
Buildings and Equipment	1,730,817	1,766,014
Less: Accumulated Depreciation	(2,373,471)	(2,352,463)
Total Capital Assets, Net	2,487,889	2,318,410
Total Noncurrent Assets	3,173,293	3,206,334
Total Assets	**3,440,739**	**3,464,778**
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred Outflow - Fin. Instruments	3	356
Deferred Outflow - Net Pension Liability	24,543	37,683
Deferred Outflow - Net OPEB Liability	7,240	-
Unamortized Loss - Refunded Debt	52,314	56,172
Total Deferred Outflows	**84,100**	**94,211**
LIABILITIES		
Current Liabilities:		
Vouchers Payable	5,788	4,794
Accounts Payable	10,758	14,299
Due to Other Funds	5,299	3,804
Salaries & Wages Payable	4,580	3,024
Construction Contracts Payable	48,729	39,851
Due to Other Components Units	1,668	1,052
Accrued Expenses	30,046	32,195
Funds Held in Escrow	1,667	1,682
Unearned Revenue	11,193	9,914
Bonds Payable - Current	102,581	129,849
Other Current Liabilities	-	-
Total Current Liabilities	222,309	240,464
Derivative Instrument Liability	3	356
Net OPEB Liability	139,806	-
Net Pension Liability	435,860	444,233
Noncurrent Liabilities:		
Bonds Payable	1,721,912	1,867,067
Unamortized Premium/(Discount and Loss)	168,678	155,569
Other Noncurrent Liabilities	41,497	39,057
Total Noncurrent Liabilities	1,932,087	2,061,693
Total Liabilities	**2,730,065**	**2,746,746**
DEFERRED INFLOWS OF RESOURCES:		
Deferred Inflows - Net Pension Liability	1,336	2,144
Deferred Inflows - Net OPEB Liability	6,797	-
Total Deferred Inflows	**8,133**	**2,144**
NET POSITION		
Net Investment in Capital Assets	687,482	542,042
Restricted For:		
Capital Projects	99,230	89,905
Debt Service	200,225	219,100
Rate Stabilization	179,485	202,108
Unrestricted	(379,781)	(243,056)
Total Net Position	**$ 786,641**	**$ 810,099**

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
FOR FISCAL YEAR ENDED JUNE 30, 2018 AND 2017

(amounts in thousands)

	2018	2017
Operating Revenues:		
Charges for Goods and Services	$ 713,730	$ 702,059
Operating Grants	570	1,283
Miscellaneous Operating Revenues	12,642	12,607
Total Operating Revenues	726,942	715,949
Operating Expenses:		
Personal Services	139,566	128,535
Purchase of Services	111,777	110,222
Materials and Supplies	37,471	35,013
Employee Benefits	144,815	132,650
Indemnities and Taxes	6,343	6,919
Depreciation	101,847	105,208
Total Operating Expenses	541,819	518,547
Operating Income (Loss)	185,123	197,402
Non-Operating Revenues (Expenses):		
Federal, State, & Local Grants	1,647	-
Interest Income	10,865	7,626
Debt Service - Interest	(70,136)	(66,295)
Other Revenue (Expenses)	(19,117)	(16,909)
Total Non-Operating Revenue (Expenses)	(76,741)	(75,578)
Income (Loss) Before Contributions & Transfers	108,382	121,824
Transfers In/(Out)	(33,280)	(28,483)
Capital Contributions	9,372	1,077
Change in Net Position	84,474	94,418
Net Position - July 1	810,099	765,104
Reclassification of Expense	(107,932)	(49,423)
Net Position Adjusted - July 1	702,167	715,681
Net Position - June 30	**$ 786,641**	**$ 810,099**

CITY OF PHILADELPHIA WATER DEPARTMENT

STATEMENT OF CASH FLOWS
June 30, 2018 (amounts in thousands)

	2018	2017
Cash Flows from Operating Activities		
Receipts from Customers	$ 728,606	$ 706,195
Payments to Suppliers	(155,723)	(144,305)
Payments to Employees	(270,613)	(255,179)
Claims Paid	(6,343)	(6,919)
Other Receipts (Payments)	-	-
Net Cash Provided (Used)	**295,927**	**299,792**
Cash Flows from Non-Capital Financing Activities		
Operating Grants Received	716	1,283
Operating Subsidies and Transfers to Other Funds	(33,301)	(27,343)
Net Cash Provided (Used)	**(32,585)**	**(26,060)**
Cash Flows from Capital & Related Financing Activities		
Proceeds from Debt Issuance	1,784	306,245
Capital Grants & Contributions Received	-	-
Acquisition and Construction of Capital Assets	(231,545)	(247,431)
Interest Paid on Debt Instruments	(85,749)	(79,638)
Principal Paid on Debt Instruments	(132,202)	(125,012)
Other Receipts (Payments)	296	-
Net Cash Provided (Used)	**(447,416)**	**(145,836)**
Cash Flows from Investing Activities		
Interest and Dividends on Investments	8,136	5,260
Net Cash Provided (Used)	8,136	5,260
Net Increase (Decrease) in Cash & Cash Equivalents	(175,938)	133,156
Cash and Cash Equivalents, July 1	762,976	629,820
Cash and Cash Equivalents, June 30	**$ 587,038**	**$ 762,976**
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	185,123	197,402
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	101,847	105,208
Change in Assets and Liabilities:		
Receivables, Net	(663)	(9,884)
Inventories	(731)	143
Accounts and Other Payables	2,673	(2,300)
Accrued Expenses	6,399	9,094
Unearned Revenue	1,279	129
Net Cash Provided by operating activities	**$ 295,927**	**$ 299,792**

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Water Department have been prepared in conformity with generally accepted accounting principles ("GAAP") as applied to governmental units. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the Water Department's accounting policies are described below.

1. REPORTING ENTITY

The City of Philadelphia was founded in 1682 and was merged with the county in 1854. Since 1951 the City has been governed largely under the Philadelphia Home Rule Charter. However, in some matters, including the issuance of short-term and long-term debt, the City is governed by the laws of the Commonwealth of Pennsylvania.

The operations and activities of the Water Department are accounted for with a separate set of balancing accounts that comprise the assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses. The activity of the Water Department is grouped in the financial statements into the broad category referred to as an enterprise fund (the "Water Fund"). The Water Fund is comprised of the funds and accounts established by the City under its Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended (the "General Ordinance"),

2. FINANCIAL STATEMENTS

The Water Fund's financial statements (i.e., the Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and Statement of Cash Flows) report information of all Water Fund activities.

The Statement of Revenues, Expenses and Changes in Net Position demonstrates the degree to which direct operating expenses are offset by operating revenues.

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS

The Water Fund, reported by the City as a major proprietary fund, accounts for the activities related to the operation of the City's water delivery and sewage systems. The Water Fund's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred regardless of the timing of related cash flows. Grants and similar items are recognized as revenues as soon as all eligibility requirements imposed by the provider have been met.

Operating revenues and expenses are distinguished from nonoperating items in the Statement of Revenues, Expenses and Changes in Net Position. Operating revenues

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's ongoing operations. The principal operating revenues of the Water Fund are charges for water and sewer service. When calculating user fees charged to customers, the Water Department includes a component for the repayment of principal on the Water Department's outstanding debt.

Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the Water Fund's policy to use restricted resources first, then unrestricted resources as they are needed.

The Water Fund's activities are used to account for operations (1) that are financed and operated in a manner similar to private business enterprises – where the intent of the government body is that costs (expenses, including depreciation) of providing goods and services to the general public on a continuous basis be recovered primarily through user charges or (2) where the government body has decided that periodic determination of revenues earned, expenses occurred, and/or net income is appropriate for capital maintenance, public policy, management's control of accountability, and other purposes.

The activities of the Water Fund are segregated as follows:

- The Revenue Fund is used to account for the operations of the water and wastewater systems.
- The Revenue Bond Sinking Fund is used to account for the payment of interest of the outstanding revenue bonds.
- The Debt Reserve Fund account of the sinking fund is funded from the proceeds of each series of Water and Wastewater Revenue Bonds; provided, however, that if the Supplemental Ordinance authorizing a series of Water and Wastewater Revenue Bonds shall so authorize, the deposit to the Debt Reserve Account in respect of such Water and Wastewater Revenue Bonds may be accumulated from project revenues over a period of not more than three fiscal years after the issuance and delivery of such Water and Wastewater Revenue Bonds. The moneys and investments in the Debt Reserve Account are held and

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

maintained in an amount equal at all times to the Debt Reserve Requirement. If at any time the moneys in the Debt Service Account of the Sinking Fund shall be insufficient to pay as and when due the principal of (and premium, if any) or interest on any Water and Wastewater Revenue Bonds or other obligations payable from the Debt Service Account (including obligations arising in connection with Qualified Swap Agreements and Credit Facilities), the fiscal agent is required to pay over from the Debt Reserve Account the amount of such deficiency for deposit in the Debt Service Account. With respect to any issue of Water and Wastewater Revenue Bonds, in lieu of the required deposit into the Debt Reserve Account, the City may cause to be deposited into the Debt Reserve Account a surety bond, an insurance policy or an irrevocable letter of credit meeting the requirements of the General Ordinance and the Bond Committee Determination relating to such issue.

The Debt Reserve Account Amendment authorizes (i) the Director of Finance to apply moneys currently on deposit in the Debt Reserve Account to purchase a surety bond or insurance policy complying with the terms of the General Ordinance (described below), (ii) the transfer of the resulting excess moneys in the Debt Reserve Fund to the Revenue Fund and from there, upon compliance with the provisions of the General Ordinance to a new account in the Residual Fund called the Special Water Infrastructure Account and (iii) the application of the moneys deposited in the Special Water Infrastructure Account to the cost of certain renewals, replacements and improvements to the water and wastewater systems described in the Debt Reserve Account Amendment.

- The Rate Stabilization Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain assets to be drawn down to offset future deficits (and corresponding rate increase requirements) in the Water Fund.

  During Fiscal 2018, the Fund had the following activity:

Balance at July 1, 2017	$202,108,361
Transfer to Revenue Fund	(24,629,566)
Interest Earnings	1,924,574
Balance at June 30, 2018	$179,403,369

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

3. BASIS OF ACCOUNTING, MEASUREMENT FOCUS AND FINANCIAL STATEMENTS (continued)

During Fiscal 2017, the Fund had the following activity:

Balance at July 1, 2016	$205,760,628
Transfer to Revenue Fund	(4,563,393)
Interest Earnings	911,126
Balance at June 30, 2017	$202,108,361

- The Residual Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The Residual Fund is the last Fund into which Project Revenues are transferred from the Revenue Fund. Money in the Residual Fund may be used to pay Operating Expenses or debt service, or other purpose to support the System. In addition, money in the Residual Fund is used transfer to the annual payment to the City's general fund of an amount equal to the lesser of (i) the interest earnings for the Fiscal Year on the Debt Reserve Account and Subordinated Bond Fund (less amounts subject to rebate) and (ii) $4.994 million.

During Fiscal 2018, the Fund had the following activity:

Balance at July 1, 2017	$15,285,705
Transfer from Debt Service Reserve	1,627,838
Transfer to Revenue Fund	(1,627,838)
Investment Earnings	155,090
Balance at June 30, 2018	$15,440,795

During Fiscal 2017, the Fund had the following activity:

Balance at July 1, 2016	$15,202,103
Transfer from Debt Service Reserve	1,866,455
Transfer to Revenue Fund	(1,866,455)
Investment Earnings	83,602
Balance at June 30, 2017	$15,285,705

4. DEPOSITS AND INVESTMENTS

The Water Fund’s deposits and investments are held in segregated operating and capital accounts due to either legal requirements or operational needs. Sinking funds and reserves are maintained in segregated investment accounts to comply with reserve and other requirements of the bond covenants.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

4. DEPOSITS AND INVESTMENTS (continued)

All highly liquid investments (except for Repurchase Agreements) with a maturity of three months or less when purchased are considered to be cash equivalents.

The Water Fund reports investments at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price. The fair value of real estate investments is based on independent appraisals. Investments which do not have an established market are reported at estimated fair value.

Statutes authorize the City to invest in obligations of the Treasury, agencies, and instruments of the United States, repurchase agreements, collateralized certificates of deposit, bank acceptance or mortgage obligations, certain corporate bonds, and money market funds. The Pension Trust Fund is also authorized to invest in corporate bonds rated AA or better by Moody's Bond Ratings, common stocks, and real estate.

5. INVENTORIES

The materials and supplies inventories are valued at moving average cost.

6. CAPITAL ASSETS

Capital assets, which include property, plant, equipment and infrastructure assets, are defined by the City as assets with an initial individual cost of more than $5,000 and an estimated useful life in excess of three years. Capital assets are recorded at cost. Costs recorded do not include interest incurred as a result of financing asset acquisition or construction. Assets acquired by gift or bequest are recorded at their acquisition price at the date of the gift. Upon sale or retirement, the cost of the assets and the related accumulated depreciation, if any, are removed from the accounts. Maintenance and repair costs are charged to operations.

The Water Fund transfers Construction in Process to one or more of the major asset classes: (1) when project expenditures are equal to or have exceeded 90% of the estimated cost on new facilities, (2) when the expenditures are for existing facilities or (3) when they relate to specific identifiable items completed during the year which were part of a larger project.

Cost of construction includes all direct contract costs plus overhead costs. Overhead costs include direct and indirect engineering costs and interest incurred during the construction period for projects financed with bond proceeds. Interest is capitalized on proprietary fund assets acquired with tax-exempt debt. The amount of interest to be capitalized is calculated by offsetting interest expense incurred from the date of the borrowing until completion of the project with interest on invested proceeds over the

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

6. CAPITAL ASSETS (continued)

same period. Capitalization of interest during construction for Fiscal Year 2018 was $7.4 million and for Fiscal Year 2017 was $8.1 million.

Depreciation on the capital assets is provided on the straight-line method over their estimated useful lives: buildings - 20 to 50 years; equipment and storage facilities - 3 to 25 years; and transmission and distribution lines - 50 years.

7. BONDS AND RELATED PREMIUMS, DISCOUNTS & ISSUANCE COSTS

Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. In FY13, GASB Statement No. 65 was implemented resulting in bond issuance costs being recognized as an expense and reported in the period incurred.

8. INSURANCE

The City, except for the Airport and certain other properties, is self-insured for most fire and casualty losses to its structures and equipment and provides statutory workers' compensation and unemployment benefits to its employees. The City is self-insured for medical benefits provided to employees in the City administered health plan.

9. RECEIVABLES AND PAYABLES

Activities between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year are referred to as due to/from other funds.

Accounts receivable included in current assets consists of billed and unbilled fees, which have been earned but not collected as of June 30, 2018 and 2017. Credit balance accounts have been included in unearned revenue in the statement of net position. The allowance for doubtful accounts is management's estimate of the amount of accounts receivable which will be deemed to be uncollectible and is based upon specific identification. Unpaid accounts are referred to the City's Law Department if deemed uncollectible. Accounts are written off when recommended by the Law Department.

As of June 30, 2018 and 2017, the allowance for doubtful accounts was $11,489,296 and $13,057,526, respectively.

10. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION

In accordance with GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, the Water Fund reports deferred outflows of resources in the Statement of Financial Position in a separate section following Assets. Similarly, the Water Fund reports deferred inflows of resources in the Statement of Net Position in a separate section following Liabilities.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

10. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION (continued)

Deferred outflows of resources represents consumption of net position that applies to a future period(s) and will not be recognized as an expense until that time. Deferred inflows of resources represents an acquisition of net position that applies to future periods and will not be recognized as revenue until that time.

On the full accrual basis of accounting, the Water Fund has three items that qualify for reporting as deferred outflows of resources and deferred inflows of resources:

- Derivative instruments are reported for the changes in fair value.
- Deferred refunding results from the difference in the refunding of debt and its reacquisition price.
- Deferred pension and OPEB transactions are recognized as expenses or revenues in a future period. Deferred outflows and inflows of resources related to pensions are discussed in Note IV. 1 and OPEB is discussed in Note IV.3.

11. COMPENSATED ABSENCES

It is the City's policy to allow employees to accumulate earned but unused vacation benefits. Vacation pay is accrued when earned in the financial statements. Sick leave balances are not accrued in the financial statements because sick leave rights are non-vesting.

The Water Fund's employees' vacation time accrued under Other Noncurrent Liabilities on the Statement of Net Position in Fiscal Years 2018 and 2017 was $12.1 million and $11.5 million, respectively.

12. CLAIMS AND JUDGMENTS

Pending claims and judgments are recorded as expenses in the financial statements when the City solicitor has deemed that a probable loss to the Water Fund has occurred.

13. UNEARNED REVENUE

GASB Statement No. 65 prohibits the usage of the term "deferred" on any line items other than deferred inflows or outflows. Therefore, the term "Deferred Revenue" has been replaced by "Unearned Revenue". Unearned revenues in the Water Fund's financial statements represents revenue received in advance of being earned. Unearned revenues relate principally to overpaid water and sewer bills.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

14. NEW ACCOUNTING STANDARDS

In June 2015, **GASB issued Statement No. 75**, **Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions**. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). This Statement replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. It establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement is effective for fiscal years beginning after June 15, 2017. The City's adoption of Statement No. 75 resulted in a prior period adjustment and affects the reporting of net OPEB liabilities, deferred inflows of resources, deferred outflows of resources, and the recognition of OPEB expense in accordance with the provisions of the Statement in the Water Fund's financial statements.

In March 2016, **GASB issued Statement No. 81**, **Irrevocable Split-Interest Agreements**. The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for reporting periods beginning after December 15, 2016. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In November 2016, **GASB issued Statement No. 83**, **Certain Asset Retirement Obligations**. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement. The Water Fund is required to adopt the provisions of GASB Statement No. 83 for its fiscal year 2019 financial statements.

In January 2017, **GASB issued Statement No. 84**, **Fiduciary Activities**. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement. The Water Fund is required to

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)
14. NEW ACCOUNTING STANDARDS (continued)

adopt the provisions of GASB Statement No. 84 for its fiscal year 2020 financial statements.

In March 2017, **GASB issued Statement No. 85, Omnibus 2017.** The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In May 2017, **GASB issued Statement No. 86, Certain Debt Extinguishment Issues.** The objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources - resources other than the proceeds of refunding debt - are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. The adoption of this statement did not result in any significant changes to the Water Fund's financial statements.

In June 2017, **GASB issued Statement No. 87, Leases.** The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)
14. NEW ACCOUNTING STANDARDS (continued)

In April 2018, **GASB issued Statement No. 88**, **Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements.** The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

In June 2018, **GASB issued STATEMENT NO. 89, Accounting for Interest Cost Incurred before the End of a Construction Period.** The objectives of this Statement are to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and to simplify accounting for interest cost incurred before the end of a construction period. This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles. The requirements of this Statement are

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

14. NEW ACCOUNTING STANDARDS (continued)

effective for reporting periods beginning after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

In August 2018**, GASB issued STATEMENT NO. 90, Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61).** The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value. For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit. This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The City has not completed the process of evaluating the impact of adopting this Statement on the Water Fund's financial statements.

15. RESTRICTED ASSETS

Restricted assets represent revenues set aside for liquidation of specific obligations as described in Note IV. 13.

16. PAYMENT TO THE CITY

In accordance with an agreement between the Finance Director and the Water Department, the Finance Director may transfer to the City's General Fund up to a limit

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

16. PAYMENT TO THE CITY (continued)

of $4,994,000 in any fiscal year in "excess interest earnings" as defined under the General Ordinance. In Fiscal Years 2018 and 2017, excess interest earnings of $1,627,838 and $1,866,455, respectively, were transferred from the Residual Fund to the General Fund of the City.

17. TRANSFERS FOR LONG TERM CONTRACTS

In addition to the transfer of funds to the General Fund of the City, the Water Fund had operating expenses of $31,652,537 and $26,687,965 in Fiscal Years 2018 and 2017, respectively, payable to the Philadelphia Municipal Authority ("PMA") under the long-term contracts described in Note IV.11 A, B, and C.

18. ACCOUNTING 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, deferred outflows of resources, liabilities, deferred inflows of resources and net position and disclosures at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

II. LEGAL COMPLIANCE

1. BUDGETARY INFORMATION

The City's budgetary process accounts for certain transactions on a basis other than U.S. generally accepted accounting principles (GAAP). In accordance with the Philadelphia Home Rule Charter, the City has formally established budgetary accounting control for its operating and capital improvement funds.

One of the City's operating funds is the Water Fund. Included in the Water Fund is the Water Residual Fund. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as personal services; purchase of services; materials and supplies; equipment; contributions; indemnities; debt service; payments to other funds; and advances and other miscellaneous payments. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have council approval. Appropriations that are not expended or encumbered at year end are lapsed. Comparisons of budget to actual activity at the legal level of compliance are located in the Water Fund's *Budgetary Comparison Schedule (Legally Enacted Basis) – Water Operating Fund*.

During the year, classification adjustments and supplementary appropriations were necessary for City funds. Therefore, budgeted appropriation amounts presented are as originally passed and as amended by the City Council. As part of the amendment process, budget estimates of City related revenues are adjusted and submitted to City Council for review. Changes in revenue estimates do not need City Council approval, but are submitted in support of testimony with regard to the appropriation adjustments. Revenue estimates are presented as originally passed and as amended.

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS

1. DEPOSITS AND INVESTMENTS

Deposits

State statutes require banks to collateralize City deposits at amounts equal to or in excess of the City's balance. Such collateral is to be held by the Federal Reserve Bank or the trust department of a commercial bank other than the pledging bank. At year end, the Water Fund's bank balances were $164.3 million and $423.8 million for 2018 and 2017, respectively.

Investments

The City has established a comprehensive investment policy that covers the Water Fund.

The City's investments include all operating, capital, debt service, and debt service reserve

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
1. DEPOSITS AND INVESTMENTS (continued)

accounts of each of the City's General Fund, Water Fund, and Aviation Division. All City investments must be in compliance with applicable provisions of the City Code and City bond resolutions, as well as the City's Investment Policy. The City's Investment Policy is meant to supplement the applicable provisions of the City Code and City bond resolutions, and is reviewed and adopted by the City's Investment Committee. The City's Investment Committee consists of the Director of Finance, the City Treasurer, and a representative from the Water Department, Aviation Division, and the Philadelphia Gas Works.

As of June 30, 2018 the fair values of the Water Fund's investments consist of the following:

	(Thousands of Dollars)	
Classifications	**Fair Value**	**Percent of Total**
U.S. Government Securities	$415,826	66.81%
U.S. Government Agency Securities	148,645	23.88%
Corporate Bonds	43,459	6.98%
Other Bonds and Investments	14,500	2.33%
	$622,430	100.00%

As of June 30, 2017, the fair values of the Water Fund's investments consisted of the following:

	(Thousands of Dollars)	
Classifications	**Fair Value**	**Percent of Total**
U.S. Government Securities	$266,272	48.26%
U.S. Government Agency Securities	199,291	36.12%
Corporate Bonds	50,217	9.10%
Other Bonds and Investments	36,017	6.53%
	$551,797	100.00%

Water Fund Investments - Credit Risk

The City's policy to limit credit risks by limiting the type of allowable investment, as well as the maximum percent of the portfolio for each type of investment.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

The City's investment in U.S. Government securities (53.52%) or US Government Agency obligations (12.53%) are allowable investments up to 100% of the portfolio. The U.S. Government Agency obligations must be rated AAA by Standard & Poor's Corp. (S&P) or Aaa by Moody's Investor Services. All U.S. Government Securities meet the criteria.

The City's investment in commercial paper (12.01%) is limited to 25% of the portfolio, and must be rated A1 by S&P or P1 by Moody's Investor's Services, Inc. (Moody's) and the senior long-term debt of the issuer must not be rated lower than A by S&P or Aa2 by Moody's. All commercial paper investments meet the criteria.

The City's investment in corporate bonds (6.26%) are limited to 25% of the portfolio, and had a S&P rating of AAA to AA or Moody's rating of Aa2 or better. All corporate investments meet the criteria.

Short Term Investment Pools are rated AAA by S&P and Aaa by Moody's Investor Services. The Short Term Investment Pools' amortized cost-based net asset value per share/unit is the same as the value of the pool shares. Cash accounts are swept nightly and idle cash invested in money market funds (short term investment pools).

The City limits its foreign currency risk by investing in certificates of deposit and banker's acceptances issued or endorsed by non-domestic banks that are denominated in U.S. dollars providing that the banking institution has assets of not less than $100 million and has a Thompson's Bank Watch Service "Peer Group Rating" not lower than II. At the end of the fiscal year, the City did not have any investments of that nature.

To minimize custodial credit risk, the City's policy is to select custodian banks that are members of the Federal Reserve System to hold its investments. Delivery of the applicable investment documents to the City's custodian is required for all investments.

As of June 30, 2018 the fixed income investments of the Water Fund had the following ratings by Moody's or S&P:

Classifications	Credit Quality Rating	Percent of Investment Type
U.S Government Securities	Aaa	100%
U.S. Government Agency Securities	Aaa	100%
Corporate Bonds	Aaa	50%
Corporate Bonds	Aa1	18%
Corporate Bonds	Aa2	32%
Other Bonds and Investments	Aa2	80%
Other Bonds and Investments	Aa3	20%

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
1. DEPOSITS AND INVESTMENTS (continued)

As of June 30, 2017 the fixed income investments of the Water Fund had the following ratings by Moody's:

Classifications	Credit Quality Rating	Percent of Investment Type
U.S Government Securities	Aaa	100%
U.S. Government Agency Securities	Aaa	100%
Corporate Bonds	Aaa	46%
Corporate Bonds	Aa1	10%
Corporate Bonds	Aa2	33%
Corporate Bonds	A1	11%
Other Bonds and Investments	Aa2	42%
Other Bonds and Investments	Aa3	42%
Other Bonds and Investments	A1	16%

Interest Rate Risk

Interest Rate Risk: The City's investment portfolio is managed to accomplish preservation of principal, maintenance of liquidity, and to maximize the return on investments. To limit its exposure to fair value losses from rising interest rates, the City's investment policy limits fixed income investments to maturities of no longer than 2 years, except in Sinking Fund Reserve portfolios.

As of June 30, 2018 the maturities of the Water Fund's fixed income investments were as follows:

	(Thousands of Dollars)	
Classifications	**Less Than 1 Year**	**1 – 2 Years**
U.S. Government Securities	$ 315,600	$ 100,226
U.S. Government Agency Securities	110,062	38,583
Corporate Bonds	14,899	28,560
Other Bonds and Investments	11,613	2,887
Grand Total	$ 452,174	$ 170,256

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
1. DEPOSITS AND INVESTMENTS (continued)

As of June 30, 2017 the maturities of the Water Fund's investments were as follows:

	(Thousands of Dollars)	
Classifications	**Less Than 1 Year**	**1 – 2 Years**
U.S. Government Securities	$ 122,483	$ 143,788
U.S. Government Agency Securities	176,828	22,464
Corporate Bonds	41,198	9,019
Other Bonds and Investments	36,017	-
Grand Total	$ 376,526	$ 175,271

Fair Value Measurement

The City measures and records its investments using fair value measurement guidelines established by U.S. generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability.
- Level 3: Unobservable inputs for assets or liabilities.

The Water Fund has the following recurring fair value measurements as of June 30, 2018:

- U.S. Government Securities of $415.8 million are valued using quoted prices for identical securities traded in active markets (Level 1).
- U.S. Agency Securities of $148.6 million are valued using quoted prices from identical securities that are traded in active markets when sufficient activity exists (Level 2).
- Corporate Bonds of $43.5 million and other bonds and investments of $14.5 million are valued using quoted prices for similar securities in active markets and via matrix pricing models (Level 2).

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

1. DEPOSITS AND INVESTMENTS (continued)

Municipal Pension Fund

See Footnote IV. 1. E. PENSION PLANS Cash Deposits, Investments and Securities Lending

2. SECURITIES LENDING

A. GOVERNMENTAL FUNDS

The City Treasurer is prohibited from lending or selling City-owned securities with an agreement to buy them back after a stated period of time (City of Philadelphia – Investment Policy Section VI. Investment Restrictions).

B. PENSION TRUST FUNDS

The Board of Directors of the Municipal Pension Fund has authorized management of the Fund to participate in securities lending transactions.

See Footnote IV. 1. E. PENSION PLANS Cash Deposits, Investments and Securities Lending.

3. AMOUNTS HELD BY FISCAL AGENT

Under Section 4.02 of the General Bond Ordinance, which authorizes the issuance of Water and Wastewater Revenue Bonds, the City pledges and assigns to the Fiscal Agent, for the security and payment of all Water and Wastewater Revenue Bonds issued under the General Ordinance, a lien on and security interest in all Project Revenues and amounts on deposit in or standing to the credit of the: 1) Revenue Fund; 2) Sinking Fund et.al.; 3) Subordinated Bond Fund: 4) Rate Stabilization Fund; 5) Residual Fund; and 6) Construction Fund and all of the accounts established therein. The Fiscal Agent shall hold and apply the security interest so granted in trust for the holders of Water and Wastewater Revenue Bonds, excluding Subordinate Bonds, without preference, priority, or distinction; provided however, that the pledge of General Bond Ordinance may also be for the benefit of a credit facility and qualified swap, or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price and interest on any series of Water and Wastewater Revenue Bonds (other than subordinated bonds), on an equal and ratable basis with Water and Wastewater Revenue Bonds, to the extent provided by any Supplemental Ordinance or Determination. The purpose for the debt secured by the pledge can be found in Note III. 6. to the financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

3. AMOUNTS HELD BY FISCAL AGENT (continued)

The following chart displays information related to the pledge as of June 30, 2018:

	Water and Wastewater Revenue Bonds
Pledged Revenue Required for Principal and Interest Payments	$3,076.4 million
Term of Pledge	2053
Percentage of Revenue Pledged	100%
Current Year Pledged Revenue	$774.7 million
Current Year Principal and Interest Paid	$218.5 million
Current Year Transfers to Escrow	$19.0 million

The following chart displays information related to the pledge as of June 30, 2017:

	Water and Wastewater Revenue Bonds
Pledged Revenue Required for Principal and Interest Payments	$3,350.4 million
Term of Pledge	2053
Percentage of Revenue Pledged	100%
Current Year Pledged Revenue	$725.2 million
Current Year Principal and Interest Paid	$206.1 million
Current Year Transfers to Escrow	$11.0 million

4. INTERFUND PAYABLES

A. Primary Government

Interfund receivable and payable balances among Water and City Funds at year-end are the result of the time lag between the dates that interfund goods and services are provided, the date the transactions are recorded in the accounting system and the date payments between funds are made. All balances are expected to be settled during the subsequent year. balances are expected to be settled during the subsequent year. Interfund receivable and payable balances at year-end are as follows:

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

4. INTERFUND PAYABLES (continued)

(Amounts in Thousands)

	Interfund Receivables Due to:				
		Non major Governmental			
	General	Special Revenue	Pension Fund	Other Funds	Total
Interfund Payables Due From:					
General	$ -	$ -	$ 98,235	$ 699	$ 98,934
Grants Revenue Fund	-	73	-	-	73
Water & Sewer Fund	-	5,299	-	-	5,299
Non major Special Revenue Funds	7,161	52	-	-	7,213
Total	$ 7,161	$ 5,424	$ 98,235	$ 699	$ 111,519

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
5. CAPITAL ASSET ACTIVITY

Capital asset activity for the years ended June 30, 2018 and 2017 was as follows:

	Beginning Balance*	Additions	Dispositions	Ending Balance
Fiscal Year Ended June 30, 2018				
Capital Assets Not Being Depreciated				
Land	$ 5,919,160	$ -	$ -	$ 5,919,160
Construction in Progress	354,701,381	235,026,430	(66,310,882)	523,416,929
Total Capital Assets Not Being Depreciated	$ 360,620,541	$ 235,026,430	$ (66,310,882)	$ 529,336,089
Capital Asssets Being Depreciated				
Buildings and related improvements	1,671,398,354	14,039,700	(61,172,379)	1,624,265,675
Intangible Assets	17,707,314	2,068,615	-	19,775,929
Equipment	94,615,621	35,855,956	(23,920,115)	106,551,462
Infrastructure	2,526,530,734	68,318,550	(13,417,979)	2,581,431,305
Total Capital Assets Being Depreciated	$ 4,310,252,023	$ 120,282,821	$ (98,510,473)	$ 4,332,024,371
Less Accumulated Depreciation For:				
Buildings and related improvements	(1,018,241,212)	(41,459,825)	53,778,475	(1,005,922,562)
Intangible Assets	(11,886,095)	(1,510,786)	726,752	(12,670,129)
Equipment	(77,451,232)	(6,727,767)	3,641,163	(80,537,836)
Infrastructure	(1,244,884,162)	(52,148,359)	22,691,645	(1,274,340,876)
Total Accumulated Depreciation	(2,352,462,701)	(101,846,737)	80,838,035	(2,373,471,403)
Total Capital Assets, Being Depreciated, Net	1,957,789,322	18,436,084	(17,672,438)	1,958,552,968
Total Capital Assets	$ 2,318,409,863	$ 253,462,514	$ (83,983,320)	$ 2,487,889,057

	Beginning Balance	Additions	Dispositions	Ending Balance
Fiscal Year Ended June 30, 2017				
Capital Assets Not Being Depreciated				
Land	$ 5,919,160	$ -	$ -	$ 5,919,160
Construction in Progress	296,253,530	266,560,079	(208,112,228)	354,701,381
Total Capital Assets Not Being Depreciated	$ 302,172,690	$ 266,560,079	$ (208,112,228)	$ 360,620,541
Capital Asssets Being Depreciated				
Buildings and related improvements	1,685,012,573	34,632,419	(48,246,638)	1,671,398,354
Intangible Assets	15,182,928	2,524,386	-	17,707,314
Equipment	83,374,347	30,777,218	(19,535,944)	94,615,621
Infrastructure	2,451,267,729	154,727,014	(79,464,010)	2,526,530,733
Total Capital Assets Being Depreciated	$ 4,234,837,577	$ 222,661,037	$ (147,246,592)	$ 4,310,252,022
Less Accumulated Depreciation For:				
Buildings and related improvements	(994,057,364)	(45,044,994)	20,861,146	(1,018,241,212)
Intangible Assets	(10,241,583)	(3,699,789)	290,044	(13,651,328)
Equipment	(69,585,419)	(5,334,074)	(2,531,739)	(77,451,232)
Infrastructure	(1,232,893,876)	(51,128,651)	40,903,597	(1,243,118,930)
Total Accumulated Depreciation	(2,306,778,242)	(105,207,508)	59,523,048	(2,352,462,702)
Total Capital Assets, Being Depreciated, Net	1,928,059,335	117,453,529	(87,723,544)	1,957,789,320
Total Capital Assets	$ 2,230,232,025	$ 384,013,608	$ (295,835,772)	$ 2,318,409,861

*Fiscal years 2018 and 2017 beginning balances have been restated; see Note III. 11. for additional information.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

5. CAPITAL ASSET ACTIVITY (continued)

Impaired Assets

Government Accounting Standards Board (GASB) Statement 42 requires the disclosure of the impairment of any major capital assets. Over the years, there have been a number of the Water Fund's assets that were either damaged or destroyed, were abandoned or became functionally obsolete.

No asset impairments occurred during fiscal years 2018 and 2017.

6. DEBT PAYABLE

(1) Governmental Debt Payable

A summary of changes in long-term debt obligations as of June 30, 2018 follows:

(In Thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Amounts Due Within One Year
Water and Sewer Revenue Bonds	$ 1,862,120	$ 174,110	$ (339,695)	$ 1,696,535	$ 94,465
Pennvest Loans	134,796	1,784	(8,608)	127,972	8,116
Unamortized Bond Premium *	155,569	30,223	(17,128)	168,664	-
Derivative Instrument Liability	356	-	(353)	3	-
Net Pension Liability	444,233	4,766	(13,139)	435,860	-
Net OPEB Liability *	-	146,603	(6,797)	139,806	
Other Non-Current Liabilities:					
Accrued Worker's Compensation	21,553	2,185	-	23,738	-
Accrued Legal Claims	6,050	-	(436)	5,614	-
Compensated Absences	11,454	2,730	(2,040)	12,144	-
Total Non-Current Liabilities	$ 2,636,131	$ 362,401	$ (388,196)	$ 2,610,336	$ 102,581

- Additions amounts have been adjusted for prior period adjustments; see Note III. 11. for additional information.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

A summary of changes in long-term debt obligations as of June 30, 2017 follows:

(In Thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Amounts Due Within One Year
Water and Sewer Revenue Bonds	$ 1,721,585	$ 472,545	$ (332,010)	$ 1,862,120	$ 120,720
Pennvest Loans	138,739	6,245	(10,188)	134,796	9,129
Unamortized Bond Premium	106,790	63,814	(15,035)	155,569	-
Derivative Instrument Liability	1,508	-	(1,152)	356	-
Net Pension Liability	455,841	-	(11,608)	444,233	-
Other Non-Current Liabilities:					
Accrued Worker's Compensation	21,718	-	(165)	21,553	-
Accrued Legal Claims	6,484	-	(434)	6,050	-
Compensated Absences	10,793	2,653	(1,992)	11,454	-
Total Non-Current Liabilities	$ 2,463,458	$ 545,257	$ (372,584)	$ 2,636,131	$ 129,849

An analysis of debt service requirements to maturity on the long-term obligations follows:

(In Millions of USD)

Year Ended June 30:	Principal Requirements	Interest Requirements	Total Debt Service Requirements
2019	$ 102.6	$83.5	$186.1
2020	95.4	78.8	174.2
2021	77.6	74.9	152.5
2022	71.4	71.5	142.9
2023	73.9	68.3	142.2
2024 - 2028	275.7	301.4	577.1
2029 - 2033	296.7	238.0	534.7
2034 - 2038	253.1	178.8	432.0
2039 - 2043	320.5	109.1	429.6
2044 - 2048	173.4	37.9	211.3
2049 - 2053	84.2	11.3	95.4
	$ 1,824.5	$1,253.5	$3,078.0

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Pertinent information regarding long-term debt obligations outstanding is presented below:

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2018	June 30, 2017
1997	$78,500,000	Water and Wastewater Revenue Bonds, Variable Rate Series of 1997B, issued for various capital projects, to fund the Debt Reserve Account, and to pay the costs of issuance related to the bond issue at a variable rate.	$49,400,000	$53,200,000
1999	6,700,000	Pennsylvania Infrastructure Investment Authority Loan of 1999, issued for various capital projects. The bonds bear rates of 1.41% - 2.73%.	74,618	161,950
2005	83,665,000	Water and Wastewater Revenue Refunding Bonds, Variable Rate Series of 2005B, issued to defease a portion of the Series of 1995 Bonds, and to pay the costs of issuance related to the bonds. The bonds bear rates at a variable rate.	165,000	18,180,000
2007	345,035,000	Water and Wastewater Revenue Refunding Bonds, Series of 2007A and 2007B, issued to defease the Series of 1997A and Series of 2001A Bonds, and to pay the costs of issuance related to the bond issue. The bonds bear rates of 4% - 5%.	0	161,380,000
2009	140,000,000	Water and Wastewater Revenue Bonds, Series of 2009A, issued for various capital projects, issued to fund the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 4% - 5.75%.	4,615,000	8,980,000
2009	31,216,779	Pennsylvania Infrastructure Investment Authority Loan of 2009 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	19,409,742	19,297,861
2009	49,157,776	Pennsylvania Infrastructure Investment Authority Loan of 2009 (C), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	33,624,172	35,667,752
2009	75,744,096	Pennsylvania Infrastructure Investment Authority Loan of 2009 (D), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	52,615,521	55,985,423

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2018	June 30, 2017
2010	$28,500,000	Pennsylvania Infrastructure Investment Authority Loan of 2010 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	22,248,264	$ 23,683,419
2010	396,460.000	Water and Wastewater Revenue Refunding Bonds, Series of 2010A, issued to defease the Series of 2003 Bonds, issued for funding a payment to terminate the Series of 2003 Swap Agreement, funding the required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 2.00% - 5.00%.	35,760,000	69,880,000
2010	185,000,000	Water and Wastewater Revenue Bonds, Series of 2010C, issued for funding a payment to terminate the Series of 2007 Swap Agreement, fund the required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the costs of issuance. The bonds bear rates of 3.00% - 5.00%.	61,970,000	134,005,000
2011	184,855,000	Water and Wastewater Revenue Bonds, Series of 2011A, and Water and Wastewater Revenue Refunding Bonds, Series of 2011B, issued for partially defeasing the Series of 2001A and Series of 2007A Bonds, for various capital projects, for funding of capitalized interest, for financing any required deposit into the Debt Reserve Account of the Sinking Fund, and to pay the cost of issuance. The bonds bear rates of 4.00% - 5.00%.	172,015,000	179,220,000
2012	70,370,000	Water and Wastewater Revenue Refunding Bonds, Series of 2012, issued for defeasing the Series of 2001A and 2001B Bonds and to pay the cost of issuance. The bonds bear rates of 1.00% - 5.00%.	38,785,000	65,005,000

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2018	Balance Outstanding at: June 30, 2017
2013	$170,000,000	Water and Wastewater Revenue Bonds, Series of 2013A, issued to finance capital improvements, finance a deposit to the Debt Reserve Account, and to pay the cost of issuance. The bonds bear rates of 3.00% to 5.125%.	163,150,000	$ 166,575,000
2014	123,170,000	Water and Wastewater Revenue Bonds, Series of 2014A, issued to advance refund a portion of the Series of 2005A Bonds, to finance capital improvements, finance a deposit to the Debt Reserve Account, and to pay the cost of issuance. The bonds bear rates of 3.00% to 5.00%.	110,975,000	117,200,000
2015	417,560,000	Water and Wastewater Revenue Bonds, Series of 2015A and 2015B, issued to finance capital improvements, finance a deposit to the Debt Reserve Account, current refund a portion of the Series of 2005 A Bonds, advance refund a portion of the Series of 2007A Bonds, and pay the cost of issuance The bonds bear rates of 3.45% to 5.00%.	417,560,000	417,560,000
2016	192,680,000	Water and Wastewater Revenue Refunding Bonds, Series 2016 issued to finance (i) the advance refunding of portions of the City's outstanding (a) Water and Wastewater Revenue Refunding Bonds, Series 2007A, (b) Water and Wastewater Revenue Bonds, Series 2009A, and (c) Water and Wastewater Revenue Bonds, Series 2010C, and (ii) the costs of issuance relating to the bonds. The bonds bear rates of 3.00% to 5.00%.	191,070,000	191,070,000

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2018	June 30, 2017
2017	279,865,000	Water and Wastewater Revenue Bonds, Series 2017A issued to finance (i) capital improvements to the City's Water and Wastewater Systems, (ii) a deposit to the Debt Reserve Account of the Sinking Fund and (iii) the costs of issuance relating to the Bonds. The bonds bear interest rates of 5.00% to 5.25%.	$279,865,000	$279,865,000
2017	174,110,000	Water and Wastewater Revenue Refunding Bonds, Series 2017B issued to finance (i) the refunding of portions of the City's outstanding (a) Water and Wastewater Revenue Refunding Bonds, Series 2007B, (b) portions of Water and Wastewater Revenue Bonds, Series 2010C, and (c) portions of Water and Wastewater Revenue Bonds, Series 2012, and (ii) the costs of issuance relating to the bonds. The bonds bear rates of 2.00% to 5.00%.	171,205,000	-
		Totals	$1,824,507,317	$1,996,916,405

(2) Pennvest Loans

In July 2010, the Water Department received approval from the Pennsylvania Infrastructure Investment Authority ("PENNVEST") for the Green Infrastructure Project (Series 2010B); bringing the total financing from PENNVEST to $214.9 million. During fiscal year 2018 and 2017, PENNVEST drawdowns totaled $1,783,849 and $6,245,094, respectively, which represent an increase in bond issuances. The funding is through low interest loans evidenced by and payables secured on a parity basis with water and wastewater revenue bonds which bear interest of 1.193% during the construction period and for the first five years of amortization (interest only payments are due during the construction period up to three years) and 2.107% for the remaining fifteen years.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

Individual loan information, by series of bonds, as of June 30, 2018 is as follows:

Date	Series	Maximum Loan Amount	Amount Received through 6/30/18	Current Balance Outstanding 6/30/18
October 2009	2009B	$ 42,886,030	$31,216,779	$19,409,742
October 2009	2009C	57,268,193	49,157,776	33,624,172
March 2010	2009D	84,759,263	75,744,096	52,615,521
July 2010	2010B	30,000,000	28,500,000	22,248,264
	Totals	$214,913,486	$184,618,651	$127,897,699

Individual loan information, by series of bonds, as of June 30, 2017 is as follows:

Date	Series	Maximum Loan Amount	Amount Received through 6/30/17	Current Balance Outstanding 6/30/17
October 2009	2009B	$ 42,886,030	$ 29,432,930	$19,297,861
October 2009	2009C	57,268,193	49,157,776	35,667,752
March 2010	2009D	84,759,263	75,744,096	55,985,423
July 2010	2010B	30,000,000	28,500,000	23,683,419
	Totals	$214,913,486	$182,834,802	$134,634,455

The purposes of the loans are:

a. 2009B – Water Plant Improvements
b. 2009C – Water Main Replacements
c. 2009D – Sewer Projects
d. 2010B – Green Infrastructure Project

(3) Defeased Debt

As of the current fiscal year-end, the Water Fund defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on the old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the Water Fund's financial statements. As of June 30, 2018 and 2017, $211 million and $286.7 million of bonds outstanding are considered defeased, respectively.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

6. DEBT PAYABLE (continued)

(4) Arbitrage Liability

The City has issued Water and Wastewater Revenue Bonds subject to federal arbitrage requirements. Federal tax legislation requires that the accumulated net excess of interest income on the proceeds of these issues over interest expense paid on the bonds be paid to the federal government at the end of a five-year period. At June 30, 2018 and 2017, the City had no arbitrage liability.

(5) Derivative Instrument

Beginning in fiscal year 2010, the City adopted the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. The fair value balances and notional amounts of the derivative instrument outstanding at June 30, 2018 and 2017 follow;

City of Philadelphia, 2005 Water & Sewer Swap

Objective: In December 2002, the City entered into a swaption that provided the City with an up-front payment of $4.0 million. As a synthetic refunding of all or a portion of its 1995 Bonds, this payment approximated the present value savings, as of December 2002, of a refunding on May 4, 2005. The swaption gave Citigroup (formerly of Salomon Brothers Holding Company, Inc.), the option to enter into an interest rate swap to receive fixed amounts and pay variable amounts.

Terms: Citigroup exercised its option to enter into a swap May 4, 2005, and the swap commenced on that date. Under the terms of the swap, the City pays a fixed rate of 4.53% and receives a variable payment computed as the actual bond rate or the alternatively, 68.5% of one-month LIBOR, in the event the average rate on the Bonds as a percentage of the average of one-month LIBOR has exceeded 68.5% for a period of more than 180 days. Citigroup is currently paying 68.5% of one-month LIBOR under the swap. The payments are based on an amortizing notional schedule (with an initial notional amount of $86.1 million), and when added to an assumption for remarketing, liquidity costs and cost of issuance expected to approximate the debt service of the refunded bonds at the time the swaption was entered into.

In May 2013, the City and Water Department converted the original variable rate bonds associated with the swap to an index-based rate, terminating the existing letter of credit in the process.

As of June 29, 2018, the swap had a notional amount of $165,000 and the associated variable-rate bond had a $165,000 principal amount. The bonds' variable-rate coupons are based on the same index as the receipt on the swap. The bonds mature on August 1, 2018 and the related swap agreement terminates on August 1, 2018.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

Fair value: As of June 29, 2018, the swap had a negative fair value of $2,676. This means that the Water Department would have to pay this amount if the swap terminated. The fair value reflects the effect of non-performance risk, which includes credit risk. The fair value of the swap was measured using the in-come approach and is categorized within Level 2 of the fair value hierarchy.

Risk: As of June 29, 2018, the City is not exposed to credit risk because the swap had a negative fair value. Should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. Since the City is now receiving 68.5% of one-month LIBOR and paying 68.5% of one-month LIBOR plus a fixed spread, the City is no longer exposed to basis risk or tax risk. The swap includes an additional termination event based on credit ratings. The swap may be terminated by the City if the ratings of Citigroup or its Credit Support Provider fall below A3 and A-, or by Citigroup if the rating of the City's water and wastewater revenue bonds falls below A3 or A-. There are 30-day cure periods to these termination events. However, because the City's swap payments are insured by Assured Guaranty Municipal Corporation (formerly FSA), no termination event based on the City's water and wastewater revenue bond ratings can occur as long as Assured is rated at least A or A2.

As of June 29, 2018, rates were as follows:

Terms	Rates	
Interest Rate Swap		
Fixed payment to Citi	Fixed	4.53000%
Variable rate payment from Citi	68.5% of 1-month LIBOR	-1.43182%
Net interest rate swap payments		3.09818%
Variable rate note coupon payments	68.5% of 1-month LIBOR + fixed spread	1.43182% *
Synthetic interest rate on bonds		4.53000%

**Excludes fixed spread, which is similar to the City's expected Letter of Credit costs on a comparable variable rate bond*

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)
6. DEBT PAYABLE (continued)

As of June 30, 2017, rates were as follows:

	Terms	Rates
Interest Rate Swap		
Fixed payment to Citi under swap	Fixed	4.53000 %
Variable rate payment from Citi under swap	68.5% of 1-month Libor	(0.83836)) %
Net interest rate swap payments		3.69164 %
Variable rate bond coupon payments	68.5% of 1-month Libor + fixed spread	0.83836 %*
Synthetic interest rate on bonds		4.53000 %

**Excludes fixed spread, which is similar to the City's expected Letter of Credit costs on a comparable variable rate bond*

Swap payments and associated debt: As of June 30, 2018, debt service requirements of the variable-rate debt and net swap payments for their term, assuming current interest rates remain the same, were as follows

	Variable Rate Bonds		Interest Rate	
June 30	**Principal**	**Interest**	**Swaps, Net**	**Total Interest**
2019	$165,000	$2,363	$5,112	$7,475
Total	$165,000	$2,363	$5,112	$7,475

7. PENSION SERVICE AGREEMENT

In Fiscal 1999, the Philadelphia Authority for Industrial Development issued $1.3 billion in Pension Funding Bonds. These bonds were issued pursuant to the provisions of the Pennsylvania Economic Development Financing Law and the Municipal Pension Plan Funding Standard and Recovery Act (Act 205). The bonds are special and limited obligations of PAID. The City entered into a Service Agreement with PAID agreeing to make yearly payments equal to the debt service on the bonds. PAID assigned its interest in the service agreement to the parties providing the financing and in accordance with GASB Interpretation #2, PAID treats this as conduit debt and does not include conduit debt transactions in its financial statements. The Pension Service Agreement of $1.4 billion is reflected in the City's financial statements in Other Long-Term Obligations. The net proceeds of the bond sale of $1.3 billion were deposited with the Municipal Pension Fund. The deposit of the proceeds reduced the Unfunded Actuarial Accrued Liability by that same amount. The deposit resulted in reductions to the City's actuarially determined pension

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

7. PENSION SERVICE AGREEMENT (continued)

plan payments. The fiscal year 2017 Pension Funding Bonds liability of $927.3 million is reflected in the City's financial statements as another Long-Term Obligation. The fiscal year 2018 Pension Funding Bonds liability of $852.3 million is reflected in the City's financial statements as another Long-Term Obligation.

8. LEASE COMMITMENTS AND LEASED ASSETS

The Water Fund enters into various operating leases to finance the purchase of photocopier and computer equipment. Leases are defined by the Financial Accounting Standard Board in Statement 13, *Accounting for Leases.* The assets acquired through the leases are shown as equipment within the Capital Asset Note (See Note III. 5.).

9. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Code and Pennsylvania laws in effect at June 30, 2014, the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. In accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, the City does not include the assets or activity of the plan in its financial statements.

10. NET POSITION POLICIES

GASB requires the classification of net position into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

Net Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings, net of unspent bond proceeds that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included.

Restricted – This component of net position consists of restricted assets and deferred outflows of resources reduced by liabilities and deferred inflows of resources related to those assets. The restrictions would be imposed by external parties including creditors, grantors, contributors, or laws or regulations of other governments and restrictions imposed by law through constitutional provisions or enabling legislation.

Unrestricted – This component of net position consists of the net amount of the

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

10. NET POSITION POLICIES (continued)

assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then unrestricted resources, as needed.

11. PRIOR PERIOD ADJUSTMENT

For the year ended June 30, 2018, the Water Fund's Net Position decreased by ($107.9) million as a result of the following:

(1) increase in the OPEB liability by $136.8 million due to the implementation of GASB Statement No. 75,

(2) recognized ($4.2) million of the federal subsidy portion of various projects placed in service in the previous year,

(3) the net effect of ($19.5) million due to a calculation adjustment of accumulated depreciation,

(4) the net effect of ($6.3) million for projects previously expensed that should have been included in capital assets and duplicate projects that should have been removed, and

(5) adjustment of amortization of the bond discount/premium of $1.1 million to coincide with the debt manager's schedule.

The effect of the adjustments is reflected as a decrease to the Water Fund's Net Position as of July 1, 2017 in the June 30, 2018 Statement of Revenues, Expenses and Changes in Net Position – Proprietary Funds, Exhibit VII.

For the year ended June 30, 2017, the Water Fund's Net Position decreased by ($49.4) million as a result of the following:

a. reclassification of net equipment purchases in prior years of ($.7) million that should have been capitalized and depreciated,

b. prior year construction projects that were cancelled for $16.0 million,

c. utility payments classified as construction in progress that should have been expensed of $2.5 million, and

d. the net effect of reclassifying fixed assets that should have been expensed from the prior year of $31.6 million.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

III. DETAILED NOTES ON ALL FUNDS AND ACCOUNTS (continued)

11. PRIOR PERIOD ADJUSTMENT (continued)

The effect of the adjustment is reflected as a decrease to the Water Fund's Net Position as of July 1, 2016 in the June 30, 2017 Statement of Revenues, Expenses and Changes in Net Position.

12. INTERFUND TRANSACTIONS

During the course of normal operations, the City has numerous transactions between funds. These transactions are recorded as operating transfers and are reported as transfers in the Water Fund. Some of the more significant transfers are: the PICA administrative fund collects a portion of the wage tax paid by City residents and transfer funds that are not needed for debt service and administrative costs to the general fund. Also, the general fund and the PICA administrative fund make transfers to the debt service funds for principal and interest payments.

Transfers between fund types during the fiscal year 2018 were:

	Transfers To:				
	Governmental	Nonmajor Governmental			
(Amounts in Thousands of USD)		Special	Debt	Capital	
Transfers From:	General	Revenue	Service	Improvement	Total
General Fund	$ -	$ 12,003	$ 183,111	$ 30,850	$ 225,964
Grants Revenue Fund	37,831	1,197	4,780	-	43,808
Non major Secial Rev. Fds	454,205	75	44,603	530	499,413
Permanent Funds	-	48	-	-	48
Capital Improvements	-	-	-	-	-
Water Fund	1,628	31,652	-	-	33,280
Total	$ 493,664	$ 44,975	$ 232,494	$ 31,380	$ 802,513

IV. OTHER INFORMATION

1. CITY PENSION PLANS

The City maintains two single employer defined benefit plans for its employees and several of its component units. The two plans maintained by the City are the City Plan and the Philadelphia Gas Works (the "PGW") Plan. In addition to the City, the three other quasi-governmental agencies that participate in the City Plan are the Philadelphia Parking Authority (the "PPA"), the Philadelphia Municipal Authority (the "PMA"), and the Philadelphia Housing Development Corporation (the "PHDC").

Effective with Fiscal Year 2015, the City implemented GASB Statement No. 68, "*Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement*

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

No. 27". This statement revises existing standards for measuring and reporting pension liabilities for pension plans. GASB Statement No. 68 defines a single employer as the primary government and its component units. All three quasi-governmental agencies that participate in the City Plan were determined to be component units of the City. Therefore, the City Plan meets the definition of a single employer plan.

The note disclosures and Required Supplementary Information required by GASB Statement No. 67, "*Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*", are presented in separately issued audited financial statements of the City Plan and PGW plan. Copies of these financial statements may be obtained by contacting the Director of Finance of the City of Philadelphia.

A. PENSION FUND DESCRIPTION

Plan Administration. The Philadelphia Board of Pensions and Retirement (the "Board") administers the City of Philadelphia Municipal Pension Fund (the "Pension Fund"), a single employer defined benefit pension plan with a small but increasing defined contribution component, which provides pensions for all officers and employees of the City, as well as those of three quasi-governmental agencies (per applicable enabling legislation and contractual agreements). The Board was established by section 2-308 of the 1952 Philadelphia Home Rule Charter. Its actions in administering the Retirement System are governed by Title 22 of the Philadelphia Code.

The Board consists of nine voting members – four elected by the active members within the civil service, and the City's Controller, Solicitor, Managing Director, Personnel Director, and Director of Finance, who serves as the Chair.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
A. PENSION FUND DESCRIPTION (continued)

Plan Membership. At July 1, 2017, the date of the most recent actuarial valuation, pension plan membership consisted of the following:

Actives	28,615
Terminated Vested	1,157
Disabled	3,942
Retirees	22,288
Beneficiaries	8,552
DROP	1,767
Total City Members	66,321
Annual Salaries	$ 1,744,728,288
Average Salary per Active Member	$ 60,973
Annual Retirement Allowances	$ 750,204,529
Average Retirement Allowance	$ 21,569

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
A. PENSION FUND DESCRIPTION (continued)

Contributions.

Per Title 22 of the Philadelphia Code, members contribute to the Fund at various rates based on bargaining unit, uniform/non-uniform/elected/exempt status, and entry date into the Fund. Beginning July 1, 2017, members contributed at one of the following rates:

Employee Contribution Rates

For the Period of July 1, 2017 to June 30, 2018

	Municpal (1)	Elected (2)	Police	Fire
Plan 67	7.00%	N/A	6.00%	6.00%
Plan 67 – 50% of Aggregate Normal Cost (3)	6.11%	N/A	N/A	N/A
Plan 87	3.14%	9.46%	5.92%	5.92%
Plan 87 – 50% of Aggregate Normal Cost (4)	3.46%	N/A	N/A	N/A
Plan 87 – Accelerated Vesting (5)	4.60%	12.38%	N/A	N/A
Plan 87 Prime (6)	4.14%	10.46%	6.92%/8.50% (7)	6.92%/8.50% (7)
Plan 87 Prime – Accelerated Vesting	5.60%	13.38%	N/A	N/A
Plan ‘10	3.10%	N/A	5.50%	5.50%
Plan ’10 – Accelerated Vesting	3.28%	N/A	N/A	N/A
Plan ‘16	4.14%	N/A	N/A	N/A

1- For the Municipal Plan 67 members who participate in the Social Security System, employee contributions are 4.75% of compensation up to the social security wage base and 6% above it.
2- The employee contribution rate is based upon the normal cost of $483,475 under Plan 87 Elected, normal cost or $261,961 under Plan 87 Municipal and current annual payroll of $3,548,609.
3- Effective November 2014 guards represented by DC 33 contributions at 50% of the aggregate Normal Cost of all members in Plan J.
4- This represents 50% of aggregate Normal Cost for all members in Plan Y.
5- Member rates for Municipal Plan 87 (Y5) members eligible to vest in 5 years and Elected Officials (L8) eligible to be vested in 8 years instead of 10.
6- Plan 87 Prime refers to new hires who have the option to elect Plan 10 but have elected to stay in Plan 87.
7- Police and Fire members hired after 7/1/2017 will pay at the higher rate of 8.50%

Employer contributions are made by the City throughout each fiscal year (which ends June 30) and by three (3) quasi-governmental agencies on a quarterly basis. These contributions, determined by an annual actuarial valuation report (“AVR”),

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

A. PENSION FUND DESCRIPTION (continued)

when combined with plan member contributions, are expected to finance the cost of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability.

Within the AVR, three contribution amounts are determined based upon two different sets of rules for determining the way the unfunded actuarial liability is funded.

The first method is defined in accordance with Act 205 and defines the Minimum Municipal Obligation ("MMO"), which is the City's minimum required contribution under Pennsylvania state law.

The second method is in accordance with the City's Funding Policy, which predates the Act 205 rules and calls for contributions that are greater than the MMO until the initial unfunded liability determined in 1984 is fully funded.

The third method currently followed by the City, the Revenue Recognition Policy (RRP), calls for additional revenue to be contributed each year to the fund in excess of the MMO. There are three sources of additional revenue that will be received by the Fund: 1) a portion of the sales tax according to the State Legislation, 2) additional tiered member contributions based on salary level for all municipal employees, and 3) additional member contributions from the current and future uniform members in Plan 87.

Under all funding methods, there are two components: the normal cost and the amortized unfunded actuarial liability. The actuarial unfunded liability is the amount of the unfunded actuarial liability that is paid each year based upon the given or defined amortization periods. The amortization periods are the same under the MMO and RRP, but different under the City's Funding Policy.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
A. PENSION FUND DESCRIPTION (continued)

Funding Policy:

The initial July 1, 1985 unfunded actuarial liability ("UAL") is amortized over 34 years ending June 30, 2019 with payments increasing at 3.3% per year, the assumed payroll growth. Other charges in the actuarial liability are amortized in level-dollar payments as follows:

- Actuarial gains and losses – 20 years beginning July 1, 2009. Prior gains and losses were amortized over 15 years.
- Assumptions changes – 15 years beginning July 1, 2010. Prior changes were amortized over 20 years.
- Plan changes for active members – 10 years.
- Plan changes for inactive members – 1 year.
- Plan changes mandated by the State – 20 years.

In fiscal year 2018, the City and other employers' contributions of $782.0 million was less than the actuarially determined employer contribution (ADEC) of $871.8 million. In the event that the City contributes less than the funding policy, an experience loss will be created that will be amortized in accordance with funding policy over a closed 20-year period.

The Schedule of Employer Contributions (based on the City's Funding Policy) is included as Required Supplemental Information and provides a 10-year presentation of employer contributions.

Minimum Municipal Obligation (MMO):

For the purposes of the MMO under Act 205 reflecting the fresh start amortization schedule, the July 1, 2009 UAL was "fresh started" to be amortized over 30 years ending June 30, 2039. This is a level dollar amortization of the UAL. All future amortization periods will follow the City's Funding Policies as outlined above.

In fiscal year 2018, the City and other employers' contributions of $782.0 million exceeded the Minimum Municipal Obligation of $661.3.

The Schedule of Employer Contributions (based on the MMO Funding Policy) is included as Required Supplemental Information and provides a 10-year presentation of employer contributions.

Revenue Recognition Policy (RRP)

Revenue Recognition Policy is similar to the MMO except that the assets used to determine the unfunded liability do not include portion of sales tax revenue, tiered member contributions from the municipal employees, and additional uniform

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
A. PENSION FUND DESCRIPTION (continued)

members' contributions. These sources of income are contributed over and above the City's contribution of the MMO and will be in addition to the MMO. Therefore, under this funding method, the additional revenue amounts are separately tracked and accumulated in a notional account which is then subtracted from the assets before calculating the contribution amounts due under the Minimum Municipal Obligation (MMO) methodology. The Pension Fund accumulates these amounts in a notional account and deducts them from the Actuarial Asset Value before the MMO is determined. These amounts are accumulated at the Actuarial Asset Value return rates to preserve the new funding methodology objective.

The Schedule of Employer Contributions (based on the RRP Funding Policy) is included as Required Supplementary Information and provides a 10-year presentation of the employer contributions.

B. BENEFITS

The Pension Fund provides retirement, disability, and death benefits according to the provisions of Title 22 of the Philadelphia Code. These provisions prescribe retirement benefit calculations, vesting thresholds, and minimum retirement ages, that vary based on bargaining unit, uniform/non-uniform status, and entry date into the System.

Non-uniform employees may retire at either age 55 with up to 80% of average final compensation ("AFC") or age 60 with up to either 100% or 25% of AFC, depending on entry date into the Fund. Uniform employees may retire at either age 45 with up to 100% of AFC or age 50 with up to either 100% or 35% of AFC, depending on entry date into the Pension Fund. Survivorship selections may result in an actuarial reduction to the calculated benefit.

Members may qualify for service-connected disability benefits regardless of length of service. Service-connected disability benefits are equal to 70% of a member's final rate of pay, and are payable immediately without an actuarial reduction. These applications require approval by the Board. Eligibility to apply for non-service-connected disability benefits varies by bargaining unit and uniform/non-uniform status. Non-service connected disability benefits are determined in the same manner as retirement benefits, and are payable immediately.

Service-connected death benefits are payable to:

1) surviving spouse/life partner at 60% of final rate of pay plus up to 2 children under age 18 at 10% each of final rate of pay (maximum payout: 80%);

2) if no surviving spouse/life partner, up to 3 children under age 18 at 25% each of final rate of pay (maximum payout 75%); or

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

B. BENEFITS (continued)

3) if no surviving spouse/life partner or children under age 18, up to 2 surviving parents at 15% each of final rate of pay (maximum payout 30%).

Non-service-connected deaths are payable as a lump sum payment, unless the deceased was either vested or had reached minimum retirement age for their plan, in which case the beneficiary(s) may instead select a lifetime monthly benefit, payable immediately with an actuarial reduction.

A Pension Adjustment Fund ("PAF") is funded with 50% of the excess earnings that are between 1% and 6% above the actuarial assumed earnings rate. Each year within sixty days of the end of the fiscal year, by majority vote of its members, the Board of Directors of the Fund (the "Board") shall consider whether sufficient funds have accumulated in the PAF to support an enhanced benefit distribution (which may include, but is not limited to, a lump sum bonus payment, monthly pension payment increases, ad-hoc cost-of-living adjustments, continuous cost-of-living adjustments, or some other form of increase in benefits as determined by the Board) to retirees, their beneficiaries and their survivors. As of July 1, 2017, the date of the most recent actuarial valuation, there was $1,097,499 in the PAF and the Board voted to make PAF distributions of $34,604 during the fiscal year ended June 30, 2018.

The Pension Fund includes a Deferred Retirement Option Plan (DROP Plan). The DROP Plan allows a participant to declare that they will retire within 4 years. During the 4-year period, the City will make no further contributions for the participant. The participant would continue to work and to receive their salary; however, any increases would not be counted towards their pension benefit. During the 4-year period the individual participates in the DROP Plan, their pension benefits will be paid into an escrow account in the participant's name. After the 4-year period, the participant would begin to receive their pension benefits and the amount that has been accumulated in the escrow account in a lump sum payment. The balance in the DROP Plan as of June 30, 2018 is $138.9 million.

C. INVESTMENTS

The Pension Board's Investment Policy Statement provides, in part:

The overall investment objectives and goals should be achieved by use of a diversified portfolio, with safety of principal a primary emphasis. The portfolio policy should employ flexibility by prudent diversification into various asset classes based upon the relative expected risk-reward relationship of the asset classes and the expected correlation of their returns.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

C. INVESTMENTS (continued)

The Pension Fund seeks an annual total rate of return of not less than 7.60% over a full market cycle. It is anticipated that this return standard should enable the Fund to meet its actuarially assumed earnings projection (currently 7.60%) over a market cycle. The investment return assumption was reduced by the Board from 7.70% to 7.60%. The Pension Fund's investment program will pursue its afore-stated total rate of return by a combination of income and appreciation, relying upon neither exclusively in evaluating a prospective investment for the Pension Fund.

All investments are made only upon recommendation of the Pension Fund's Investment Committee and approval by a majority of the Pension Board. In order to document and communicate the objectives, restrictions, and guidelines for the Fund's investment staff and investments, a continuously updated Investment Policy Statement will be maintained. The Investment Policy Statement will be updated (and re-affirmed) each year at the January Board meeting.

The following was the Board's approved asset allocation policy as of June 30, 2018:

Asset Class	Target Allocation
Broad Fixed Income	10.0%
Global Fixed Income	2.0%
Emerging Market Debt	2.0%
U.S. Large-Cap Core	22.0%
U.S. Mid-Cap Core	3.0%
U.S. Small-Cap Core	5.0%
ACWI ex-U.S.	15.0%
Non-U.S. Small Cap	6.0%
Emerging Markets	4.0%
Public REITs	1.0%
Real Estate Core	11.0%
Real Estate-Mezzanine	1.0%
Real Estate-Opportunistic	1.0%
Infrastructure	5.0%
Private Equity	10.0%
Private Debt	2.0%
Total	100.0%

Money Weighted Rate of Return: For the year ended June 30, 2018, the annual money-weighted return on pension plan investments, net of pension plan investment expense, was 8.83%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

D. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

Financial statements of the Pension Fund are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds of contributions are recognized when due and payable in accordance with the terms of the Pension Fund.

Methods Used to Value Investments

The Pension Fund's investments are reported at fair value. Fair value is the amount that the Pension 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 exchange or security 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 which include private equity, private debt, venture capital, hedge funds and equity real estate 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.

Futures contracts, foreign exchange contracts, and options are marked-to-market daily with changes in market value recognized as part of net appreciation/depreciation in the fair value of investments. Initial margin requirements for such financial instruments are provided by investment securities pledged as collateral or by cash.

Investment expenses consist of investment manager fees and investment consultant fees related to the traditional investments only, and not those fees related to the alternative investments. Unsettled investment sales are reported as Accrued Interest and Other Receivable, and unsettled investment purchases are included in Accrued Expenses and Other Liabilities.

Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

D. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Income Taxes

The Pension Fund qualifies under Section 401(a) of the Internal Revenue Code (IRC) and is exempt from income taxation as allowed by Section 501(a) of the IRC.

Related Parties

The City's Department of Finance provides cash receipt and cash disbursement services to the Pension Fund. The City Solicitor's office provides legal services to the Pension Fund. Other administrative services are also provided by the City.

Use of Estimates in Preparing Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties

The Pension Fund 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 that such changes could materially affect the amounts reported in the Pension Fund's Statement of Fiduciary Net Position.

Contributions are calculated 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 estimation and assumption process, it is at least reasonably possible that changes in these statements and assumptions in the near term would be material to the financial statements.

Administrative Expenses

Administrative expenses of the Pension Fund are paid for by the Pension Fund.

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING

Legal Provisions

The Pension Fund is authorized to invest in "prudent investments," including obligations of the U.S. Treasury, agencies and instrumentalities of the United States, investment grade corporate bonds, common stock, real estate, private market, etc. City

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

ordinances contain provisions which preclude the Pension Fund from investing in organizations that conduct business in certain countries and also 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.

Duration is a measure of the approximate sensitivity of a bond's value to interest rate changes. The higher the duration, the greater the changes in fair value when interest rates change. The Pension Fund measures interest rate risk using option-adjusted duration, which recognizes the fact that yield changes may change the expected cash flows due to embedded options.

The table below details the exposure to interest rate changes based upon maturity dates of the fixed income securities at June 30, 2018:

2018(in thousands)	Total Fair Value	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years
Asset Backed Securities	$ 19,263	$ 1,168	$ 6,810	$ 2,557	$ 8,728
CMO/REMIC	7,827	3,488		152	4,187
Commercial Mortgage Backed Securities	20,057	7,936	382	176	11,563
Corporate Bonds	307,972	104,587	84,580	79,855	38,950
Government Bonds	379,809	100,974	125,121	90,887	62,827
Mortgage Backed Securities	77,759	759		9,820	67,180
Municipal Bonds	12,136			4,521	7,615
Total Interest Risk of Debt Securities	$ 824,823	$ 218,912	$ 216,893	$ 187,968	$ 201,050

Custodial Credit Risk

In the event of counter-party failure, the Pension Fund 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

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

by the counterparty or counterparty's trust department, are uninsured and are not registered in the name of the Pension Fund. The Pension Fund requires that all investments be clearly marked as to ownership, and to the extent possible, be registered in the name of the Pension Fund. Certain investments may be held by the managers in the Pension Fund's name.

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, 2018, the Pension Fund has no single issuer that exceeds 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded.

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NOTES TO THE FINANCIAL STATEMENTS
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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Credit Risk

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The fund is subject to credit risk on $824.8 million of directly owned fixed income. The Pension Fund's directly owned rated debt investments as of June 30, 2018 were rated by Standard & Poor's, a nationally recognized statistical rating agency and are presented below using Standard & Poor's rating scale:

Credit Rating										
2018 (in thousands)	Total Fair Value	AAA	AA	A	BBB	BB	B	CCC	D	NR
Asset Backed Securities	$ 19,263	$ 6,579	$ 1,475	$ 3,147	$ 2,996	$ -	$ -	$ -	$ -	$ 5,066
CMO/REMIC	7,827	760	5,489	14	333	199	336			696
Commercial Mortgage Backed Securities	20,057	5,518	10,896	1,002	6	246	6			2,383
Corporate Bonds	307,972	812	14,116	84,089	84,359	39,069	49,474	22,295		13,758
Government Bonds	379,809	11,504	258,672	48,770	16,816	26,657	12,125	2,907	758	1,600
Mortgage Backed Securities	77,759		77,759							
Municipal Bonds	12,136		8,722	2,788	626					
Total Credit Risk of Debt Securities	$824,823	$25,173	$377,129	$139,810	$105,036	$66,171	$61,941	$25,202	$758	$23,503

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NOTES TO THE FINANCIAL STATEMENTS
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IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Foreign Currency Risk

The Pension Fund's exposure to foreign currency risk derives from its position in foreign currency-denominated cash and investments in fixed income, equities, and derivatives. The foreign currency investment in equity securities is 41% of the total investment in equities.

The Fund's exposure to foreign currency risk at June 30, 2018 was as follows (expressed in thousands):

Currency	Cash	Fixed Income	Equities	Derivatives	Total
Euro (EUR)	$1,683	$ 1,960	$ 320,471	$ 2	$ 324,116
Japanese Yen (JPY)	1,431	50	252,842	(232)	254,091
Pound Sterling (GBP)	595	11,034	189,706	(79)	201,256
Canadian Dollar (CAD)	233	903	111,165	(310)	111,991
Hong Kong Dollar (HKD)	264		106,481		106,745
Australian Dollar (AUD)	122	8,934	70,395	(92)	79,359
Swiss Franc (CHF)	377		70,578		70,955
South Korean Won (KRW)			43,143		43,143
Mexican Peso (MXN)	114	25,141	7,860	26	33,141
South African Rand (ZAR)	8	10,484	16,181	387	27,060
Swedish Krona (SEK)	84		25,498	(853)	24,729
Brazilian Real (BRL)	4	7,114	15,346	11	22,475
Malaysian Ringgit (MYR)	35	11,301	6,995		18,331
Danish Krone (DKK)	52		13,742		13,794
Indonesian Rupiah (IDR)	13	6,886	6,451		13,350
Polish Zloty (PLN)	2	9,954	3,139	49	13,144
Singapore Dollar (SGD)	65		11,100		11,165
Norwegian Krone (NOK)	31		8,000	(238)	7,793
Thai Baht (THB)	5		6,822		6,827
New Turkish Lira (TRY)	10	2,430	1,990	21	4,451
Chilean Peso (CLP)	30	977	3,329	(6)	4,330
Philippine Peso (PHP)			3,787		3,787
All Others	2,667	10,260	10,071	(468)	22,530
	$7,825	$107,428	$1,305,092	$ (1,782)	$ 1,418,563

Derivatives

The Pension Fund may invest in derivatives as permitted by guidelines established by the Pension Board. Pursuant to such authority, the Pension Fund may invest in foreign currency forward contracts, options, futures (S&P Fund) and swaps. No derivatives were purchased with borrowed funds.

Derivatives are generally used to provide market exposure in the equity portfolio and to hedge against foreign currency risk and changes in interest rates, improve yield and adjust the duration of the Pension Fund's fixed income portfolio. These securities are subject to

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
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IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

changes in value due to changes in interest rates or currency valuations. Credit risk for derivatives results from the same considerations as other counterparty risk assumed by the Pension Fund, which is the risk that the counterparty might be unable to meet its obligations.

Derivative instruments such as swaps, options, futures and forwards are often complex financial arrangements used by governments to manage specific risks or to make investments. By entering into these arrangements, governments receive and make payments based on market prices without actually entering into the related financial or commodity transactions. Derivative instruments associated with changing financial and commodity prices result in changing cash flows and fair values that can be used as effective risk management or investment tools. Derivative instruments, however, also can expose governments to significant risks and liabilities.

The Pension Fund enters into a variety of financial contracts, which include options, futures, forwards and swap agreements to gain exposure to certain sectors of the equity and fixed income markets; collateralized mortgage obligations (CMOs); other forward contracts, and U.S. treasury strips. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. The Pension Fund is exposed to credit risk in the event of non-performance by counterparties to financial instruments. The Pension Fund generally enters into transactions only with high quality institutions. Legal risk is mitigated through selection of executing brokers and review of all documentation. The Pension Fund is exposed to market risk, the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed in accordance with risk limits set by senior management, through buying or selling instruments or entering into offsetting positions. The notional or contractual amounts of derivatives indicate the extent of the Pension Fund's involvement in the various types and uses of derivative financial instruments and do not measure the Pension Fund's exposure to credit or market risks and do not necessarily represent amounts exchanged by the parties. The amounts exchanged are determined by reference to the notional amounts and the other terms of the derivatives.

Derivative Instruments

The following table summarizes aggregate notional or contractual amounts for the Fund's derivative financial instruments at June 30, 2018 in addition to the fair value and change in the fair value of derivatives.

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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

List of Derivatives Aggregated by Investment Type

Classification Investment Derivatives	Change in Fair Value		Fair Value at June 30, 2018		Notional
Forwards Currency Contracts	Net appreciation/(depreciation) in Investments	($2,649,840)	Accrued interest and other receivables	($1,795,360)	$220,322,282
Futures	Net appreciation/(depreciation) in Investments	($82,352)	Accrued expenses and other liabilities	(158,317)	158
Grand Totals		($2,732,192)		($1,953,677)	$ 220,322,440

A Derivatives Policy Statement identifies and allows common derivative investments and strategies, which are consistent with the Investment Policy Statement of the City of Philadelphia Municipal Pension Fund. The guidelines identify transaction-level and portfolio-level risk control procedures and documentation requirements. Managers are required to measure and monitor exposure to counterparty credit risk. All counterparties must have credit ratings available from nationally recognized rating institutions such as Moody, Fitch, and S&P. The details of other risks and financial instruments in which the Fund involves are described below.

Credit risk:

The Pension Fund is exposed to credit risk on hedging derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, it is the Pension Fund's policy to require counterparty collateral posting provisions in its non-exchange-traded hedging derivative instruments. These terms require full collateralization of the fair value of hedging derivative instruments in asset positions (net of the effect of applicable netting arrangements) should the counterparty's credit rating fall below AA as issued by Fitch Ratings and Standard & Poor's or Aa as issued by Moody's Investors Service. Collateral posted is to be in the form of U.S. Treasury securities held by a third-party custodian. The City has never failed to access collateral when required.

It is the Pension Fund's policy to enter into netting arrangements whenever it has entered into more than one derivative instrument transaction with counterparty. Under the terms of these arrangements, should one party become insolvent or otherwise default on its obligations, close-out netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions' fair values so that a single sum will be owed by, or owed to, the non-defaulting party.

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

Swap agreements:

These derivative instruments provide for periodic payments at predetermined future dates between parties based on the change in value of underlying securities, indexes or interest rates. Under fixed interest rate type swap arrangements, the Pension Fund receives the fixed interest rate on certain equity or debt securities or indexes in exchange for a fixed charge. There were not any total receive fixed interest Swaps during 2018. On its pay-variable, received-fixed interest rate swap, as LIBOR increases, the Fund's net payment on the swap increases. Alternatively, on its pay-fixed, receive-variable interest rate swap, as LIBOR or the SIFMA swap index decreases, the Pension Fund's net payment on the swap increases.

Futures contracts:

These derivative instruments are types of contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specific financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that counterparty will not pay and generally requires margin payments to minimize such risk. In addition, the Pension Fund enters into short sales, sales of securities it does not presently own, to neutralize the market risk of certain equity positions. Initial margin requirements on futures contracts and collateral for short sales are provided by investment securities pledged as collateral and by cash held by various brokers. Although the Pension Fund has the right to access individual pledged securities, it must maintain the amount pledged by substituting other securities for those accessed. The realized gain from Futures contracts was $373,351.

Forward contracts:

The Pension Fund is exposed to basis risk on its forward contracts because the expected funds purchase being hedged will price based on a pricing point different than the pricing point at which the forward contract is expected to settle. The realized gain from Forward contracts was $2,919,043.

Termination risk:

The Pension Fund or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. In addition, the Pension Fund is exposed to termination risk on its receive-fixed interest rate swap. The Pension Fund is exposed to termination risk on its rate cap because the counterparty has the option to terminate the contract if the SIFMA swap index exceeds 12 percent. If at the time of termination, a hedging derivative instrument is in a liability position, the City would be

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Rollover risk:

The Pension Fund is exposed to rollover risk on hedging derivative instruments that are hedges of debt that mature or may be terminated prior to the maturity of the hedged debt. When these hedging derivative instruments terminate, or in the case of a termination option, if the counterparty exercises its option, the Pension Fund will be reexposed to the risks being hedged by the hedging derivative instrument.

Fair Value Measurement

The Municipal Pension Fund has the following recurring fair value measurement as of June 30, 2018 and is presented on the following page.

PHILADELPHIA WATER DEPARTMENT
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(Amounts in Thousands)		Fair Value Measurements Using		
	6/30/2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
U.S. Treasury Securities	$ 220,476	$ -	$ 220,476	$ -
Agency Bonds	18,191		18,191	
Asset Backed Securities	19,264		19,264	
Corporate Bonds	307,972		307,971	1
Government Bonds	133,947		133,947	
Mortgage Backed Securities	105,643		105,643	
Municipal Bonds	12,136		12,136	
Sovereign Debt	7,195		7,195	
Mutual Funds	7,144	739	6,405	
Equity	3,150,606	3,148,506	391	1,709
Total Investments by fair value level	$3,982,574	$ 3,149,245	$ 831,619	$ 1,710
Investments measured at the net asset value (NAV)				
Credit Distressed Hedge Fund	$ 3,833			
Equity Long/Short Hedge Fund	31,213			
Real Estate	491,004			
Private Equity	487,071			
Fixed Income Funds	121,328			
Total Investments measured at the NAV	1,134,449			
Total Investments measured at fair value	$5,117,023			
Investment derivative instruments				
Equity index Futures (Assets)	$ 15	$ 15	$ -	
Equity index Futures (Liabilities)	(227)	(227)		
Currency Futures (Assets)	53	53		
Forward Currency Contracts (Assets)	1,179		1,179	
Forward Currency Contracts (Liabilities)	(2,974)		(2,974)	
Total Investment derivative instruments	$ (1,954)	$ (159)	$ (1,795)	

Equity securities classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Corporate bonds and Equities in Level 3 are valued using discounted cash flow techniques.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Derivative instruments classified in Level 2 are valued using a market approach that considers benchmark for foreign exchange rates.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the following table.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

(Amounts in Thousands)		Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investment Measured at the net asset value (NAV)				
Credit Distressed Hedge Fund	$ 3,833	$ -	Quarterly	90 days
Equity Long/Short Hedge Fund	31,213		Quarterly	90 days' notice
Real Estate	491,004	30,723	N/A	N/A
Private Equity	487,071	291,557	N/A	N/A
Fixed Income Funds	121,328		Quarterly	90-120 days
Total Investments measured at the NAV	$1,134,449			

1. Credit distressed hedge funds: The Funds seek to identify and exploit event driven opportunities both on the long and short side in the stressed and distressed corporate debt markets. Investments are generally driven by fundamental, value-oriented analysis and specific credit events. The Funds maintain the flexibility to invest globally and across capital structures of stressed and distressed companies. Investments generally target secondary U.S. credit opportunities across all tranches of a company's debt capital structure. The Funds may also invest opportunistically in certain equities, long and short. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. Investment can be redeemed with a 90 days' notice.

2. Equity long/short hedge funds: This Fund will typically hold 0-50 long positions and 10-15 short positions in U.S. common stocks. Management has the ability to shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position. The Fund mitigates market risk by utilizing short positions. In periods of extreme volatility, the Fund may hold a significant portion of its assets in cash. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investment can be redeemed with a 90 days' notice.

3. Real estate funds: This type includes funds that invest in U.S. and Non-U.S. commercial and residential real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. However, the individual investments that will be sold have not yet been determined. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Once it has been determined which investments will be sold and whether those investments will be sold individually or in a group, the investments will be sold in an auction process. The investee fund's management is required to approve of the buyer before the sale of the investments can be completed. It is expected that the underlying assets of the funds will be liquidated over the next seven to 10 years.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

4. Private equity funds: The primary goal of these Funds is to generate returns for investors that exceed private equity industry benchmarks and are commensurate with asset class risk through the construction of a portfolio of opportunistic, highly performing private equity investments. Investments that fund may undertake include early-stage venture capital, later-stage growth financings, leveraged buyouts of medium and large-sized companies, mezzanine investments, PIPES and investments in companies that are being taken private. These investments can never be redeemed with the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. If these investments were held, it is expected that the underlying assets of the fund would be liquidated over five to 10 years. The fair values of the investments in this type have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. Once a buyer has been identified, the investee fund’s management is required to approve of the buyer before the sale of the investments can be completed.

5. Fixed Income funds: The primary goal of these Funds is to create alpha by sourcing proprietary opportunities, avoiding capital loss, buying securities below their intrinsic value and selling securities above their intrinsic value. Firms look for opportunities that are currently mispriced, based on fundamentals or potentially an event that may improve the price of the holding.

Securities Lending Program

The Pension Fund, pursuant to a Securities Lending Authorization Agreement, has authorized J.P. Morgan Bank and Trust Company (J.P. Morgan) to act as the Pension Fund’s agent in lending the Pension Fund’s securities to approved borrowers. J.P. Morgan, as agent, enters into Securities Loan Agreements with borrowers.

During the fiscal year, J.P. Morgan lent, on behalf of the Pension Fund, certain securities of the Pension Fund held by J.P. Morgan Chase Bank, N.A. as custodian and received cash or other collateral including securities issued or guaranteed by the United States, U.K., and Eurozone governments. J.P. Morgan does not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 102% or 105% of the market value of the loaned securities.

Pursuant to the Securities Lending Authorization Agreement, J.P. Morgan had an obligation to indemnify the Pension Fund in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default of the borrower.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

E. CASH DEPOSITS, INVESTMENTS AND SECURITIES LENDING (continued)

During the fiscal year, the Pension Fund and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested in a separately managed account based upon the investment guidelines established by the Fund. As of June 30, 2018, the weighted average maturity was 48 days and the final maturity was 351 days. Because the securities lending transactions were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral received from the borrower.

On June 30, 2018, the Pension Fund had no credit risk exposure to borrowers.

As of June 30, 2018, the fair value of securities on loan was $401.0 million. Associated collateral totaling $411.3 million was comprised of cash which was invested in a separately managed account based upon the investment guidelines established by the Pension Fund. As of June 30, 2018, the invested cash collateral was $411.3 million and is valued at amortized cost.

F. INVESTMENT ADVISORS

The Pension Fund utilizes investment advisors to manage long-term debt, real estate, private market, and equity portfolios. To be eligible for consideration, investments must meet criteria set forth in governing laws and regulations.

G. NET PENSION LIABILITY

The components of the net pension liability as of June 30, 2018 were as follows:

Total Pension Liability	$ 11,510,667,823
Plan Fiduciary Net Position	5,341,285,527
Net Pension Liability	$ 6,169,382,296

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability is 46.4%.

The Water Fund’s portion of the net pension liability was $435,860,389 and $444,232,700 as of June 30, 2018 and 2017, respectively.

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2017 and was rolled forward to June 30, 2018. The June 30, 2017 actuarial valuation used the following actuarial assumptions, applied to all periods including the measurement period:

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
G. NET PENSION LIABILITY (continued)

Actuarial Cost Method:	Entry Age Normal
Investment Rate of Return:	7.60% compounded annually, net of expenses
Salary Increases:	Age Based Table

- The investment return assumption was changed from 7.70% from the prior year valuation to 7.60% for the current year valuation.
- To recognize the expense of the benefits payable under the Pension Adjustment Fund, the actuarial liabilities have been increased by 0.54%. This estimate is based on the statistical average expected value of the benefits.
- The mortality rates were based on the RP 2000 Healthy Annuitant Mortality Table for males and females with adjustments for mortality improvements using Scale AA with a five year set-back for Municipal males and females and a 2 year set-back for Police and Fire males and females.

The measurement date for the net pension liability (NPL) is June 30, 2018. Measurements are based on the fair value of assets as of June 30, 2018 and the total pension liability (TPL) as of the valuation date, July 1, 2017, updated to June 30, 2018. The roll-forward procedure included the addition of service cost and interest cost offset by actual benefit payments. During the measurement year, the collective NPL decreased by approximately $149 million. The service cost and interest cost increased the collective NPL by the approximately $1,007 million while contributions plus investment income offset by administrative expenses decreased the collective NPL by approximately $1,295 million.

There was a benefit change to provide a minimum benefit of $1,000 per month for Police and Fire retirees which increased the TPL by approximately $4 million. There were actuarial experience losses during the year of approximately $29 million which includes the loss due to the Pension Adjustment Fund payment of $7 million for the previous year.

In addition, the Board adopted proposed assumption changes following the Experience Study completed March 2018, including:

1. Decrease the expected long-term return on assets from 7.70% to 7.60% and
2. Demographic assumption changes, including updates to the mortality rates, retirement rates, termination rates, disability rates, salary scale for Municipal, service-connected disability rates, and percent married for non-active members.

The combined effect of these assumption changes increased the TPL by approximately $106 million.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
G. NET PENSION LIABILITY (continued)

Long-term expected rate of return:

The long-term rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2018 are summarized in the following table:

(See pension plan's investment policy: http://www.phila.gov/pensions/PDF/ips.pdf.)

	Long-Term Expected Real Rate of Return	Benchmark Index
Fixed Income		
Broad Fixed Income	2.80%	Bloomberg Barclays U.S. Aggregate TR
Int. Government	2.20%	Bloomberg Barclays U.S. Govt TR
High Yield	4.50%	Bloomberg Barclays U.S. High Yield TR
Global Aggregate	1.70%	Bloomberg Barclays U.S. Global Aggregate TR
Bank Loans	4.90%	Credit Suisse Leveraged Loans
Emerging Market Debt	6.30%	JP Morgan EMBI Global TR
Equities		
Broad U.S. Equity	7.30%	Russell 3000
Global Equity	7.40%	MSCI ACWI
Broad Non-U.S. Equity	7.60%	MSCI EAFE
Emerging Market	8.60%	MSCI Emerging Markets
Hedge Fund		
Hedge Funds	5.00%	HFRI Fund of Funds Composite Index
Real Estate		
Real Estate – Core	7.60%	NCREIF Fund Index
Public REITs	7.10%	NAREIT
Opportunistic Real Estate	11.70%	NCREIF Property Index
Real Asset		
MLPs	7.60%	Alerian MLP Index
Global Infrastructure	7.50%	Dow Jones Brookfield Global Infrastructure Index
Private Equity		
Private Equity	11.10%	Cambridge Associates
Private Debt	10.00%	Cambridge Associates
Cash		
TIPS	3.80%	Bloomberg Barclays US TIPS TR
91 Day T-Bills	1.20%	

The above table reflects the expected real rate of return for each major asset class. The expected inflation rate is projected at 2.5% for the same time period.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
G. NET PENSION LIABILITY (continued)

Discount Rate: The discount rate used to measure the total pension liability was 7.60%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the participating governmental entity contributions will be made at rates equal to the difference between the actuarial determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all on project benefit payment to determine the total pension liability.

Sensitivity of the net pension liability: The following presents the net pension liability of the System, calculated using the discount rate of 7.60%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	1% Decrease 6.60%	Discount Rate 7.60%	1% Increase 8.60%
Total Pension Liability	$ 12,692,479,606	$ 11,510,667,823	$ 10,504,052,174
Plan Fiduciary Net Position	5,341,285,527	5,341,285,527	5,341,285,527
Collective Net Pension Liability	$ 7,351,194,079	$ 6,169,382,296	$ 5,162,766,647
Plan Fiduciary Net Position as a Percentage of the of the Total Pension Liability	42.1%	46.4%	50.8%

H. GUARANTEE OF BENEFITS

Benefits under the Pension fund are guaranteed by statute. In the event that employee contributions do no equal required benefits, the City's General Fund must provide any shortfall.

I. PARTICIPATION IN THE PENSION FUND

The trustees for the Pension Fund are also members of the Fund and as such, are subject to the provisions of the Fund as described in the notes to these financial statements.

J. SUBSEQUENT EVENTS

Management evaluated subsequent events as of the issuance date. Management noted no items which would require disclosure in the financial statements.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Changes in Collective Net Pension Liability: The following table shows the changes in total pension liability (TPL), the plan fiduciary net position (i.e., fair value of the Pension Fund assets) (FNP), and the net pension liability (NPL) during the measurement period ended on June 30, 2018.

Change in Collective Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) - (b)**
Balances at 6/30/2017	$ 11,192,601,311	$ 4,874,074,826	$ 6,318,526,485
Changes for the year:			
Service cost	164,137,303		164,137,303
Interest	843,171,926		843,171,926
Changes of benefits	4,064,886		4,064,886
Differences between expected and actual experience	28,937,167		28,937,167
Changes of assumptions	106,021,273		106,021,273
Contributions - employer		781,984,326	(781,984,326)
Contributions - member		83,288,635	(83,288,635)
Net investment income		440,326,787	(440,326,787)
Benefit payments	(828,266,043)	(828,266,043)	0
Administrative expense		(10,123,004)	10,123,004
Net Changes	318,066,512	467,210,701	(149,144,189)
Balances at 6/30/2018	$ 11,510,667,823	$ 5,341,285,527	$ 6,169,382,296

Employer's Proportionate Shares: GASB 68 requires that the proportionate share for each employer be determined based upon the "employer's projected long-term contribution effort to the pension…as compared to the total long-term contribution effort of all employers." In addition to the City, three quasi-governmental agencies currently participate in the system, PHDC, PPA, and PMA. The method of allocation is based on the ratio of quasi-governmental agency contributions in proportion to total contributions of the plan.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Pension amounts by employer: The following schedule presents the pension amounts for each participating employer: Philadelphia Parking Authority (PPA), Philadelphia Municipal Authority (PMA), Philadelphia Housing Development Corporation (PHDC), and the City of Philadelphia (City):

Schedule of Pension Amounts by Employer

	For the year ended	PPA	PMA	PHDC	City	Total
Collective pension expenses		$17,747,229	$331,724	$1,575,689	$809,655,144	$829,309,786
Change in proportion		(5,042,579)	203,806	(1,017,591)	5,856,364	0
Contribution difference		6,217,376	52,433	453,677	(6,723,486)	0
Employer pension expense		18,922,026	587,963	1,011,775	808,788,022	829,309,786
Net pension liability	6/30/17	166,146,127	2,592,010	15,138,241	6,134,650,107	6,318,526,485
Net pension liability	6/30/18	132,024,781	2,467,753	11,721,826	6,023,167,936	6,169,382,296
Change in net pension liability		(34,121,346)	(124,257)	(3,416,415)	(111,482,171)	(149,144,189)
Deferred outflows	6/30/17	43,794,815	842,698	3,319,721	527,544,043	575,501,277
Deferred outflows	6/30/18	27,191,684	511,556	2,071,464	352,592,300	382,367,004
Change in deferred outflows		(16,603,131)	(331,142)	(1,248,257)	(174,951,743)	(193,134,273)
Deferred inflows	6/30/17	(25,061,614)	(190,428)	(3,032,702)	(32,992,732)	(61,277,476)
Deferred inflows	6/30/17	(38,017,115)	(171,458)	(4,180,348)	(22,243,931)	(64,612,852)
Change in deferred inflows		(12,955,501)	18,970	(1,147,646)	10,748,801	(3,335,376)
Employer contributions		23,484,740	400,047	2,032,285	756,067,254	781,984,326
Employer pension expense		18,922,026	587,963	1,011,775	808,788,022	829,309,786

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Reconciliation of Net Pension Liability

The following table reconciles the Collective Net Pension Liability to the amount reported in the Statement of Net Position included in the City of Philadelphia's Comprehensive Annual Financial Report:

Reconciliation of Collective Net Pension Liability to the Primary Government Net Pension Liability

(Amounts in thousands of USD)

Municipal Pension Fund	Proportionate Share of NPL	Discretely Presented Component Units	City and Blended Component Units
City	$ 6,023,168	$ -	6,023,168
PPA	132,025	132,025	-
PMA	2,468	-	2,468
PHDC (1)	11,722	11,722	-
Collective Net Pension Liability	6,169,382	143,747	6,025,636
State Pension Fund			
PICA			1,383
City's Primary Government Net Pension Liability (Exhibit 1)			$ 6,027,019

(1) PHDC does not appear in the Component Unit Financial Statements (Exhibit XI Statement of Net Position and Exhibit XII Statement of Activities) due to immaterially.

Deferred Outflows by Employer

The following table summarizes the deferred outflows allocated to each employer for experience, assumption changes, investment returns, and contribution differences:

Schedule of Employer's Deferred Outflows

	PPA	PMA	PHDC	CITY	Total
Proportionate Shares	2.14%	0.04%	0.19%	97.63%	100%
Experience	$ 2,388,708	$ 44,649	$ 212,082	$ 108,976,444	$ 111,621,883
Assumption changes	2,707,606	50,609	240,395	123,525,017	126,523,627
Investment return	1,703,625	31,843	151,256	77,721,918	79,608,642
Proportion change	10,414,417	282,117	712,824	42,368,921	53,778,279
Contribution difference	9,977,328	102,338	754,907	-	10,834,573
	$ 27,191,684	$ 511,556	$ 2,071,464	$ 352,592,300	$ 382,367,004

The Water Fund's proportionate share of Deferred Outflows of Resources related to the pension plan as of June 30, 2018 and 2017 was $24,543,646 and $37,682,522, respectively.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Deferred Inflows by Employer

The following table summarizes the deferred inflows allocated to each employer for experience, assumptions changes, investment return, and contribution differences:

Schedule of Employer's Deferred Intflows

	PPA	PMA	PHDC	CITY	Total
Proportionate Shares	2.14%	0.04%	0.019%	97.63%	100%
Experience	$ -	$ -	$ -	$ -	$ -
Assumption changes	-	-	-	-	-
Investment return	-	-	-	-	-
Proportion change	(38,017,115)	(171,458)	(4,180,348)	(11,409,358)	(53,778,279)
Contribution difference	-	-	-	(10,834,573)	(10,834,573)
	$ (38,017,115)	$ (171,458)	$ (4,180,348)	$ (22,243,931)	$ (64,612,852)

The Water Fund's proportionate share of Deferred Inflows of Resources related to the pension plan as of June 30, 2018 and 2017 was $1,336,290 and $2,143,525, respectively.

Recognition of Deferred Outflows and Inflows by Employer

The following table shows the net amount of deferred outflows and inflows to be recognized by each participating employer in each of the next five years and the total thereafter:

Schedule of Employer's Recognition of Deferred Outflows and Intflows

For Year ending	PPA	PMA	PHDC	CITY	Total
2019	$ 5,188,837	$ 347,796	$ (184,336)	$ 238,861,127	$ 244,213,424
2020	(9,754,812)	1,096	(1,266,735)	123,995,780	112,975,329
2021	(5,975,047)	(3,477)	(632,561)	(19,533,372)	(26,144,457)
2022	(284,409)	(5,316)	(25,251)	(12,975,165)	(13,290,141)
2023	-	-	-	-	-
Thereafter	-	-	-	-	-
Total	$ (10,825,431)	$ 340,099	$ (2,108,883)	$ 330,348,370	$ 317,754,155

2. ACCUMULATED UNPAID SICK LEAVE

Employees are credited with varying amounts of sick leave according to type of employee and/or length of service. Employees may accumulate unused sick leave to predetermined balances. Employees (upon retirement only) are paid varying amounts ranging from 25% to 50% of unused sick time, not to exceed predetermined amounts. Employees, who separate for any reason other than indicated above, forfeit their entire sick leave. The City budgets for and charges the cost of sick leave as it is taken.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

3. OTHER POSTEMPLOYMENT BENEFITS (OPEB)

Plan Description: The City of Philadelphia self-administers a single employer, defined benefit plan that provides OPEB for all eligible retirees. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

Benefits Provided: The City of Philadelphia subsidizes health care for five years from the time of coverage election for eligible retirees. Certain union represented employees may defer their coverage until a later date, but the amount that the City pays for their health care is limited to the amount that the City would have paid at the date of their retirement. The City also provides lifetime insurance coverage for all eligible retirees. Firefighters are entitled to $7,500 coverage and all other employees receive $6,000 in coverage. The plan does not issue stand-alone financial statements, and the accounting for the plan is reported within the financial statements of the City of Philadelphia.

Funding Policy: The City's funding policy is to pay the net expected benefits for the current retirees. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by union contracts and is self-insured for non-union employees. The City's contributions are estimated to be about $96.4 million for fiscal year ended June 30, 2018.

Employees covered by benefit terms: At July 1, 2016, the following employees were covered by the benefit terms:

Medical Coverage:	
Inactive employees or beneficiaries currently receiving medical coverage	3,929
DROPS with medical coverage	1,614
Inactive employees entitled to, but not yet receiving medical coverage	639
Active employees	28,308
Total	34,490
Life Insurance Coverage	
Inactive employees or beneficiaries currently receiving life insurance coverage	27,736
Active employees	28,308
Total	56,044

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Total OPEB Liability: The City's total OPEB liability of $1,861,600,000 was measured as of June 30, 2017 and was determined by an actuarial valuation as of that date. The Water Fund's proportionate share of the OPEB liability as of June 30, 2018 was $139,806,000.

Actuarial assumptions and other inputs: The total OPEB liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified.

Measurement Date: June 30, 2016 and June 30, 2017; reporting dates June 30, 2017 and June 30, 2018.

Discount Rate: The discount rate as of June 30, 2017 is 3.58%, which is the 20-year bond buyer index rate as of June 29, 2017. The discount rate that was used for June 30, 2016 liability calculation is 2.85%, which is the 20-year bond buyer index rate as of June 30, 2016.

Salary Increase Rate:

Age	All Divisions
<20	20.00%
20 - 24	11.00%
25 - 29	7.00%
30 - 34	5.00%
35 - 39	4.25%
40 - 44	4.00%
45 - 49	3.50%
50 - 54	3.30%
55 - 60	3.00%
61 +	2.75%

Per Person Cost Trends: The trend rates represent the annual rate of increase in employer claim payments, employer premiums (including those paid to union-sponsored plans), and retiree contributions.

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

To Year	Medical		Rx		Medical /Rx Combined	
Beginning July 1	Pre Medicare	Medicare Eligible	Pre Medicare	Medicare Eligible	Pre Medicare	Medicare Eligible
2017	8.00%	6.00%	10.00%	8.00%	8.40%	7.40%
2018	7.67%	5.80%	9.53%	7.67%	8.04%	7.11%
2019	7.33%	5.60%	9.07%	7.33%	7.68%	6.81%
2020	7.00%	5.40%	8.60%	7.00%	7.32%	6.52%
2021	6.67%	5.20%	8.13%	6.67%	6.96%	6.23%
2022	6.33%	5.00%	7.67%	6.33%	6.60%	5.93%
2023	6.00%	4.80%	7.20%	6.00%	6.24%	5.64%
2024	5.67%	4.60%	6.73%	5.67%	5.88%	5.35%
2025	5.33%	4.40%	6.27%	5.33%	5.52%	5.05%
2026	5.00%	4.20%	5.80%	5.00%	5.16%	4.76%
2027	4.67%	4.00%	5.33%	4.67%	4.80%	4.47%
2028	4.33%	3.80%	4.87%	4.33%	4.44%	4.17%
2029	4.00%	3.60%	4.40%	4.00%	4.08%	3.88%
2030	3.67%	3.40%	3.93%	3.67%	3.72%	3.59%
2031	3.33%	3.20%	3.47%	3.33%	3.36%	3.29%
2032 +	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Retirees Share of Benefit Related Costs:

Percent of Retirees Electing Coverage

Participation rate for medical coverage

- 85% of future retirees from Non-Represented groups are assumed to elect post-retirement medical covers.
- 100% of future retirees from represented groups (DC 33, DC 47, Fire, and Police) are assumed to elect post-retirement medical coverage.
- 100% of DROP participants are assumed to continue in DROP for the remainder of their DROP period (maximum four years) and then retire with a medical benefit.

Participation rate for life insurance

- 95% of current and future retired firefighters who participated in the pension plan are assumed to be covered by City-provided life insurance.
- 87% of all other current and future retired pension plan participants are assumed to be covered by City-provided life insurance.

Mortality Rates:
It is assumed that deaths of active municipal and elected members would follow the RP-2000 Mortality Table with Blue Collar adjustment, projected 17 years using Scale AA with a five-year setback for males and females.

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

It is assumed that deaths of active uniformed members would follow the RP-2000 Mortality Table with Blue Collar adjustment, projected 17 years using Scale AA with a two-year setback for males and females.

It is assumed that mortality for healthy inactive lives will follow RP-2000 with Blue Collar adjustment, projected 17 years using Scale AA with a one-year set forward for males and females.

For Police and Fire, it is assumed that mortality for disabled retirees follows RP-2000 Healthy Mortality with Blue Collar adjustment, projected 17 years using Scale AA with a 1% upwards adjustment and a five-year setback for males and females.

For Municipal and Elected officials, it is assumed that mortality for disabled retirees follows RP-2000 Healthy Mortality with Blue Collar adjustment, projected 17 years using Scale AA with a 1% upward adjustment and a one-year setback for males and females.

Change in the Total OPEB Liability:

The table below shows the changes in the Total OPEB Liability (TOL), the plan fiduciary net position (i.e., the fair value of Plan assets) (FNP), and the Net OPEB Liability (NOL) during the measurement period ended on June 30, 2017.

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IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Change in Net OPEB Liability	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Balances at 6/30/2016	**$ 1,936,600,000**	**$ -**	**$ 1,936,600,000**
Changes for the year:			
Service cost	89,300,000		89,300,000
Interest	56,100,000		56,100,000
Changes of benefits			-
Differences between expected/actual			-
Changes of assumptions	(105,600,000)		(105,600,000)
Contributions - employer		114,800,000	114,800,000
Contributions - non employer			-
Contributions - member			-
Net investment income			-
Benefit payments	(114,800,000)	(114,800,000)	-
Administrative expense			-
Net changes	(75,000,000)	-	(75,000,000)
Balances at 6/30/2017	**$ 1,861,600,000**	**$ -**	**$ 1,861,600,000**

During the measurement year, the NOL decreased by approximately $75.0 million. The service cost and interest cost increased the NOL by approximately $145.4 million while contributions plus investment gains offset by administrative expenses decreased the NOL by approximately $114.8 million. The employer contribution of $114.8 million is based on a blend of actual contributions and estimated contributions based on the prior report.

There were no changes in benefits during the year. Because the beginning and ending values are based on the same actuarial valuation and there were no significant events, there were no liability gains or losses during the year due to experience.

There was an assumption change due to the change in the 20-year bond buyer index rate. The discount rate changed from 2.85% to 3.58% as of June 30, 2017, reducing the liability by $105.6 million.

Sensitivity of the total OPEB liability to changes in the discount rate:

The following represents the total OPEB liability of the City, as well as what the City's total liability would be if it were calculated using a discount rate that is 1-percentage-

PHILADELPHIA WATER DEPARTMENT
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IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

point lower (2.58%) or 1-percentage-point higher (4.58%) than the current discount rate:

Changes in the discount rate affect the measurement of the TOL. Lower discount rates produce a higher TOL and higher discount rates produce a lower TOL. The table below shows the sensitivity of the NOL to the discount rate.

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

	1/% Decrease 2.58%	Discount Rate 3.58%	1/% Increase 4.58%
Total OPEB Liability	$ 2,007,100,000	$ 1,861,600,000	$ 1,730,100,000
Plan Fiduciary Net Position			
Net OPEB Liability	$ 2,007,100,000	$ 1,861,600,000	$ 1,730,100,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB liability	0.0%	0.0%	0.0%

A one percent decrease in the discount rate increases the TOL and NOL by approximately 8%. A one percent increase in the discount rate decreases the TOL and NOL by approximately 7%.

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The following represents the total OPEB liability of the City, as well as what the City's total 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 discount rate:

Changes in healthcare trends affect the measurement of the TOL. Lower healthcare trends produce a lower TOL and higher healthcare trends produce a higher TOL. The table below shows the sensitivity of the NOL to the healthcare trends.

Sensitivity of Net OPEB Liability to Changes in Healthcare Cost Trend Rates

	1/% Decrease	Healthcare Trend	1/% Increase
Total OPEB Liability	$ 1,692,700,000	$ 1,861,600,000	$ 2,058,600,000
Plan Fiduciary Net Position			
Net OPEB Liability	$ 1,692,700,000	$ 1,861,600,000	$ 2,058,600,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB liability	0.0%	0.0%	0.0%

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A one percent decrease in the healthcare trends decreases the TOL and NOL by approximately 9%. A one percent increase in the healthcare trend rate increases the TOL and NOL by approximately 11%.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB.

For the year ended June 30, 2018, the City recognized OPEB expense of $130,300,000. The table below shows the development of OPEB expense.

Calculation of OPEB Expense		
Fiscal Year Ending		**June 30, 2018**
Measurement Year Ending		**June 30, 2017**
Change in Net OPEB Liability	$	(75,000,000)
Change in Deferred Outflows		-
Change in Deferred Inflows		90,500,000
Non Employer Contributions		-
Employer Contributions		114,800,000
OPEB Expense	**$**	**130,300,000**
OPEB Expense as % of Payroll		**7.47%**
Operating Expenses		
Service cost	$	89,300,000
Employee contributions		-
Administrative expenses		-
Total	$	89,300,000
Financing Expenses		
Interest cost	$	56,100,000
Expected return on assets		-
Total	$	56,100,000
Changes		
Benefit changes	$	-
Recognition of assumption changes		(15,100,000)
Recognition of liability gains and losses 0		-
Recognition of investment gains and losses -		-
Total	$	(15,100,000)
OPEB Expense	**$**	**130,300,000**

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

At June 30, 2018, the City reported deferred outflows of resources and deferred inflow of resources related to OPEB from the following sources:

Schedule of Deferred Inflows and Outflows of Resources as of
June 30, 2018 Projected Fiscal Year End
June 30, 2017 Measurement Date

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ -
Changes in assumption		90,500,000
Net differences between projected and actual earnings on OPEB plan investments		
Contributions subsequent to measurement date	96,400,000	
Total	**$ 96,400,000**	**$ 90,500,000**

Amounts reported as deferred outflows and inflows of resources will be recognized in OPEB expense as follows:

Year Ended in June 30:	
2019	(15,100,000)
2020	(15,100,000)
2021	(15,100,000)
2022	(15,100,000)
2023	(15,100,000)
Thereafter	$ (15,100,000)

At June 30, 2018, the Water Fund reported deferred outflows of resources and deferred inflow of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	$ -	$ 6,797,000
Contributions subsequent to measurement date	7,240,000	-
Total	$ 7,240,000	$ 6,797,000

Amounts reported as deferred outflows and inflows of resources will be recognized in OPEB expense over a six-year period in the amount of ($1,132,833) per year.

The subsequent contributions after the measurement date are reflected as a deferred outflow, but this is not subject to a deferred recognition period in the OPEB expense.

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Instead, this will be fully recognized in the OPEB expense for the Fiscal Year ending June 30, 2019.

Required Supplementary Information: The schedule below shows the changes in NOL and related ratios required by GASB.

Schedule of Changes in Net OPEB Liability and Related Ratios

Measurement Year Ending	**6/30/2017**
Total OPEB Liability	
Service cost (BOY)	$ 89,300,000
Interest (includes interest on service cost)	56,100,000
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions	(105,600,000)
Benefit payments, including refunds of member contributions	(114,800,000)
Net change in total OPEB liability	**$ (75,000,000)**
Total OPEB liability - beginning	1,936,600,000
Total OPEB liability - ending	$ 1,861,600,000
Plan fiduciary net position	
Contributions - employer	$ 114,800,000
Contributions - non-employer	-
Contributions - member	-
Net investment income	-
Benefit payments, including refunds of member contributions	(114,800,000)
Administrative expense	
Net change in plan fiduciary net position	$ -
Plan fiduciary net position - beginning	-
Plan fiduciary net position - ending	$ -
Net OPEB liability - ending	**$ 1,861,600,000**
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%
Covered payroll	$1,744,700,000
Net OPEB liability as a percentage of covered payroll	106.70%

The Plan is not currently being pre-funded so there is no actuarially determined contribution shown below. The actuarially determined contribution is a target or recommended contribution to the OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contributions for the reporting period was adopted. The Actuarial Required Contribution (ARC) determined under GASB 45 is not a recommended contribution under Actuarial Standards of Practice, and thus is not shown below. If the

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Plan decides to pre-fund the liabilities, we will provide an appropriate actuarially determined contribution.

4. PENNSYLVANIA INTERGOVERNMENTAL COOPERATION AUTHORITY (PICA)

PICA, a body corporate and politic, was organized in June 1991 and exists under and by virtue of the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (the Act). Pursuant to the Act, PICA was established to provide financial assistance to cities of the first class. The City currently is the only city of the first class in the Commonwealth of Pennsylvania. Under the Act, PICA is administered by a governing Board consisting of five voting members and two ex officio non-voting members. The Governor of Pennsylvania, the President Pro Tempore of the Pennsylvania Senate, the Minority Leader of the Pennsylvania Senate, the Speaker of the Pennsylvania House of Representatives and the Minority Leader of the Pennsylvania House of Representatives each appoints one voting member to the Board.

The Act provides that, upon PICA's approval of a request of the City to PICA for financial assistance, PICA shall have certain financial and oversight functions. First, PICA shall have the power to issue bonds and grant or lend the proceeds thereof to the City. Second, PICA also shall have the power, in its oversight capacity, to exercise certain advisory and review powers with respect to the City's financial affairs, including the power to review and approve five-year financial plans prepared at least annually by the City and to certify noncompliance by the City with its current five-year financial plan (which certification would require the Secretary of the Budget of the Commonwealth of Pennsylvania to cause certain Commonwealth payments due to the City to be withheld).

PICA bonds are payable from the proceeds of a PICA tax on the wages and income earned by City residents. The City has reduced the amount of wage and earnings tax that it levies on City residents by an amount equal to the PICA tax so that the total tax remains the same. PICA returns to the City any portion of the tax not required to meet their debt service and operating expenses. In Fiscal 2018, this transfer amounted to $454.2 million.

5. RELATED PARTY TRANSACTIONS

The City is associated, through representation on the respective Board of Directors, with several local governmental organizations and certain quasi-governmental organizations created under the laws of the Commonwealth of Pennsylvania. These

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K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

organizations are separate legal entities having governmental character and sufficient autonomy in the management of their own affairs to distinguish them as separate independent governmental entities. A list of such related party organizations and a description of significant transactions with the City, where applicable, is as follows:

A. SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY (SEPTA)

During the year the City provided an operating subsidy of $81.95 million to SEPTA.

B. OTHER ORGANIZATIONS

The City provides varying levels of subsidy and other support payments which totaled $120.46 million during the year to the following organizations:

- Philadelphia Health Management Corporation
- Philadelphia Industrial Development Corporation
- Fund for Philadelphia Incorporated

6. RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The City (except for Aviation Fund operations, the Municipal Authority, and PICA) is self-insured for fire damage, casualty losses, public liability, Workers' Compensation and Unemployment Compensation. The Aviation Fund is self-insured for Workers' Compensation and Unemployment Compensation and insured through insurance carriers for other coverage. The City is self-insured for medical benefits provided to employees in the Fraternal Order of Police, its city-administered health plan, the International Association of Fire Fighters, and District Council 47.

The City covers all claim settlements and judgments, except for those discussed above, out of the resources of the fund associated with the claim. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. These losses include: an estimate of claims that have been incurred but not reported; the effects of specific, incremental claims adjustment expenditures, salvage, and subrogation; and unallocated claims adjustment expenditures

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

At June 30, the amount of these liabilities was $353.0 million for the Primary Government. This liability is the City's best estimate based on available information. Changes in the reported liability since June 30, 2016 resulted from the following:

(Amounts in Millions of USD)

	Beginning Liability	Current Year Claims & Changes In Estimates	Claim Payments	Ending Liability
Fiscal 2016	353.6	216.2	(219.5)	350.3
Fiscal 2017	350.3	243.9	(229.1)	365.1
Fiscal 2018	365.1	198.7	(211.4)	352.4

The City's Unemployment Compensation and Workers' Compensation coverages are provided through its General Fund. Unemployment Compensation and Workers' Compensation coverages are funded by a pro rata charge to the various funds. Payments for the year were $3.1 million for Unemployment Compensation claims and $62.98 million for Workers' Compensation claims.

The City's estimated outstanding workers' compensation liabilities are $263.8 million discounted at 3.5%. On an undiscounted basis, these liabilities total $343.9 million. These liabilities include provisions for indemnity, medical and allocated loss adjustment expense (ALAE). Excluding the ALAE, the respective liabilities for indemnity and medical payments relating to workers' compensation total $240.0 million (discounted) and $314.8 million (undiscounted). The Water Fund's accrued liability for workers' compensation was $23.7 million and $21.6 million at June 30, 2018 and 2017, respectively.

During the last five (5) fiscal years, no claim settlements have exceeded the level of insurance coverage for operations using third party carriers. None of the City's insured losses have been settled with the purchase of annuity contracts.

7. CONTINGENCIES

Generally, claims against the City are payable out of the General Fund, except claims against the City Water Department, City Aviation Division, or Component Units which are paid out of their respective funds and only secondarily out of the General Fund which is then reimbursed for the expenditure. Unless specifically noted otherwise, all claims hereinafter discussed are payable out of the General Fund or the individual

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Enterprise Fund. The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act", established a $500,000 aggregate limitation on damages arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation has been upheld by the United States Supreme Court. There is no such limitation under federal law.

Various claims have been asserted against the City and in some cases lawsuits have been instituted. Many of these claims are reduced to judgment or otherwise settled in a manner requiring payment by the Water Fund. The aggregate estimate of loss deemed to be probable as of June 30, 2018 and 2017 is approximately $5.6 million and $6.1 million, respectively. This amount has been included on the Statement of Net Position under Other Long-Term Liabilities.

The City's aggregate estimate of loss deemed to be probable is approximately $329.40 million. Of this amount, $36.51 million is charged to the current operations of the Enterprise Funds. The remaining $292.88 million pertaining to the General Fund is reflected in the Government Wide Statements

In addition to the above, there are certain lawsuits against the City for which an additional loss is reasonably possible. These lawsuits relate to General Fund and Enterprise Fund operations. The aggregate estimate of the amount of loss from these lawsuits in which some amount of loss is reasonably possible is approximately $93.0 million from the General Fund, $8.3 million from the Water Fund and $5.5 million from the Aviation Fund.

8. SUBSEQUENT EVENTS

In preparing the accompanying financial statements, the Water Fund has reviewed events that occurred subsequent to June 30, 2018 through and including February 24, 2019. The following events are described below:

- Through August 2018 draw-downs totaling $1.5 million represent new loans from the Pennsylvania State Infrastructure Financing Authority ("PENNVEST") for green infrastructure storm water management.
- In November 2018, the City issued $276.9 million of Water and Wastewater Revenue Bonds, Series 2018A. The 2018A bonds were issued at an interest rate of 5%. The 2018A bonds were issued for the purpose of providing funds which, together with the other available funds of the City, will be used to finance (A)

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

capital improvements to the City's Water and Wastewater Systems, and (B) the costs of issuance relating to the issuance of the 2018A bonds.

- The City, through the Procurement Department, Water Department and the Water Revenue Bureau, entered into a contract with the PMA for the delivery of an advanced metering infrastructure ("AMI") system for water meter reading. The PMA has entered into a service subcontract with Sensus USA Inc., effective February 4, 2019. The scope of the contact includes AMI system network installation, installation of new meter reading units and operation and maintenance of the AMI system. The City does not intend to replace all of the water meters during the initial installation phase of the new system. The Water Department expects installation of the AMI system and communications network to take approximately 12 months. The deployment phase, during which AMR equipment will be replaced with AMI units, is expected to take approximately 24 months. After the initial installation and deployment phase, the AMI operations and maintenance term of the contract will begin for a term of 20 years, with the option to renew for additional one-year terms for a period of three years.
- In February of 2019, the City issued $68.3 million of Water and Wastewater Revenue Refunding Bonds, Series 2019. The 2019 bonds were issued for the purposes of refunding (i) the refunding of all or a portion of the City's outstanding Water and Wastewater Revenue Bonds, Series 2010C and all or a portion of the City's outstanding Water and Wastewater Revenue Refunding Bonds, Series 2011B and Series 2012 and (ii) the costs of issuance relating to the Bonds.
- On or about February 20, 2019, the City entered into a Forward Delivery Bond Purchase Agreement with Morgan Stanley Municipal Funding Inc., as purchaser (the "Purchaser"), pursuant to which the City will issue and deliver $127,740,000 principal amount of its Water and Wastewater Revenue Refunding Bonds, Series 2020 (Forward Delivery) (the "2020 Bonds"). Proceeds of the 2020 Bonds are intended to be used to refund all or a portion of the City's outstanding Water and Wastewater Revenue Bonds, Series 2011A, and to pay certain costs of issuance. The 2020 Bonds will bear interest at 5.000% and mature on October 1, 2040. The obligations of the City and the Purchaser, respectively, to issue and deliver, and purchase and accept the delivery of, the 2020 Bonds, are subject to the satisfaction of certain requirements as more fully set forth in the Forward Delivery Bond Purchase Agreement.

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

9. ACCOUNTS RECEIVABLE

Balances of accounts receivable and allowance for doubtful accounts consisted of the following:

FISCAL YEAR ENDED JUNE 30, 2018	
Accounts Receivable	
Billed in the Last Twelve Months	$147,590,216
Billed in 15-year Cycle Billing	5,484,328
Penalties on Receivables	8,113,183
Other Receivables	4,053,616
Subtotal	165,241,343
Bad Debt Written Off	6,474,206
Total	$158,767,137
Allowance for Doubtful Accounts	$ 11,489,296

FISCAL YEAR ENDED JUNE 30, 2017	
Accounts Receivable	
Billed in the Last Twelve Months	$ 149,661,403
Billed in 15-year Cycle Billing	8,440,721
Penalties on Receivables	12,359,977
Other Receivables	4,095,453
Subtotal	174,557,554
Bad Debt Written Off	13,251,217
Total	$ 161,306,337
Allowance for Doubtful Accounts	$ 13,057,526

10. ACCOUNTING FOR THE NEW RIVER CITY PROJECT FUNDS – WATER SINKING FUND RESERVE SUBSTITUTION

Pursuant to the Water Department's General Bond Ordinance, the Sinking Fund Reserve provides a reserve against default of the payment of principal and interest on Water Revenue Bonds when due.

The New River City Ordinance dated January 23, 2007 (Bill No 060005) authorized the purchase and deposit of a surety bond that meets the requirements of the General

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IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Ordinance to replace $67,000,000 of the Sinking Fund Reserve Balance. The $67,000,000 was used as follows:

Cost of the surety bond	$ 2,010,000
Legal and financial services	290,000
Management fees	375,000
Costs of certain water and sewer infrastructure components of the New River City Program	64,325,000
Total	$67,000,000

The prepaid surety bond was recorded as an asset in the Sinking Fund Reserve and amortized over the lives of the outstanding bonds.

In connection with the New River City Program, the City executed a program agreement with Philadelphia Authority for Industrial Development ("PAID") to provide program management and oversight for the program. To date, twelve projects totaling $83,697,833 have been executed (disbursements were limited to the $64,325,000). As of June 30, 2016, all projects were completed and all of the project funds have been disbursed. The transfer of the water and sewer utilities at Philadelphia Naval Business Center from PAID to the Water Department, including the projects outlined above, occurred in November, 2009.

11. LONG TERM AGREEMENTS

The City has entered into several long term agreements with third parties through the Philadelphia Municipal Authority as follows:

A. Automatic Meter Reading

In September 1997, the Water Department and the Water Revenue Bureau began the implementation of the Automatic Meter Reading Program (the "AMR Program") involving the replacement of all residential water meters with new meters equipped with radio transmitter endpoint reading devices ("ERT"). Installation commenced on schedule on September 11, 1997. By June 30, 2012, more than 482,841 new meters had been installed. From 2011 through 2013, as required in the long-term meter reading contract, the service provider (ITRON) conducted battery replacement of the vast majority of customer ERTs, thus enabling the battery capability of the existing population through 2025. The Water Department is also working on the purchase and installation of upgraded AMR devices for all commercial customers that have ERTs. The AMR Program agreement term ends in 2017. The Department has two one-year renewal options, and is in the process of exercising the first one year extension.

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K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

Under the agreement ITRON is paid a fixed amount for each monthly meter reading actually obtained. The Water Department paid ITRON, through the Philadelphia Municipal Authority ("PMA"), $1,852,777 and $1,940,536 in Fiscal Year 2018 and Fiscal Year 2017, respectively for meter reads. Additionally, the Water Department paid ITRON, through PMA, $2,079,339 and $2,087,360 in Fiscal Year 2018 and Fiscal Year 2017, respectively, for the purchase of meters.

B. Biosolids Treatment and Utilization

In 2008, the City entered into a long-term contract and lease with the Philadelphia Municipal Authority (the "PMA") for the PMA to operate the Water Department's existing Biosolids Recycling Center (the "BRC"). The PMA and Philadelphia Biosolids Services, LLC ("PBS") entered into a Service Agreement (the "PBS Service Contract"), pursuant to which PBS designed and built, and currently operates, a facility at the BRC to heat dry and dispose of biosolids captured during wastewater treatment. The PMA is required to make annual payments to PBS for operating the BRC. Pursuant to a Service Agreement between the PMA and the City (the "City Service Contract"), the City assumed all of PMA's obligations under the PBS Service Contract. The obligations under the City Service Contract constitute operating expenses of the Water Department. In Fiscal Years 2017 and 2018, the City paid to PMA, from revenues generated by the Water Department, $17,941,469 and $21,782,487, respectively. The City Service Contract contains adjusters for the Consumer Price Index, Producer Price Index, and fluctuations in fuel prices, among others; thus, expenditures under the City Service Contract may vary over time. The contract expires on October 13, 2028, and contains the possibility of a five-year renewal term at the option of the City. In addition to facilitating compliance with various state and federal environmental regulations, including the Clean Air Act, the PBS Service Contract has produced cost savings for the Water Department.

C. Northeast Water Pollution Control Plant Digester Gas Cogeneration Facility

In 2011, the City entered into a long-term contract and lease with the PMA for the PMA to arrange the construction, financing, maintenance and sublease of a digester gas cogeneration facility at the Northeast Water Pollution Control Plant. The PMA entered into a lease (the "Lease") with BAL Green Biogas I, LLC, a special purpose entity of Bank of America (the "Lessor"), which requires the PMA to make certain lease payments to the Lessor. Pursuant to a sublease dated December 23, 2011 (the "Sublease"), the City assumed all of the PMA's obligations under the Lease. The obligations under this contract constitute operating expenses of the Water Department. In Fiscal Year 2017 and Fiscal Year 2018, the City paid to the Lessor from revenues

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)
K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

generated from the Water Department, $4,718,600 and $5,937,935 respectively. The Sublease expires on September 25, 2029, unless renewed by PMA for an additional term of eighteen months.

D. Laurel Street Combined Sewer Overflow

In 2011, the City entered into an Amended and Restated Development and Tax and Claim Settlement Agreement (the "Sugarhouse Agreement") with Sugarhouse HSP Gaming, L.P. ("HSP"). Under the terms of the Sugarhouse Agreement, HSP is required to fund the development and expansion of the Laurel Street Combined Sewer Overflow Project. As compensation for the development and expansion of the project, HSP has been allotted a five-year credit against real estate taxes and settlement payments otherwise due to the City. The amount of the credit corresponds to the amount expended by HSP on the Laurel Street Combined Sewer Overflow Project.

The Laurel Street Combined Sewer Overflow Project is a capital asset of the Water Department, and the credit awarded to HSP is a capital expenditure of the Water Department payable to the City. The Water Department paid the City $3,514,421 for Fiscal Year 2016. The Water Department paid the City $7,028,842 in Fiscal Year 2017, which sum included its payment obligations for both Fiscal Years 2017 and 2018 combined. The Water Department's final payment obligation under the terms of the Sugarhouse Agreement will occur during this Fiscal Year 2019.

12. COMBINED SEWER OVERFLOW PROGRAM

The PaDEP and the City signed the Consent Order and Agreement ("COA") on June 1, 2011 that allowed the City to officially to embark on the implementation of its strategy known as the Green City, Clean Waters Program to use green and traditional infrastructure investments to substantially mitigate combined sewer overflows ("CSOs") and enhance the quality of local waterways over 25 years.

The Water Department anticipates that over the next 18 years, compliance with the COA will significantly increase capital and operating expenditures related to its Combined Sewer Overflow Program. Moreover, any resulting changes to the COA as a result of the EPA's information request could further increase the costs of compliance. Looking ahead to the 10th-year milestone, the Water Department continues to review program cost and delivery in an effort to optimize the program while satisfying the necessary regulatory requirements. As of the most recent projections, the total cost of the 25-year program is approximately $4.5 billion, of which approximately $3.5 billion are capital related costs and $1 billion are operation and maintenance costs.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

In its current form, the COA adopts the presumption approach to the management of CSOs. The goal under the presumption approach is to eliminate and remove by 2036 (year 25 of the COA) the mass of pollutants that otherwise would be removed by the capture of 85% by volume city-wide of the combined sewage otherwise collected in the City's combined sewer system during precipitation events. To ensure this ultimate goal is met, the COA requires interim milestones at the end of the fifth, tenth, fifteenth and twentieth years. The interim milestones require the City to achieve specific targets in four categories: (1) Total Greened Acres; (2) Overflow Reduction Volume; (3) Miles of Interceptor Lined; and (4) Wastewater Treatment Plant Upgrades: Design and Construction. The COA includes financial protections in the event that the costs of complying with the COA exceed the Water Department's projections. Should the costs of complying with the COA increase to the extent that the wastewater component of a customer's bill exceeds 2.27% of median household income, the City may petition the PaDEP for an extension of time to satisfy the requirements of the COA so that the financial burden does not become excessive on ratepayers. The COA also includes significant penalties for non-compliance with the various 5-year milestone targets. Penalties start at $25,000 per month for each violation (for the first 6 months) and increase up to $100,000 monthly for uncured violations of 13 months or more.

The City allocated $55 million and $76 million for capital COA Expenditures in the budgets for Fiscal Years 2017 and 2018, respectively. Since July 1, 2011 through and including June 30, 2018, the Water Department's capital spending for COA projects is approximately $108 million. During the same period, the Water Department has spent $200 million from its operating budget. In addition, the Water Department's revenues have been reduced due to stormwater credits.

The Water Department has completed the requirements of the fifth-year milestone by completing approximately 838 greened acres and reducing CSO by approximately 1,710 million gallons. Under the COA, the Water Department must complete an additional 1,310 greened acres and reduce CSO by an additional 334 million gallons by the end of 2021 (the "Tenth Year Milestone"). As of June 30, 2018, the Water Department has completed 1,159 greened acres and needs to complete 990 more greened acres to meet the next five-year milestone.

PHILADELPHIA WATER DEPARTMENT
NOTES TO THE FINANCIAL STATEMENTS
JUNE 30, 2018 AND 2017

IV. OTHER INFORMATION (continued)

K. REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS (continued)

13. RESTRICTED ASSETS

Assets whose use is limited to a specific purpose have been classified as "restricted" in the Statement of Fund Net Position. Restricted assets as of June 30, 2018, comprised the following:

	(Thousands of Dollars) Cash and Investments	Accrued Interest
Amounts Reserved for:		
Capital Projects	$ 289,733	$ 371
Rate Stabilization	178,876	526
Residual	15,402	39
Sinking Fund	373	1
Debt Service Reserve	199,460	623
Total	$ 683,844	$ 1,560

Restricted assets as of June 30, 2017, comprised the following:

	(Thousands of Dollars) Cash and Investments	Accrued Interest
Amounts Reserved for:		
Capital Projects	$ 450,667	$ 318
Rate Stabilization	201,759	349
Residual	15,262	23
Sinking Fund	823	-
Debt Service Reserve	218,277	446
Total	$ 886,788	$ 1,136

Required Supplementary Information

CITY OF PHILADELPHIA WATER DEPARTMENT

BUDGETARY COMPARISON SCHEDULE
Water Operating Fund
For the Fiscal Year Ending June 30, 2018
(Legally Enacted Basis) **(Thousands of Dollars)**

Revenues	Budgeted Amounts			Final Budget to Actual Positive (Negative)
	Original	Final	Actual	
Locally Generated Non-Tax Revenue	$ 679,802	$ 698,952	$ 715,641	$ 16,689
Revenue from Other Governments	1,000	1,000	569	(431)
Revenue from Other Funds	120,431	118,139	58,490	(59,649)
Total Revenues	**$ 801,233**	**$ 818,091**	**$ 774,700**	**$ (43,391)**
Expenditures and Encumbrances				
Personal Services	139,466	139,466	132,309	7,157
Pension Contributions	67,127	80,551	76,957	3,594
Other Employee Benefits	55,005	56,887	56,887	-
Sub-Total Employee Compensation	261,598	276,904	266,153	10,751
Purchase of Services	188,881	188,881	175,855	13,026
Materials and Supplies	50,473	49,613	44,653	4,960
Equipment	6,908	7,768	5,424	2,344
Contributions, Indemnities and Taxes	7,105	9,105	6,779	2,326
Debt Service	240,268	240,268	237,249	3,019
Payments to Other Funds	71,000	71,000	71,000	-
Advances and Other Miscellaneous Payments	-	-	-	-
Total Expenditures and Encumbrances	826,233	843,539	807,113	36,426
Operating Surplus (Deficit) for the Year	**$ (25,000)**	**$ (25,448)**	**$ (32,413)**	**$ (6,965)**
Fund Balance Available, July 1, 2016	-	-	-	-
Operations in Respect to Prior Fiscal Years				
Commitments Cancelled - Net	25,000	25,000	32,413	7,413
Prior Period Adjustments	-	-	-	-
Adjusted Fund Balance, July 1, 2016	25,000	25,000	32,413	7,413
Fund Balance Available, June 30, 2018	**$ -**	**$ (448)**	**$ 0**	**$ 448**

City of Philadelphia
Required Supplementary Information
Other Post Employment Benefits (OPEB) and Pension Plans

City of Philadelphia - Schedule of Changes in Net OPEB Liability and Related Ratios *(Amounts of USD)*

	FYE 2017
Total OPEB Liability	
Service Cost (BOY)	89,300,000
Interest (includes interest on service cost)	56,100,000
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions	(105,600,000)
Benefit payments, including refunds of member contributions	(114,800,000)
Net change in total OPEB liability	**(75,000,000)**
Total OPEB liability - beginning	1,936,600,000
Total OPEB liability - ending	**1,861,600,000**
Plan fiduciary net position	
Contributions - employer	114,800,000
Contributions - non-employer	-
Contributions - member	-
Net investment income	-
Benefit payments, including refunds of member contributions	(114,800,000)
Administrative expense	-
Net change in plan fiduciary net position	-
Plan fiduciary net position - beginning	-
Plan fiduciary net position - ending	-
Net OPEB liability - ending	**1,861,600,000**
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%
Covered-employee payroll	1,864,800,000
Net OPEB liability as a percentage of covered-employee payroll	99.83%

City of Philadelphia - Municipal Pension Plan - Schedule of Changes in Net Pension Liability *(Amounts of USD)*

	FYE 2018	FYE 2017	FYE 2016	FYE 2015
Total Pension Liability				
Service Cost (MOY)	164,137,303	157,607,110	148,370,075	143,556,347
Interest (includes interest on service cost)	843,171,926	823,959,345	802,450,569	791,298,503
Changes of benefit terms	4,064,886	-	-	-
Differences between expected and actual experience	28,937,167	103,878,650	151,918,733	34,909,464
Changes of assumptions	106,021,273	51,441,475	85,147,737	48,146,352
Benefit payments, including refunds of member contributions	(828,266,043)	(821,495,227)	(889,343,124)	(881,464,964)
Net change in total pension liability	**318,066,512**	**315,391,353**	**298,543,990**	**136,445,702**
Total Pension liability - beginning	11,192,601,311	10,877,209,958	10,578,665,968	**10,442,220,266**
Total Pension liability - ending	**11,510,667,823**	**11,192,601,311**	**10,877,209,958**	**10,578,665,968**
Plan fiduciary net position				
Contributions - employer	781,984,326	706,236,698	660,246,511	577,195,412
Contributions - member	83,288,635	73,607,359	67,055,003	58,657,817
Net investment income	440,326,787	566,624,580	(145,681,480)	13,838,367
Benefit payments, including refunds of member contributions	(828,266,043)	(821,495,227)	(889,343,124)	(881,666,036)
Administrative expense	(10,123,004)	(8,873,657)	(8,553,837)	(10,478,541)
Net change in plan fiduciary net position	467,210,701	516,099,753	**(316,276,927)**	**(242,452,981)**
Plan fiduciary net position - beginning	4,874,074,826	4,357,975,073	4,674,252,416	**4,916,705,397**
Plan fiduciary net position - ending	**5,341,285,527**	**4,874,074,826**	**4,357,975,073**	**4,674,252,416**
Net pension liability - ending	**6,169,382,296**	**6,318,526,485**	**6,519,234,885**	**5,904,413,552**
Plan fiduciary net position as a percentage of the total pension liability	46.40%	43.55%	40.07%	44.19%
Covered payroll	1,801,398,776	1,744,729,284	1,676,411,925	1,545,499,872
Net pension liability as a percentage of covered payroll	342.48%	362.15%	388.88%	382.04%

This schedule represents the other post-employment benefits plan of the City of Philadelphia. The Water Department is a department of the City of Philadelphia.

City of Philadelphia
Required Supplementary Information
Other Post Employment Benefits (OPEB) and Pension Plans

Exhibit XVII

City of Philadelphia Schedule of Collective Contributions (Based on Minimum Municipal Obligations)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009
Actuarially determined Contribution	661,257	629,620	594,975	556,030	523,368	727,604	534,039	463,375	297,446	438,522
Contributions in Relation to the Actuarially Determined Contribution	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556	455,389
Contribution Deficiency/(Excess)	(120,727)	(76,617)	(65,272)	(21,165)	(29,811)	(54,219)	(21,651)	(6,780)	(15,110)	(16,867)
Covered Payroll	1,801,399	1,744,729	1,676,412	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151	1,463,260
Contributions as a Percentage of Covered Payroll	43.41%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%	31.12%

City of Philadelphia Schedule of Collective Contributions (Based on Revenue Recognition Policy)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009
Actuarially determined Contribution	662,139	629,620	594,975	556,030	523,368	727,604	534,039	463,375	297,446	438,522
Contributions in Relation to the Actuarially Determined Contribution	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556	455,389
Contribution Deficiency/(Excess)	(119,845)	(76,617)	(65,272)	(21,165)	(29,811)	(54,219)	(21,651)	(6,780)	(15,110)	(16,867)
Covered Payroll	1,801,399	1,744,729	1,676,549	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151	1,463,260
Contributions as a Percentage of Covered Payroll	43.41%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%	31.12%

City of Philadelphia Schedule of Collective Contributions (Based on Funding Policy)
Last 10 Fiscal Years
Amounts in Thousands

	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009
Actuarially determined Contribution	871,802	881,356	846,283	798,043	823,885	738,010	722,491	715,544	581,123	539,464
Contributions in Relation to the Actuarially Determined Contribution	781,984	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556	455,389
Contribution Deficiency/(Excess)	89,818	175,119	186,036	220,847	270,706	(43,813)	166,801	245,389	268,567	84,075
Covered Payroll	1,801,399	1,744,729	1,676,412	1,597,849	1,495,421	1,429,723	1,372,174	1,371,274	1,421,151	1,463,260
Contributions as a Percentage of Covered Payroll	43.41%	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%	31.12%

Notes to Schedule

Valuation Date	7/1/2016
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation two years prior to the beginning of the plan year

Key Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry Age
Asset valuation method	Ten-year smoothed market
Amortization method	Gain/Losses are amortized over closed 20-year periods, assumption changes over 15years, benefit changes for actives over 10 years, benefit changes for inactive members over 1 year, and plan changes mandated by state over 20 years. Under the City's Funding policy, the initial July 1, 1985 unfunded actuarial liability (UAL) is amortized over 34 years ending June 30, 2019, with payments increasing 3.3% per year, the assumed payroll growth. Under the MMO Funding Policy, the July 1, 2009 unfunded actuarial liability (UAL) was "fresh started", to be amortized over 30 years, ending June 30, 2039. This is level dollar amortization of the UAL. Under the RRP Funding Policy, sales tax revenue and additional member contributions are dedicated to fund the unfunded liability over reducing the City's obligation such that this revenue is in addition to the MMO would be without these additional assets.
Discount rate	7.70%
Amortization growth rate	3.30%
Salary increases	Age based salary scale
Mortality	Sex distinct RP-2000 Combined Mortality with adjustments and improvements using Scale AA

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2018 can be found in the July 1, 2016 actuarial valuation report.
This schedule represents the other post-employment benefits plan of the City of Philadelphia. The Water Department is a department of the City of Philadelphia.

Other Supplementary Information

CITY OF PHILADELPHIA WATER DEPARTMENT

BONDED DEBT
WATER AND WASTEWATER REVENUE BONDS
AS OF FEBRUARY 27, 2019

Year End	Principal Requirements	Interest Requirements	Total Debt Service
06/30/2019	38,454,399	23,357,477	61,811,876
06/30/2020	105,371,757	91,802,241	197,173,998
06/30/2021	87,860,183	87,410,310	175,270,492
06/30/2022	81,692,298	83,434,437	165,126,735
06/30/2023	79,228,182	79,909,016	159,137,198
06/30/2024	53,087,914	76,497,321	129,585,234
06/30/2025	55,441,576	74,305,232	129,746,807
06/30/2026	58,804,251	71,976,728	130,780,979
06/30/2027	61,321,026	69,527,700	130,848,726
06/30/2028	48,251,987	67,336,360	115,588,347
06/30/2029	65,357,224	64,932,097	130,289,320
06/30/2030	60,611,827	62,082,513	122,694,340
06/30/2031	63,470,889	59,300,635	122,771,523
06/30/2032	63,390,629	56,448,772	119,839,401
06/30/2033	52,377,971	54,107,151	106,485,122
06/30/2034	53,093,383	51,614,351	104,707,735
06/30/2035	55,125,000	49,123,060	104,248,060
06/30/2036	59,055,000	46,592,905	105,647,905
06/30/2037	60,010,000	43,830,299	103,840,299
06/30/2038	63,000,000	40,831,880	103,831,880
06/30/2039	66,160,000	37,679,520	103,839,520
06/30/2040	69,475,000	34,364,817	103,839,817
06/30/2041	78,135,000	31,150,191	109,285,191
06/30/2042	74,515,000	26,912,075	101,427,075
06/30/2043	78,335,000	23,091,256	101,426,256
06/30/2044	63,950,000	19,074,625	83,024,625
06/30/2045	56,185,000	16,071,250	72,256,250
06/30/2046	59,070,000	13,189,875	72,259,875
06/30/2047	26,155,000	11,059,250	37,214,250
06/30/2048	27,500,000	9,717,875	37,217,875
06/30/2049	28,920,000	8,296,281	37,216,281
06/30/2050	30,425,000	6,789,881	37,214,881
06/30/2051	32,010,000	5,205,031	37,215,031
06/30/2052	33,675,000	3,537,669	37,212,669
06/30/2053	35,430,000	1,783,675	37,213,675
06/30/2054	17,690,000	442,250	18,132,250
Total	**2,042,635,496**	**1,502,786,005**	**3,545,421,500**

(1) Interest on the Series 1997B bonds assumes a rate of 1.154589%, the average interest rate of the bonds during the period 24 consecutive calendar months preceding the date of calculation per the Ordinance.

(2) Totals may not add due to rounding.

CITY OF PHILADELPHIA WATER DEPARTMENT

SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEARS ENDED JUNE 30, 2018, 2017, AND 2016 (Legally Enacted Basis)

(amounts in thousands)

LINE NO.		YEAR ENDED JUNE 30 2018	2017	2016
1.	Total Revenue	$ 750,070.00	$ 720,645.00	$ 678,906.00
2.	Net Operating Expense	$ (506,184.00)	$ (480,257.00)	$ (433,025.00)
2a	Liquidated Encumbrances (Commitments Cancelled which reduces operating expenses)	$ 32,413.00	$ 24,550.00	$ 24,088.00
2b	Adjustment between Debt Service and Net Operating Expenses due to timing differences	$ -	$ -	$ 339.00
3.	Transfer (To) From Rate Stabilization Fund	$ 24,630.00	$ 4,563.00	$ 1,629.00
4.	**Net Revenues**	**300,929**	**269,501**	**271,937**
5.	Revenue Bonds Outstanding	$ (218,483.00)	$ (206,142.00)	$ (219,304.00)
6.	Transfer to Escrow Account to Redeem Bonds	$ (19,000.00)	$ (11,000.00)	$ -
6a	Other (Adjustment between Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses	$ 235.00	$ 1,244.00	$ -
7.	Pennvest Loan	$ -	$ -	$ -
8.	**Total Debt Service**	**(237,248)**	**(215,898)**	**(219,304)**
9.	**Net Revenue after Debt Service**	$ 63,681.00	$ 53,603.00	$ 52,633.00
10.	Transfer to General Fund ("Scoop")[1]	$ -	$ -	$ -
11.	Transfer to Capital Fund	$ (34,776.00)	$ (22,302.00)	$ (21,497.00)
12.	Transfer to Residual Fund	$ (28,905.00)	$ (31,301.00)	$ (31,136.00)
13.	**Total Transfers**	**(63,681)**	**(53,603)**	**(52,633)**
14.	**Net Operating Balance for Current Year**	-	-	-

1 Adjustment between Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses and Net Operating Expenses due to timing differences

The rate covenant contained in the General Ordinance requires the City to establish rates and charges for the use of the Water and Wastewater Systems sufficient to yield Net Revenues, as defined therein , in each fiscal year at least equal to 120%(coverage A) of the Debt Service Requirements for such fiscal year (excluding debt service due on any Subordinated Bonds). In addition, Net Revenues, in each fiscal year, must equal at least 100%(coverage B) of : (i) the Debt Service Requirements (including Debt Service Requirements in respect of Subordinated Bonds) payable is such fiscal year; (ii) amounts required to be deposited of Subordinated Bonds) payable in such fiscal year; (ii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iii)debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable is such fiscal year; (iv) debt service payable on Interim Debt in such fiscal year; and (v) the Capital Account Deposit Amount for such fiscal year, less amounts transferred from the Residual Fund to the Capital Account during such fiscal year. To insure compliance with the rate covenant, the General Ordinance requires that the City review its rates, rents, fees, and charges at least annually.

Additional Rate Covenant. As long as the Insured Bonds are outstanding, the City covenants to establish rates and charges for the use of the System sufficient to yield Net Revenues (excluding amounts transferred from the Rate Stabilization Fund into the Revenue Fund during, or as of the end of, such fiscal year) at least equal to 90% (coverage C) of the Debt Service Requirements (excluding debt service on any Subordinated Bonds) in such fiscal year.

	2018	2017	2016
COVERAGE A:			
Line 4	**$300,929**	**$269,501**	**$271,937**
/ Line 5	**$218,483**	**$206,142**	**$219,304**
= COVERAGE A:	**1.38**	**1.31**	**1.24**
COVERAGE B[2]:			
Line 4	**$300,929**	**$269,501**	**$271,937**
/ Line 8 + Line 11	**$253,259**	**$238,200**	**$240,801**
= COVERAGE B:	**1.19**	**1.13**	**1.13**

2 For FY 2017, Coverage B calculated as follows: Net Revenues (Line 4)/ Debt Service Requirements which does not include transfer to escrow+ Capital Account Deposit (Line 5 + Line 11)

	2018	2017	2016
COVERAGE C:			
Line 4 - Line 3	**$276,299**	**$264,938**	**$270,308**
/ Line 5	**$218,483**	**$206,142**	**$219,304**
= COVERAGE C:	**1.26**	**1.29**	**1.23**

CITY OF PHILADELPHIA WATER DEPARTMENT

HISTORICAL OPERATING RESULTS FOR FISCAL YEARS ENDED JUNE 30, 2018, 2017, AND 2016 JUNE 30, 2017

(Thousands of Dollars)

Operating Revenues:		**FY18**		**FY17**		**FY16**
Sales to General Customers	$	635,072	$	615,886	$	587,572
Service (Sales) to Other Municipalities	$	37,428	$	34,652	$	32,389
Services to Other Philadelphia Agencies (Includes Fire Protection)	$	33,490	$	33,364	$	34,810
Private Fire Connections	$	3,169	$	2,872	$	2,737
Industrial Sewer Surcharge	$	5,628	$	5,911	$	7,375
Other Operating Revenue	$	7,208	$	7,122	$	5,158
Total Operating Revenue	**$**	**721,995**	**$**	**699,807**	**$**	**670,041**
Non-Operating Revenues						
Interest on Investments	$	1,506	$	920	$	20
Operating Grants	$	569	$	1,408	$	745
Other Non-Operating Revenues	$	26,000	$	18,511	$	8,100
Total Non-Operating Revenues	**$**	**28,075**	**$**	**20,839**	**$**	**8,865**
Total Revenues	**$**	**750,070**	**$**	**720,646**	**$**	**678,906**
Operating Expenses	**$**	**506,184**	**$**	**480,257**	**$**	**433,026**
Deduct: Commitments Cancelled - Net	$	32,413	$	24,550	$	24,088
Net Operating Expenses	**$**	**473,771**	**$**	**455,707**	**$**	**408,938**
Adjustment between Debt Service and Net Operating Expenses (due to timing differences)	**$**	**-**	**$**	**-**	**$**	**340**
Excess of Operating Revenues over Operating Expenses	**$**	**248,224**	**$**	**244,100**	**$**	**261,443**
Excess of Revenues over Expenses before Interest Expenses and Principal Payments on Bonded Indebtedness	**$**	**276,299**	**$**	**264,939**	**$**	**270,308**
Interest Expenses:						
Revenue Bonds	$	86,294	$	80,294	$	82,594
Total Interest Expenses	**$**	**86,294**	**$**	**80,294**	**$**	**82,594**
Excess of Revenues over Expenses Exclusive of Debt Principal Payments	**$**	**190,005**	**$**	**184,645**	**$**	**187,714**
Add: Unencumbered Funds Available for Appropration at Beginning of Fiscal Year	$	-	$	-	$	-
Add: Adjustment between Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses and Net Operating Expenses due to timing differences	$	235	$	1,244	$	-
Deduct: Debt Principal Payments on Bonded Indebtedness During Fiscal Year	$	132,189	$	125,848	$	136,710
Deduct: Transfer to Escrow Account to Redeem Bonds	$	19,000	$	11,000	$	-
Net Unapplied Project Revenues	**$**	**39,051**	**$**	**49,041**	**$**	**51,004**
Deduct: Funds Transferred to Residual Fund	$	28,905	$	31,301	$	31,136
Deduct: Funds Transferred to Capital Account	$	34,776	$	22,302	$	21,497
Transfer (TO)/FROM The Rate Stabilization Fund	$	24,630	$	4,562	$	1,629
Debt Service Coverage Ratio:						
Total Debt Service		1.19		1.18		1.13
Revenue Bond Debt Service		1.38		1.31		1.24

CITY OF PHILADELPHIA WATER DEPARTMENT

WHOLESALE WATER AND WASTEWATER
CUSTOMER REVENUES AND CONTRACT TERMS
FISCAL YEAR ENDING JUNE 30, 2018

	Total [5]	Contract Start Date	% Total Revenue	Contract End Date	COA %
Wastewater					
Bucks County Water & Sewer Authority	$ 9,368,448	2/8/1971	1.25%	3/31/2038	N/A
Delcora [1]	$ 8,839,578	3/4/1974	1.18%	4/1/2028	9.44%
Cheltenham Township	$ 4,056,591	1/10/1957	0.54%	6/30/2025	2.43%
Lower Southampton Township	$ 3,763,178	2/18/1957	0.50%	6/30/2024	0.96%
Upper Darby Township	$ 2,559,240	11/20/1923	0.34%	8/8/2023	NA
Lower Merion Township	$ 2,359,459	9/2/1903	0.31%	N/A	N/A
Springfield Township	$ -		0.00%		
Erdenheim [2]	$ 1,975,879	8/5/1931	0.26%	6/30/2023	0.79%
Wyndmoor [2] [3]	$ 343,636	8/5/1931	0.05%	6/30/2023	N/A
Bucks (for Bensalem) [2]	$ 1,944,698	1/3/1955	0.26%	6/30/2023	N/A
Abington Township	$ 1,326,888	12/9/1958	0.18%	6/30/2023	0.58%
Lower Moreland Township [4]	$ 890,109	6/12/1967	0.12%	6/30/2025	0.36%
Other Municipal Revenue	-		0.00%	N/A	N/A
Sub-total	**$ 37,427,703**		**4.99%**		**14.57%**
Water					
Aqua Pennsylvania	$ 3,265,964	6/29/2000	0.44%	3/1/2026	N/A
Sub-total	**$ 3,265,964**		0.44%		
Total Wholesale Revenues	**$ 40,693,667**		**5.43%**		

Note: The Water Department includes capital charges within operation and maintenance charges for all customers except Bensalem, Lower Merion, and Upper Darby.

(1) Delcora allocated capital is based on assets placed in service on or after July 4, 2011.

(2) Bucks County Water and Sewer Authority purchased the wastewater collection and disposal system of Springfield Township in December 2015 and purchased the wastewater collection system of Bensalem in September 1999.

(3) The total amount of the COA for Springfield Township – Wyndmoor is contained in the Springfield Township – Erdenheim amount.

CITY OF PHILADELPHIA WATER DEPARTMENT

TOP 10 CUSTOMERS
FISCAL YEAR ENDING JUNE 30, 2018

	Customer	Revenue ($)	% Total Revenue
1	City of Philadelphia*	$ 23,686,204	3.16%
2	Philadelphia Housing Authority	$ 13,345,562	1.78%
3	School District of Philadelphia	$ 5,971,061	0.80%
4	Veolia Energy Philadelphia	$ 5,184,053	0.69%
5	University of Pennsylvania	$ 5,011,081	0.67%
6	SEPTA	$ 4,468,667	0.60%
7	AdvanSix Inc (1)	$ 4,398,889	0.59%
8	Temple University	$ 3,274,600	0.44%
9	University of Pennsylvania Health System	$ 2,665,987	0.36%
10	Federal Government	$ 2,340,592	0.31%
	TOTALS	**$ 70,346,696**	**9.40%**

*The total above for the City of Philadelphia includes, among others, charges for water and wastewater services, which include stormwater services as follows: (i) $19,554,936.30 – General Fund and (ii) $4,131,267.75 – Aviation Fund.

(1) Based on the best information availabile as of June 30, 2017 AdvanSix was just outside PWD's top 10 customers. For FY2018, their usage increased and revenues were $4,398,889.

CITY OF PHILADELPHIA WATER DEPARTMENT

INCENTIVE AND ASSISTANCE PROGRAMS
FISCAL YEAR ENDING JUNE 30,

Program	Program Type		2018		2017		2016
SMIP[1] and GARP[2][3]	Operating Expense	$	21,484,429	$	18,354,069	$	9,067,109
Phase in Program (CAP)[4]	Bill Reductions	$	2,011,096	$	2,531,367	$	3,282,654
Stormwater Credits[4]	Bill Reductions	$	16,038,856	$	13,819,758	$	12,864,862
Community Gardens	Bill Reductions	$	14,320	$	-	$	-
Tiered Assistance Program	Bill Reductions	$	2,927,221	$	-	$	-
Total		**$**	**42,475,922**	**$**	**34,705,194**	**$**	**25,214,625**

(1) Stormwater Management Incentives Program.
(2) Grant and Greened Acres Retrofit Program.
(3) In Fiscal Year 2016 and 2017 and 2018, SMIP and GARP were partially funded with grants.
(4) Amounts are credits against certain customers' bills.

CITY OF PHILADELPHIA WATER DEPARTMENT

RECONCILIATION OF LEGALLY ENACTED AND GAAP BASIS OPERATING REVENUES AND EXPENSES JUNE 30, 2018

		(Thousands of Dollars)
Legal Basis of Accounting Revenues		
Legal Basis Revenues	$	774,699
GAAP Adjustments		
Reverse Fiscal Year 2017 Accounts Receivable Accrual		(39,499)
Record Fiscal Year 2018 Accounts Receivable Accrual		38,510
Accounts Receivable Adjustment		(30)
Allowance for Doubtful Accounts Adjustment		(1,228)
Reclassification of Interest Income to Nonoperating Revenue		(45,510)
Total GAAP Adjustments		(47,757)
Total GAAP Basis Operating Revenues	$	726,942
Legal Basis of Accounting Expenses		
Legal Basis Expenses, Tranfers and Debt Service	$	807,113
GAAP Adjustments		
Expense in Fiscal Year 2018, included in Fiscal Year 2017 for Legal Basis		41,492
Encumbrances in Fiscal Year 2018, included in Fiscal Year 2017 for Legal Basis		(77,604)
Depreciation on Capital Assets, not included for Legal Basis		101,847
Payments among Water Department Funds, netted for GAAP Basis		(71,000)
Accrual of Probable Indemnities and Worker's Compensation Expenses		1,750
Reclassification of Transfers Out to Nonoperating Expenses		(29,573)
Allocation of Interfund Activity - Payment to General Fund		7,319
Allocation of Accrued Expenses		(4,014)
Change in Inventory Balance as of June 30, 2018		(731)
Elimination of Legal Basis Adjustments		(276)
Net Pension Expense, included in GAAP Basis		3,959
OPEB Expense, included in GAAP Basis		2,545
Removal of Debt Service Principal Payments and Transfers to the Escrow		(237,248)
Net Adjustments from Capitalization of Capital Assets		(4,157)
Removal of Legal Basis Compensated Absences Expense and Increase in Compensated Absence Liability		320
Amortization of Prepaid Surety Bond Insurance		77
Total GAAP Adjustments		(265,294)
Total GAAP Basis Operating Expenses	**$**	**541,819**