

**City Of Philadelphia  
Philadelphia Water Department  
Financial Statements  
Fiscal Years Ended June 30, 2017 And 2016**

**CITY OF PHILADELPHIA WATER DEPARTMENT****YEAR ENDED JUNE 30, 2017 AND 2016****TABLE OF CONTENTS**

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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") 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"),

### **2017 Financial Highlights**

The Water Fund met its required coverage ratios for the year with a revenue bond coverage ratio of 1.31, 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 1.29 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 \$810.1 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 \$243.1 million. This deficiency will have to be funded from resources generated in future years.

The Water Fund's net position showed an increase of \$45.0 million 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

	2017	2016	2015*
<b>Assets:</b>			
Current Assets	\$ 258,444	\$ 233,821	\$ 240,216
Capital Assets	2,318,410	2,230,233	2,149,680
Restricted Assets	887,924	772,376	889,928
Total Assets	<u>3,464,778</u>	<u>3,236,430</u>	<u>3,279,824</u>
Deferred Outflows of Resources	94,211	108,809	83,507
Total Assets and Deferred Outflows	<u>3,558,989</u>	<u>3,345,239</u>	<u>3,363,331</u>
<b>Liabilities:</b>			
Current Liabilities	240,464	238,542	225,234
Bonds Payable	2,022,636	1,842,386	1,974,073
Other Non-Current Liabilities	483,646	496,344	454,445
Total Liabilities	<u>2,746,746</u>	<u>2,577,272</u>	<u>2,653,752</u>
Deferred Inflows of Resources	2,144	2,863	-
Total Liabilities and Deferred Inflows	<u>2,748,890</u>	<u>2,580,135</u>	<u>2,653,752</u>
<b>Net Position:</b>			
Net Investment in Capital Assets	542,042	523,367	385,721
Restricted	511,113	499,916	559,802
Unrestricted	(243,056)	(258,179)	(235,944)
Total Net Position, as Restated	<u>\$ 810,099</u>	<u>\$ 765,104</u>	<u>\$ 709,579</u>

\*The capital asset balances and net position of fiscal year 2015 was not restated for a reclassification of expense. For more information on the restatement, see Note III. 10. to the financial statements.

The Water Fund's net position at June 30, 2017 was approximately \$810.1 million, a \$45.0 million or 5.9% increase from June 30, 2016. Total assets and deferred outflows of resources increased by \$213.8 million, or 6.4%, to \$3.6 billion, and total liabilities and deferred inflows of resources increased \$168.8 million, or 6.5%, 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 2016:

- After restatement (see Note III. 5. and Note III. 10.), capital assets, net of depreciation and amortization, increased by \$88.2 million to \$2.3 billion, or 4.0% as a result of capital additions of \$462.3 million, offset by depreciation of \$105.2 million and net retirements of \$258.0 million.

- Current assets increased by \$24.6 million to \$258.4 million, or 10.5%, due to increases in Equity in Treasurer's account and accounts receivable.
- Restricted assets increased by \$115.5 million to \$887.9 million, or 15.0%, due to increases in the Water Capital Fund primarily due to a bond issuance.
- Deferred outflows of resources decreased by \$14.6 million to \$94.2 million, or 13.4%, due to deferred outflows of resources related to the Water Fund's net pension liability which was partially offset by amortization of the unamortized loss on refunded debt.
- Current liabilities increased by \$1.9 million to \$240.4 million, or 0.8%, primarily due to increases in amounts due to other funds, accounts payable and current portion of long term obligations, partially offset by reductions in vouchers payable, salaries and wages payable, and construction contracts payable.
- Bonds payable increased by \$180.2 million to \$2.0 billion, or 9.8%, primarily due to the issuance of revenue bonds.
- Other non-current liabilities decreased by \$12.7 million to \$483.6 million, or 2.6%, primarily due to a decrease in net pension liability of \$11.6 million.
- Deferred inflows of resources decreased by \$0.7 million to \$2.1 million, or 25.1%, due to deferred inflows of resources related to the Water Fund's net pension liability.
- The Water Fund's net position increased by \$45.0 million to \$810.1 million, or 5.9%, as a result of fiscal year 2017 operations and capital contributions.
- Net investment in capital assets increased by \$18.7 million, or 3.6%, to \$542.0 million.
- Unrestricted net position increased by \$15.1 million, or 5.9%, to a deficit of \$243.1 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 \$15.1 million change is primarily due to a prior period adjustment (see Note III. 10.) of \$49.4 million, which relates to 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

	2017	2016	2015*
<b>Operating Revenues:</b>			
Charges for Goods and Services	\$ 702,059	\$ 659,583	\$ 667,699
Miscellaneous Operating Revenues	12,607	10,367	8,261
Operating Grants	1,283	870	907
<b>Total Operating Revenues</b>	<b>715,949</b>	<b>670,820</b>	<b>676,867</b>
<b>Operating Expenses:</b>			
Operating Expenses excluding Depreciation and Amortization	413,339	382,272	376,528
Depreciation and Amortization	105,208	101,711	103,763
<b>Total Operating Expenses</b>	<b>518,547</b>	<b>483,983</b>	<b>480,291</b>
<b>Operating Income (Loss)</b>	<b>197,402</b>	<b>186,837</b>	<b>196,576</b>
<b>Nonoperating Revenues (Expenses):</b>			
Federal, State, & Local Grants	-	250	-
Interest Income	7,626	5,600	3,732
Debt Service – Interest	(66,295)	(82,659)	(65,933)
Other Expenses	(16,909)	(2,339)	(3,993)
<b>Total Nonoperating Revenues (Expenses)</b>	<b>(75,578)</b>	<b>(79,148)</b>	<b>(66,194)</b>
<b>Increase in Net Position before Transfers</b>	<b>121,824</b>	<b>107,689</b>	<b>130,382</b>
Transfers Out	(28,483)	(31,622)	(30,258)
Capital Contributions	1,077	1,506	1,337
<b>Change in Net Position</b>	<b>94,418</b>	<b>77,573</b>	<b>101,461</b>
<b>Net Position – Beginning of Period, Before Restatement</b>	<b>765,104</b>	<b>709,579</b>	<b>970,483</b>
Cumulative Effect of Change in Accounting Principle	-	-	(362,365)
Reclassification of Expense	(49,423)	(22,048)	-
<b>Net Position – Beginning of Period, as Restated*</b>	<b>715,681</b>	<b>687,531</b>	<b>608,118</b>
<b>Net Position – Ending of Period</b>	<b>\$ 810,099</b>	<b>\$ 765,104</b>	<b>\$ 709,579</b>

\*The net position of fiscal year 2015 was not restated for a reclassification of expense. For more information on the restatement, see Note III. 10. to the financial statements.

- Operating revenues increased by \$45.1 million to \$715.9 million due to an increase in charges for goods and services.
- Operating expenses increased by \$34.6 million to \$518.5 million due primarily to increases in employee benefits, personal services, and purchase of services partially offset by a reduction in indemnities and taxes, and materials and supplies.
- Non-operating expenses decreased by \$3.6 million to \$75.6 million. The decrease in non-operating expenses is due primarily to the debt service interest expense decrease of \$16.4 million, partially offset by the \$14.6 million increase in other expenses and \$2.0 million increase in interest income.

## **Capital Assets and Debt Administration**

### *Capital Assets*

Investment in capital assets, net of accumulated depreciation, amounted to \$2.3 billion as of June 30, 2017. This represented an increase of \$88.2 million, or 4.0% over the previous year's total of \$2.2 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		
	2017	2016	2015*
Land	\$ 5,919	\$ 5,919	\$ 5,919
Construction in Progress	354,702	296,254	303,005
Infrastructure	2,544,238	2,466,451	2,422,387
Buildings and	1,766,014	1,768,387	1,667,810
Equipment			
Accumulated	(2,352,463)	(2,306,778)	(2,249,441)
Depreciation			
Total Capital Assets, net	<u>\$2,318,410</u>	<u>\$ 2,230,233</u>	<u>\$ 2,149,680</u>

\*The capital assets of 2015 were not restated for a reclassification of expense. For more information on the restatement, see Note III. 10. to the financial statements.

### *Long-Term Debt*

As of June 30, 2017, the Water Fund had \$2.5 billion of non-current liabilities outstanding. This was an increase of \$167.6 million or 7.2% from 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		
	2017	2016	2015
Revenue Bonds – Net	\$2,022,636	\$1,842,386	\$1,974,073
Derivative Instrument	356	1,508	3,289
Other Non-Current Liabilities	39,057	38,995	35,829
Net Pension Obligation	444,233	455,841	415,327
Total Non-Current Liabilities	<u>\$2,506,282</u>	<u>\$2,338,730</u>	<u>\$2,428,518</u>

The following details activity of debt during fiscal year 2017:

	(Thousands of Dollars)
Beginning balance at July 1, 2016	\$1,967,114
Debt issued	542,604
Less principal payments and amortization	(357,233)
Ending balance at June 30, 2017	<u>\$2,152,485</u>

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, Aramark Tower, 5th Floor, 1101 Market Street, Philadelphia, Pennsylvania 19107.

**CITY OF PHILADELPHIA WATER DEPARTMENT**
**STATEMENTS OF FUND NET POSITION, JUNE 30, 2017 AND 2016**

(amounts in thousands)

	<b>2017</b>	<b>2016</b>
<b>ASSETS</b>		
Current Assets:		
Cash on Deposit and on Hand	\$ 30	\$ 30
Equity in Treasurer's Account	95,258	79,044
Due from Other Governments	-	125
Accounts Receivable	161,306	152,588
Allowance for Doubtful Accounts	(13,058)	(13,007)
Inventories	14,772	14,915
Receivables	136	126
Total Current Assets	258,444	233,821
Noncurrent Assets:		
Restricted Assets:		
Equity in Treasurer's Account	667,688	550,746
Sinking Funds and Reserves	219,100	220,890
Receivables	1,136	740
Total Restricted Assets	887,924	772,376
Capital Assets:		
Land	5,919	5,919
Infrastructure	2,544,238	2,466,451
Construction in Progress	354,702	296,254
Buildings and Equipment	1,766,014	1,768,387
Accumulated Depreciation	(2,352,463)	(2,306,778)
Total Capital Assets	2,318,410	2,230,233
Total Noncurrent Assets	3,206,334	3,002,609
<b>Total Assets</b>	<b>3,464,778</b>	<b>3,236,430</b>
<b>DEFERRED OUTFLOWS OF RESOURCES:</b>		
Deferred Outflow - Fin. Instruments	356	1,508
Deferred Outflow - Net Pension Liability	37,683	59,042
Unamortized Loss - Refunded Debt	56,172	48,259
<b>Total Deferred Outflows</b>	<b>94,211</b>	<b>108,809</b>
<b>LIABILITIES</b>		
Current Liabilities:		
Vouchers Payable	4,794	6,635
Accounts Payable	14,299	11,939
Salaries & Wages Payable	3,024	6,598
Construction Contracts Payable	39,851	42,880
Accrued Expenses	32,195	33,215
Due to Other Components	1,052	918
Due to Other Funds	3,804	103
Unearned Revenue	9,914	9,785
Funds Held in Escrow	1,682	1,741
Current Portion of Long Term Obligations	129,849	124,728
Total Current Liabilities	240,464	238,542
Noncurrent Liabilities:		
Bond Payable - Net	2,022,636	1,842,386
Derivative Instrument Liability	356	1,508
Other Noncurrent Liabilities	39,057	38,995
Net Pension Liability	444,233	455,841
Total Noncurrent Liabilities	2,506,282	2,338,730
<b>Total Liabilities</b>	<b>2,746,746</b>	<b>2,577,272</b>
<b>DEFERRED INFLOWS OF RESOURCES:</b>		
Deferred Inflow - Net Pension Liability	2,144	2,863
<b>NET POSITION</b>		
Net Investment in Capital Assets	542,042	523,367
Restricted For:		
Capital Projects	89,905	73,266
Debt Service	219,100	220,889
Rate Stabilization	202,108	205,761
Unrestricted	(243,056)	(258,179)
<b>Total Net Position</b>	<b>\$ 810,099</b>	<b>\$ 765,104</b>

**CITY OF PHILADELPHIA WATER DEPARTMENT**

**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION  
FOR FISCAL YEARS ENDED JUNE 30, 2017 AND 2016**

(amounts in thousands)

	<b>2017</b>	<b>2016</b>
<b>Operating Revenues:</b>		
Charges for Goods and Services	\$ 702,059	\$ 659,583
Miscellaneous Operating Revenues	12,607	10,367
Operating Grants	1,283	870
<b>Total Operating Revenues</b>	<b>715,949</b>	<b>670,820</b>
<b>Operating Expenses:</b>		
Personal Services	128,535	122,873
Purchase of Services	110,222	97,409
Materials and Supplies	35,013	36,376
Employee Benefits	132,650	117,394
Indemnities and Taxes	6,919	8,220
Depreciation and Amortization	105,208	101,711
<b>Total Operating Expenses</b>	<b>518,547</b>	<b>483,983</b>
<b>Operating Income</b>	<b>197,402</b>	<b>186,837</b>
<b>Nonoperating Expenses:</b>		
Federal, State, & Local Grants	-	250
Interest Income	7,626	5,600
Debt Service - Interest	(66,295)	(82,659)
Other Expenses	(16,909)	(2,339)
<b>Total Nonoperating Expenses</b>	<b>(75,578)</b>	<b>(79,148)</b>
<b>Increase in Net Position before Transfers</b>	<b>121,824</b>	<b>107,689</b>
Transfers Out	(28,483)	(31,622)
Capital Contributions	1,077	1,506
<b>Change in Net Position</b>	<b>94,418</b>	<b>77,573</b>
Net Position - Beginning of Year	765,104	709,579
Restatement (see Note III. 10.)	(49,423)	(22,048)
<b>Net Position - End of Year</b>	<b>\$ 810,099</b>	<b>\$ 765,104</b>

**CITY OF PHILADELPHIA WATER DEPARTMENT**
**STATEMENTS OF CASH FLOWS**
**FOR THE FISCAL YEARS ENDED JUNE 30, 2017 AND 2016**

(amounts in thousands)

	<b>2017</b>	<b>2016</b>
<b>Cash Flows from Operating Activities</b>		
Receipts from Customers	\$ 706,195	\$ 677,061
Payments to Suppliers	(144,305)	(143,758)
Payments to Employees	(255,179)	(230,376)
Claims Paid	(6,919)	(5,441)
<b>Net Cash Provided by Operating Activities</b>	<b>299,792</b>	<b>297,486</b>
<b>Cash Flows from Non-Capital Financing Activities</b>		
Operating Grants Received	1,283	1,120
Operating Subsidies and Transfers to Other Funds	(27,343)	(31,622)
<b>Net Cash Used by Non-Capital Financing Activities</b>	<b>(26,060)</b>	<b>(30,502)</b>
<b>Cash Flows from Capital &amp; Related Financing Activities</b>		
Proceeds from Capital Debt	306,245	5,823
Acquisition and Construction of Capital Assets	(247,431)	(175,797)
Interest Paid on Capital Debt	(79,638)	(82,250)
Principal Paid on Capital Debt	(125,012)	(136,712)
Other Receipts (Payments)	-	33
<b>Net Cash Used by Non-Capital Financing Activities</b>	<b>(145,836)</b>	<b>(388,903)</b>
<b>Cash Flows from Investing Activities</b>		
Interest and Dividends	5,260	3,626
<b>Net Cash Provided by Investing Activities</b>	<b>5,260</b>	<b>3,626</b>
Net Increase (Decrease) in Cash & Cash Equivalents	133,156	(118,293)
Cash and Cash Equivalents, July 1 (including \$550.7 in restricted accounts)	629,820	748,113
<b>Cash and Cash Equivalents, June 30 (including \$667.7 in restricted accounts)</b>	<b>\$ 762,976</b>	<b>\$ 629,820</b>
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:</b>		
Operating Income	197,402	186,837
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	105,208	101,711
Change in Assets and Liabilities:		
Receivables, Net	(9,884)	4,220
Inventories	143	(1,593)
Accounts and Other Payables	(2,300)	2,265
Accrued Expenses	9,094	3,166
Unearned Revenue	129	880
<b>Net Cash Provided by operating activities</b>	<b>\$ 299,792</b>	<b>\$ 297,486</b>

The accompanying notes are an integral part of the financial statements

**PHILADELPHIA WATER DEPARTMENT  
NOTES TO THE FINANCIAL STATEMENTS  
JUNE 30, 2017 AND 2016**

**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 (i.e., the Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position) report information of all Water Department’s 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’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 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 non-operating items in the statement of revenues, expenses and changes in net position. Operating revenues and expenses result from providing services in connection with the Water Department’s

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principal ongoing operations. Principal operating revenues are charges to customers for water use and wastewater collection, transmission and treatment. 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 providing water and wastewater services, inclusive of stormwater, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. The principal non-operating revenues are interest and certain grants. The principal non-operating expenses of interest expense and other miscellaneous expenses.

As a general rule, the effect of interfund activity has been eliminated from the financial statements. Exceptions to this general rule are charges between the City's water and sewer function and various other programs of the City. Elimination of these charges would distort the direct costs and revenues reported for the various programs concerned.

The operations of the Water Department are accounted for in separate balancing funds and accounts that comprise its 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"),

Such 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.

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- 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 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.

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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
<b>Balance at June 30, 2017</b>	<b>\$202,108,361</b>

During Fiscal 2016, the Fund had the following activity:

Balance at July 1, 2015	\$ 206,446,966
Transfer to Revenue Fund	(1,629,332)
Interest Earnings	942,994
<b>Balance at June 30, 2016</b>	<b>\$205,760,628</b>

- 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. The balance as of June 30, 2017 was \$15,285,705 and the balance as of June 30, 2016 was \$15,202,102.

#### **4. DEPOSITS AND INVESTMENTS**

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

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

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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 reported at cost including any liability for contract retainage and construction costs payable. 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. Renewals and betterments are capitalized and depreciated based upon the expected life of such improvements.

The Water Fund transfers construction in progress to one or more of the major asset classes when projects are considered substantially complete.

Cost of construction includes all direct contract costs. Overhead costs include direct and indirect engineering costs and interest incurred during the construction period on projects financed 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 same period. Capitalization of interest during construction for Fiscal Year 2017 was \$8,080,248 and for Fiscal Year 2016 was \$6,212,946.

Depreciation on the capital assets is provided on the straight-line method over their estimated useful lives: computer equipment – 3 years; automotive – 5 years; leasehold improvements – 8 years; general and monitoring equipment – 10 – 20 years; buildings – 40 years; reconstructed transmission and distribution lines – 40 years; and new 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. Bonds payable are reported net of the applicable bond premium or discount. In FY13, GASB Statement No. 65 was implemented resulting in bond issuance costs being recognized as an expense and reported in the period incurred.

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**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, 2017 and 2016. 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, 2017 and 2016 the allowance for doubtful accounts was \$13,057,526 and \$13,006,803 respectively.

**10. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES AND NET POSITION**

Beginning with the fiscal year ended June 30, 2013 the Water Fund implemented GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. This GASB Statement replaces the term Net Assets with Net Position. Net Position is the residual of (a) assets and deferred outflows, less (b) liabilities and deferred inflows. The deferred classifications take into consideration the fact that governments enter into transactions that are applicable to future periods.

Also, beginning with the fiscal year ended June 30, 2013 the Water Fund chose to implement GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*. The objective of Statement No. 65 is to either properly classify or recognize certain items that were previously reported as assets and liabilities as outflows of resources (expenses) or inflows of resources (revenues).

Beginning in fiscal year ended June 30, 2015 the Water Fund implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. This statement requires the reporting of pension transactions that incorporates deferred outflows of resources and deferred inflows of resources related to pensions over a defined, closed period, rather than a choice between an open or closed period.

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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 in all three categories.

- 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 transactions are recognized as an expense or revenue in a future period. Deferred outflows of resources related to pensions are discussed in Note IV. 1.

**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 Year 2017 was \$11.5 million and in Fiscal Year 2016 was \$10.8 million.

**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 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 represent funds received in advance of being earned. Unearned revenues relate principally to overpaid water and sewer bills.

**14. NEW ACCOUNTING STANDARDS**

The Water Fund adopted the requirements of GASB Statement No. 74, *Financial Reporting for Postemployment Benefits Plans Other Than Pension Plans*. As a result of the adoption of GASB Statement No. 74, the Water Fund has determined that there was no effect on its financial statements.

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The Water Fund adopted the requirements of GASB Statement No. 77, *Tax Abatement Disclosures*. The adoption of this statement had no effect on the Water Fund's Financial Statements.

The Water Fund adopted the requirements of GASB Statement No. 78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans*. The adoption of this statement did not result in any significant changes to the financial statements of the Water Fund.

The Water Fund adopted the requirements of GASB Statement No. 79, *Certain External Investment Pools and Pool Participants*. The adoption of this statement had no effect on previously reported amounts.

The Water Fund adopted the requirements of GASB Statement No. 80, *Blending Requirements for Certain Component Units – An Amendment of GASB Statement No. 14*. The adoption of this statement had no effect on previously reported amounts.

The Water Fund adopted the requirements of GASB Statement No. 82, *Pension Issues – An amendment of GASB Statements No. 67, No. 68, and No. 73*. The adoption of this statement did not result in any significant changes to the financial statements of the Water Fund.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The Water Fund is required to adopt the provisions of GASB Statement No. 75 for its fiscal year 2018.

In March 2016, the GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements*. The Water Fund is required to adopt the provisions of GASB Statement No. 81 for its fiscal year 2018 financial statements.

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. The Water Fund is required to adopt the provisions of GASB Statement No. 83 for its fiscal year 2019 financial statements.

In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities*. The Water Fund is required to adopt the provisions of GASB Statement No. 84 for its fiscal year 2020 financial statements.

In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*. The Water Fund is required to adopt the provisions of GASB Statement No. 84 for its fiscal year 2018 financial statements.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. The Water Fund is required to adopt the provisions of GASB Statement No. 86 for its fiscal year 2018 financial statements.

In June 2017, the GASB issued Statement No. 87, *Leases*. The Water Fund is

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required to adopt the provisions of GASB Statement No. 87 for its fiscal year 2021 financial statements.

The Water Fund has not yet completed the various analyses required to estimate the financial statement impact of these new pronouncements.

**15. RESTRICTED ASSETS**

Restricted assets represent revenues set aside for liquidation of specific obligations as described in Note IV. 14.

**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 2017 and 2016, excess interest earnings of \$1,866,455 and \$1,555,702, 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 \$26,687,965 and \$30,066,352 in Fiscal Years 2017 and 2016, respectively, payable to the Philadelphia Municipal Authority ("PMA") under the long-term contracts described in Note IV.12 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.

**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

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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 the Water Fund. Therefore, budgeted amounts presented are as originally passed and as amended by the City Council. As part of the amendment process, budget estimates of Water Fund revenues and expenses 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 adjustments. Revenue and expense 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 bank balances were \$423.8 million and \$621.3 million for 2017 and 2016, respectively.

**Investments**

The City has established a comprehensive investment policy that covers all funds other than the Municipal Pension Fund, the Philadelphia Gas Works Retirement Reserve, and the Fairmount Park and Free Library Trust Funds. Those funds have separate investment policies designed to meet the long-term goals of the funds.

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 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.

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

Classifications	(Thousands of Dollars)	
	Fair Value	Percent of Total
U.S. Government Securities	\$ 266,272	48.25%
U.S. Government Agency Securities	199,291	36.12%
Corporate Bonds	50,217	9.10%
Other Bonds and Investments	36,017	6.53%
<b>Grand Total</b>	<b>\$ 551,797</b>	<b>100.00%</b>

As of June 30, 2016, the fair values of the Water Fund's investments consist of the following:

Classifications	(Thousands of Dollars)	
	Fair Value	Percent of Total
U.S. Government Securities	\$ 366,587	53.97%
U.S. Government Agency Securities	236,884	34.88%
Corporate Bonds	24,642	3.63%
Other Bonds and Investments	51,081	7.52%
<b>Grand Total</b>	<b>\$ 679,194</b>	<b>100.00%</b>

### Credit Risk

*Credit Risk:* The City's policy is to limit credit risk by limiting the type of allowable investments, as well as setting a maximum percent of the portfolio for each type of investment.

The City's investments in U.S. Government Securities (48.25%) or U.S. Government Agency obligations (36.12%) are allowable 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 ("Moody's"). All US Government Securities meet the criteria.

The City's investment in Commercial Paper is limited to 25% of the portfolio, and must be rated A1 by S&P and/or M1G1 by Moody's and the senior long-term debt of the issuer must not be rated lower than A by S&P and/or Moody's. All commercial paper investments meet the criteria.

The City's investments in corporate bonds (9.10%) are limited to 25% of the portfolio,

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and have an S&P rating of AAA or AA or Moody's rating of Aa2 or better.

Short Term Investment Pools are rated AAA by S&P and Aaa by Moody's. 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 is invested in money market funds (short term investment pools).

The City limits its foreign currency risk by investing in certificates of deposits 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, 2017 the fixed income investments of the Water Fund had the following ratings by Moody's:

<b>Classifications</b>	<b>Credit Quality Rating</b>	<b>Percent of Investment Type</b>
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%

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As of June 30, 2016 the fixed income investments of the Water Fund had the following ratings by Moody's:

<b>Classifications</b>	<b>Credit Quality Rating</b>	<b>Percent of Investment Type</b>
U.S. Government Securities	Aaa	100%
U.S. Government Agency Securities	Aaa	100%
Corporate Bonds	Aaa	18%
Corporate Bonds	Aa1	29%
Corporate Bonds	Aa2	53%
Other Bonds and Investments	Aa1	23%
Other Bonds and Investments	Aa2	65%
Other Bonds and Investments	Aa3	12%

### **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, 2017 the maturities of the Water Fund's fixed income investments were as follows:

<b>Classifications</b>	(Thousands of Dollars)	
	<b>Less Than 1 Year</b>	<b>1 - 2 Years</b>
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	-
<b>Grand Total</b>	<b>\$ 376,526</b>	<b>\$ 175,271</b>

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As of June 30, 2016 the maturities of the Water Fund's investments were as follows:

Classifications	(Thousands of Dollars)	
	Year	1 - 2 Years
U.S. Government Securities	\$ 131,486	\$ 235,101
U.S. Government Agency Securities	132,136	104,748
Corporate Bonds	7,013	17,629
Other Bonds and Investments	31,931	19,150
<b>Grand Total</b>	<b>\$ 302,566</b>	<b>\$ 376,628</b>

### **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 through corroboration with observable market data.
- Level 3: Unobservable inputs for an asset or liability.

The Water Fund has the following recurring fair value measurements as of June 30, 2017:

- U.S. Government securities of \$266.3 million are valued using quoted prices from active markets (Level 1).
- U.S. Agency Securities of \$199.3 million are valued using quoted prices from identical securities that are traded in active markets (Level 2).
- Corporate Bonds of \$50.2 million and other bonds and investments of \$36.0 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

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**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. 5. to the financial statements.

The following chart displays information related to the pledge as of June 30, 2017:

	<u>Water and Wastewater Revenue Bonds</u>
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	\$722.5 million

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Current Year Principal and Interest Paid	\$206.1
Current Year Transfers to Escrow & LOC	\$9.7

The following chart displays information related to the pledge as of June 30, 2016:

	<u>Water and Wastewater Revenue Bonds</u>
Pledged Revenue Required for Principal and Interest Payments	\$2,979.7 million
Term of Pledge	2046
Percentage of Revenue Pledged	100%
Current Year Pledged Revenue	\$676.7 million
Current Year Principal and Interest Paid	\$219.3 million

**4. INTERFUND PAYABLES**

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.

Interfund payable balances within the Water Fund at year-end are as follows:

Due to Other Funds: (Amounts in Thousands of USD)

General Fund	
Philadelphia Municipal Authority	\$3,725
Capital Projects Fund	
Philadelphia Municipal Authority	<u>79</u>
Total Balance Due	<u>\$3,804</u>

Due to City's Component Units:

General Fund	
Philadelphia Gas Works	\$ 26
Philadelphia Authority for Industrial Development	923

Capital Projects Fund	
Philadelphia Authority for Industrial Development	<u>103</u>
Total Balance Due	<u>\$1,052</u>

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**5. CAPITAL ASSET ACTIVITY**

Capital asset activity for the years ended June 30, 2017 and 2016 was as follows:

	Beginning Balance*	Additions	Dispositions	Ending Balance
<b>Fiscal Year Ended June 30, 2017</b>				
<u>Capital Assets Not Being Depreciated</u>				
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	<u>\$ 302,172,690</u>	<u>\$ 266,560,079</u>	<u>\$ (208,112,228)</u>	<u>\$ 360,620,541</u>
<u>Capital Assets Being Depreciated</u>				
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	<u>\$ 4,234,837,577</u>	<u>\$ 222,661,037</u>	<u>\$ (147,246,592)</u>	<u>\$ 4,310,252,022</u>
<u>Less Accumulated Depreciation For:</u>				
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	<u>(2,306,778,242)</u>	<u>(105,207,508)</u>	<u>59,523,048</u>	<u>(2,352,462,702)</u>
Total Capital Assets, Being Depreciated, Net	<u>1,928,059,335</u>	<u>117,453,529</u>	<u>(87,723,544)</u>	<u>1,957,789,320</u>
Total Capital Assets	<u>\$ 2,230,232,025</u>	<u>\$ 384,013,608</u>	<u>\$ (295,835,772)</u>	<u>\$ 2,318,409,861</u>
	Beginning Balance	Additions	Dispositions	Ending Balance
<b>Fiscal Year Ended June 30, 2016</b>				
<u>Capital Assets Not Being Depreciated</u>				
Land	\$ 5,919,160	\$ -	\$ -	\$ 5,919,160
Construction in Progress	284,357,128	195,326,061	(183,429,659)	296,253,530
Total Capital Assets Not Being Depreciated	<u>\$ 290,276,288</u>	<u>\$ 195,326,061</u>	<u>\$ (183,429,659)</u>	<u>\$ 302,172,690</u>
<u>Capital Assets Being Depreciated</u>				
Buildings and related improvements	1,590,656,309	102,294,925	(7,938,661)	1,685,012,573
Intangible Assets	14,441,712	741,216	-	15,182,928
Equipment	77,153,927	25,282,377	(19,061,957)	83,374,347
Infrastructure	2,407,945,075	138,637,147	(95,314,493)	2,451,267,729
Total Capital Assets Being Depreciated	<u>\$ 4,090,197,023</u>	<u>\$ 266,955,665</u>	<u>\$ (122,315,111)</u>	<u>\$ 4,234,837,577</u>
<u>Less Accumulated Depreciation For:</u>				
Buildings and related improvements	(953,842,551)	(45,229,475)	5,014,662	(994,057,364)
Intangible Assets	(8,760,351)	(1,481,232)	-	(10,241,583)
Equipment	(66,265,555)	(4,055,849)	735,985	(69,585,419)
Infrastructure	(1,223,971,858)	(50,944,974)	42,022,956	(1,232,893,876)
Total Accumulated Depreciation	<u>(2,252,840,315)</u>	<u>(101,711,530)</u>	<u>47,773,603</u>	<u>(2,306,778,242)</u>
Total Capital Assets, Being Depreciated, Net	<u>1,837,356,708</u>	<u>165,244,135</u>	<u>(74,541,508)</u>	<u>1,928,059,335</u>
Total Capital Assets	<u>\$ 2,127,632,996</u>	<u>\$ 360,570,196</u>	<u>\$ (257,971,167)</u>	<u>\$ 2,230,232,025</u>

\*Fiscal years 2017 and 2016 beginning balances have been restated; see Note III. 10. for additional information.

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**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 2017 and 2016.

**6. DEBT PAYABLE**

(1) Governmental Debt Payable

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	<u>\$ 2,463,458</u>	<u>\$ 545,257</u>	<u>\$ (372,584)</u>	<u>\$ 2,636,131</u>	<u>\$ 129,849</u>

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A summary of changes in long-term debt obligations as of June 30, 2016 follows:

(In Thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Amounts Due Within One Year
Water and Sewer Revenue Bonds	\$ 1,847,625	\$ -	\$ (126,040)	\$ 1,721,585	\$ 113,985
Pennvest Loans	143,583	5,823	(10,667)	138,739	10,743
Unamortized Bond Premium	119,589	-	(12,799)	106,790	-
Derivative Instrument Liability	3,289	-	(1,781)	1,508	-
Net Pension Liability	415,327	40,514	-	455,841	-
Other Non-Current Liabilities:					
Accrued Worker's Compensation	21,990	3,770	(4,042)	21,718	-
Accrued Legal Claims	3,706	8,178	(5,400)	6,484	-
Compensated Absences	10,133	2,505	(1,845)	10,793	-
Total Non-Current Liabilities	<u>\$ 2,565,242</u>	<u>\$ 60,790</u>	<u>\$ (162,574)</u>	<u>\$ 2,463,458</u>	<u>\$ 124,728</u>

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

(Amounts in Millions of USD)

Year Ended June 30:	Principal	Interest	Total Debt Service
2018	\$ 129.8	\$ 89.1	\$ 218.9
2019	103.9	84.7	188.6
2020	96.8	79.9	176.7
2021	80.5	76.0	156.5
2022	73.1	72.4	145.5
2023-2037	312.0	318.4	630.4
2028-2032	321.6	254.4	576.0
2033-2037	246.1	190.7	436.8
2038-2042	307.4	124.8	432.2
2043-2047	227.2	48.4	275.6
2048-2052	79.9	15.5	95.4
2053-2057	18.6	0.4	19.0
	<u>\$ 1,996.9</u>	<u>\$ 1,354.7</u>	<u>\$ 3,351.6</u>

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

Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at:	
			June 30, 2017	June 30, 2016
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.	\$53,200,000	\$56,900,000
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%.	161,950	246,933
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.	18,180,000	35,325,000
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%.	161,380,000	241,375,000
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%.	8,980,000	140,000,000
2009	22,828,000	Pennsylvania Infrastructure Investment Authority Loan of 2009 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	19,297,861	21,464,949
2009	35,667,000	Pennsylvania Infrastructure Investment Authority Loan of 2009 (C), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	35,667,752	35,528,947
2009	64,380,000	Pennsylvania Infrastructure Investment Authority Loan of 2009 (D), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	55,985,423	56,396,744

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Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2017	June 30, 2016
2010	\$ 8,111,000	Pennsylvania Infrastructure Investment Authority Loan of 2010 (B), issued for various capital projects. The bonds bear rates of 1.193% - 2.107%.	\$ 23,683,419	\$ 25,101,563
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%.	69,880,000	102,395,000
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%.	134,005,000	185,000,000
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%.	179,220,000	184,855,000
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%.	65,005,000	65,005,000

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Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2017	June 30, 2016
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%.	\$ 166,575,000	\$ 170,000,000
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%.	117,200,000	123,170,000
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	-

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Date of Issue	Amount of Original Issue	Purpose	Balance Outstanding at: June 30, 2017	June 30, 2016
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	\$ -
	Totals		\$1,996,916,405	\$1,860,324,136

## (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. 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 payment are due during the construction period up to three years) and 2.107% for the remaining fifteen years.

During fiscal year 2017 and 2016, PENNVEST drawdowns totaled \$6,245,094 and \$5,823,347, respectively, which represent an increase in bond issuances.

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

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Individual loan information, by series of bonds, as of June 30, 2016 is as follows:

Date	Series	Maximum Loan Amount	Amount Received through 6/30/16	Current Balance Outstanding 6/30/16
October 2009	2009B	\$ 42,886,030	\$ 29,432,930	\$ 21,464,949
October 2009	2009C	57,268,193	46,699,887	35,528,947
March 2010	2009D	84,759,263	71,956,891	56,396,744
July 2010	2010B	30,000,000	28,500,000	25,101,563
	Totals	<u>\$214,913,486</u>	<u>\$176,589,708</u>	<u>\$138,492,203</u>

### **(3) Defeased Debt**

The Water Fund has defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on 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, 2017, \$286.7 million of bonds outstanding are considered defeased. As of June 30, 2016, \$70.3 million of bonds outstanding were considered defeased.

### **(4) Arbitrage Liability**

The City has issued Water and Waste Water Revenue Bonds subject to Federal arbitrage requirements. Federal tax legislation requires 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. The arbitrage liability was zero as of June 30, 2017 and 2016.

### **(5) Derivative Instrument**

#### **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

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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 30, 2017, the swap had a notional amount of \$18.18 million and the associated variable rate bonds had an \$18.18 million outstanding aggregate principal amount. The bonds' variable rate coupons are based on the same index as variable rate received on the swap. The bonds mature on August 1, 2018 and the related swap agreement terminates on August 1, 2018.

*Fair value:* Effective in fiscal year 2010, the City adopted the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. As of June 30, 2017, the swap had a negative fair value of (\$.36 million). This means that the Water Department would have to pay this amount if the swap terminated. 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 30, 2017, 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 or 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 (Assured) (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.

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As of June 30, 2017, rates were as follows:

	<u>Terms</u>	<u>Rates</u>
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*

As of June 30, 2016, rates were as follows:

	<u>Terms</u>	<u>Rates</u>
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	(0.31856)%
Net interest rate swap payments		4.21144 %
Variable rate bond coupon payments	68.5% of 1-month Libor + fixed spread	0.31856 %*
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, 2017, 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

<b>Fiscal Year Ending</b>	<b>Variable Rate Bonds</b>		<b>Interest Rate</b>	
<b>June 30</b>	<b>Principal</b>	<b>Interest</b>	<b>Swaps, Net</b>	<b>Total Interest</b>
2018	18,015,000	\$152,415	\$671,139	\$823,554
2019	165,000	1,383	6,091	7,475
<b>Total</b>	<b>\$18,180,000</b>	<b>\$153,798</b>	<b>\$677,230</b>	<b>\$831,029</b>

## **7. 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*. Lease payments consisted of \$2,540,050 in fiscal year 2017 and \$1,899,734 in fiscal year 2016. The assets acquired through the leases are shown as equipment within the Capital Asset Note (See Note III. 4.).

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**8. DEFERRED COMPENSATION PLAN**

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Internal Revenue 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.

**9. 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 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.

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**10. PRIOR PERIOD ADJUSTMENT**

The Water Fund's Net Position decreased by (\$49.4) million as a result of:

- (1) reclassification of net equipment purchases in prior years of (\$.7) million that should have been capitalized and depreciated,
- (2) prior year construction projects that were cancelled for \$16.0 million,
- (3) utility payments classified as construction in progress that should have been expensed of \$2.5 million, and
- (4) the net effect of reclassifying fixed assets that should have been expensed from the prior year of \$31.6 million.

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.

The Water Fund's Net Position decreased by (\$22.0) million as a result of:

- (1) direct payments and cancelled projects of (\$18.6) million being carried in Construction in Progress (CIP) that should have been expensed in prior fiscal years when incurred; and
- (2) depreciation from CIP of (\$3.4) million that should have been transferred to fixed assets in previous fiscal years.

The effect of the adjustment is reflected as a decrease to the Water Fund's Net Position as of July 1, 2015 in the June 30, 2016 Statement of Revenues, Expenses and Changes in Net Position.

**11. 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 other financial sources (uses) in the Governmental Funds and as transfers in the Proprietary Funds. 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.

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Transfers between fund types during the year were:

(Amounts in Thousands of USD)	Transfers To:				
	Governmental		Non Major Governmental		
	General	Special Revenue	Debt Service	Capital Improvement	Total
<b>Transfers From:</b>					
General Fund	\$ -	\$ 11,265	\$ 168,694	\$ 5,764	\$ 185,723
Grants Revenue Fund	42,592	1,200	4,579	-	48,371
Non major Special Rev. Fds	409,518	-	55,706	1,500	466,724
Permanent Funds	-	72	-	-	72
Capital Improvements	-	2,045	-	-	2,045
Water Fund	1,866	26,617	-	-	28,483
<b>Total</b>	<b>\$ 453,976</b>	<b>\$ 41,199</b>	<b>\$ 228,979</b>	<b>\$ 7,264</b>	<b>\$ 731,418</b>

#### **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.

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

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“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, 2016, the date of the most recent actuarial valuation, pension plan membership consisted of the following:

Actives	28,308
Terminated Vested	1,248
Disabled	4,005
Retirees	22,412
Beneficiaries	8,567
DROP	<u>1,614</u>
Total City Members	<u>66,154</u>
Annual Salaries	\$1,676,548,962
Average Salary per Active Member	\$59,225
Annual Retirement Allowances	\$741,828,339
Average Retirement Allowance	\$21,205

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**Contributions.**

Per Title 22 of the Philadelphia Code, members contribute to the System at various rates based on bargaining unit, uniform status, and entry date into the System. As of July 1, 2016 members contributed at one of the following rates:

<b>Employee Contribution Rates</b>				
<b>For the Period of July 1, 2016 to June 30, 2017</b>				
	<b>Municipal (1)</b>	<b>Elected</b>	<b>Police</b>	<b>Fire</b>
Plan 67	6.00%	N/A	6.00%	6.00%
Plan 67 - 50% of Aggregate Normal Cost (2)	5.95%	N/A	N/A	N/A
Plan 87	3.02%	8.21%	5.00%	5.00%
Plan 87 - 50% of Aggregate Normal Cost (3)	3.37%	N/A	N/A	N/A
Plan 87 - Accelerated Vesting (4)	3.63%	10.60%	N/A	N/A
Plan 87 Prime (5)	4.02%	9.21%	6.00%	6.00%
Plan 87 Prime - Accelerated Vesting	4.63%	11.60%	N/A	N/A
Plan 10	3.14%	N/A	5.50%	5.50%
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 3.75% of compensation up to the social security wage base and 6% above it.

2- Effective November 2014 guards represented by DC 33 contributions at 50% of the aggregate Normal Cost of all members in Plan J.

3- This represents 50% of aggregate Normal Cost for all members in Plan Y.

4- 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.

5- Plan 87 Prime refers to new hires who have the option to elect Plan 10 but have elected to stay in Plan 87.

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”), 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, two 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.

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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.

Under both 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 different under the MMO and City's Funding Policy.

**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 2017, the City and other employers' contributions of \$706.2 million was less than the actuarially determined employer contribution (ADEC) of \$881.4 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 20 years.

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 2017, the City and other employers' contributions of \$706.2 million exceeded the Minimum Municipal Obligation of \$629.6 million.

The Schedule of Employer Contributions (based on the MMO Funding Policy) is

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included as Required Supplemental Information and provides a 10-year presentation of 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 may retire at either age 60 with up to 100% or 25% of AFC, depending on entry date into the System. 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 System. 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
- 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

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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, 2016, the date of the most recent actuarial valuation, there was \$7,222,828 in the PAF and the Board voted to make distributions of \$6,855,987 during the fiscal year ended June 30, 2017.

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, 2017 is \$122.3 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.

The Pension Fund seeks an annual total rate of return of not less than 7.70% over a full market cycle. It is anticipated that this return standard should enable the Fund to meet its actuarially assumed earnings projection (currently 7.70%) over a market cycle. The investment return assumption was reduced by the Board from 7.75% to 7.70%. 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.

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The following was the Board's approved asset allocation policy as of June 30, 2017:

<u>Asset Class</u>	<u>Target Allocation</u>
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	<u>100.0%</u>

**Money Weighted Rate of Return:** For the year ended June 30, 2017, the annual money-weighted return on pension plan investments, net of pension plan investment expense, was 13.68%. 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

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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.

Directly-owned real estate investments are primarily valued based on appraisals performed by independent appraisers and for properties not appraised, the present value of the projected future net income stream is used.

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. 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.

**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's 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.

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**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 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.

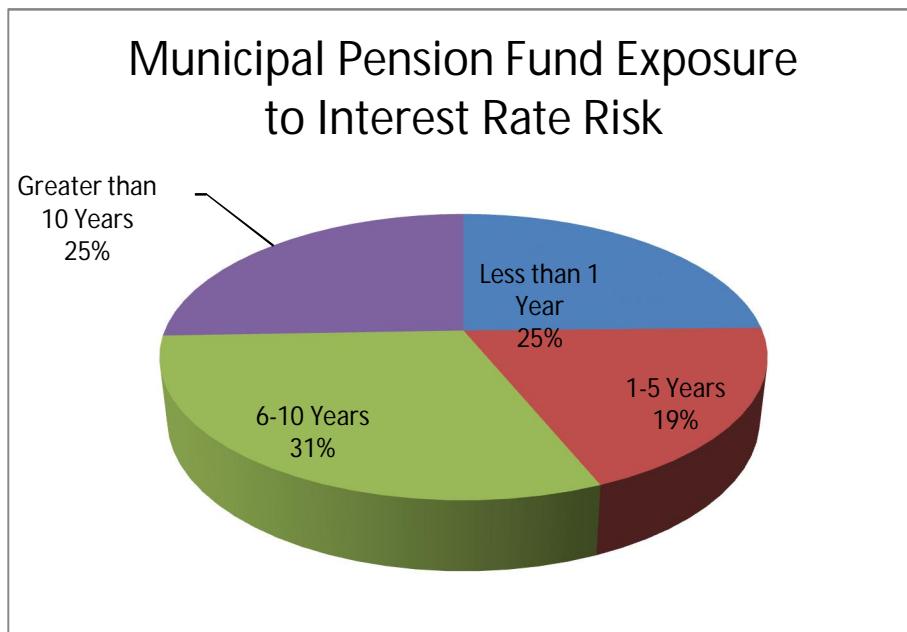
**Interest Rate Risk**

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.

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This chart details the exposure to interest rate changes based on maturity dates of the fixed income securities at June 30, 2017:



### **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 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, 2017, 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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**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 \$852.3 million of directly owned fixed income. The Pension Fund's directly owned rated debt investments as of June 30, 2017 were rated by S&P, a nationally recognized statistical rating agency and are presented below using S&P rating scale:

2017 (in thousands)	Total Fair Value	Credit Rating											
		AAA	AA	A	BBB	BB	B	CCC	CC	C	D	NR	
Asset Backed Securities	\$ 20,970	\$ 6,890	\$ 2,162	\$ 3,163	\$ 4,458	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,297	
CMO/REMIC	4,271	-	2,663	812	278	188	-	-	-	-	-	331	
Commercial Mortgage Backed Securities	21,853	6,095	11,893	1,512	255	96	63	-	-	-	-	1,940	
Corporate Bonds	300,807	1,466	15,620	62,238	79,782	43,259	60,995	27,206	-	454	95	9,694	
Government Bonds	403,240	10,905	272,918	47,460	25,397	22,836	11,710	3,311	-	-	-	8,701	
Mortgage Backed Securities	87,593	-	87,593	-	-	-	-	-	-	-	-	-	
Municipal Bonds	13,574	-	9,329	3,591	654	-	-	-	-	-	-	-	
Total Credit Risk of Debt Securities	\$ 852,308	\$ 25,356	\$ 402,178	\$ 118,776	\$ 110,824	\$ 66,379	\$ 72,768	\$ 30,517	\$ -	\$ 454	\$ 95	\$ 24,963	

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**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 39% of the total investment in equities.

Currency	(thousands of USD)				
	Fixed		Equities	Derivatives	Total
Cash	Income				
Euro (EUR)	\$ 2,015	\$ 6,123	\$ 262,079	\$ (110)	\$ 270,107
Pound Sterling (GBP)	640	11,302	177,421	99	189,462
Japanese Yen (JPY)	343	-	186,820	(7)	187,156
Hong Kong Dollar (HKD)	381	-	95,179	-	95,560
Canadian Dollar (CAD)	336	75	93,138	88	93,637
Swiss Franc (CHF)	185	-	80,098	-	80,283
Australian Dollar (AUD)	80	8,899	52,388	147	61,514
South Korean Won (KRW)	-	-	52,661	(14)	52,647
Mexican Peso (MXN)	-	25,631	9,826	4	35,461
Brazilian Real (BRL)	492	9,563	16,679	-	26,734
South African Rand (ZAR)	(1)	8,510	16,226	5	24,740
Swedish Krona (SEK)	445	-	21,250	344	22,039
Malaysian Ringgit (MYR)	7	10,268	7,700	-	17,975
Indonesian Rupiah (IDR)	26	9,025	8,390	-	17,441
Polish Zloty (PLN)	2	10,851	3,741	45	14,639
Danish Krone (DKK)	122	-	10,551	-	10,673
Singapore Dollar (SGD)	45	-	8,560	-	8,605
Thai Baht (THB)	2	-	7,128	-	7,130
New Turkish Lira (TRY)	-	2,739	3,285	-	6,024
Philippine Peso (PHP)	-	393	5,126	-	5,519
Norwegian Krone (NOK)	125	-	4,389	281	4,795
Chilean Peso (CLP)	-	-	4,008	(86)	3,922
All Others	2,631	7,688	6,420	39	16,778
	<u>\$ 7,876</u>	<u>\$ 111,067</u>	<u>\$ 1,133,063</u>	<u>\$ 835</u>	<u>\$ 1,252,841</u>

**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 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

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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.

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**Derivative Instruments**

The following table summarizes aggregate notional or contractual amounts for the Pension Fund's derivative financial instruments at June 30, 2017 in addition to the fair value and change in the fair value of derivatives.

List of Derivatives Aggregated by Investment Type

Classification	Change in Fair Value		Fair Value at June 30, 2017		Notional	
	Investment Derivatives:					
Forwards Currency Contracts	Net appreciation/(depreciation) in Investments	\$ 1,442,945	Accrued interest and other receivables	\$ 854,480	\$ 220,310,216	
Futures	Net appreciation/(depreciation) in Investments	\$ 65,566	Accrued expenses and other liabilities	\$ (75,965)	\$ 156	
Grand Totals		\$ 1,508,511		\$ 778,515	\$ 220,310,372	

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

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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 receive fixed interest Swaps during 2017. 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 \$1,474,541.

**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 \$55,615.

**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

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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, 2017:

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
<b>6/30/2017</b>				
<b>Investments by fair value level</b>				
U.S. Treasury Securities	\$ 180,538,575	\$ -	\$ 180,538,575	\$ -
Agency Bonds	67,357,205	-	67,357,205	-
Asset Backed Securities	20,970,026	-	20,970,021	5
Corporate Bonds	300,807,297	-	300,806,001	1,296
Government Bonds	144,638,309	-	144,638,309	-
Mortgage Backed Securities	113,717,302	-	113,717,302	-
Municipal Bonds	13,574,040	-	13,574,040	-
Sovereign Debt	10,705,557	-	10,705,557	-
Mutual Funds	456,121	456,121	-	-
Equity	2,871,077,516	2,866,682,157	2,902,089	1,493,270
<b>Total Investments by fair value level</b>	<b>\$ 3,723,841,949</b>	<b>\$ 2,867,138,278</b>	<b>\$ 855,209,099</b>	<b>\$ 1,494,571</b>
<b>Investments measured at the net asset value (NAV)</b>				
Credit Distressed Hedge Fund	\$ 22,419,608			
Equity Long/Short hedge funds	27,857,614			
Real Estate	258,320,778			
Private Equity	442,257,227			
Fixed Income Funds	188,473,203			
Equity Funds	529,857			
<b>Total Investments measured at the NAV</b>	<b>\$ 939,858,287</b>			
<b>Total Investments measured at fair value</b>	<b>\$ 4,663,700,236</b>			
<b>Investment derivative instruments</b>				
Equity index Futures (Assets)	\$ 191	\$ 191		
Equity index Futures (Liabilities)	(76,156)	(76,156)		
Forward Currency Contracts (Assets)	1,541,922		1,541,922	
Forward Currency Contracts (Liabilities)	(687,443)		(687,443)	
<b>Total Investment derivative instruments</b>	<b>\$ 778,515</b>	<b>\$ (75,965)</b>	<b>\$ 854,480</b>	

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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. Mortgage and Asset backed securities and Corporate bonds 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.

<u>Investment Measured at the net asset value (NAV)</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If Currently Eligible)</u>	<u>Redemption Notice Period</u>
Credit Distressed Hedge Fund	\$ 22,419,608	-	Quarterly 90 days
Equity Long/Short hedge funds	27,857,614	-	Quarterly 90 days' notice
Real Estate	258,320,778	31,048,304	N/A N/A
Private Equity	442,257,227	232,073,081	N/A N/A
Fixed Income Funds	188,473,203	-	90-120 days
Equity Funds	529,857	-	90-120 days
<b>Total Investments measured at the NAV</b>	<b>\$ 939,858,287</b>		

**1. 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.

**2. 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.

**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

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

**6. Equity funds:** The primary goal of these Funds is employ a private equity approach to public market investing which seeks to deliver superior returns through a value-oriented investment strategy focusing on companies that are (or should be) implementing strategic change.

### **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.

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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 Pension Fund. As of June 30, 2017 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, 2017, the Pension Fund had no credit risk exposure to borrowers.

As of June 30, 2017, the fair value of securities on loan was \$360.6 million. Associated collateral totaling \$369.2 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, 2017, the invested cash collateral was \$369.2 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.

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**G. NET PENSION LIABILITY**

The components of the net pension liability for the pension plan as of June 30, 2017 were as follows:

Total Pension Liability	\$ 11,192,601,311
Plan Fiduciary Net Position	<u>4,874,074,826</u>
Net Pension Liability	<u><u>\$ 6,318,526,485</u></u>

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability is 43.5%.

The Water Fund's portion of the net pension liability was \$444,232,700 and \$455,840,648 as of June 30, 2017 and 2016, respectively.

**Actuarial Assumptions**

The total pension liability was determined by an actuarial valuation as of June 30, 2016 and was rolled forward to June 30, 2017. The June 30, 2016 actuary valuation used the following actuarial assumptions, applied to all periods including the measurement period:

Actuarial Cost Method: Entry Age Normal

Investment Rate of Return: 7.70% compounded annually, net of expenses

Salary Increases: Age Based Table

- The investment return assumption was changed from 7.75% from the prior year valuation to 7.70 percent for the current year valuation.
- To recognize the expense of the benefits payable under the Pension Adjustment Fund, the actuarial liabilities have been increased 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 five years 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 is June 30, 2017. Measurements are based on the fair value of assets as of June 30, 2017 and the Total Pension Liability ("TPL") as of the valuation date, July 1, 2016 updated to June 30, 2017. 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

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decreased by approximately \$201 million. The service cost and interest cost increased the collective net pension liability by approximately \$982 million while contributions plus investment income offset by administrative expenses decreased the collective net pension liability by approximately \$1,338 million.

There were no changes in benefits during the year. There were actuarial experience losses during the year of approximately \$104 million which includes the loss due to the Pension Adjustment Fund payment of \$30 million for the previous year.

The Board adopted an assumption change to decrease the expected long-term return on assets from 7.75% to 7.70% which increased the TPL by approximately \$51 million.

**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, 2017 (see discussion of pension plan's investment policy) are summarized in the following table:

	<u>Average 10-Year Annualized Return</u>	<u>Benchmark Index</u>
<b>Fixed Income</b>		
Broad Fixed Income	2.80%	Bloomberg Barclays U.S. Aggregate TR
Int. government	2.20%	Bloomberg Barclays U.S. Govt TR
High Yield	4.5%	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
<b>Equities</b>		
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
<b>Hedge Fund</b>		
Hedge Funds	5.00%	HFRI Fund of Funds Composite Index
Real Estate		
Real Estate – Core	7.60%	NCREIF Fund Index

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Public REITs	7.10%	NAREIT
Opportunistic Real Estate	11.70%	NCREIF Property Index
<b>Real Estate</b>		
MLPs	7.60%	Alerian MLP Index
Global Infrastructure	7.50%	Dow Jones Brookfield Global Infrastructure Index
<b>Private Equity</b>		
Private Equity	11.10%	Cambridge Associates
Private Debt	10.00%	Cambridge Associates
<b>Cash</b>		
TIPS	3.80%	Bloomberg Barclays U.S. TIPS TR
91-Day T-Bills	1.20%	

The above table reflects the expected (7-10 year) real rate of return for each major asset class. The expected inflation rate is projected 2.5% for the same time period.

**Discount Rate:** The discount rate used to measure the total pension liability was 7.70%. 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 7.70%, 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 (6.70%)	Discount Rate (7.70%)	1% Increase (8.70%)
Total Pension Liability	<u>\$12,314,093,713</u>	<u>\$11,192,601,311</u>	<u>\$10,236,978,416</u>
Plan Fiduciary Net Position	<u>4,874,074,826</u>	<u>4,874,074,826</u>	<u>4,874,074,826</u>
Collective Net Pension Liability	<u>\$ 7,440,018,887</u>	<u>\$ 6,318,526,485</u>	<u>\$ 5,362,903,590</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	39.6%	43.5%	47.6%

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**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 through December 20, 2017, the date the pension financial statements were available to be issued. Events or transactions occurring after June 30, 2017, but prior to December 20, 2017 that provided additional evidence about conditions that existed at June 30, 2017, have been recognized in the financial statements for the year ended June 30, 2017. Events or transactions that provided evidence about conditions that did not exist at June 30, 2017, but arose before the financial statements were available to be issued have not been recognized in the financial statements for the year ended June 30, 2017.

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**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 ending June 30, 2017:

	Change in Collective Net Pension Liability		
	Increase (Decrease)		
	Total Pension Liability	(a)	Plan Fiduciary Net Position (b)
<b>Balances at 6/30/2016</b>	\$ 10,877,209,958	\$ 4,357,975,073	\$ 6,519,234,885
<b>Changes for the year:</b>			
Service cost	157,607,110		157,607,110
Interest	823,959,345		823,959,345
Changes of benefits	0		0
Differences between expected and actual experience	103,878,650		103,878,650
Changes of assumptions	51,441,475		51,441,475
Contributions - employer		706,236,698	(706,236,698)
Contributions - member		73,607,359	(73,607,359)
Net investment income		566,624,580	(566,624,580)
Benefit payments	(821,495,227)	(821,495,227)	0
Administrative expense		(8,873,657)	8,873,657
<b>Net Changes</b>	<b>315,391,353</b>	<b>516,099,753</b>	<b>(200,708,400)</b>
<b>Balances at 6/30/2017</b>	<b>\$ 11,192,601,311</b>	<b>\$ 4,874,074,826</b>	<b>\$ 6,318,526,485</b>

**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.

**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):

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**Schedule of Pension Amounts by Employer**

	<b>For the Year Ended</b>	<b>PPA</b>	<b>PMA</b>	<b>PHDC</b>	<b>City</b>	<b>Total</b>
Collective Pension Expense		\$ 21,764,584	\$ 339,545	\$ 1,983,059	\$ 803,618,540	\$ 827,705,728
Change in Proportion		2,060,545	218,642	(298,075)	(1,981,112)	-
Contribution Difference		4,529,808	30,619	317,046	(4,877,473)	-
Employer Pension Expense		<u>28,354,937</u>	<u>588,806</u>	<u>2,002,030</u>	<u>796,759,955</u>	<u>827,705,728</u>
Net Pension Liability	06/30/16	209,757,356	2,965,619	20,257,850	6,286,254,060	6,519,234,885
Net Pension Liability	06/30/17	<u>166,146,127</u>	<u>2,592,010</u>	<u>15,138,241</u>	<u>6,134,650,107</u>	<u>6,318,526,485</u>
Change in Net Pension Liability		<u>(43,611,229)</u>	<u>(373,609)</u>	<u>(5,119,609)</u>	<u>(151,603,953)</u>	<u>(200,708,400)</u>
Deferred Outflows	06/30/16	65,741,046	1,275,353	5,267,031	806,510,385	878,793,815
Deferred Outflows	06/30/17	<u>43,794,815</u>	<u>842,698</u>	<u>3,319,721</u>	<u>527,544,043</u>	<u>575,501,277</u>
Change in Deferred Outflows		<u>(21,946,231)</u>	<u>(432,655)</u>	<u>(1,947,310)</u>	<u>(278,966,342)</u>	<u>(303,292,538)</u>
Deferred Inflows	06/30/16	-	-	-	(42,392,584)	(42,392,584)
Deferred Inflows	06/30/17	<u>(25,061,614)</u>	<u>(190,428)</u>	<u>(3,032,702)</u>	<u>(32,992,732)</u>	<u>(61,277,476)</u>
Change in Deferred Inflows		<u>(25,061,614)</u>	<u>(190,428)</u>	<u>(3,032,702)</u>	<u>9,399,852</u>	<u>(18,884,892)</u>
Employer Contributions		24,958,321	339,332	2,141,627	678,797,417	706,236,697
Employer Pension Expense		<u>28,354,937</u>	<u>588,806</u>	<u>2,002,030</u>	<u>796,759,955</u>	<u>827,705,728</u>

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### **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	6,134,650	0	6,134,650
PPA	166,146	166,146	
PMA	2,592		2,592
PHDC (1)	15,138	15,138	
Collective Net Pension Liability	<u>6,318,526</u>	<u>181,284</u>	<u>6,137,242</u>
State Pension Fund			
PICA			1,387
City's Primary Government Net Pesnion Liability (Exhibit I)			<u>6,138,629</u>

(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 immateriality.

### **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 Employers' Deferred Outflows**

	PPA	PMA	PHDC	City	Total
Proportionate Shares	2.63%	0.04%	0.24%	97.09%	100.00%
Experience	\$ 4,275,467	\$ 66,701	\$ 389,555	\$ 157,863,998	\$ 162,595,721
Assumption Changes	2,450,479	38,229	223,273	90,479,593	93,191,574
Investment Returns	6,795,607	106,017	619,175	250,915,708	258,436,507
Proportion Change	20,828,833	564,235	1,425,650	28,284,744	51,103,462
Contribution Differences	<u>9,444,429</u>	<u>67,517</u>	<u>662,068</u>	-	<u>10,174,014</u>
	<u>\$ 43,794,815</u>	<u>\$ 842,699</u>	<u>\$ 3,319,721</u>	<u>\$ 527,544,043</u>	<u>\$ 575,501,278</u>

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### **Deferred Inflows by Employer**

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

<b>Schedule of Employers' Deferred Inflows</b>						
	<b>PPA</b>	<b>PMA</b>	<b>PHDC</b>	<b>City</b>	<b>Total</b>	
Proportionate Shares	2.63%	0.04%	0.24%	97.09%		100.00%
Experience	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Assumption Changes	-	-	-	-	-	-
Investment Returns	-	-	-	-	-	-
Proportion Change	(25,061,614)	(190,428)	(3,032,702)	(22,818,718)	(51,103,462)	
Contribution Differences	-	-	-	(10,174,015)	(10,174,015)	
	<u><u>\$ (25,061,614)</u></u>	<u><u>\$ (190,428)</u></u>	<u><u>\$ (3,032,702)</u></u>	<u><u>\$ (32,992,733)</u></u>	<u><u>\$ (61,277,477)</u></u>	

### **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**

<b>For Year ending</b>	<b>PPA</b>	<b>PMA</b>	<b>PHDC</b>	<b>CITY</b>	<b>Total</b>
2018	\$ 13,020,233	\$ 349,573	\$ 604,825	\$ 230,553,287	\$ 244,527,918
2019	11,262,115	334,926	470,650	211,696,262	223,763,953
2020	(4,323,955)	(13,115)	(676,823)	97,539,752	92,525,859
2021	(1,225,191)	(19,114)	(111,632)	(45,237,991)	(46,593,928)
2022	-	-	-	-	-
Thereafter	-	-	-	-	-
<b>Total</b>	<b>\$ 18,733,202</b>	<b>\$ 652,270</b>	<b>\$ 287,020</b>	<b>\$ 494,551,310</b>	<b>\$ 514,223,802</b>

### **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.

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**3. OTHER POST EMPLOYMENT BENEFITS (OPEB)**

**Plan Description:** The City of Philadelphia self-administers a single employer, defined benefit plan and provides health care for five years subsequent to separation 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 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 \$114.8 million for fiscal year ended June 30, 2017.

**Annual OPEB Cost and Net OPEB Obligation:** The City's annual other post-employment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding, which if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty (30) years. The following table shows the components of the City's annual OPEB cost for the year, the amount actually contributed to the plan, and changes in the net OPEB obligation:

	(Thousands of Dollars)
Annual Required Contribution	\$ 140,272
Interest on Net OPEB Liability	12,600
Adjustment to Annual Required Contribution	<u>(11,353)</u>
Annual OPEB Cost	141,519
Payments Made	
Increase in Net OPEB Obligation	(114,800)
Net OPEB Obligation - beginning of year	<u>296,474</u>
Net OPEB Obligation - end of year	<u>\$ 323,193</u>

**PHILADELPHIA WATER DEPARTMENT  
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The City of Philadelphia's annual OPEB cost, the percentage of annual OPEB cost contributed to the Plan, and the net OPEB obligation for the fiscal year ended June 30, 2017 was as follows:

(Amounts in Thousands of USD)

<b>Fiscal Year Ended</b>	<b>Annual OPEB Cost</b>	<b>Percentage of Annual OPEB Contributed</b>	<b>Net OPEB Obligation</b>
6/30/2017	\$ 141,519	81%	\$ 323,193
6/30/2016	137,388	78%	296,474
6/30/2015	133,052	72%	266,286

**Funded Status and Funding Progress:** As of July 1, 2016, the most recent actuarial valuation date, the City is funding OPEB on a pay as you go basis and accordingly, the unfunded actuarial accrued liability for benefits was \$1.94 billion. The covered annual payroll was \$1.68 billion and the ratio of the UAAL to the covered payroll was 115.5%.

The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of the plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

The projections of future benefit payments for an ongoing plan obligation involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the funded status of the obligation and the contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

**Actuarial Methods and Assumptions:** The July 1, 2016 valuation was performed using a full valuation methodology. This means that new claims cost assumptions were developed based on the claims data available for the fiscal year ending June 30, 2015 through June 30, 2017, and this was applied to census data as of July 1, 2016.

The Entry Age Cost Method was used to value the Plan's actuarial liabilities and to set the normal cost. Under this method, the normal cost rate is the percentage of pay contribution which would be sufficient to fund the plan benefits if it were paid from each member's entry into the Retirement System until termination or retirement.

**PHILADELPHIA WATER DEPARTMENT  
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**Changes in Methods and Assumptions:** The valuation includes updated claims cost and trend assumptions based on information available as of June 30, 2016, and increased to 3.58% as of June 30, 2017.

**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 2017 this transfer amounted to \$409.5 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. A list of such related party organizations and a description of significant transactions with the City, where applicable, is as follows:

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**A. SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY  
(SEPTA)**

During the year the City provided an operating subsidy of \$79.72 million to SEPTA.

**B. OTHER ORGANIZATIONS**

The City provides varying levels of subsidy and other support payments which totaled \$100.39 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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At June 30, 2017 the amount of these liabilities was \$365.1 million for the City. This liability is the City's best estimate based on available information. Changes in the reported liability since June 30, 2015 resulted from the following:

Fiscal Years Ending June 30	(Amounts in Millions of USD)			
	Beginning Liability	and Changes in Estimates	Current Year Claims	Claim Payments
2015	349.3	296.0	(291.7)	353.6
2016	353.6	216.2	(219.5)	350.3
2017	350.3	243.9	(229.1)	365.1

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 \$2.9 million for Unemployment Compensation claims and \$67.4 million for Workers' Compensation claims.

The City's estimated outstanding workers' compensation liabilities are \$269.4 million discounted at 3.5%. On an undiscounted basis, these liabilities total \$352.6 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 \$244.1 million (discounted) and \$321.3 million (undiscounted). The Water Fund's accrued liability for workers' compensation was \$21.6 million and \$21.7 million at June 30, 2017 and 2016, 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. COMMITMENTS**

Encumbrance accounting is utilized to assure effective budgetary control and accountability and to facilitate effective cash planning and control. At year end the open encumbrances for both the current and prior fiscal years for the Water Fund totaled \$554 million.

## **8. 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 Water Fund. The

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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, transaction, 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 Water Fund 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. As of June 30, 2017 and 2016, the aggregate estimate of loss deemed to be probable is \$27.6 million and \$28.2 million, respectively. This amount has been included on the Statement of Net Position under Other Long-Term Liabilities.

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 loss, which could result if unfavorable legal determinations were rendered against the City with respect to these lawsuits is approximately \$100.4 million to the General Fund, \$11.2 million from the Water Fund and \$2.7 million from the Aviation Fund.

**9. SUBSEQUENT EVENTS**

In August of 2017, the City of Philadelphia, issued Water and Wastewater Revenue Refunding Bonds, Series 2017B in the amount of \$174,110,000 to finance (i) the refunding, on a current basis, of all or a portion of the City’s outstanding Water and Wastewater Revenue Refunding Bonds, Series 2007B, (ii) the refunding, on an advance basis, of portions of the City’s outstanding Water and Wastewater Revenue Bonds, Series 2010C and portions of its Water and Wastewater Revenue Refunding Bonds, Series 2012, and (iii) the costs of issuance relating to the bonds. The bonds bear interest rates of 2.00% to 5.00%. The debt service requirements of the Water Fund following the issuance of the Series 2016 Water and Wastewater Revenue Refunding Bonds are detailed in the Other Supplementary Information section.

**PHILADELPHIA WATER DEPARTMENT  
NOTES TO THE FINANCIAL STATEMENTS  
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**10. ACCOUNTS RECEIVABLE**

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

**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	<u>4,095,452</u>
<b>Subtotal</b>	<u>174,557,554</u>
Bad Debt Written Off	<u>13,251,217</u>
<b>Total</b>	<u><u>\$161,306,337</u></u>
Allowance for Doubtful Accounts	<u><u>\$ 13,057,526</u></u>

**FISCAL YEAR ENDED JUNE 30, 2016**

**Accounts Receivable**

Billed in the Last Twelve Months	\$ 135,402,994
Billed in 15-year Cycle Billing	9,113,657
Penalties on Receivables	7,321,722
Other Receivables	<u>18,736,616</u>
<b>Subtotal</b>	<u>170,574,989</u>
Bad Debt Written Off	<u>17,986,820</u>
<b>Total</b>	<u><u>\$ 152,588,169</u></u>
Allowance for Doubtful Accounts	<u><u>\$ 13,006,803</u></u>

**11. 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:

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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	<u>64,325,000</u>
Total	<u><u>\$67,000,000</u></u>

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.

## **12. 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.

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”), \$1,940,536 and \$1,689,812 in Fiscal Year 2017 and Fiscal Year 2016, respectively for meter reads. Additionally, the Water Department paid ITRON, through PMA, \$2,087,360 and \$2,745,479 in Fiscal Year 2017 and Fiscal Year 2016, respectively, for the purchase of meters.

**PHILADELPHIA WATER DEPARTMENT  
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**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 2016 and 2017, the City paid to PMA, from revenues generated by the Water Department, \$20,074,514 and \$17,941,469, 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 2016 and Fiscal Year 2017, the City paid to the Lessor from revenues generated from the Water Department, \$5,556,547 and \$4,718,600, 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

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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.

**13. 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 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 20 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 Section 308 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.

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

**PHILADELPHIA WATER DEPARTMENT  
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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 Water Department has completed its fifth year of the 25 year COA. 1,310 additional greened acres and 334 million gallons of combined sewer overflow reduction are required over the next 5 years for a total of 2,148 greened acres and 2,044 million gallons of combined sewer overflow reduction by the end of year 10.

#### **14. 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, 2017, are comprised of the following:

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

Restricted assets as of June 30, 2016, are comprised of the following:

(Thousands of Dollars)			
	<b>Cash and Investments</b>	<b>Accrued Interest</b>	
Amounts Reserved for:			
Capital Projects	\$ 329,957	\$ 20	
Rate Stabilization	205,600	160	
Residual	15,189	14	
Debt Service Reserve	<u>220,890</u>	<u>546</u>	
<b>Total</b>	<b><u>\$ 771,636</u></b>	<b><u>\$ 740</u></b>	

## **Required Supplementary Information**

**CITY OF PHILADELPHIA WATER DEPARTMENT**

**BUDGETARY COMPARISON SCHEDULE**  
**Water Operating Fund**  
**For the Fiscal Year Ending June 30, 2017**  
**(Legally Enacted Basis)**

**(Thousands of Dollars)**

<b>Revenues</b>	<b>Budgeted Amounts</b>			<b>Final Budget to Actual Positive (Negative)</b>
	<b>Original</b>	<b>Final</b>	<b>Actual</b>	
Locally Generated Non-Tax Revenue	\$ 663,450	\$ 663,440	\$ 685,515	\$ 22,075
Revenue from Other Governments	1,000	1,000	1,408	408
Revenue from Other Funds	<u>86,735</u>	<u>88,986</u>	<u>38,285</u>	<u>(50,701)</u>
<b>Total Revenues</b>	<b>\$ 751,185</b>	<b>\$ 753,426</b>	<b>\$ 725,208</b>	<b>\$ (28,218)</b>
<b>Expenditures and Encumbrances</b>				
Personal Services	131,865	129,886	125,010	4,876
Pension Contributions	60,200	68,915	68,915	-
Other Employee Benefits	<u>53,765</u>	<u>52,652</u>	<u>52,652</u>	<u>-</u>
Sub-Total Employee Compensation	245,830	251,453	246,577	4,876
Purchase of Services	187,942	183,942	167,609	16,333
Materials and Supplies	49,813	50,177	42,592	7,585
Equipment	6,522	6,157	4,030	2,127
Contributions, Indemnities and Taxes	7,006	7,481	7,352	129
Debt Service	207,372	218,372	215,898	2,474
Payments to Other Funds	66,700	65,700	65,700	-
Advances and Other Miscellaneous Payments	-	-	-	-
<b>Total Expenditures and Encumbrances</b>	<b><u>771,185</u></b>	<b><u>783,282</u></b>	<b><u>749,758</u></b>	<b><u>33,524</u></b>
<b>Operating Surplus (Deficit) for the Year</b>	<b><u>\$ (20,000)</u></b>	<b><u>\$ (29,856)</u></b>	<b><u>\$ (24,550)</u></b>	<b><u>\$ 5,306</u></b>
Fund Balance Available, July 1, 2016	-	-	-	-
<b>Operations in Respect to Prior Fiscal Years</b>				
Commitments Cancelled - Net	20,000	25,000	24,550	(450)
Prior Period Adjustments	-	-	-	-
Adjusted Fund Balance, July 1, 2016	20,000	25,000	24,550	(450)
<b>Fund Balance Available, June 30, 2017</b>	<b><u>\$ -</u></b>	<b><u>\$ (4,856)</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 4,856</u></b>

**CITY OF PHILADELPHIA**  
**OTHER POST EMPLOYMENT BENEFITS**  
**SCHEDULE OF FUNDING PROGRESS**  
**FISCAL YEAR ENDED JUNE 30, 2017**

(Amounts in Millions of USD)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b - a) / c
(a)	(b)	(b - a)	(a / b)	(c)	(b - a) / c	
<b><u>City of Philadelphia Other Post-Employment Benefits</u></b>						
07/01/2008	-	\$ 1,156.0	\$ 1,156.0	0.00%	\$ 1,456.5	79.37%
07/01/2009	-	1,119.6	1,119.6	0.00%	1,461.7	76.60%
07/01/2010	-	1,169.5	1,169.5	0.00%	1,419.5	82.39%
07/01/2011	-	1,212.5	1,212.5	0.00%	1,469.2	82.53%
07/01/2012	-	1,511.9	1,511.9	0.00%	1,371.6	110.23%
07/01/2013	-	1,703.6	1,703.6	0.00%	1,416.9	120.23%
07/01/2014	-	1,732.1	1,732.1	0.00%	1,495.1	115.85%
07/01/2015	-	1,772.6	1,772.6	0.00%	1,544.5	114.77%
07/01/2016	-	1,936.6	1,936.6	0.00%	1,676.5	115.51%

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.

MUNICIPAL PENSION PLAN

Schedule of Changes in Net Pension Liability  
Fiscal Year Ending June 30, 2017, 2016, 2015, and 2014

**Schedule of Changes in Net Pension Liability**

**Fiscal Year Ending**

	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>
<b>Total Pension Liability</b>				
Service Cost (MOY)	\$ 157,607,110	\$ 148,370,075	\$ 143,556,347	\$ 136,986,515
Interest (Includes Interest on Service Cost)	823,959,345	802,450,569	791,298,503	774,518,750
Changes of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	103,878,650	151,918,733	34,909,464	-
Change of Assumptions	51,441,475	85,147,737	48,146,352	213,156,725
Benefit Payments, Including Refund of Member Contributions	(821,495,227)	(889,343,124)	(881,464,964)	(808,597,357)
Net Change in Total Pension Liability	\$ 315,391,353	\$ 298,543,990	\$ 136,445,702	\$ 316,064,633
Total Pension Liability - Beginning	10,877,209,958	10,578,665,968	10,442,220,266	10,126,155,633
<b>Total Pension Liability - Ending</b>	<b>\$ 11,192,601,311</b>	<b>\$ 10,877,209,958</b>	<b>\$ 10,578,665,968</b>	<b>\$ 10,442,220,266</b>
<b>Plan Fiduciary Net Position</b>				
Contributions - Employer	\$ 706,236,698	\$ 660,246,511	\$ 577,195,412	\$ 553,178,927
Contributions - Member	73,607,359	67,055,003	58,657,817	53,722,275
Net Investment Income	566,624,580	(145,681,480)	13,838,367	681,469,584
Benefit Payments, Including Refunds of Member Contributions	(821,495,227)	(889,343,124)	(881,666,036)	(808,597,357)
Administrative Expense	(8,873,657)	(8,553,837)	(10,478,541)	(8,291,820)
Net Change in Plan Fiduciary Net Position	\$ 516,099,753	\$ (316,276,927)	\$ (242,452,981)	\$ 471,481,609
Plan Fiduciary Net Position - Beginning	4,357,975,073	4,674,252,416	4,916,705,397	4,445,223,788
<b>Plan Fiduciary Net Position - Ending</b>	<b>\$ 4,874,074,826</b>	<b>\$ 4,357,975,073</b>	<b>\$ 4,674,252,416</b>	<b>\$ 4,916,705,397</b>
<b>Net Pension Liability - Ending</b>	<b>\$ 6,318,526,485</b>	<b>\$ 6,519,234,885</b>	<b>\$ 5,904,413,552</b>	<b>\$ 5,525,514,869</b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>				
	43.55%	40.07%	44.19%	47.08%
<b>Covered-Employee Payroll</b>	<b>\$ 1,744,729,284</b>	<b>\$ 1,676,411,925</b>	<b>\$ 1,597,848,869</b>	<b>\$ 1,556,660,223</b>
<b>Net Pension Liability as a Percentage of Covered-Employee Payroll</b>				
	362.15%	388.88%	369.52%	354.96%

This schedule represents the changes in net pension liability of the Municipal Pension Plan. The entities within the Municipal Pension Plan are the City of Philadelphia, the Philadelphia Parking Authority, Philadelphia Municipal Authority, and the Philadelphia Housing Development Corporation. The Water Department is a department of the City of Philadelphia.

MUNICIPAL PENSION PLAN

Schedules of Collective Contributions - Last 10 Years

**Schedule of Collective Contributions (Based on Minimum Municipal Obligation)**

Last 10 Fiscal Years  
(Thousands of Dollars)

	<b>FYE 2016</b>	<b>FYE 2016</b>	<b>FYE 2015</b>	<b>FYE 2014</b>	<b>FYE 2013</b>	<b>FYE 2012</b>	<b>FYE 2011</b>	<b>FYE 2010</b>	<b>FYE 2009</b>	<b>FYE 2008</b>
Actuarially Determined Contribution	\$ 629,620	\$ 594,975	\$ 556,030	\$ 523,368	\$ 727,604	\$ 534,039	\$ 463,375	\$ 297,446	\$ 438,522	\$ 412,449
Contributions in Relation to the Actuarially Determined Contribution	706,237	660,246	577,195	553,179	781,823	555,690	470,155	312,556	455,389	426,934
Contribution Deficiency/(Excess)	\$ (76,617)	\$ (65,271)	\$ (21,165)	\$ (29,811)	\$ (54,219)	\$ (21,651)	\$ (6,780)	\$ (15,110)	\$ (16,867)	\$ (14,485)
Covered-Employee Payroll*	\$ 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	\$ 1,456,520
Contributions as a Percentage of Covered-Employee Payroll	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%	31.12%	29.31%

**Schedule of Collective Contributions (Based on Funding Policy)**

Last 10 Fiscal Years  
(Thousands of Dollars)

	<b>FYE 2016</b>	<b>FYE 2016</b>	<b>FYE 2015</b>	<b>FYE 2014</b>	<b>FYE 2013</b>	<b>FYE 2012</b>	<b>FYE 2011</b>	<b>FYE 2010</b>	<b>FYE 2009</b>	<b>FYE 2008</b>
Actuarially Determined Contribution	\$ 881,356	\$ 846,283	\$ 798,043	\$ 823,885	\$ 738,010	\$ 722,491	\$ 715,544	\$ 581,123	\$ 539,464	\$ 536,874
Contributions in Relation to the Actuarially Determined Contribution	706,237	660,247	577,195	553,179	781,823	555,690	470,155	312,556	455,389	426,934
Contribution Deficiency/(Excess)	\$ 175,119	\$ 186,036	\$ 220,848	\$ 270,706	\$ (43,813)	\$ 166,801	\$ 245,389	\$ 268,567	\$ 84,075	\$ 109,940
Covered-Employee Payroll*	\$ 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	\$ 1,456,520
Contributions as a Percentage of Covered-Employee Payroll	40.48%	39.38%	36.12%	36.99%	54.68%	40.50%	34.29%	21.99%	31.12%	29.31%

This schedule represents the collective contributions of the Municipal Pension Plan. The entities within the Municipal Pension Plan are the City of Philadelphia, the Philadelphia Parking Authority, Philadelphia Municipal Authority, and the Philadelphia Housing Development Corporation. The Water Department is a department of the City of Philadelphia.

## Schedules of Collective Contributions - Last 10 Years

**Notes to Schedules of Collective Contributions**

Valuation Date July 1, 2015  
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 15 years, benefit changes for actives over 10 years, benefit changes for inactives members over 1 year, plan changes mandated by the State over 20 years Under the City's Funding Policy, the initial July 1, 1985 unfunded actuarial liability (UAL) is amortized over a 34 year period 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 a 30 year period, ending June 30, 2039. This is a level dollar amortization of the UAL.
Discount Rate	7.75%
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, 2017 can be found in the July 1, 2015 actuarial valuation report.

## **Other Supplementary Information**

## CITY OF PHILADELPHIA WATER DEPARTMENT

### BONDED DEBT WATER AND WASTEWATER REVENUE BONDS AS OF DECEMBER 10, 2017

<u>Year End</u>	<u>Principal Requirements</u>	<u>Interest Requirements</u>	<u>Total Debt Service</u>
6/30/2018	45,946,041	44,811,635	90,757,676
6/30/2019	102,581,328	83,123,823	185,705,151
6/30/2020	95,411,027	78,425,136	173,836,163
6/30/2021	77,560,288	74,562,584	152,122,873
6/30/2022	71,383,257	71,121,733	142,504,990
6/30/2023	73,905,012	68,005,422	141,910,434
6/30/2024	52,775,634	64,741,603	117,517,237
6/30/2025	55,160,205	62,550,026	117,710,231
6/30/2026	58,563,808	60,209,820	118,773,629
6/30/2027	61,136,531	57,736,952	118,873,483
6/30/2028	48,108,460	55,542,140	103,650,601
6/30/2029	65,219,686	53,136,894	118,356,579
6/30/2030	60,475,298	50,287,906	110,763,204
6/30/2031	63,340,391	47,497,763	110,838,154
6/30/2032	63,266,185	44,638,277	107,904,462
6/30/2033	44,360,206	42,463,976	86,824,181
6/30/2034	45,965,000	40,316,063	86,281,063
6/30/2035	48,115,000	38,159,869	86,274,869
6/30/2036	51,715,000	35,961,163	87,676,163
6/30/2037	52,345,000	33,522,000	85,867,000
6/30/2038	55,005,000	30,856,750	85,861,750
6/30/2039	57,810,000	28,056,000	85,866,000
6/30/2040	60,755,000	25,112,375	85,867,375
6/30/2041	69,025,000	22,285,375	91,310,375
6/30/2042	64,810,000	18,487,950	83,297,950
6/30/2043	68,130,000	15,164,881	83,294,881
6/30/2044	53,225,000	11,671,500	64,896,500
6/30/2045	44,910,000	9,218,125	54,128,125
6/30/2046	47,215,000	6,915,000	54,130,000
6/30/2047	13,690,000	5,392,375	19,082,375
6/30/2048	14,395,000	4,690,250	19,085,250
6/30/2049	15,145,000	3,940,656	19,085,656
6/30/2050	15,945,000	3,140,631	19,085,631
6/30/2051	16,785,000	2,298,406	19,083,406
6/30/2052	17,670,000	1,411,794	19,081,794
6/30/2053	18,605,000	478,550	19,083,550
6/30/2054	-	-	-
<b>Total</b>	<b>1,870,453,358</b>	<b>1,295,935,403</b>	<b>3,166,388,761</b>

(1) Interest on the Series 1997B bonds assumes a rate of 0.5724760%, the average interest rate of the bonds during the period 24 consecutive calendar months preceding the date of calculation per the Ordinance.

(2) Interest on Series 2005B assumes rate of 4.53%

(3) Totals may not add due to rounding.

**CITY OF PHILADELPHIA WATER DEPARTMENT**

**SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEARS ENDED  
JUNE 30, 2017, 2016, AND 2015 (Legally Enacted Basis)**

(amounts in thousands)

LINE NO.		YEAR ENDED JUNE 30		
		2017	2016	2015
1.	Total Revenue	\$ 720,645	\$ 678,906	\$ 676,846
2.	Net Operating Expense	(480,257)	(433,025)	(426,767)
2a	Liquidated Encumbrances (Commitments Cancelled which reduces operating expenses)	24,550	24,088	19,389
2b	Adjustment between Debt Service and Net Operating Expenses due to timing differences	-	339	4,470
3.	Transfer (To) From Rate Stabilization Fund	4,563	1,629	(21,456)
<b>4.</b>	<b>Net Revenues</b>	<b>269,501</b>	<b>271,937</b>	<b>252,482</b>
5.	Revenue Bonds Outstanding	(206,142)	(219,304)	(205,270)
6.	Transfer to Escrow Account to Redeem Bonds	(11,000)	-	-
6a	Other (Adjustment between Debt Service Payments to Sinking Fund, Revenue Bond Payments, LOC expenses	1,244	-	-
7.	Pennvest Loan	-	-	-
<b>8.</b>	<b>Total Debt Service</b>	<b>(215,898)</b>	<b>(219,304)</b>	<b>(205,270)</b>
<b>9.</b>	<b>Net Revenue after Debt Service</b>	<b>53,603</b>	<b>52,633</b>	<b>47,212</b>
10.	Transfer to General Fund ("Scoop") <sup>1</sup>	-	-	-
11.	Transfer to Capital Fund	(22,302)	(21,497)	(20,705)
12.	Transfer to Residual Fund	(31,301)	(31,136)	(26,507)
<b>13.</b>	<b>Total Transfers</b>	<b>(53,603)</b>	<b>(52,633)</b>	<b>(47,212)</b>
<b>14.</b>	<b>Net Operating Balance for Current Year</b>	<b>-</b>	<b>-</b>	<b>-</b>

<sup>1</sup> Payment to the General Fund (Scoop Payment) occurs annually as a transfer from the Water Residual Fund to the General Fund, in accordance with the General Ordinance

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 in such fiscal year; (ii) amounts required to be deposited of Subordinated Bonds payable in such fiscal year; (iii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iv) debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable in such fiscal year; (v) debt service payable on Interim Debt in such fiscal year; and (vi) 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.

	2017	2016	2015
<b>COVERAGE A:</b>			
Line 4	\$269,501	\$271,937	\$252,482
/ Line 5	\$206,142	\$219,304	\$205,270
= COVERAGE A:	1.31	1.24	1.23
<b>COVERAGE B:</b>			
Line 4	\$269,501	\$271,937	\$252,482
/ Line 8 + Line 11	\$228,444	\$240,801	\$225,975
= COVERAGE B:	1.18	1.13	1.12

<sup>1</sup> 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)

	2017	2016	2015
<b>COVERAGE C:</b>			
Line 4 - Line 3	\$264,938	\$270,308	\$273,938
/ Line 5	\$206,142	\$219,304	\$205,270
= COVERAGE C:	1.29	1.23	1.33

**CITY OF PHILADELPHIA WATER DEPARTMENT**

**HISTORICAL OPERATING RESULTS FOR FISCAL  
YEARS ENDED JUNE 30, 2017, 2016, AND 2015**  
**Legally Enacted Basis**

(Amounts in Thousands of Dollars)

	YEAR ENDED JUNE 30		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Operating Revenues:</b>			
Sales to General Customers	\$ 615,886	\$ 587,572	\$ 585,911
Service (Sales) to Other Municipalities	34,652	32,389	33,222
Services to Other Philadelphia Agencies (Includes Fire Protection)	33,364	34,810	35,251
Private Fire Connections	2,872	2,737	2,374
Industrial Sewer Surcharge	5,911	7,375	3,407
Other Operating Revenue	7,121	5,158	5,033
<b>Total Operating Revenue</b>	<b>699,806</b>	<b>670,041</b>	<b>665,198</b>
<b>Non-Operating Revenues</b>			
Interest on Investments	920	20	270
Operating Grants	1,408	745	1,083
Other Non-Operating Revenues	18,511	8,100	10,295
<b>Total Non-Operating Revenues</b>	<b>20,839</b>	<b>8,865</b>	<b>11,648</b>
<b>Total Revenues</b>	<b>\$ 720,645</b>	<b>\$ 678,906</b>	<b>\$ 676,846</b>
<b>Operating Expenses</b>			
Deduct: Commitments Cancelled - Net	\$ 480,257	\$ 433,026	\$ 426,767
<b>Net Operating Expenses</b>	<b>\$ 455,707</b>	<b>\$ 408,938</b>	<b>\$ 407,378</b>
<b>Adjustment between Debt Service and Net Operating Expenses (due to timing differences)</b>	\$ -	\$ 340	\$ 4,470
<b>Excess of Operating Revenues over Operating Expenses</b>	<b>\$ 244,099</b>	<b>\$ 261,443</b>	<b>\$ 262,290</b>
<b>Excess of Revenues over Expenses before Interest Expenses and Principal Payments on Bonded Indebtedness</b>	<b>\$ 264,938</b>	<b>\$ 270,308</b>	<b>\$ 273,938</b>
<b>Interest Expenses:</b>			
Revenue Bonds	\$ 80,294	\$ 82,594	\$ 79,975
<b>Total Interest Expenses</b>	<b>\$ 80,294</b>	<b>\$ 82,594</b>	<b>\$ 79,975</b>
<b>Excess of Revenues over Expenses Exclusive of Debt Principal Payments</b>	<b>\$ 184,644</b>	<b>\$ 187,714</b>	<b>\$ 193,963</b>
Add: Unencumbered Funds Available for Appropriation 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	1,244	-	-
Deduct: Debt Principal Payments on Bonded Indebtedness During Fiscal Year	125,848	136,710	125,295
Deduct: Transfer to Escrow Account to Redeem Bonds	11,000	-	-
<b>Net Unapplied Project Revenues</b>	<b>\$ 49,040</b>	<b>\$ 51,004</b>	<b>\$ 68,668</b>
Deduct: Funds Transferred to Residual Fund	31,301	31,136	26,507
Deduct: Funds Transferred to Capital Account	22,302	21,497	20,705
Transfer (TO)/FROM The Rate Stabilization Fund	\$ 4,563	\$ 1,629	\$ (21,456)
<b>Debt Service Coverage Ratio:</b>			
Total Debt Service	1.18	1.13	1.12
Revenue Bond Debt Service	1.31	1.24	1.23

**CITY OF PHILADELPHIA WATER DEPARTMENT**

**WHOLESALE WATER AND WASTEWATER  
CUSTOMER REVENUES AND CONTRACT TERMS  
FISCAL YEAR ENDING JUNE 30, 2017**

	Total <sup>(5)</sup>	% Total Revenue	Contract End Date	COA %
<b><i>Wastewater</i></b>				
Delcora <sup>(1)</sup>	\$ 8,274,572	1.14%	4/1/2028	9.44%
Bucks County Water & Sewer Authority	7,940,300	1.09%	3/31/2038	N/A
Cheltenham Township	3,712,261	0.51%	6/30/2025	2.43%
Lower Southampton Township	3,540,324	0.49%	6/30/2024	0.96%
Upper Darby Township	2,442,757	0.34%	8/8/2023	NA
Lower Merion Township	2,225,241	0.31%	N/A	N/A
Springfield Township				
Erdenheim <sup>(2)</sup>	1,864,095	0.26%	6/30/2023	0.79%
Wyndmoor <sup>(2)(3)</sup>	326,765	0.05%	6/30/2023	N/A
Bucks (for Bensalem) <sup>(2)</sup>	1,925,423	0.27%	6/30/2023	N/A
Abington Township	1,614,469	0.22%	6/30/2023	0.58%
Lower Moreland Township <sup>(4)</sup>	785,757	0.11%	6/30/2025	0.36%
Other Municipal Revenue	60	0.00%	N/A	N/A
<b>Sub-total</b>	<b>\$ 34,652,023</b>	<b>4.78%</b>		<b>14.57%</b>
<b><i>Water</i></b>				
Aqua Pennsylvania	\$ 3,276,834	0.45%	3/1/2026	N/A
<b>Sub-total</b>	<b>\$ 3,276,834</b>	<b>0.45%</b>		
<b>Total Wholesale Revenues</b>	<b>\$ 37,928,857</b>	<b>5.23%</b>		

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 maintains and operates the Bensalem Township Sewer System and the Springfield Township System.

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

(4) During Fiscal Year 2016, Lower Moreland renewed its wholesale wastewater contract, which now includes its proportional share of the Water Department's COA Expenditures and will expire in Fiscal Year 2025.

(5) Totals may not add due to rounding.

## CITY OF PHILADELPHIA WATER DEPARTMENT

### TOP 10 CUSTOMERS FISCAL YEAR ENDING JUNE 30, 2017

	<u>Customer</u>	<u>Revenue (\$)</u>	<u>% Total Revenue</u>
1	City of Philadelphia*	\$ 24,312,071	3.35%
2	Philadelphia Housing Authority	13,672,016	1.89%
3	Veolia Energy Philadelphia	7,027,161	0.97%
4	University of Pennsylvania	5,750,699	0.79%
5	School District of Philadelphia	5,597,120	0.77%
6	Federal Government	3,839,127	0.53%
7	SEPTA	3,407,420	0.47%
8	Temple University	3,164,536	0.44%
9	Paperworks Industries Inc.	2,925,902	0.40%
10	University of Pennsylvania Health System	2,084,287	0.29%
<b>TOTALS**</b>		<b>\$ 71,780,341</b>	<b>9.90%</b>

\*The total above for the City of Philadelphia includes, among others, charges for water and wastewater services, which include stormwater services as follows: (i) \$17,703,287.82 – General Fund; (ii) \$4,267,811.64 – Aviation Fund; and (iii) \$2,340,971.77 – Philadelphia Zoo.

\*\* Totals may not add due to rounding.

## CITY OF PHILADELPHIA WATER DEPARTMENT

### INCENTIVE AND ASSISTANCE PROGRAMS FISCAL YEARS ENDING JUNE 30

<b>Program</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
SMIP <sup>(1)</sup> and GARP <sup>(2)</sup>	\$ 18,518,690 <sup>(3)</sup>	\$ 9,217,109	\$ 14,507,948 <sup>(3)</sup>
Phase in Program (CAP) <sup>(4)</sup>	\$ 2,531,367	\$ 3,282,654	\$ 4,164,073
Stormwater Credits <sup>(4)</sup>	\$ 13,819,758	\$ 12,864,862	\$ 12,262,191
<b>Total</b>	<b>\$ 34,869,815</b>	<b>\$ 25,364,625</b>	<b>\$ 30,934,212</b>

<sup>(\*)</sup> Budgeted, unaudited

<sup>(1)</sup> Stormwater Management Incentives Program.

<sup>(2)</sup> Grant and Greened Acres Retrofit Program.

<sup>(3)</sup> In Fiscal Year 2015 and 2017, SMIP and GARP were partially funded with grants.

<sup>(4)</sup> 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, 2017**

(Thousands of Dollars)

**Legal Basis of Accounting Revenues**

Legal Basis Revenues	\$	725,208
<b>GAAP Adjustments</b>		
Reverse Fiscal Year 2016 Accounts Receivable Accrual		(38,015)
Record Fiscal Year 2017 Accounts Receivable Accrual		39,499
Accounts Receivable Adjustment		7,048
Allowance for Doubtful Accounts Adjustment		6
Reverse Fiscal Year 2016 Grants Receivable Accrual		(125)
Reclassification of Interest Income to Nonoperating Revenue		(17,672)
Total GAAP Adjustments		(9,259)

**Total GAAP Basis Operating Revenues**

\$ 715,949

**Legal Basis of Accounting Expenses**

Legal Basis Expenses	\$	749,758
<b>GAAP Adjustments</b>		

Expense in Fiscal Year 2017, included in Fiscal Year 2016 for Legal Basis		31,722
Encumbrances in Fiscal Year 2017, included in Fiscal Year 2017 for Legal Basis		(75,777)
Depreciation on Capital Assets, not included for Legal Basis		105,208
Payments among Water Department Funds, netted for GAAP Basis		(60,679)
Accrual of Probable Indemnities and Worker's Compensation Expenses		(599)
Reclassification of Transfers Out to Nonoperating Expenses		(24,601)
Reclassification of Payment to General Fund (Sugarhouse)		(5,021)
Allocation of Interfund Activity - Payment to General Fund (Excluding Sugarhouse)		7,076
Allocation of Accrued Expenses		4,905
Change in Inventory Balance as of June 30, 2017		143
Elimination of Legal Basis Net Position Adjustments		34
Net Pension Expense, included in GAAP Basis		9,032
Removal of Debt Service Principal Payments and Transfers to the Escrow Account, included in Legal Basis		(215,898)
Net Adjustments from Capitalization of Capital Assets		(7,128)
Removal of Legal Basis Compensated Absences Expense and Increase in Compensated Absence Liability		303
Amortization of Prepaid Surety Bond Insurance		73
Refund of Prior Year Revenue (Capital Fund)		(4)
Total GAAP Adjustments		(231,211)
<b>Total GAAP Basis Operating Expenses</b>	\$	518,547