

City of Philadelphia

PENNSYLVANIA

Founded 1682



Washington Square

Annual Report of Bonded Indebtedness and Other Long Term Obligations Fiscal Year Ended June 30, 2017



Annual Report of Bonded Indebtedness & Other Long-Term Obligations

Fiscal Year Ended June 30, 2017



City of Philadelphia
P E N N S Y L V A N I A

James F. Kenney
Mayor

Prepared by:

Office of the Director of Finance

Rob Dubow
Director of Finance

Josefine Arevalo
Accounting Director



Table of Contents

Letter of Transmittal	1
-----------------------------	---

Part A – Bonded Indebtedness and Other Long Term Obligations

Exhibit A-1	Statement of Outstanding Bonds and Other Long-Term Obligations	
	By Major Purpose	5
Exhibit A-2	Statement of Long-Term Debt and Interest Payable	6
Exhibit A-3	Analysis of Changes in Bonded Debt Outstanding.....	7
Exhibit A-4	Analysis of Changes in Bonds and Other Long-Term Obligations.....	8
Exhibit A-4a	Analysis of Changes in Other Long-Term Obligations.....	10
Exhibit A-5	Summary of Bonded Debt Outstanding	12
Exhibit A-6	Summary of Bonded Debt Outstanding and Sinking Fund Assets	13
Exhibit A-7	Statement of Debt Incurring Capacity	14
Exhibit A-8	Schedule of Revenue Bond Rate Covenant Compliance	15
Exhibit A-9	City Related Annual Debt Service on Long-Term Debt	16
Exhibit A-9a	General Fund and PICA Supported Debt	19
Exhibit A-10	Statement of Debt Outstanding by Interest Rate	20
Exhibit A-11	Gross Bonded Debt, Net Bonded Debt and Changes Therein	21
Exhibit A-12	Bonds Authorized but Unissued.....	22
Exhibit A-13	Authorized Debt-Issued and Unissued	23
Exhibit A-14	Schedule of Overlapping Debt	24
Exhibit A-15	Summary of Bonded Debt Outstanding by Issue.....	25
Exhibit A-15a	Analysis of Bonded Debt Outstanding by Issue	26
Exhibit A-16	Bond Insurance by Issue	34

Part B – Sinking Fund – General Obligation Bonds / Sinking Funds, Sinking Fund Reserves and Renewal Funds – Revenue Bonds

Exhibit B-1	Sinking Funds-General Obligation Bonds- Combining Balance Sheet.....	37
Exhibit B-2	Sinking Funds-General Obligation Bonds- Combining Statement of Fund Balance Available for Debt Service	38
Exhibit B-3	Sinking Funds-General Obligation Bonds- Consolidated Statement of Cash Receipts and Disbursements	39

Part B – Sinking Fund – General Obligation Bonds / Sinking Funds, Sinking Fund Reserves and Renewal Funds – Revenue Bonds (Continued)

Exhibit B-4	Sinking Funds, Sinking Fund Reserves and Renewal Funds- Balance Sheet	40
Exhibit B-4a	Sinking Funds, Sinking Fund Reserves and Renewal Funds- Statement of Investments	41
Exhibit B-5	Sinking Funds, Sinking Fund Reserves and Renewal Funds- Statement of Revenue, Expenditures and Fund Balance	45

Part C – Notes to the Report of Bonded Indebtedness	46
--	-----------



CITY OF PHILADELPHIA

OFFICE OF THE DIRECTOR OF FINANCE

1401 John F. Kennedy Blvd.
Suite 1330, Municipal Services Bldg.
Philadelphia, PA 19102-1693

ROB DUBOW

Director of Finance

February 23, 2018

To the Honorable Mayor, Members of City Council, and the People of the City of Philadelphia:

This letter is intended to serve as an introduction and overview of the City of Philadelphia's Bonded Debt and Other Long-Term Obligations. As of June 30, 2017, the City's total bonded debt outstanding amounted to:

SEVEN BILLION SIX-HUNDRED SEVENTY MILLION DOLLARS

The amount above consists of the following:

BONDED DEBT		(Amounts rounded to millions)
General Obligation Bonds	\$ 1,432	
Revenue Bonds - Water & Aviation	3,183	
Revenue Bonds - PGW	835	
PMA and PICA Bonds	414	
Conduit Debt	1,806	
Total Bonded Debt		\$ 7,670
OTHER LONG-TERM OBLIGATIONS		
Net Pension Liability	6,139	
Other Post Employment Obligation	323	
Other Long-Term Obligations	617	
Total Other Long-Term Debt		7,079
Total Bonded Debt & Other Long-Term Obligations		<u>\$ 14,749</u>

During the course of fiscal year 2017 the City issued the bonds listed below:

- \$125.0 million of Aviation Revenue bonds
- \$472.6 million of Water and Wastewater Revenue bonds
- \$312.4 million of Philadelphia Gas Works Revenue bonds
- \$83.2 million of Philadelphia Municipal Authority (PMA)
- \$262.9 million of General Obligation bonds

The City is subject to a statutory limitation established by the Commonwealth of PA for bonded indebtedness (General Obligation bonds) payable principally from property taxes. In fiscal year 2014, the City instituted the Actual Value Initiative (AVI). This has increased the statutory limit from \$1.7 billion (FY2013) to \$6.6 billion (FY2017). At June 30, 2017, the City's legal borrowing capacity is \$4.7 billion, as noted in Exhibit A-7.

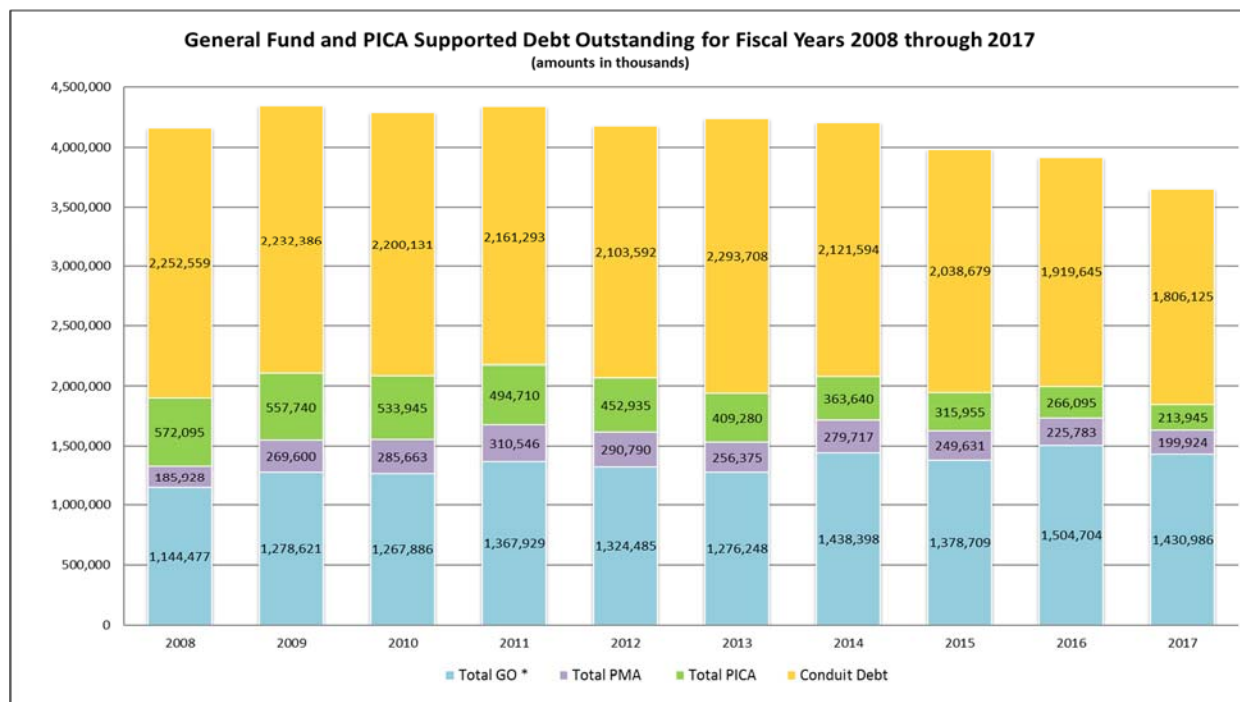
Bond ratings signify the ability of an issuer to meet its financial obligations in a timely fashion. As of February 23, 2018, the City's bond ratings are:

Bond Type	Moody's Investor Service	Standard & Poor's Corporation	Fitch IBCA
General Obligation Bonds	A2	A+	A-
Water Revenue Bonds	A1	A+	A+
Aviation Revenue Bonds	A2	A	A

Over the last decade, the changes in the City's bond ratings have demonstrated a gradual improvement. The following chart shows the City's 10-year history as of June 30th.

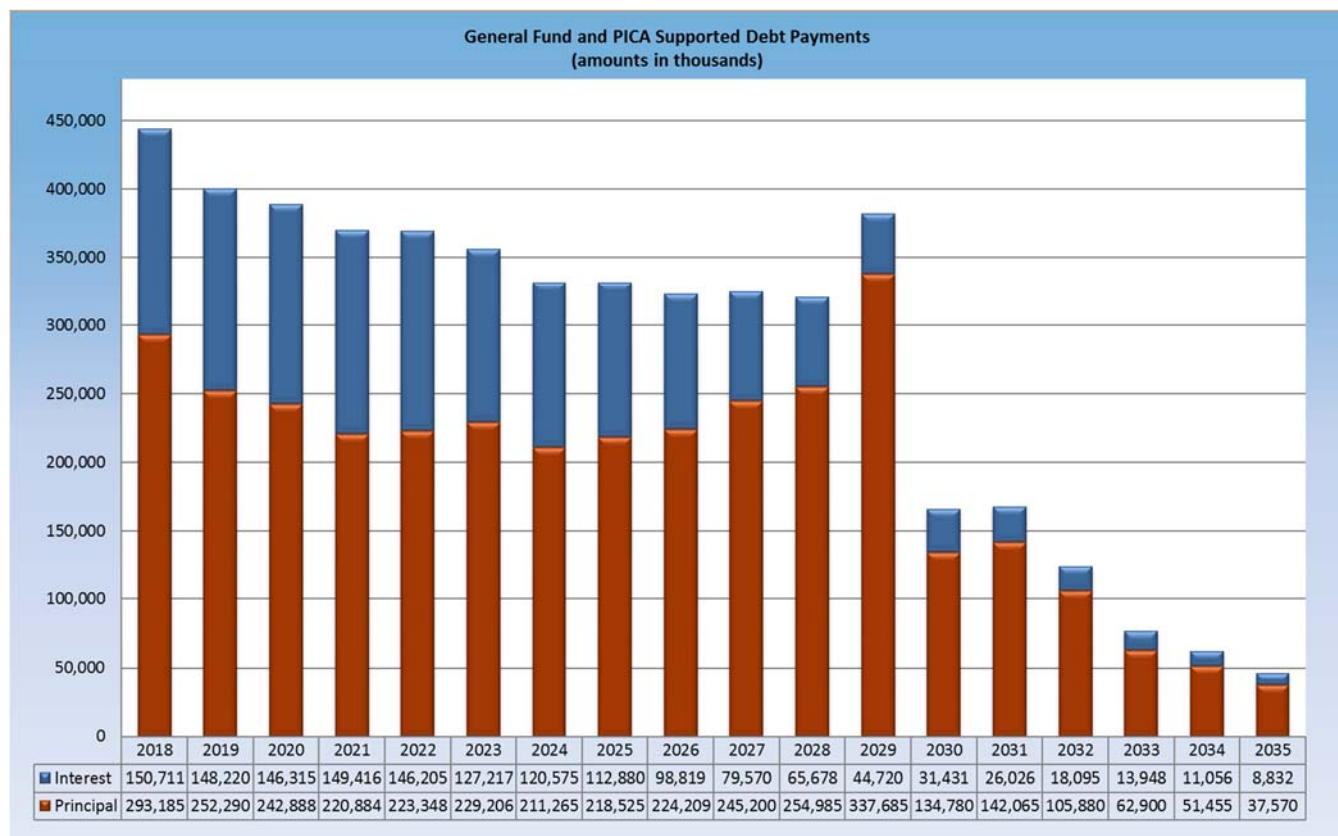
City of Philadelphia's General Obligation Bond Ratings			
Fiscal Year End	Moody's Investor Service	Standard & Poor's Corporation	Fitch IBCA
2017	A2	A+	A-
2016	A2	A+	A-
2015	A2	A+	A-
2014	A2	A+	A-
2013	A2	A-	A-
2012	A2	BBB+	A-
2011	A2	BBB	A-
2010	A1	BBB	A-
2009	Baa1	BBB	BBB+
2008	Baa1	BBB	BBB+

The chart below illustrates the 10-year history of General Fund-Supported debt outstanding, comprised of Conduit debt, General Obligation, PMA, and PICA bonds. Conduit debt includes Philadelphia Authority for Industrial Development (PAID) and Redevelopment Authority (RDA) bonds.



*The total GO debt outstanding excludes \$0.7 million of self-sustaining debt for 2017

It is also important to understand the City's future principal and interest obligations based on the current debt outstanding. The following chart illustrates the future debt service payments as of June 30, 2017. General Fund-Supported debt represents General Obligation, Philadelphia Authority for Industrial Development (PAID), Redevelopment Authority (RDA), Philadelphia Intergovernmental Cooperation Authority (PICA), and Philadelphia Municipal Authority (PMA) bond issues. The principal payments in fiscal year 2029 include \$254.4 million of PAID bonds, \$15.4 million of RDA bonds, \$2.1 million of PMA bonds, and \$65.7 million of General Obligation bonds.



Refer to Exhibit A-9a

The issuance of debt is the primary method of financing the City's capital projects. As such, the City has and will continue to improve its debt management practices to maintain its financial integrity, flexibility, and credit strength.

Respectfully submitted,

ROB DUBOW
Director of Finance

Part A

Bonded Indebtedness

and

Other Long-Term Obligations

City of Philadelphia
Statement of Outstanding Bonds and Other Long Term Obligations
By Major Purpose
June 30, 2017

Exhibit A-1

Amounts in thousands of USD

	Total Debt and L-T Obligations	General Fund & PICA Supported Debt
<u>City General Obligation Debt</u>		
Transit	65,176	65,176
Streets and Sanitation	288,998	288,998
Municipal Buildings	572,158	572,158
Recreation, Parks, and Museums	328,888	328,888
Economic and Community Development	174,134	174,134
Harbor Improvements	1,629	1,629
Broad Ridge Locust Subway	574	-
Hospitals Tri Institutional Laundry	48	-
Vet Stadium	100	3
Total GO Bond Payable (Exhibit A-9)	1,431,705	1,430,986
<u>City Revenue Bonds</u>		
Water and Sewer Revenue Bonds	1,996,916	-
Aviation Revenue Bonds	1,186,465	-
Total City Revenue Bonds	3,183,381	-
<u>PGW Revenue Bonds</u>		
Philadelphia Gas Works Revenue Bonds	834,850	-
Total Revenue Bonds Payable (Exhibit A-5)	4,018,231	-
Total City GO and Revenue (Exhibit A-3)	5,449,936	1,430,986
<u>Other Long-Term Obligations Payable</u>		
<u>Blended Component Units Bonds & Lease Payable</u>		
PMA - Buildings	195,495	195,495
PMA - Equipment Lease	4,429	4,429
PICA - Financial Assistance	213,945	213,945
Total Blended Component Unit Bonds & Lease Payable	413,869	413,869
<u>Conduit Debt</u>		
PAID - Library	5,570	5,570
PAID - Cultural Corridors	89,205	89,205
RDA - Neighborhood Transformation Initiative	174,670	174,670
PAID - Pension obligation bonds Series 1999	927,200	927,200
PAID - Pension obligation refunding bonds Series 2012	299,805	299,805
PAID - Stadiums	262,830	262,830
PAID - One Parkway (Building)	32,165	32,165
PAID - School District	14,680	14,680
Total Conduit Debt	1,806,125	1,806,125
Total Bonded Debt	7,669,930	3,650,980
<u>Non-Bond related Other Long-Term Obligations Payable</u>		
Net Pension Liability	6,138,629	5,476,918
OPEB Obligation	323,193	323,193
Other Long-Term Obligations	616,973	562,527
Total Other Long-Term Obligations Payable (Exhibit A-4a)	7,078,795	6,362,638
<u>TOTAL BONDED DEBT & OTHER LONG-TERM DEBT</u>	14,748,725	10,013,618

City of Philadelphia
Statement of Long-Term Debt and Interest Payable
For the Period July 1, 2016 to June 30, 2017

Exhibit A-2

Amounts in thousands of USD

Amount Available and to be Provided for Payment of Long-Term Debt - Principal and Interest

Bond Principal:		
Amount Available in Sinking Fund Reserves for Revenue Bonds (Notes 1 & 2)	382,515	
Amount of Principal to be Provided in Future Years (Exhibit A-5)	<u>5,067,421</u>	5,449,936
Other Long-Term Obligations Principal:		
Amount of Principal to be Provided in Future Years		9,298,789
Bond Interest:		
Amount Available in Sinking Funds for General Obligation Bonds (Exhibit B-1) (Note 2)	355	
Amount Available in Sinking Funds for Revenue Bonds (Exhibit B-4) (Note 2)	1,057	
Amount of Interest to be Provided in Future Years	<u>2,877,521</u>	2,878,933
Other Long-Term Obligations Interest:		
Amount of Interest to be Provided in Future Years		<u>891,568</u>
Total Amount Available and to be Provided for Payment of Long-Term Debt - Principal and Interest		<u>18,519,226</u>

Principal and Interest Payable in Future Years

Bonds Payable in Future Years:		
General Obligation Serial Bonds Payable	370,770	
General Obligation Term Bonds Payable	59,860	
General Obligation Refunding Bonds Payable	<u>1,001,075</u>	1,431,705
Revenue Serial Bonds Payable	2,301,030	
Revenue Term Bonds Payable	<u>1,717,201</u>	4,018,231
Total Bonds Payable (Exhibit A-5)		5,449,936
Other Long-Term Obligations Payable (Exhibit A-4a)		9,298,789
Interest Payable in Future Years:		
General Obligation Bonds	676,544	
Revenue Bonds	2,202,389	
Interest Payable on Other Long-Term Obligations	<u>891,568</u>	3,770,501
Total Principal and Interest Payable in Future Years		<u>18,519,226</u>

City of Philadelphia
Analysis of Changes in Bonded Debt Outstanding
For the Period July 1, 2016 to June 30, 2017

Exhibit A-3

Amounts in thousands of USD

	General Fund	Water Fund	Aviation Fund	Gas Works Fund	Total
Bonded Debt Outstanding - July 1, 2016	<u>1,505,575</u>	<u>1,860,324</u>	<u>1,124,705</u>	<u>915,175</u>	<u>5,405,779</u>
Increases:					
Par Value of Bonds Issued:					
General Obligation	262,865	-	-	-	262,865
Revenue (Notes 5 and 6)	<u>-</u>	<u>478,790</u>	<u>125,000</u>	<u>312,425</u>	<u>916,215</u>
<u>Total Increases</u>	<u>262,865</u>	<u>478,790</u>	<u>125,000</u>	<u>312,425</u>	<u>1,179,080</u>
Decreases:					
Matured Bonds:					
General Obligation (Note 10)	67,890	-	-	-	67,890
Revenue (Notes 11)	-	125,783	63,240	41,195	230,218
General Obligation Refunded	268,845	-	-	-	268,845
Revenue Refunded (Note 5)	<u>-</u>	<u>216,415</u>	<u>-</u>	<u>351,555</u>	<u>567,970</u>
<u>Total Decreases</u>	<u>336,735</u>	<u>342,198</u>	<u>63,240</u>	<u>392,750</u>	<u>1,134,923</u>
Total Debt Outstanding - June 30, 2017 (Exhibit A-5)	<u><u>1,431,705</u></u>	<u><u>1,996,916</u></u>	<u><u>1,186,465</u></u>	<u><u>834,850</u></u>	<u><u>5,449,936</u></u>

City of Philadelphia
Analysis of Changes in Bonds and Other Long-Term Obligations
For the Period July 1, 2016 to June 30, 2017

Exhibit A-4

Amounts in millions of USD

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Retirements & Transfers</u>	<u>Ending Balance</u>	<u>Due Within One Year</u>
Governmental Activities					
Bonds Payable					
General Obligation	1,505.6	262.8	(336.7)	1,431.7	70.8
Philadelphia Municipal Authority (PMA)	217.1	83.2	(104.8)	195.5	28.7
PMA Lease	8.7	-	(4.3)	4.4	4.4
Philadelphia Intergovernmental Cooperation Authority (PICA)	266.0	-	(52.1)	213.9	45.4
Total Bonds Payable	<u>1,997.4</u>	<u>346</u>	<u>(497.9)</u>	<u>1,845.5</u>	<u>149.3</u>
Obligations under Lease & Service Agreements					
Pension Service agreement	997.5	34.7	(104.9)	927.3	104.9
Neighborhood Transformation	182.4	-	(7.7)	174.7	8.1
One Parkway	34.6	-	(2.4)	32.2	2.6
Sports Stadiums	276.5	-	(13.7)	262.8	14.1
Library	6.2	-	(0.6)	5.6	0.6
PAID cultural Corridor bonds	93.6	-	(4.4)	89.2	4.2
City Service agreement	299.8	-	-	299.8	-
City Service agreement PAID School Dist.	29.1	-	(14.4)	14.7	14.7
Total Lease and Service Agreements	<u>1,919.7</u>	<u>34.7</u>	<u>(148.1)</u>	<u>1,806.3</u>	<u>149.2</u>
Total Bonds and Lease and Service Agreements Payable	<u>3,917.1</u>	<u>380.7</u>	<u>(646.0)</u>	<u>3,651.8</u>	<u>298.5</u>
Non-Bond Related Debt					
Medical and Indemnity Claims	70.4	169.6	(153.1)	86.9	28.4
Workmen's Compensation Claims	244.3	60.1	(61.9)	242.5	-
Termination Compensation	243.7	9.4	(19.9)	233.2	23.3
	<u>558.4</u>	<u>239.1</u>	<u>(234.9)</u>	<u>562.6</u>	<u>51.7</u>
Net Pension Liability	5,611.8	-	(134.8)	5,477.0	-
OPEB Obligation	296.5	26.7	-	323.2	-
Governmental activity Long-Term Liabilities	<u>10,383.8</u>	<u>646.5</u>	<u>(1,015.7)</u>	<u>10,014.6</u>	<u>350.2</u>
Business-type Activities:					
Revenue Bonds Payable					
Water and Wastewater	1,860.3	478.8	(342.2)	1,996.9	129.9
Aviation	1,124.7	125.0	(63.2)	1,186.5	65.6
Total bonds payable	<u>2,985.0</u>	<u>603.8</u>	<u>(405.4)</u>	<u>3,183.4</u>	<u>195.5</u>
Non-Bond Related Debt					
Medical and Indemnity Claims	9.0	7.1	(8.6)	7.5	-
Worker's Compensation claims	27.1	5.3	(5.5)	26.9	-
Termination Compensation Payable	19.3	3.6	(3.2)	19.7	-
Arbitrage	-	-	-	-	-
	<u>55.4</u>	<u>16.0</u>	<u>(17.3)</u>	<u>54.1</u>	<u>-</u>
Net Pension Liability	678.6	-	(16.9)	661.7	-
Business-type Activity Long-Term Liabilities	<u>3,719.0</u>	<u>619.8</u>	<u>(439.6)</u>	<u>3,899.2</u>	<u>195.5</u>



City of Philadelphia
Analysis of Changes in Other Long-Term Obligations
For the Period July 1, 2016 to June 30, 2017

Exhibit A-4a

	<i>Amounts in thousands of USD</i>				
	General Fund	Water Fund	Aviation Fund	Other Funds	Total All Funds
<u>Balance Outstanding - July 1, 2016</u>					
Worker's Compensation	244,321	21,717	5,429	-	271,467
Termination Compensation	243,696	10,792	8,488	231	263,207
Medical and Indemnity Claims	70,365	6,484	2,007	-	78,856
Arbitrage Payable	-	-	-	-	-
Net Pension Liability	5,611,853	455,841	222,761	-	6,290,455
OPEB	296,474	-	-	-	296,474
Non bond related debt	6,466,709	494,834	238,685	231	7,200,459
Pension Service Agreement Series 1999	997,414	-	-	-	997,414
Pension Refunding Service Agreement	299,805	-	-	-	299,805
One Parkway	34,645	-	-	-	34,645
Philadelphia Municipal Authority	217,080	-	-	-	217,080
PMA Equipment Leases	8,693	-	-	-	8,693
Neighborhood Transformation	182,415	-	-	-	182,415
Sports Stadiums	276,515	-	-	-	276,515
Central Library Project	6,160	-	-	-	6,160
Cultural Corridor Project	93,585	-	-	-	93,585
PAID School District	29,105	-	-	-	29,105
PICA	266,095	-	-	-	266,095
Bond related other debt	2,411,512	-	-	-	2,411,512
<u>Increases:</u>					
Worker's Compensation	60,068	4,343	939	-	65,350
Termination Compensation	9,426	2,653	918	56	13,053
Medical and Indemnity Claims	169,586	6,566	1,093	-	177,245
Arbitrage Payable	-	-	-	-	-
Net Pension Liability	-	-	-	-	-
OPEB	26,719	-	-	-	26,719
Pension Service Agreement Series 1999	34,726	-	-	-	34,726
Pension Refunding Service Agreement	-	-	-	-	-
One Parkway	-	-	-	-	-
Philadelphia Municipal Authority	83,220	-	-	-	83,220
PMA Equipment Lease Payments	-	-	-	-	-
Neighborhood Transformation (Note 9)	-	-	-	-	-
Sports Stadiums (Note 7)	-	-	-	-	-
Central Library Project	-	-	-	-	-
Cultural Corridor Project	-	-	-	-	-
PAID School District (Note 8)	-	-	-	-	-
Total Increases	383,745	13,562	2,950	56	400,313

Decreases:

Worker's Compensation	61,925	4,508	980	-	67,413
Termination Compensation	19,910	1,992	1,170	20	23,092
Medical and Indemnity Claims	153,100	7,000	1,600	-	161,700
Arbitrage Payable	-	-	-	-	-
Net Pension Liability	134,935	11,608	5,283	-	151,826
OPEB	-	-	-	-	-
Pension Service Agreement Series 1999	104,940	-	-	-	104,940
Pension Refunding Service Agreement	-	-	-	-	-
One Parkway	2,480	-	-	-	2,480
Philadelphia Municipal Authority	104,805	-	-	-	104,805
PMA Equipment Lease Payments	4,264	-	-	-	4,264
Neighborhood Transformation	7,745	-	-	-	7,745
Sports Stadiums	13,685	-	-	-	13,685
Central Library Project	590	-	-	-	590
Cultural Corridor Project	4,380	-	-	-	4,380
PAID School District	14,425	-	-	-	14,425
PICA	52,150	-	-	-	52,150
Total Decreases	679,334	25,108	9,033	20	713,495

Balance Outstanding - June 30, 2017

Worker's Compensation	242,464	21,552	5,388	-	269,404
Termination Compensation	233,212	11,453	8,236	267	253,168
Medical and Indemnity Claims	86,851	6,050	1,500	-	94,401
Arbitrage Payable	-	-	-	-	-
Net Pension Liability	5,476,918	444,233	217,478	-	6,138,629
OPEB	323,193	-	-	-	323,193
Total non bond related debt	6,362,638	483,288	232,602	267	7,078,795
Pension Service Agreement Series 1999	927,200	-	-	-	927,200
Pension Refunding Service Agreement	299,805	-	-	-	299,805
One Parkway	32,165	-	-	-	32,165
Philadelphia Municipal Authority	195,495	-	-	-	195,495
PMA Equipment Leases	4,429	-	-	-	4,429
Neighborhood Transformation	174,670	-	-	-	174,670
Sports Stadiums	262,830	-	-	-	262,830
Central Library Project	5,570	-	-	-	5,570
Cultural Corridor Project	89,205	-	-	-	89,205
PAID School District	14,680	-	-	-	14,680
PICA	213,945	-	-	-	213,945
Total Bond related other debt	2,219,994	-	-	-	2,219,994
Total other long term obligations	8,582,632	483,288	232,602	267	9,298,789

City of Philadelphia
Summary of Bonded Debt Outstanding
June 30, 2017

Exhibit A-5

Amounts in thousands of USD

Funds Responsible for Payment of Debt Service

	<u>General Fund</u>	<u>Water Fund</u>	<u>Aviation Fund</u>	<u>Gas Works Fund</u>	<u>Total</u>
General Obligation Serial Bonds	370,770	-	-	-	370,770
General Obligation Term Bonds	59,860	-	-	-	59,860
General Obligation Refunding Bonds					
Serial	827,640	-	-	-	827,640
Term	173,435	-	-	-	173,435
<u>Total General Obligation Bonds</u>	<u>1,431,705</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,431,705</u>
Revenue Serial Bonds	-	916,305	745,405	639,320	2,301,030
Revenue Term Bonds	-	1,080,611	441,060	195,530	1,717,201
<u>Total Revenue Bonds</u>	<u>-</u>	<u>1,996,916</u>	<u>1,186,465</u>	<u>834,850</u>	<u>4,018,231</u>
 Total Bonded Debt Outstanding (Exhibit A-3)	 <u>1,431,705</u>	 <u>1,996,916</u>	 <u>1,186,465</u>	 <u>834,850</u>	 <u>5,449,936</u>

City of Philadelphia
Summary of Bonded Debt Outstanding and Sinking Fund Assets
June 30, 2016

Exhibit A-6

Amounts in thousands of USD

Funds Responsible for Payment of Debt Service

	<u>General Fund</u>	<u>Water Fund</u>	<u>Aviation Fund</u>	<u>Gas Works Fund</u>	<u>Total</u>
General Obligation Bonds					
Authorized by Electorate:					
Serial Bonds Outstanding	370,770	-	-	-	370,770
Term Bonds Outstanding	59,860	-	-	-	59,860
Serial Refunding Bonds Outstanding	801,277	-	-	-	801,277
Term Refunding Bonds Outstanding	<u>163,028</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>163,028</u>
Total Authorized by Electorate	1,394,935	-	-	-	1,394,935
Applicable Sinking Fund Assets	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Net Amount Outstanding</u>	<u>1,394,935</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,394,935</u>
Authorized by Council:					
Serial Refunding Bonds Outstanding	26,363	-	-	-	26,363
Term Refunding Bonds Outstanding	<u>10,407</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>10,407</u>
Total Authorized By Council	36,770	-	-	-	36,770
Applicable Sinking Fund Assets	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Net Amount Outstanding</u>	<u>36,770</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>36,770</u>
<u>Net General Obligation Bonds Outstanding</u>	<u>1,431,705</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,431,705</u>
Revenue Bonds					
Authorized by Council:					
Serial Bonds Outstanding	-	916,305	745,405	639,320	2,301,030
Term Bonds Outstanding	<u>-</u>	<u>1,080,611</u>	<u>441,060</u>	<u>195,530</u>	<u>1,717,201</u>
Total Authorized By Council	-	1,996,916	1,186,465	834,850	4,018,231
Net Assets of Debt Service Reserve Fund (Note 1)	<u>-</u>	<u>218,723</u>	<u>76,769</u>	<u>87,023</u>	<u>382,515</u>
<u>Net Revenue Bonds Outstanding</u>	<u>-</u>	<u>1,778,193</u>	<u>1,109,696</u>	<u>747,827</u>	<u>3,635,716</u>
Total Net Bonded Debt Outstanding	<u>1,431,705</u>	<u>1,778,193</u>	<u>1,109,696</u>	<u>747,827</u>	<u>5,067,421</u>

City of Philadelphia
City Related Schedule of Debt Incurring Capacity
June 30, 2017

Exhibit A-7

Amounts in millions of USD

	Authorized		
	Issued and Outstanding	Unissued	Total
General Obligation Bonded Debt:			
Tax Supported	1,431.0	521.0	1,952.0
Self-Sustaining	0.7	352.6	353.3
<u>Total General Obligation Bonded Debt</u>	<u>1,431.7</u>	<u>873.6</u>	<u>2,305.3</u>
 Total Net Deductions Authorized by Law			<u>353.3</u>
 Total Amount of Debt Applicable to Debt Limit			<u>1,952.0</u>
 Legal Debt Limit (Notes 1, 2, 3, 4, 5, 6, and 7 below)			<u>6,629.5</u>
 Legal Debt Margin (Section C note 17)			<u>4,677.5</u>

NOTES:

- (1) Refer to Purdon's Statutes 53 P.S. Sections 15721 - 727 - 728 - 761 - 763 and 781.
- (2) This statement does not reflect \$4,018.2 million of Revenue Bonds, which are secured by a pledge of Water and Sewer Revenues of (\$1,996.9 million), Airport revenues of (\$1,186.5 million), and Gas Works revenues of (\$834.9 million)
- (3) The legal limit is based on the Pennsylvania Constitution Article IX Section 12.
- (4) Calendar Years 2006 - 2012 assessed values were provided by OPA via The Department of Revenue
- (5) Calendar Year 2013/Tax Year 2014 assessed values were provided by OPA. The higher amount was due to the implementation of the AVI (Actual Value Initiative) in 2013
- (6) Beginning in 2014, the Finance Department began using Calendar Year assessed values to calculate the preceding 10 year average; prior to this change, the Tax Year assessed values was used.
- (7) In August of 1990, the City sold the Philadelphia Port Corporation to the Regional Port Authority (State Authority). Indebtedness authorized for the port related activities was considered self-sustaining. After the sale, the outstanding self sustaining debt was classified as tax supported.

Calendar Year of assessment	Tax Year of assessment	R.E. Assessments
2007	2008	12,901,810,390
2008	2009	13,307,070,680
2009	2010	13,102,186,291
2010	2011	13,522,847,116
2011	2012	13,602,484,741
2012	2013	13,755,670,566
2013	2014	107,209,023,547
2014	2015	106,062,882,977
2015	2016	98,268,051,621
2016	2017	99,343,238,214
	Ten Year Average	<u>49,107,526,614</u>
	Limit per Art. 9	13.50%
	Legal Debt Limit	6,629,516,093

City of Philadelphia
Schedule of Revenue Bond Rate Covenant Compliance
For the Fiscal Years 2008 through 2017

Exhibit A-8

Amounts in millions of USD

No.		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<u>Water and Sewer Revenue Bonds</u>											
1	Total Revenue and Beginning Fund Balance	597.8	527.5	566.7	589.7	613.3	638.4	680.4	676.8	678.9	720.6
2	Net Operating Expenses	334.7	342.6	334.0	357.7	375.1	399.3	410.8	402.9	408.6	455.7
3	Transfer To (From) Rate Stabilization Fund	(9.8)	(34.7)	(2.7)	10.9	8.5	(4.7)	22.9	21.4	(1.6)	(4.6)
4	Net Revenues	272.9	219.6	235.4	221.1	229.7	243.8	246.7	252.5	271.9	269.5
Debt Service:											
5	Revenue Bonds Outstanding	173.8	183.0	195.7	184.3	191.4	201.0	201.7	205.3	219.3	206.1
	Transfer to Escrow Account to Redeem Bonds	-	-	-	-	-	-	-	-	-	11.0
6	Other Adjustments	-	-	-	-	-	-	-	-	-	(1.2)
7	Pennvest Loan	1.2	1.2	1.2	1.2	1.0	-	-	-	-	-
8	Total Debt Service	175.0	184.2	196.9	185.5	192.4	201.0	201.7	205.3	219.3	215.9
9	Net Revenue after Debt Service	97.9	35.4	38.5	35.6	37.3	42.8	45.0	47.2	52.6	53.6
10	Transfer to General Fund	5.0	4.2	2.3	-	1.1	0.6	-	-	-	-
11	Transfer to Capital Fund	16.9	17.1	17.3	18.1	18.9	19.4	20.2	20.7	21.5	22.3
12	Transfer to Residual Fund	76.0	14.1	18.9	17.5	17.3	22.8	24.8	26.5	31.1	31.3
13	Ending Fund Balance	-	-	-	-	-	-	-	-	-	-
Debt Service Coverage:											
	Coverage A (Line 4/Line 5)	1.57	1.20	1.20	1.20	1.20	1.21	1.22	1.23	1.24	1.31
	Coverage B (Line 4/(Line 8 + Line 11))	1.42	1.09	1.10	1.09	1.09	1.11	1.11	1.12	1.13	1.18
<u>Airport Revenue Bonds</u>											
1	Fund Balance	42.6	61.4	55.1	77.6	65.9	69.3	66.5	66.3	71.2	87.9
2	Project Revenues	250.5	255.3	246.9	260.8	269.6	291.8	316.9	322.8	341.2	362.0
3	Passenger Facility Charges	32.9	32.9	33.1	32.4	31.6	31.2	31.2	31.2	31.2	33.7
4	Total Fund Balance and Revenue	326.0	349.6	335.1	370.8	367.1	392.3	414.6	420.3	443.6	483.6
5	Net Operating Expenses	99.8	99.5	102.9	98.1	99.0	110.7	117.3	126.0	132.1	136.5
6	Interdepartmental Charges	89.1	89.0	80.7	88.6	92.7	101.9	103.9	108.7	106.8	116.7
7	Total Expenses	188.9	188.5	183.6	186.7	191.7	212.6	221.2	234.7	238.9	253.2
Available for Debt Service:											
8	Revenue Bonds (Line 4-Line 5)	226.2	250.1	232.2	272.7	268.1	281.6	297.3	294.3	311.5	347.1
9	All Bonds (Line 4-Line 7)	137.1	161.1	151.5	184.1	175.4	179.7	193.4	185.6	204.7	230.4
Debt Service:											
10	Revenue Bonds	84.4	95.6	94.3	102.4	103.0	109.8	125.4	125.2	120.6	122.6
11	General Obligation Bonds	-	-	-	-	-	-	-	-	-	-
12	Total Debt Service	84.4	95.6	94.3	102.4	103.0	109.8	125.4	125.2	120.6	122.6
Debt Service Coverage:											
	Revenue Bonds Only - Test "A" (Line 8/Line 10)	2.68	2.62	2.46	2.66	2.60	2.56	2.37	2.35	2.58	2.83
	Total Debt Service - Test "B" (Line 9/Line 12)	1.62	1.69	1.61	1.80	1.70	1.64	1.54	1.48	1.69	1.88

Note:

The rate covenant of the Aviation issues permit inclusion of Fund Balance at the beginning of the period with project revenues for the period to determine adequacy of coverage.

Coverage "A" requires that Net Revenues equal at least 120% of the Debt Service Requirements while Coverage "B" requires that Net Revenues equal at least 100% of the Debt Service Requirements plus Required Capital Account Transfers. Test "A" requires that Project Resources be equal to Net Operating Expenses plus 150% of Revenue Bond Debt Service for the year. Test "B" requires Project Resources be equal to Operating Expenses for the year plus all debt service requirements for the year except any General Obligation Debt Service not applicable to the project.

Amounts in the above statement have been extracted from reports submitted to the respective Fiscal Agents in accordance with the reporting requirements of the General Ordinance and Supplemental Ordinance relative to rate covenants. Water and Sewer Coverage is calculated on the modified accrual basis; Aviation Fund on the accrual basis. Prior to FY2008 Airport Revenues and Expenses were reduced by amounts applicable to the Outside Terminal Area and the Overseas Terminal as prescribed by the indenture.

Prior to FY2015, Commitments Cancelled were included as part of Total Revenue and Beginning Fund Balance. Beginning in FY2015 these amounts were reclassified as contra-expenses and reported under Net Operating Expenses.

City of Philadelphia
City Related Annual Debt Service on Long-Term Debt
June 30, 2017

Exhibit A-9

Amounts in millions of USD

Fiscal Year	General Obligation Bonds						Revenue Bonds								
	Tax-Supported			Self-Sustaining			Total			Water and Sewer			Gas Works		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2018	70.7	69.5	140.2	0.1	-	0.1	70.8	69.5	140.3	129.8	89.1	218.9	53.5	37.4	90.9
2019	74.3	65.9	140.2	0.1	-	0.1	74.4	65.9	140.3	103.9	84.7	188.6	48.8	35.1	83.9
2020	76.4	62.3	138.7	0.2	-	0.2	76.6	62.3	138.9	96.8	79.9	176.7	49.5	32.7	82.2
2021	69.9	58.7	128.6	0.1	-	0.1	70.0	58.7	128.7	80.5	76.0	156.5	45.6	30.4	76.0
2022	72.9	55.2	128.1	0.2	-	0.2	73.1	55.2	128.3	73.1	72.4	145.5	50.9	28.0	78.9
2023	77.8	51.5	129.3	-	-	-	77.8	51.5	129.3	77.1	69.2	146.3	51.8	25.5	77.3
2024	81.7	47.5	129.2	-	-	-	81.7	47.5	129.2	56.1	65.9	122.0	35.2	23.3	58.5
2025	85.7	43.2	128.9	-	-	-	85.7	43.2	128.9	58.6	63.6	122.2	55.5	21.1	76.6
2026	82.4	39.0	121.4	-	-	-	82.4	39.0	121.4	58.9	61.1	120.0	49.0	18.7	67.7
2027	86.4	34.7	121.1	-	-	-	86.4	34.7	121.1	61.2	58.6	119.8	50.9	16.4	67.3
2028	91.1	30.2	121.3	-	-	-	91.1	30.2	121.3	48.2	56.4	104.6	50.1	14.1	64.2
2029	65.7	26.3	92.0	-	-	-	65.7	26.3	92.0	64.3	54.0	118.3	52.5	11.8	64.3
2030	81.5	22.6	104.1	-	-	-	81.5	22.6	104.1	67.3	51.0	118.3	24.1	10.0	34.1
2031	86.3	18.4	104.7	-	-	-	86.3	18.4	104.7	70.3	48.0	118.3	25.3	8.8	34.1
2032	90.7	14.0	104.7	-	-	-	90.7	14.0	104.7	71.5	45.0	116.5	26.6	7.5	34.1
2033	55.6	10.4	66.0	-	-	-	55.6	10.4	66.0	45.2	42.6	87.8	27.9	6.1	34.0
2034	43.8	7.8	51.6	-	-	-	43.8	7.8	51.6	47.3	40.4	87.7	20.9	4.9	25.8
2035	29.5	5.9	35.4	-	-	-	29.5	5.9	35.4	49.5	38.2	87.7	44.1	3.9	48.0
2036	31.0	4.5	35.5	-	-	-	31.0	4.5	35.5	51.7	36.0	87.7	9.6	3.3	12.9
2037	17.3	3.3	20.6	-	-	-	17.3	3.3	20.6	52.4	33.5	85.9	17.7	2.7	20.4
2038	17.8	2.4	20.2	-	-	-	17.8	2.4	20.2	55.0	30.9	85.9	18.5	1.8	20.3
2039	18.7	1.5	20.2	-	-	-	18.7	1.5	20.2	57.8	28.1	85.9	8.5	1.2	9.7
2040	7.6	0.9	8.5	-	-	-	7.6	0.9	8.5	60.8	25.1	85.9	9.0	0.7	9.7
2041	7.9	0.6	8.5	-	-	-	7.9	0.6	8.5	69.0	22.3	91.3	9.4	0.2	9.6
2042	8.3	0.2	8.5	-	-	-	8.3	0.2	8.5	64.8	18.5	83.3	-	-	-
2043	-	-	-	-	-	-	-	-	-	68.1	15.2	83.3	-	-	-
2044	-	-	-	-	-	-	-	-	-	53.2	11.7	64.9	-	-	-
2045	-	-	-	-	-	-	-	-	-	44.9	9.2	54.1	-	-	-
2046	-	-	-	-	-	-	-	-	-	47.2	6.9	54.1	-	-	-
2047	-	-	-	-	-	-	-	-	-	13.7	5.4	19.1	-	-	-
2048	-	-	-	-	-	-	-	-	-	14.4	4.7	19.1	-	-	-
2049-2053	-	-	-	-	-	-	-	-	-	84.3	11.1	95.4	-	-	-
Total bond related debt (Notes 13 & 14)	1,431.0	676.5	2,107.5	0.7	-	0.7	1,431.7	676.5	2,108.2	1,996.9	1,354.7	3,351.6	834.9	345.6	1,180.5
Total Non bond related debt															
Available City Sinking Fund Assets	-	0.3	0.3	-	-	-	-	0.3	0.3	218.7	0.8	219.5	87.0	-	87.0
(Notes 1, & 2, and 15)															
Net Debt	1,431.0	676.2	2,107.2	0.7	-	0.7	1,431.7	676.2	2,107.9	1,778.2	1,353.9	3,132.1	747.9	345.6	1,093.5

City of Philadelphia
City Related Annual Debt Service on Long-Term Debt
June 30, 2017

Exhibit A-9

Amounts in millions of USD

Fiscal Year	Revenue Bonds				Total General Obligation Bonds and Revenue Bonds				Conduit Debt (includes PMA)		
	Aviation		Total		Principal		Interest		Principal	Interest	Total
	Principal	Interest	Total	Total	Principal	Interest	Total	Total			
2018	65.6	56.2	121.8	248.9	182.7	431.6	319.7	252.2	177.0	83.0	260.0
2019	61.8	52.6	114.4	214.5	172.4	386.9	288.9	238.3	139.1	87.5	226.6
2020	65.1	49.4	114.5	211.4	162.0	373.4	288.0	224.3	125.9	91.4	217.3
2021	68.3	46.1	114.4	194.4	152.5	346.9	284.4	211.2	118.1	87.3	205.4
2022	187.1	42.5	229.6	311.1	142.9	454.0	384.2	198.1	116.1	89.2	205.3
2023	72.5	36.2	108.7	201.4	130.9	332.3	279.2	182.4	200.2	75.7	275.9
2024	75.9	32.7	108.6	167.2	121.9	289.1	248.9	169.4	214.1	74.0	288.1
2025	79.4	29.1	108.5	193.5	113.8	307.3	279.2	157.0	225.8	70.5	296.3
2026	67.8	25.5	93.3	175.7	105.3	281.0	258.1	144.3	339.5	60.6	400.1
2027	71.1	22.2	93.3	183.2	97.2	280.4	269.6	131.9	51.7	45.4	97.1
2028	67.5	18.6	86.1	165.8	89.1	254.9	256.9	119.3	50.0	36.0	86.0
2029	29.3	15.2	44.5	146.1	81.0	227.1	211.8	107.3	47.0	18.7	65.7
2030	27.0	13.7	40.7	118.4	74.7	193.1	199.9	97.3	53.3	9.0	62.3
2031	28.4	12.3	40.7	124.0	69.1	193.1	210.3	87.5	55.8	6.2	62.0
2032	27.2	10.9	38.1	125.3	63.4	188.7	216.0	77.4	15.2	4.1	19.3
2033	28.5	9.7	38.2	101.6	58.4	160.0	157.2	68.8	7.4	3.5	10.9
2034	29.9	8.2	38.1	98.1	53.5	151.6	141.9	61.3	7.7	3.2	10.9
2035	31.4	6.7	38.1	125.0	48.8	173.8	154.5	54.7	8.0	2.8	10.8
2036	25.3	5.1	30.4	86.6	44.4	131.0	117.6	48.9	8.4	2.5	10.9
2037	26.6	3.9	30.5	96.7	40.1	136.8	114.0	43.4	8.8	2.1	10.9
2038	16.1	2.6	18.7	89.6	35.3	124.9	107.4	37.7	9.2	1.7	10.9
2039	16.9	1.7	18.6	83.2	31.0	114.2	101.9	32.5	9.7	1.2	10.9
2040	17.8	0.9	18.7	87.6	26.7	114.3	95.2	27.6	3.3	0.7	4.0
2041	-	-	-	78.4	22.5	100.9	86.3	23.1	3.5	0.6	4.1
2042	-	-	-	64.8	18.5	83.3	73.1	18.7	3.6	0.5	4.1
2043	-	-	-	68.1	15.2	83.3	68.1	15.2	3.8	0.3	4.1
2044	-	-	-	53.2	11.7	64.9	53.2	11.7	3.9	0.1	4.0
2045	-	-	-	44.9	9.2	54.1	44.9	9.2	-	-	-
2046	-	-	-	47.2	6.9	54.1	47.2	6.9	-	-	-
2047	-	-	-	13.7	5.4	19.1	13.7	5.4	-	-	-
2048	-	-	-	14.4	4.7	19.1	14.4	4.7	-	-	-
2049-2053	-	-	-	84.3	11.1	95.4	84.3	11.1	-	-	-
Total bond related debt (Notes 13 & 14)	1,186.5	502.0	1,688.5	4,018.3	2,202.3	6,220.6	5,450.0	2,878.8	2,006.1	857.8	2,863.9
Total Non bond related debt											
Available City Sinking Fund Assets	76.8	0.2	77.0	382.5	1.0	383.5	382.5	1.3	-	-	-
(Notes 1, & 2 and 15)											
Net Debt	1,109.7	501.8	1,611.5	3,635.8	2,201.3	5,837.1	5,067.5	2,877.5	2,006.1	857.8	2,863.9

City of Philadelphia **Exhibit A-9**
City Related Annual Debt Service on Long-Term Debt
June 30, 2017 **Amounts in millions of USD**

Fiscal Year	Pennsylvania Intergovernmental Cooperation Authority			Total Other Long-Term Obligations			Total Long-Term Debt		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2018	45.4	10.7	56.1	222.4	93.7	316.1	542.1	345.9	888.0
2019	38.8	8.4	47.2	177.9	95.9	273.8	466.8	334.2	801.0
2020	40.5	6.4	46.9	166.4	97.8	264.2	454.4	322.1	776.5
2021	32.9	4.4	37.3	151.0	91.7	242.7	415.4	302.9	718.3
2022	34.4	2.8	37.2	150.5	92.0	242.5	534.7	290.1	824.8
2023	21.9	1.1	23.0	222.1	76.8	298.9	501.3	259.2	760.5
2024	-	-	-	214.1	74.0	288.1	463.0	243.4	706.4
2025	-	-	-	225.8	70.5	296.3	505.0	227.5	732.5
2026	-	-	-	339.5	60.6	400.1	597.6	204.9	802.5
2027	-	-	-	51.7	45.4	97.1	321.3	177.3	498.6
2028	-	-	-	50.0	36.0	86.0	306.9	155.3	462.2
2029	-	-	-	47.0	18.7	65.7	258.8	126.0	384.8
2030	-	-	-	53.3	9.0	62.3	253.2	106.3	359.5
2031	-	-	-	55.8	6.2	62.0	266.1	93.7	359.8
2032	-	-	-	15.2	4.1	19.3	231.2	81.5	312.7
2033	-	-	-	7.4	3.5	10.9	164.6	72.3	236.9
2034	-	-	-	7.7	3.2	10.9	149.6	64.5	214.1
2035	-	-	-	8.0	2.8	10.8	162.5	57.5	220.0
2036	-	-	-	8.4	2.5	10.9	126.0	51.4	177.4
2037	-	-	-	8.8	2.1	10.9	122.8	45.5	168.3
2038	-	-	-	9.2	1.7	10.9	116.6	39.4	156.0
2039	-	-	-	9.7	1.2	10.9	111.6	33.7	145.3
2040	-	-	-	3.3	0.7	4.0	98.5	28.3	126.8
2041	-	-	-	3.5	0.6	4.1	89.8	23.7	113.5
2042	-	-	-	3.6	0.5	4.1	76.7	19.2	95.9
2043	-	-	-	3.8	0.3	4.1	71.9	15.5	87.4
2044	-	-	-	3.9	0.1	4.0	57.1	11.8	68.9
2045	-	-	-	-	-	-	44.9	9.2	54.1
2046	-	-	-	-	-	-	47.2	6.9	54.1
2047	-	-	-	-	-	-	13.7	5.4	19.1
2048	-	-	-	-	-	-	14.4	4.7	19.1
2049-2053	-	-	-	-	-	-	84.3	11.1	95.4
Total bond related debt (Notes 18 & 19)	213.9	33.8	247.7	2,220.0	891.6	3,111.6	7,670.0	3,770.4	11,440.4
Total Non bond related debt	-	-	-	7,078.8	-	7,078.8	7,078.8	-	7,078.8
Available City Sinking Fund Assets (Notes 1, 2 & 3)	-	-	-	-	-	-	382.5	1.3	383.8
Net Debt	213.9	33.8	247.7	9,298.8	891.6	10,190.4	14,366.3	3,769.1	18,135.4

City of Philadelphia
General Fund and PICA Supported Bonded Debt
June 30, 2017

Exhibit A-9a

Amounts in millions of USD

Fiscal Year	General Obligation Bonds			Conduit Debt (includes PMA)			Pennsylvania Intergovernmental Cooperation Authority			Total General Fund & PICA Supported Debt		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2018	70.7	69.5	140.2	177.0	83.0	260.0	45.4	10.7	56.1	293.1	163.2	456.3
2019	74.3	65.9	140.2	139.1	87.5	226.6	38.8	8.4	47.2	252.2	161.8	414.0
2020	76.4	62.3	138.7	125.9	91.4	217.3	40.5	6.4	46.9	242.8	160.1	402.9
2021	69.9	58.7	128.6	118.1	87.3	205.4	32.9	4.4	37.3	220.9	150.4	371.3
2022	72.9	55.2	128.1	116.1	89.2	205.3	34.4	2.8	37.2	223.4	147.2	370.6
2023	77.8	51.5	129.3	200.2	75.7	275.9	21.9	1.1	23.0	299.9	128.3	428.2
2024	81.7	47.5	129.2	214.1	74.0	288.1	-	-	-	295.8	121.5	417.3
2025	85.7	43.2	128.9	225.8	70.5	296.3	-	-	-	311.5	113.7	425.2
2026	82.4	39.0	121.4	339.5	60.6	400.1	-	-	-	421.9	99.6	521.5
2027	86.4	34.7	121.1	51.7	45.4	97.1	-	-	-	138.1	80.1	218.2
2028	91.1	30.2	121.3	50.0	36.0	86.0	-	-	-	141.1	66.2	207.3
2029	65.7	26.3	92.0	47.0	18.7	65.7	-	-	-	112.7	45.0	157.7
2030	81.5	22.6	104.1	53.3	9.0	62.3	-	-	-	134.8	31.6	166.4
2031	86.3	18.4	104.7	55.8	6.2	62.0	-	-	-	142.1	24.6	166.7
2032	90.7	14.0	104.7	15.2	4.1	19.3	-	-	-	105.9	18.1	124.0
2033	55.6	10.4	66.0	7.4	3.5	10.9	-	-	-	63.0	13.9	76.9
2034	43.8	7.8	51.6	7.7	3.2	10.9	-	-	-	51.5	11.0	62.5
2035	29.5	5.9	35.4	8.0	2.8	10.8	-	-	-	37.5	8.7	46.2
2036	31.0	4.5	35.5	8.4	2.5	10.9	-	-	-	39.4	7.0	46.4
2037	17.3	3.3	20.6	8.8	2.1	10.9	-	-	-	26.1	5.4	31.5
2038	17.8	2.4	20.2	9.2	1.7	10.9	-	-	-	27.0	4.1	31.1
2039	18.7	1.5	20.2	9.7	1.2	10.9	-	-	-	28.4	2.7	31.1
2040	7.6	0.9	8.5	3.3	0.7	4.0	-	-	-	10.9	1.6	12.5
2041	7.9	0.6	8.5	3.5	0.6	4.1	-	-	-	11.4	1.2	12.6
2042	8.3	0.2	8.5	3.6	0.5	4.1	-	-	-	11.9	0.7	12.6
2043	-	-	-	3.8	0.3	4.1	-	-	-	3.8	0.3	4.1
2044	-	-	-	3.9	0.1	4.0	-	-	-	3.9	0.1	4.0
2045	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,431.0	676.5	2,107.5	2,006.1	857.8	2,863.9	213.9	33.8	247.7	3,651.0	1,568.1	5,219.1
Available City Sinking Fund Assets	-	0.3	0.3	-	-	-	-	-	-	-	0.3	0.3
(Notes 1, 2, & 15)												
Net Debt	1,431.0	676.2	2,107.2	2,006.1	857.8	2,863.9	213.9	33.8	247.7	3,651.0	1,567.8	5,218.8

City of Philadelphia
Statement of Debt Outstanding by Interest Rate
June 30, 2017

Exhibit A-10

Amounts in thousands of USD

Interest Rate (%)	Debt Outstanding	Interest Rate (%)	Debt Outstanding	Interest Rate (%)	Debt Outstanding
1.193 *	134,634	4.100	1,385	5.000 *	2,672,205
2.729 *	162	4.125 *	4,050	5.000	802,000
2.797 *	125,000	4.125	4,510	5.125 *	50,005
3.000 *	12,990	4.200 *	2,205	5.125	28,135
3.000	925	4.250 *	73,860	5.250 *	256,805
3.125 *	6,110	4.250	18,380	5.250	291,710
3.250 *	1,415	4.300 *	3,400	5.300	3,190
3.250	-	4.375 *	1,960	5.375 *	16,055
3.375 *	1,565	4.400 *	1,250	5.375	7,315
3.500 *	4,060	4.500 *	26,805	5.450	4,085
3.600 *	-	4.500	25,475	5.500	24,700
3.750 *	9,300	4.625 *	19,470	5.750 *	8,080
3.750	525	4.750 *	64,910	5.750	-
4.000 *	172,310	4.750	13,860	5.875	-
4.000	72,040	4.875 *	2,350	6.000	31,280
4.100 *	12,385	4.875	2,190	6.500	-

* Denotes Revenue Bonds

(Note 16) * Water Variable Rate Bonds	71,380
* PGW Variable Rate Bonds	152,810
* Aviation Variable Rate Bonds	110,700
G.O. Variable Rate Bonds	100,000
	<u>5,449,936</u>

General Obligation Bonds	1,431,705
Revenue Bonds	<u>4,018,231</u>
Total	<u>5,449,936</u>

City of Philadelphia
Gross Bonded Debt, Net Bonded Debt and Changes Therein
For The Fiscal Years 2013 through 2017

Exhibit A-11

Amounts in thousands of USD

	2013	2014	2015	2016	2017
<u>Gross Bonded Debt:</u>					
Gross Bonded Debt, Beginning of Fiscal Year	5,715,806	5,446,243	5,606,180	5,573,599	5,405,779
Bonds Issued During Fiscal Year:					
General Obligation Bonds	-	362,635	-	330,380	262,865
Revenue Bonds	85,815	316,746	418,318	365,373	916,215
Total	5,801,621	6,125,624	6,024,498	6,269,352	6,584,859
Bonds Paid During Fiscal Year:					
General Obligation Bonds (Note 15)	48,535	50,905	59,850	59,175	67,890
Revenue Bonds (Notes 16)	224,428	220,719	237,789	241,583	230,218
General Obligation Bonds Refunded (Notes 6 and 7)	-	149,750	-	145,330	268,845
Revenue Bonds Refunded (Note 9)	82,415	98,070	153,260	417,485	567,970
Gross Bonded Debt, End of Fiscal Year	5,446,243	5,606,180	5,573,599	5,405,779	5,449,936
Increase (Decrease) in Gross Bonded Debt	(269,563)	159,937	(32,581)	(167,820)	44,157
<u>Net Bonded Debt:</u>					
Net Bonded Debt, Beginning of Fiscal Year	5,424,740	5,089,546	5,239,438	5,199,359	5,050,530
Bonds Issued During Fiscal Year:					
General Obligation Bonds	-	362,635	-	330,380	262,865
Revenue Bonds	85,815	316,747	418,318	365,373	916,215
Total	5,510,555	5,768,928	5,657,756	5,895,112	6,229,610
Adjustments to Net Bonded Debt During Fiscal Year:					
Deductions:					
Sinking Fund Reserve Earnings	700	1,325	1,616	2,762	2,207
Sinking Fund Assets held by Fiscal Agent for Payment of Principal	-	-	-	-	-
Debt Service Reserve from Sale of Revenue Bonds	-	8,667	7,052	-	7,755
Contributions from Water Residual Fund	66,638	454	-	-	-
Contributions from Aviation Fund	-	-	-	-	31,000
Bonds Paid at Maturity Other Than through Accumulating Sinking Funds	272,963	271,624	297,639	300,758	298,108
Refunded Revenue Bonds	82,415	98,070	153,260	417,485	567,970
Refunded General Obligation Bonds	-	149,750	-	145,330	268,845
Proceeds from Sale of Revenue Bond Refunding Issues	-	-	-	-	-
Proceeds from Sale of General Obligation Bond Refunding Issues	-	-	-	-	-
Additions:					
Earnings Transferred to Other Funds	1,707	400	1,170	21,753	13,696
Funds Transferred to Fiscal Agent	-	-	-	-	-
Net Bonded Debt and Bond Anticipation Notes, End of Fiscal Year	5,089,546	5,239,438	5,199,359	5,050,530	5,067,421
Increase (Decrease) in Net Bonded Debt	(335,194)	149,892	(40,079)	(148,829)	16,891
<u>Gross Bonded Debt to Net Bonded Debt:</u>					
Gross Bonded Debt, End of Fiscal Year	5,446,243	5,606,180	5,573,599	5,405,779	5,449,936
Sinking Fund Assets held by Fiscal Agent for Payment of Principal	-	-	-	-	-
Revenue Bond Debt Service Reserve Funds (Notes 1, 2 & 3)	356,697	366,742	374,240	355,249	382,515
Net Bonded Debt and Bond Anticipation Notes, End of Year	5,089,546	5,239,438	5,199,359	5,050,530	5,067,421

City of Philadelphia
Bonds Authorized but Unissued
June 30, 2017

Exhibit A-12

Amounts in thousands of USD

			<u>Funds Responsible for Payment of Debt Service</u>				
			<u>General Fund</u>	<u>Water Fund</u>	<u>Aviation Fund</u>	<u>Gas Works Fund</u>	<u>Total</u>
Loan							
1,000,000	September 25, 1950	e	24	-	-	-	24
7,000,000	September 30, 1958	e	2,400	-	-	-	2,400
5,600,000	October 6, 1961	e	425	-	-	-	425
87,330,000	September 17, 1964	e	41,300	-	-	-	41,300
8,400,000	October 4, 1967	e	4,880	-	-	-	4,880
17,400,000	October 2, 1969	e	-	17,400	-	-	17,400
40,000,000	September 26, 1970	e	-	-	-	15,000	15,000
100,000,000	September 26, 1970	e	-	-	12,500	-	12,500
17,100,000	September 26, 1970	e	-	17,100	-	-	17,100
50,000,000	October 4, 1971	e	-	-	50,000	-	50,000
17,000,000	October 4, 1971	e	-	-	-	17,000	17,000
17,700,000	October 4, 1971	e	-	17,700	-	-	17,700
50,000,000	September 29, 1972	e	-	-	-	50,000	50,000
64,500,000	September 29, 1972	e	-	64,500	-	-	64,500
10,000,000	September 28, 1973	e	-	-	-	10,000	10,000
32,385,000	September 28, 1973	e	-	32,385	-	-	32,385
350,000,000	June 3, 2009	c	-	32,079	-	-	32,079
106,690,000	September 17, 2010	e	8,138	-	-	-	8,138
111,295,000	September 14, 2011	e	8,487	-	-	-	8,487
450,000,000	July 5, 2012	c	-	250,000	-	-	250,000
123,670,000	September 14, 2012	e	15,192	-	-	-	15,192
94,745,000	September 16, 2013	e	11,638	-	-	-	11,638
137,295,000	September 11, 2014	e	137,295	-	-	-	137,295
155,965,000	June 18, 2015	e	155,965	-	-	-	155,965
600,000,000	December 8, 2015	c	-	594,315	-	-	594,315
184,303,000	September 6, 2016	e	184,303	-	-	-	184,303
Total Bonds Authorized by Unissued			<u>570,047</u>	<u>1,025,479</u>	<u>62,500</u>	<u>92,000</u>	<u>1,750,026</u>

c - Councilmanic Loan ; e - Loan Voted by People

<u>Analysis of Changes in Bonds Authorized but Unissued</u> <u>for the Fiscal Year Ended June 30, 2017</u>					
	<u>General Fund</u>	<u>Water Fund</u>	<u>Aviation Fund</u>	<u>Gas Works Fund</u>	<u>Total</u>
Balance at July 1, 2016	385,744	711,589	62,500	92,000	1,251,833
Additions:					
General Obligation Bonds					
Authorized During the Period	447,168	792,680	-	-	1,239,848
Revenue Bonds					
Authorized During the Period	-	-	125,000	312,425	437,425
	<u>447,168</u>	<u>792,680</u>	<u>125,000</u>	<u>312,425</u>	<u>1,677,273</u>
Deductions:					
General Obligation Bonds					
Issued During the Period (Notes 6 and 7)	262,865	472,545			
Revenue Bonds					
Issued During the Period (Notes 8, 9, and 10)	-	6,245	125,000	312,425	443,670
	<u>262,865</u>	<u>478,790</u>	<u>125,000</u>	<u>312,425</u>	<u>1,179,080</u>
Balance at June 30, 2017	<u>570,047</u>	<u>1,025,479</u>	<u>62,500</u>	<u>92,000</u>	<u>1,750,026</u>

City of Philadelphia
Authorized Debt - Issued and Unissued
June 30, 2017

Exhibit A-13

Amounts in thousands of USD

	<u>General Fund</u>	<u>Water Fund</u>	<u>Aviation Fund</u>	<u>Gas Works Fund</u>	<u>Total</u>
General Obligation Bonds Outstanding	1,431,705	-	-	-	1,431,705
Revenue Bonds Outstanding	-	1,996,916	1,186,465	834,850	4,018,231
Authorized Debt Unissued (Exhibit A-12)	<u>570,047</u>	<u>1,025,479</u>	<u>62,500</u>	<u>92,000</u>	<u>1,750,026</u>
Total Debt Outstanding and Unissued	<u>2,001,752</u>	<u>3,022,395</u>	<u>1,248,965</u>	<u>926,850</u>	<u>7,199,962</u>

City of Philadelphia
Schedule of Overlapping Debt
For The Fiscal Years 2008 through 2017

Exhibit A-14

Amounts in thousands of USD

Overlapping governments are those that coincide, at least in part, with the geographic boundaries of the City. The outstanding debt of the School District of Philadelphia is supported by property taxes levied on properties within the City boundaries. 100% of the debt listed below is supported by City residents and businesses.

Fiscal Year	City of Philadelphia General Bonded Debt	School District of Philadelphia General Bonded Debt	Total
2008	4,135.9	2,633.7	6,769.6
2009	4,311.2	2,892.8	7,204.0
2010	4,271.1	3,092.5	7,363.6
2011	4,282.9	2,866.3	7,149.2
2012	4,143.1	3,067.5	7,210.6
2013	4,279.8	3,260.0	7,539.8
2014	4,277.1	3,073.7	7,350.8
2015	4,066.4	3,125.2	7,191.6
2016	4,041.9	2,984.5	7,026.4
2017	3,799.2	3,082.6	6,881.8

City of Philadelphia
Summary of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15

Amounts in thousands of USD

Title	Date of Bonds	Range of Maturities	Range of Interest Rates %	Principal Amount
General Obligation Bonds, Series 2007A	Dec. 20, 2007	Aug. 1, 2017-2019	5 to 5-1/4	57,075
General Obligation Bonds, Series 2008A	May 1, 2008	Dec. 15, 2017-2032	5 to 5-1/4	17,825
General Obligation Bonds, Series 2009A	Aug. 13, 2009	Aug. 1, 2019-2031	4-1/4 to 5-1/2	215,210
General Obligation Bonds, Series 2009B	Aug. 13, 2009	Aug. 1, 2027-2031	Variable	100,000
General Obligation Bonds, Series 2011	Apr. 19, 2011	Aug. 1, 2017-2041	3-1/4 to 6-1/2	100,665
General Obligation Bonds, Series 2012A	May 8, 2012	Sep. 15, 2019-2021	5	19,925
General Obligation Bonds, Series 2013A	Jul. 30, 2013	Jul. 15, 2017-2033	4-1/8 to 5-1/4	182,345
General Obligation Bonds, Series 2014A	Feb. 6, 2014	Jul. 15, 2017-2038	3 to 5-1/4	151,220
General Obligation Bonds, Series 2015A	Jul. 8, 2015	Aug. 1, 2017-2031	4 to 5	138,795
General Obligation Bonds, Series 2015B	Sep. 30, 2015	Aug. 1, 2017-2035	2 to 5	185,780
General Obligation Bonds, Series 2017	Feb. 2, 2017	Aug. 1, 2018-2041	4 to 5	262,865
General Obligation Bonds Outstanding				1,431,705
Water and Wastewater Revenue Bonds, Series 1997B	Nov. 25, 1997	Aug. 1, 2017-2027	Variable	53,200
Water and Wastewater Revenue Bonds, Series 1999A	Apr. 22, 1999	Jul. 1, 2017 - Apr. 1, 2019	2-7/10	162
Water and Wastewater Revenue Bonds, Series 2005B	May 4, 2005	Aug. 1, 2017-2018	Variable	18,180
Water and Wastewater Revenue Bonds, Series 2007A	May 9, 2007	Aug. 1, 2017-2027	4-1/2 to 5	9,925
Water and Wastewater Revenue Bonds, Series 2007B	May 9, 2007	Nov. 1, 2017 to 2031	4 to 5	151,455
Water and Wastewater Revenue Bonds, Series 2009A	May 21, 2009	Jan. 1, 2018-2036	4 to 5-3/4	8,980
Water and Wastewater Revenue Bonds, Series 2009B	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	19,298
Water and Wastewater Revenue Bonds, Series 2009C	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	35,668
Water and Wastewater Revenue Bonds, Series 2009D	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	55,985
Water and Wastewater Revenue Bonds, Series 2010B	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	23,683
Water and Wastewater Revenue Bonds, Series 2010A	Apr. 15, 2010	Jun. 15, 2018-2019	3-3/4 to 5	69,880
Water and Wastewater Revenue Bonds, Series 2010C	Aug. 5, 2010	Aug. 1, 2017-2040	3 to 5	134,005
Water and Wastewater Revenue Bonds, Series 2011A	Nov. 16, 2011	Jan. 1, 2033-2041	4-1/2 to 5	135,000
Water and Wastewater Revenue Bonds, Series 2011B	Nov. 16, 2011	Nov. 1, 2017-2026	4 to 5	44,220
Water and Wastewater Revenue Bonds, Series 2012	Nov. 1, 2012	Nov. 1, 2025-2028	5	65,005
Water and Wastewater Revenue Bonds, Series 2013A	Aug. 22, 2013	Jan. 1, 2018-2043	4 to 5-1/8	166,575
Water and Wastewater Revenue Bonds, Series 2014A	Jan. 23, 2014	Jul. 1, 2017 to 2043	3 to 5	117,200
Water and Wastewater Revenue Bonds, Series 2015A	Apr. 16, 2015	Jul. 1, 2036-45	5	275,820
Water and Wastewater Revenue Bonds, Series 2015B	Apr. 16, 2015	Jul. 1, 2019-35	4 to 5	141,740
Water and Wastewater Revenue Bonds, Series 2016	Nov. 3, 2016	Oct. 1, 2018-35	3 to 5	191,070
Water and Wastewater Revenue Bonds, Series 2017A	Apr. 13, 2017	Oct. 1, 2018-52	5 to 5-1/4	279,865
Gas Works Revenue Bonds, Fifth Series A-2	Oct. 19, 2004	Sep. 1, 2034	Variable	30,000
Gas Works Revenue Bonds, Seventh Series	May 15, 2007	Oct. 1, 2017-2037	5	16,070
Gas Works Revenue Bonds, Eighth Series A	Aug. 20, 2009	Aug. 1, 2017	5 to 5-1/4	7,840
Gas Works Revenue Bonds, Eighth Series B	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,370
Gas Works Revenue Bonds, Eighth Series C	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,225
Gas Works Revenue Bonds, Eighth Series D	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	40,845
Gas Works Revenue Bonds, Eighth Series E	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,370
Gas Works Revenue Bonds, Ninth Series	Aug. 26, 2010	Aug. 1, 2017-2040	3 to 5-1/4	67,860
Gas Works Revenue Bonds, Tenth Series	Sep. 28, 2011	Jul. 1, 2017-2026	3-1/4 to 5	35,355
Gas Works Revenue Bonds, Thirteenth Series	Aug. 18, 2015	Aug. 1, 2017-2034	3 to 5	245,470
Gas Works Revenue Bonds, Fourteenth Series	Aug. 30, 2016	Oct. 1, 2017-2037	4 to 5	309,445
Airport Revenue Bonds, Series 1998B	Jul. 1, 1998	Jun. 15, 2028	5-1/8	5
Airport Revenue Bonds, Series 2005C	Jun. 2, 2005	Jun. 15, 2018-2025	Variable	110,700
Airport Revenue Bonds, Series 2007A	Aug. 16, 2007	Jun. 15, 2018-2037	5	146,780
Airport Revenue Bonds, Series 2007B	Aug. 16, 2007	Jun. 15, 2018-2027	5	46,785
Airport Revenue Bonds, Series 2009A	Apr. 14, 2009	Jun. 15, 2018-2029	4 to 5-3/8	32,930
Airport Revenue Bonds, Series 2010A	Nov. 15, 2010	Jun. 15, 2018-2040	3-3/4 to 5-1/4	251,310
Airport Revenue Bonds, Series 2010C	Nov. 15, 2010	Jun. 15, 2018	5	8,995
Airport Revenue Bonds, Series 2010D	Nov. 15, 2010	Jun. 15, 2018-2028	4 to 5-1/4	185,755
Airport Revenue Bonds, Series 2011A	Dec. 14, 2011	Jun. 15, 2018-2028	4-5/8 to 5	161,240
Airport Revenue Bonds, Series 2011B	Dec. 14, 2011	Jun. 15, 2018-2031	3 to 5	26,440
Airport Revenue Bonds, Series 2015A	Sep. 3, 2015	Jun. 15, 2018-2032	4 to 5	90,525
Airport Revenue Bonds, Series 2017	Apr. 27, 2017	Jul. 1, 2018-2022	2-7/10	125,000
Revenue Bonds Outstanding				4,018,231
Total Bonds Outstanding				5,449,936

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
General Obligation Bonds Series 2007A	Dec. 20, 2007	(14e)	Serial-Rfdg.	Aug. 1, 2017		5-1/4	26,375
				Aug. 1, 2018-19	Aug. 1, 2017	5	30,700
							<u>57,075</u>
Series 2008A	May 1, 2008	(14e)	Serial-Rfdg.	Dec. 15, 2017-18		5	17,825
							<u>17,825</u>
General Obligation Bonds Series 2009A	Aug. 13, 2009	(16e)	Serial-Rfdg.	Aug. 1, 2019		4-1/4	4,816
				Aug. 1, 2020	Aug. 1, 2019	4-1/2	16,550
				Aug. 1, 2021	Aug. 1, 2019	4-3/4	8,984
				Aug. 1, 2021	Aug. 1, 2019	5-1/4	7,284
				Aug. 1, 2022	Aug. 1, 2019	4-3/4	2,553
				Aug. 1, 2022	Aug. 1, 2019	5-1/4	21,842
				Aug. 1, 2023	Aug. 1, 2019	5	11,136
				Aug. 1, 2023	Aug. 1, 2019	5-1/2	14,563
				Aug. 1, 2024	Aug. 1, 2019	5	21,430
				Aug. 1, 2024	Aug. 1, 2019	5-1/2	5,618
				Aug. 1, 2025	Aug. 1, 2019	5-1/8	22,986
				Aug. 1, 2026	Aug. 1, 2019	5	20,539
				Aug. 1, 2026	Aug. 1, 2019	5-1/4	3,645
				Aug. 1, 2027	Aug. 1, 2019	5-1/4	3,423
				Aug. 1, 2028	Aug. 1, 2019	5-1/4	2,280
				Aug. 1, 2029	Aug. 1, 2019	5-3/10	2,607
				Aug. 1, 2030	Aug. 1, 2019	5-3/8	2,958
				Aug. 1, 2031	Aug. 1, 2019	5-9/20	3,338
							<u>176,552</u>
		(16c)	Serial-Rfdg.	Aug. 1, 2019		4-1/4	939
				Aug. 1, 2020	Aug. 1, 2019	4-1/2	3,225
				Aug. 1, 2021	Aug. 1, 2019	4-3/4	1,751
				Aug. 1, 2021	Aug. 1, 2019	5-1/4	1,631
				Aug. 1, 2022	Aug. 1, 2019	4-3/4	572
				Aug. 1, 2022	Aug. 1, 2019	5-1/4	4,893
				Aug. 1, 2023	Aug. 1, 2019	5	2,494
				Aug. 1, 2023	Aug. 1, 2019	5-1/2	3,262
				Aug. 1, 2024	Aug. 1, 2019	5	4,800
				Aug. 1, 2024	Aug. 1, 2019	5-1/2	1,257
				Aug. 1, 2025	Aug. 1, 2019	5-1/8	5,149
				Aug. 1, 2026	Aug. 1, 2019	5	4,601
General Obligation Bonds Series 2009B	Aug. 13, 2009	(16e)	Term-Rfdg.	Aug. 1, 2027-31		N.A.	92,707
		(16c)	Term-Rfdg.	Aug. 1, 2027-31	Feb. 1, 2010	N.A.	7,293
							<u>100,000</u>
General Obligation Bonds Series 2011	Apr. 19, 2011	(19e)	Serial	Aug. 1, 2017-19		5-1/4	7,775
				Aug. 1, 2020		4-1/4	940
				Aug. 1, 2020		5	1,920
				Aug. 1, 2021	Aug. 1 2020	4-7/8	2,190
				Aug. 1, 2021	Aug. 1 2020	5-1/4	820
				Aug. 1, 2022-23	Aug. 1 2020	5	6,490
				Aug. 1, 2024	Aug. 1 2020	5-1/4	3,500
				Aug. 1, 2025	Aug. 1 2020	5-3/8	3,695
				Aug. 1, 2026	Aug. 1 2020	5-1/4	3,895
				Aug. 1, 2032-36	Aug. 1 2020	6	31,280
							<u>62,505</u>

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
Series 2011 Refunding	Apr. 19, 2011	(19c)	Serial-Rfdg.	Aug. 1, 2017		3-3/4	16
				Aug. 1, 2017		5-1/4	261
				Aug. 1, 2018		4-1/10	42
				Aug. 1, 2018		5-1/4	250
				Aug. 1, 2019		4-1/2	69
				Aug. 1, 2019		5-1/4	213
				Aug. 1, 2020		4-1/4	192
				Aug. 1, 2020		4-1/2	102
							1,145

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
Revenue Bonds - Water and Sewer Bonds:							
Water & Wastewater Rev. Bonds Variable Rate, Series 1997B	Nov. 25, 1997	(1c)	Serial-Var.	Aug. 1, 2017-27	Aug. 1, 1999	N.A.	53,200
Water & Wastewater Rev. Bonds Pennsylvania Infrastructure Investment Authority Series 1999A	Apr. 22, 1999	(3c)	Term	Jul. 1, 2017-Apr. 1, 2019		2-7/10	162
Water & Wastewater Revenue Ref. Bonds, Var. Rate, Series 2005B	May 4, 2005	(7c)	Term-Var.	Aug. 1, 2017-18	Aug. 1, 2009	N.A.	18,180
Water & Wastewater Revenue Ref. Bonds, Series 2007A	May 9, 2007	(11c)	Serial-Rfdg.	Aug. 1, 2017		5	9,925
Water & Wastewater Revenue Ref. Bonds, Series 2007B	May 9, 2007	(11c)	Serial-Rfdg.	Nov. 1, 2017		4	275
				Nov. 1, 2018	Nov. 1, 2017	5	285
				Nov. 1, 2019-20	Nov. 1, 2017	5	8,140
				Nov. 1, 2021-22	Nov. 1, 2017	5	8,940
			Serial-Rfdg.	Nov. 1, 2023-24	Nov. 1, 2017	4-1/2	18,625
				Nov. 1, 2025-31	Nov. 1, 2017	4-1/4	57,735
			Term-Rfdg.	Nov. 1, 2025-31	Nov. 1, 2017	4-3/4	57,455
							151,455
Water & Wastewater Rev. Bonds Series 2009A	May 21, 2009	(15c)	Serial	Jan. 1, 2018-19		5-3/4	8,080
				Jan. 1, 2018		5	100
				Jan. 1, 2019		4-1/8	800
							8,980
Water & Wastewater Rev. Bonds Series 2010C	Aug. 5, 2010	(20c)	Serial	Aug. 1, 2017-18		3	2,130
				Aug. 1, 2017-19		5	36,850
				Aug. 1, 2019		4	400
				Aug. 1, 2020		5	3,230
				Aug. 1, 2021-22	Aug. 1, 2020	5	3,395
				Aug. 1, 2023	Aug. 1, 2020	3-3/4	950
				Aug. 1, 2026	Aug. 1, 2020	4-1/10	1,900
				Aug. 1, 2027	Aug. 1, 2020	4-1/4	2,000
				Aug. 1, 2028	Aug. 1, 2020	4-3/10	3,400
				Aug. 1, 2028	Aug. 1, 2020	5	1,290
				Aug. 1, 2029	Aug. 1, 2020	4-2/5	1,250
				Aug. 1, 2029	Aug. 1, 2020	5	3,665
				Aug. 1, 2030	Aug. 1, 2020	4-1/2	2,280
				Aug. 1, 2030	Aug. 1, 2020	5	2,875
			Term	Aug. 1, 2031-35	Aug. 1, 2020	4-3/4	5,210
				Aug. 1, 2031-35	Aug. 1, 2020	5	24,750
				Aug. 1, 2036-40	Aug. 1, 2020	5	38,430
							134,005
Water & Wastewater Rev. Bonds Pennsylvania Infrastructure Investment Authority Series 2009B, 2009C, 2009D & 2010B	Apr. 20, 2009	(18c)	Term	Jul. 1, 2017-33		1-2/10	19,298
			Term	Jul. 1, 2017-33		1-2/10	35,668
			Term	Jul. 1, 2017-33		1-2/10	55,985
			Term	Jul. 1, 2017-33		1-2/10	23,683
							134,634
Water & Wastewater Revenue Ref. Bonds, Series 2010A	Apr. 15, 2010	(17c)	Serial-Rfdg.	Jun. 15, 2018-19		5	53,280
				Jun. 15, 2018		3-3/4	6,115
				Jun. 15, 2019		4-1/10	10,485
							69,880
Water & Wastewater Rev. Bonds Series 2011A	Nov. 16, 2011	(22c)	Term	Jan. 1, 2033-36	Jan. 1, 2021	4-1/2	2,600
				Jan. 1, 2033-36	Jan. 1, 2021	5	50,185
				Jan. 1, 2037-41	Jan. 1, 2021	5	82,215
							135,000

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
Water & Wastewater Revenue Ref. Bonds, Series 2011B	Nov. 16, 2011	(22c)	Serial	Nov. 1, 2017 Nov. 1, 2017-21 Nov. 1, 2022-26	Nov. 1, 2021	4 5 5	1,225 32,650 10,345 <u>44,220</u>
Water & Wastewater Revenue Ref. Bonds, Series 2012	Nov. 1, 2012	(22c)	Serial-Rfdg.	Nov. 1, 2025-28	Nov. 1, 2022	5	<u>65,005</u>
Water & Wastewater Revenue Bonds, Series 2013A	Aug. 22, 2013	(17c)	Serial	Jan. 1, 2018-19 Jan. 1, 2020 Jan. 1, 2020 Jan. 1, 2021 Jan. 1, 2021-2022 Jan. 1, 2023 Jan. 1, 2023 Jan. 1, 2041-43	Nov. 1, 2022	5 3 5 4 5 4 5 5-1/8	6,850 210 30,635 5,025 49,780 210 23,865 50,000 <u>166,575</u>
Water & Wastewater Revenue Ref. Bonds, Series 2014A	Jan. 23, 2014	(24c)	Serial-Rfdg.	Jul. 1, 2017 Jul. 1, 2017 Jul. 1, 2018-20 Jul. 1, 2021 Jul. 1, 2021 Jul. 1, 2022 Jul. 1, 2022 Jul. 1, 2023 Jul. 1, 2023 Jul. 1, 2024 Jul. 1, 2025-27	Jul. 1, 2024	3 5 5 4 5 4 5 4 5 5	2,000 4,225 20,415 2,445 5,045 2,820 5,020 3,210 4,990 8,595 28,435 <u>87,200</u>
Water & Wastewater Revenue Ref. Bonds, Series 2014A	Jan. 23, 2014	(24c)	Term-Rfdg.	Jul. 1, 2041-43	Jul. 1, 2024	5	<u>30,000</u>
Water & Wastewater Revenue Bonds, Series 2015A	Apr. 16, 2015	(24c)	Term	Jul. 1, 2036-45	Jul. 1, 2024	5	<u>275,820</u>
Water & Wastewater Revenue Ref. Bonds, Series 2015B	Apr. 16, 2015	(24c)	Serial-Rfdg.	Jul. 1, 2019-22 Jul. 1, 2028-33 Jul. 1, 2034-35	Jul. 1, 2025 Jul. 1, 2025	5 5 4	44,770 69,280 27,690 <u>141,740</u>
Water & Wastewater Revenue Ref. Bonds, Series 2016	Nov. 3, 2016	(29c)	Serial-Rfdg.	Oct. 1, 2018-28 Oct. 1, 2018-34 Oct. 1, 2031-35 Oct. 1, 2035 Oct. 1, 2029-30	Oct. 1, 2026 Oct. 1, 2026	5 3 4 3-1/8 5	135,635 7,135 28,510 6,110 13,680 <u>191,070</u>
Water & Wastewater Revenue Bonds, Series 2017A	Apr. 13, 2017	(29c)	Serial-Rfdg.	Oct. 1, 2018-19 Oct. 1, 2032-37 Oct. 1, 2038-52 Oct. 1, 2048-52	Oct. 1, 2027 Oct. 1, 2027 Oct. 1, 2027	5 5 5 5-1/4	40,000 48,770 141,945 49,150 <u>279,865</u>
							<u>1,996,916</u>

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
<u>Revenue Bonds - Philadelphia Gas Works Bonds:</u>							
Gas Works Revenue Bonds Var. Rate, 5th Series A-2	Oct. 19, 2004	(6c)	Term-Var.	Sep. 1, 2034	Sep. 1, 2005	N.A.	30,000
Gas Works Revenue Bonds 7th Series	15-May-07	(12c)	Serial	Oct. 1, 2017		5	8,725
				Oct. 1, 2018-28	Oct. 1, 2017	5	7,345
							16,070
Gas Works Revenue Ref. Bonds 8th Series A	Aug. 20, 2009	(9c)	Serial	Aug. 1, 2017		5-1/4	7,840
							7,840
Gas Works Revenue Bonds 8th Series B, C, D & E	Aug. 20, 2009	(9c)	Term-Var.	Aug. 1, 2017-28	Feb. 1, 2010	N.A.	27,370
	Aug. 20, 2009	(9c)	Term-Var.	Aug. 1, 2017-28	Feb. 1, 2010	N.A.	27,225
	Aug. 20, 2009	(9c)	Term-Var.	Aug. 1, 2017-28	Feb. 1, 2010	N.A.	40,845
	Aug. 20, 2009	(9c)	Term-Var.	Aug. 1, 2017-28	Feb. 1, 2010	N.A.	27,370
							225,520
Gas Works Revenue Bonds 9th Series	Aug. 26, 2010	(9c)	Serial	Aug. 1, 2017-20		5	8,335
				Aug. 1, 2018		3-1/2	2,445
				Aug. 1, 2021	Aug. 1, 2020	4	3,945
				Aug. 1, 2022	Aug. 1, 2020	5	4,105
				Aug. 1, 2023-24	Aug. 1, 2020	4-1/4	6,310
				Aug. 1, 2031-40	Aug. 1, 2020	5-1/4	42,720
							67,860
Gas Works Revenue Ref. Bonds 10th Series	Sep. 28, 2011	(9c)	Serial-Rfdg.	Jul. 1, 2017		4	5,895
				Jul. 1, 2018		5	5,385
				Jul. 1, 2019		4	750
				Jul. 1, 2019-20		5	8,575
				Jul. 1, 2021		3-1/4	1,415
				Jul. 1, 2021		4	2,470
				Jul. 1, 2022-23	Jul. 1, 2021	5	6,000
				Jul. 1, 2024	Jul. 1, 2021	4	2,100
				Jul. 1, 2025	Jul. 1, 2021	4-1/8	1,445
				Jul. 1, 2026	Jul. 1, 2021	4-1/4	1,320
							35,355
Gas Works Revenue Ref. Bonds 13th Series	Aug. 18, 2015	(27c)	Serial-Rfdg.	Aug. 1, 2017-18		4	35,345
				Aug. 1, 2019-25		5	121,520
				Aug. 1, 2026-34			88,605
					Aug. 1, 2015		245,470
Gas Works Revenue Ref. Bonds 14th Series	Aug. 30, 2016	(27c)	Serial-Rfdg.	Aug. 1, 2017-26		5	171,555
				Aug. 1, 2027-35	Oct. 1, 2026	5	117,405
				Aug. 1, 2036-37	Oct. 1, 2026	4	20,485
							309,445
							834,850

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
<u>Revenue Bonds - Airport Bonds:</u>							
Airport Revenue Bonds Series 1998B	Jul. 1, 1998	(2c)	Term	Jul. 1, 2026--28	Jul. 1, 2010	5-1/8	5
Airport Revenue Refunding Bonds Series 2005C	Jun. 2, 2005	(8c)	Term-Var. Rfdg.	Jun. 15, 2018-25		N.A.	110,700
Airport Revenue Bonds Series 2007A	Aug. 16, 2007	(13c)	Serial Term	Jun. 15, 2018-21	Jun. 15, 2018	5	19,135
				Jun. 15, 2022-23	Jun. 15, 2018	5	11,060
				Jun. 15, 2024-25	Jun. 15, 2018	5	12,195
				Jun. 15, 2026-27	Jun. 15, 2018	5	13,445
				Jun. 15, 2028-32	Jun. 15, 2018	5	39,950
				Jun. 15, 2033-37	Jun. 15, 2018	5	50,995
							<u>146,780</u>
Airport Revenue Refunding Bonds Series 2007B	Aug. 16, 2007	(13c)	Serial Term	Jun. 15, 2018-19	Jun. 15, 2018	5	7,625
				Jun. 15, 2020-21	Jun. 15, 2018	5	8,405
				Jun. 15, 2022-23	Jun. 15, 2018	5	9,270
				Jun. 15, 2024-25	Jun. 15, 2018	5	10,220
				Jun. 15, 2026-27	Jun. 15, 2018	5	11,265
							<u>46,785</u>
Airport Revenue Refunding Bonds Series 2009A	Apr. 14, 2009	(4c)	Serial Rfdg.	Jun. 15, 2018		4	2,120
				Jun. 15, 2019		4-1/5	2,205
				Jun. 15, 2020		4-1/4	2,295
				Jun. 15, 2021	Jun. 15, 2017	4-1/2	2,395
				Jun. 15, 2022	Jun. 15, 2017	4-5/8	2,500
				Jun. 15, 2023	Jun. 15, 2017	5	1,420
			Term	Jun. 15, 2023-24	Jun. 15, 2017	5	3,940
				Jun. 15, 2025-29	Jun. 15, 2017	5-3/8	16,055
							<u>32,930</u>
Airport Revenue Bonds Series 2010A	Nov. 15, 2010	(21c)	Serial	Jun. 15, 2018		5	6,050
				Jun. 15, 2019		4	100
				Jun. 15, 2019-20		5	12,925
				Jun. 15, 2021	Jun. 15, 2020	4	275
				Jun. 15, 2021	Jun. 15, 2020	5	6,730
				Jun. 15, 2022	Jun. 15, 2020	3-3/4	560
				Jun. 15, 2022-25	Jun. 15, 2020	5	31,115
				Jun. 15, 2026	Jun. 15, 2020	4	2,910
				Jun. 15, 2026-30	Jun. 15, 2020	5-1/4	44,175
				Jun. 15, 2029	Jun. 15, 2020	4-1/4	2,320
			Term	Jun. 15, 2035	Jun. 15, 2020	4-1/2	595
				Jun. 15, 2031-35	Jun. 15, 2020	5	25,000
				Jun. 15, 2031-35	Jun. 15, 2020	5	37,750
				Jun. 15, 2036-40	Jun. 15, 2020	5	48,000
				Jun. 15, 2036-40	Jun. 15, 2020	5	32,805
							<u>251,310</u>
Airport Revenue Refunding Bonds Series 2010C	Nov. 15, 2010	(21c)	Serial Rfdg.	Jun. 15, 2018		5	8,995
Airport Revenue Refunding Bonds Series 2010D	Nov. 15, 2010	(21c)	Serial Rfdg.	Jun. 15, 2018-20		5	52,420
				Jun. 15, 2020		4	630
				Jun. 15, 2021	Jun. 15, 2020	5	19,475
				Jun. 15, 2022-24	Jun. 15, 2020	5-1/4	64,310
				Jun. 15, 2024	Jun. 15, 2020	4-1/2	310
				Jun. 15, 2025	Jun. 15, 2020	5-1/4	23,830
				Jun. 15, 2028	Jun. 15, 2020	5-1/4	24,780
							<u>185,755</u>
Airport Revenue Refunding Bonds Series 2011A	Dec. 14, 2011	(21c)	Serial Rfdg.	Jun. 15, 2018-21		5	31,705
				Jun. 15, 2022-27	Jun. 15, 2021	5	114,710
				Jun. 15, 2028	Jun. 15, 2021	4-5/8	14,825
							<u>161,240</u>

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2017

Exhibit A-15a

Amounts in thousands of USD

Title	Date of Bonds	Legal Counsel & Nature	Bond Type	Maturity Date	Call Date	Interest Rate %	Amount Outstanding
Airport Revenue Refunding Bonds Series 2011B	Dec. 14, 2011	(21c)	Serial Rfdg.	Jun. 15, 2018		5	1,445
				Jun. 15, 2019		3	1,515
				Jun. 15, 2020		3-3/8	1,565
				Jun. 15, 2021		3-1/2	1,615
				Jun. 15, 2022	Jun. 15, 2021	3-3/4	1,675
				Jun. 15, 2023	Jun. 15, 2021	4	1,735
				Jun. 15, 2024	Jun. 15, 2021	4-1/8	1,805
				Jun. 15, 2025	Jun. 15, 2021	4-1/4	1,880
				Jun. 15, 2026	Jun. 15, 2021	4-3/8	1,960
				Jun. 15, 2027	Jun. 15, 2021	5	2,040
				Jun. 15, 2028	Jun. 15, 2021	4-5/8	2,145
				Jun. 15, 2029	Jun. 15, 2021	4-3/4	2,245
				Jun. 15, 2030	Jun. 15, 2021	4-7/8	2,350
				Jun. 15, 2031	Jun. 15, 2021	5	2,465
							<u>26,440</u>
Airport Revenue Refunding Bonds Series 2015A	Sep. 3, 2015	(28c)	Serial Rfdg.	Jun. 15, 2018		4	3,255
				Jun. 15, 2019-25		5	27,590
				Jun. 15, 2026-35	Jun. 15, 2025	5	51,125
				Jun. 15, 2031-32	Jun. 15, 2025	4	8,555
							<u>90,525</u>
Airport Revenue Refunding Bonds Series 2017	Apr. 27, 2017	(28c)	Serial	Jul. 1, 2018-22		2-7/10	125,000
							<u>1,186,465</u>
Total Revenue Bonds Outstanding							<u>4,018,231</u>
Total Bonded Debt Outstanding							<u>5,449,936</u>

City of Philadelphia
Analysis of Bonded Debt Outstanding by Issue
June 30, 2016

Exhibit A-15a

Amounts in thousands of USD

NOTES:

Legal Opinion - Code symbols indicating Philadelphia law firms rendering opinions are analyzed as follows:

- 1 - Joint - Ballard, Spahr, Andrews & Ingersoll and Singley & Associates
- 2 - Joint - Saul, Ewing, Remick & Saul and Singley & Associates
- 3 - Joint - Ballard, Spahr, Andrews & Ingersoll and Ronald A. White
- 4 - Joint - Saul, Ewing, LLP and Andre C. Dasent
- 5 - Duane, Morris, LLP and Ronald A. White
- 6 - Joint - Dilworth, Paxson and Jettie D. Newkirk
- 7 - Joint - Saul, Ewing and Booth & Tucker
- 8 - Joint - Saul, Ewing and Denise Joy Smyler
- 9 - Joint - Blank, Rome, LLP and Andre C. Dasent, P.C.
- 10 - Joint - Cozen, O'Connor and Booth & Tucker
- 11 - Joint - Saul, Ewing and Kelly, Monaco & Naples
- 12 - Joint - Ballard, Spahr, Andrews & Ingersoll and Andre C. Dasent, P.C.
- 13 - Joint - Saul, Ewing and TME Law
- 14 - Joint - Blank, Rome and Booth & Tucker
- 15 - Joint - Ballard, Spahr, Andrews & Ingersoll and Denise Joy Smyler
- 16 - Cozen, O'Connor and TME Law
- 17 - Joint - Greenberg, Traurig and Gonzalez Saggio & Harlan
- 18 - Ballard, Spahr, Andrews & Ingersoll
- 19 - Joint - Cozen O'Connor and Grant & Lebowitz
- 20 - Joint - Ballard, Spahr and Denise Joy Smyler
- 21 - Joint - Saul, Ewing and Gonzalez, Saggio & Harlan
- 22 - Joint - Ballard, Spahr and The Smyler Firm
- 23 - Joint - Cozen O'Connor and Ann C. Lebowitz
- 24 - Joint - Ballard, Spahr and Andre C. Dasent
- 25 - Joint - Cozen O'Connor and Ahmad Zaffarese
- 26 - Joint - Cozen O'Connor and Turner Law
- 27 - Joint - Eckert Seamans Cherin & Mellot, and Andre C. Dasent
- 28 - Joint - Saul, Ewing and Andre C, Dasent
- 29 - Joint - Ballard Spahr LLC and Ahmad Zaffarese LLC

Nature of Loan - Code symbols are analyzed as follows:

- c - Councilmanic
- e - Vote of People

City of Philadelphia
Bonded Debt Insurance by Issue
June 30, 2017

Exhibit A-16

Amounts in thousands of USD

Title	Insurer	Date of Bonds	Range of Maturities	Range of Interest Rates %	Principal Amount
General Obligation Bonds, Series 2007A	FSA	Dec. 20, 2007	Aug. 1, 2017-2019	5 to 5-1/4	57,075
General Obligation Bonds, Series 2008A	FSA	May 1, 2008	Dec. 15, 2017-2032	5 to 5-1/4	17,825
General Obligation Bonds, Series 2009A	Assured Guaranty	Aug. 13, 2009	Aug. 1, 2019-2031	4-1/4 to 5-1/2	215,210
General Obligation Bonds, Series 2009B	Uninsured	Aug. 13, 2009	Aug. 1, 2027-2031	Variable	100,000
General Obligation Bonds, Series 2011	Assured Guaranty	Apr. 19, 2011	Aug. 1, 2017-2041	3-1/4 to 5-1/4	19,905
General Obligation Bonds, Series 2011	Uninsured	Apr. 19, 2011	Aug. 1, 2017-2041	3-1/4 to 6-1/2	80,760
General Obligation Bonds, Series 2012A	Uninsured	May 8, 2012	Sep. 15, 2019-2021	5	19,925
General Obligation Bonds, Series 2013A	Assured Guaranty	Jul. 30, 2013	Jul. 15, 2024-2025	4-1/8 to 4-1/4	9,775
General Obligation Bonds, Series 2013A	Uninsured	Jul. 30, 2013	Jul. 15, 2017-2033	4-1/8 to 5-1/4	172,570
General Obligation Bonds, Series 2014A	Uninsured	Feb. 6, 2014	Jul. 15, 2017-2038	3 to 5-1/4	151,220
General Obligation Bonds, Series 2015A	Uninsured	Jul. 8, 2015	Aug. 1, 2017-2031	4 to 5	138,795
General Obligation Bonds, Series 2015B	Uninsured	Sep. 30, 2015	Aug. 1, 2017-2035	2 to 5	185,780
General Obligation Bonds, Series 2017	Assured Guaranty	Feb. 2, 2017	Aug. 1, 2025-2039	4 to 5	105,965
General Obligation Bonds, Series 2017	Uninsured	Feb. 2, 2017	Aug. 1, 2018-2041	4 to 5	156,900
General Obligation Bonds Outstanding					1,431,705
Water and Wastewater Revenue Bonds, Series 1997B	AMBAC	Nov. 25, 1997	Aug. 1, 2017-2027	Variable	53,200
Water and Wastewater Revenue Bonds, Series 1999A	Uninsured	Apr. 22, 1999	Jul. 1, 2017 - Apr. 1, 2019	2-7/10	162
Water and Wastewater Revenue Bonds, Series 2005B	Uninsured	May 4, 2005	Aug. 1, 2017-2018	Variable	18,180
Water and Wastewater Revenue Bonds, Series 2007A	AMBAC	May 9, 2007	Aug. 1, 2017-2027	4-1/2 to 5	9,925
Water and Wastewater Revenue Bonds, Series 2007B	AMBAC	May 9, 2007	Nov. 1, 2017 to 2031	4 to 5	151,455
Water and Wastewater Revenue Bonds, Series 2009A	Uninsured	May 21, 2009	Jan. 1, 2018-2036	4 to 5-3/4	8,980
Water and Wastewater Revenue Bonds, Series 2009B	Uninsured	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	19,298
Water and Wastewater Revenue Bonds, Series 2009C	Uninsured	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	35,668
Water and Wastewater Revenue Bonds, Series 2009D	Uninsured	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	55,985
Water and Wastewater Revenue Bonds, Series 2010B	Uninsured	Apr. 20, 2009	Jul. 1, 2017-2033	1-2/10	23,683
Water and Wastewater Revenue Bonds, Series 2010A	Uninsured	Apr. 15, 2010	Jun. 15, 2018-2019	3 to 5	31,185
Water and Wastewater Revenue Bonds, Series 2010A	Assured Guaranty	Apr. 15, 2010	Jun. 15, 2018-2019	3 to 5	38,695
Water and Wastewater Revenue Bonds, Series 2010C	Assured Guaranty	Aug. 5, 2010	Aug. 1, 2017-2040	3 to 5	134,005
Water and Wastewater Revenue Bonds, Series 2011A	Uninsured	Nov. 16, 2011	Jan. 1, 2036-2041	4-1/2 to 5	135,000
Water and Wastewater Revenue Bonds, Series 2011B	Uninsured	Nov. 16, 2011	Nov. 1, 2017-2026	4 to 5	44,220
Water and Wastewater Revenue Bonds, Series 2012	Uninsured	Nov. 1, 2012	Nov. 1, 2025-2028	5	65,005
Water and Wastewater Revenue Bonds, Series 2013A	Uninsured	Aug. 22, 2013	Jan. 1, 2018-2043	4 to 5-1/4	166,575
Water and Wastewater Revenue Bonds, Series 2014	Uninsured	Jan. 23, 2014	Jul. 1, 2017-2027	3 to 5	117,200
Water and Wastewater Revenue Bonds, Series 2015A	Uninsured	Apr. 16, 2015	Jul. 1, 2036-2045	5	275,820
Water and Wastewater Revenue Bonds, Series 2015B	Uninsured	Apr. 16, 2015	Jul. 1, 2019-2035	4 to 5	141,740
Water and Wastewater Revenue Bonds, Series 2016	Uninsured	Nov. 3, 2016	Oct. 1, 2018-2035	3 to 5	191,070
Water and Wastewater Revenue Bonds, Series 2017A	Uninsured	Apr. 13, 2017	Oct. 1, 2018-2052	5 to 5-1/4	279,865
Gas Works Revenue Bonds, Fifth Series A-2	Uninsured	Oct. 19, 2004	Sep. 1, 2034	Variable	30,000
Gas Works Revenue Bonds, Seventh Series	AMBAC	May 15, 2007	Oct. 1, 2017-2037	5	16,070
Gas Works Revenue Bonds, Eighth Series A	Uninsured	Aug. 20, 2009	Aug. 1, 2017	5 to 5-1/4	7,840
Gas Works Revenue Bonds, Eighth Series B	Uninsured	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,370
Gas Works Revenue Bonds, Eighth Series C	Uninsured	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,225
Gas Works Revenue Bonds, Eighth Series D	Uninsured	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	40,845
Gas Works Revenue Bonds, Eighth Series E	Uninsured	Aug. 20, 2009	Aug. 1, 2017-2028	Variable	27,370
Gas Works Revenue Bonds, Ninth Series	Uninsured	Aug. 26, 2010	Aug. 1, 2017-2040	3 to 5-1/4	32,220
Gas Works Revenue Bonds, Ninth Series	Assured Guaranty	Aug. 26, 2010	Aug. 1, 2017-2040	3 to 5-1/4	35,640
Gas Works Revenue Bonds, Tenth Series	Assured Guaranty	Sep. 28, 2011	Jul. 1, 2017-2026	3-1/2 to 5	35,355
Gas Works Revenue Ref. Bonds, Thirteenth Series	Uninsured	Aug. 18, 2015	Aug. 1, 2017-2034	3 to 5	245,470
Gas Works Revenue Ref. Bonds, Fourteenth Series	Uninsured	Aug. 30, 2016	Oct. 1, 2017-2037	3 to 5	309,445
Airport Revenue Bonds, Series 1998B	FGIC	Jul. 1, 1998	Jun. 15, 2028	5-1/8	5
Airport Revenue Bonds, Series 2005C	MBIA	Jun. 2, 2005	Jun. 15, 2018-2025	Variable	110,700
Airport Revenue Bonds, Series 2007A	FSA	Aug. 16, 2007	Jun. 15, 2018-2037	5	146,780
Airport Revenue Bonds, Series 2007B	FSA	Aug. 16, 2007	Jun. 15, 2018-2027	5	46,785
Airport Revenue Bonds, Series 2009A	Assured Guaranty	Apr. 14, 2009	Jun. 15, 2018-2029	4 to 5-3/8	32,930
Airport Revenue Bonds, Series 2010A	Uninsured	Nov. 15, 2010	Jun. 15, 2018-2040	3-3/4 to 5-1/4	165,500
Airport Revenue Bonds, Series 2010A	Assured Guaranty	Nov. 15, 2010	Jun. 15, 2018-2040	3-3/4 to 5-1/4	85,810
Airport Revenue Bonds, Series 2010C	Uninsured	Nov. 15, 2010	Jun. 15, 2018-2018	5	8,995
Airport Revenue Bonds, Series 2010D	Uninsured	Nov. 15, 2010	Jun. 15, 2018-2028	4 to 5-1/4	184,815
Airport Revenue Bonds, Series 2010D	Assured Guaranty	Nov. 15, 2010	Jun. 15, 2020-2024	4 to 4-1/2	940

City of Philadelphia
Bonded Debt Insurance by Issue
June 30, 2017

Exhibit A-16

Amounts in thousands of USD

Title	Insurer	Date of Bonds	Range of Maturities	Range of Interest Rates %	Principal Amount
Airport Revenue Bonds, Series 2011A	Uninsured	Dec. 14, 2011	Jun. 15, 2018-2028	4-5/8 to 5	161,240
Airport Revenue Bonds, Series 2011B	Uninsured	Dec. 14, 2011	Jun. 15, 2018-2031	3-3/4 to 5	26,440
Airport Revenue Bonds, Series 2015A	Uninsured	Sep. 3, 2015	Jun. 15, 2018-2035	4 to 5	90,525
Airport Revenue Bonds, Series 2017	Uninsured	Apr. 27, 2017	Jul. 1, 2018-2022	2-7/10	125,000
Revenue Bonds Outstanding					<u>4,018,231</u>
Total Bonds Outstanding					<u>5,449,936</u>
Summary					
		<u>Insurer</u>	<u>Principal</u>		
		AMBAC	230,650		
		Assured Guaranty	714,230		
		FGIC	5		
		FSA	268,465		
		MBIA	110,700		
		Uninsured	4,125,886		
		Total Bonds Outstanding	<u>5,449,936</u>		

Part B

Sinking Fund - General Obligation Bonds

**Sinking Funds, Sinking Fund Reserves and
Renewal Funds - Revenue Bonds**

City of Philadelphia
Sinking Funds - General Obligation Bonds
Combining Balance Sheet
June 30, 2017

Exhibit B-1

Amounts in USD

	General Fund	Water Fund	Aviation Fund	Total
<u>Assets</u>				
Investments	355,277	-	-	355,277
Accrued Interest Receivable	233	-	-	233
<u>Total Assets</u>	<u>355,510</u>	<u>-</u>	<u>-</u>	<u>355,510</u>
<u>Fund Balance</u>				
Reserved for:				
Debt Service Interest - Series 2009B	355,510	-	-	355,510
<u>Total Fund Balance</u>	<u>355,510</u>	<u>-</u>	<u>-</u>	<u>355,510</u>

City of Philadelphia
Sinking Funds - General Obligation Bonds
Combining Statement of Fund Balance Available for Debt Service
June 30, 2017

Exhibit B-2

Amounts in USD

	General Fund	Water Fund	Aviation Fund	Total
<u>Fund Balance - July 1, 2016</u>	<u>986,842</u>	<u>-</u>	<u>-</u>	<u>986,842</u>
<u>Additions:</u>				
Interest Earnings	12,874	-	-	12,874
Appropriation Funding	137,714,458	-	-	137,714,458
Receipt of Bond Proceeds	262,865,000	-	-	262,865,000
Receipt of Bond Premium	30,077,256	-	-	30,077,256
<u>Total Additions</u>	<u>430,669,588</u>	<u>-</u>	<u>-</u>	<u>430,669,588</u>
<u>Deductions:</u>				
Payment of Debt Service				
Interest	70,468,664	-	-	70,468,664
Principal	67,890,000	-	-	67,890,000
Issuance Expenses	2,180,148	-	-	2,180,148
Bond Defeasance	290,762,108	-	-	290,762,108
<u>Total Deductions</u>	<u>431,300,920</u>	<u>-</u>	<u>-</u>	<u>431,300,920</u>
<u>Fund Balance - June 30, 2017</u>	<u>355,510</u>	<u>-</u>	<u>-</u>	<u>355,510</u>

City of Philadelphia
Sinking Funds - General Obligation Bonds
Consolidated Statement of Cash Receipts and Disbursements
For The Period July 1, 2016 to June 30, 2017

Exhibit B-3

Amounts in USD

	<u>Bonds</u>
<u>Balance - July 1, 2016</u>	<u>986,842</u>
<u>Receipts:</u>	
Appropriations - Bond Interest:	
General Fund	69,824,458
Appropriations - Bond Principal:	
General Fund	67,890,000
Interest Earnings	12,641
Accrued Interest Receivable June 30, 2017	233
Receipt of Bond Premium	30,077,256
Maturity of Investments	-
Issuance of Refunding Debt	<u>262,865,000</u>
<u>Total Receipts</u>	<u>430,669,588</u>
<u>Disbursements:</u>	
Purchase of Investments	-
Bond Maturities	67,890,000
Interest on General Obligation Bonds	70,468,664
Bond Issuance Expenses	2,180,148
Bond Defeasance	<u>290,762,108</u>
<u>Total Disbursements</u>	<u>431,300,920</u>
<u>Balance - June 30, 2017</u>	<u><u>355,510</u></u>

Assets	Water Fund		Aviation Fund			Philadelphia Gas Works		
	Sinking Fund	Sinking Fund Reserve	Total	Sinking Fund	Sinking Fund Reserve	Renewal Fund	Total	Total
Investments (Note 22)	823,192	220,972,398	221,795,590	232,476	76,605,721	2,273,643	79,111,840	86,843,291
Accrued Interest Receivable	546	446,438	446,984	152	162,740	2,874	165,765	180,607
Due from Other Funds	-	-	-	-	-	250,000	250,000	-
	823,738	221,418,836	222,242,574	232,628	76,768,461	2,526,516	79,527,605	87,023,898
Due to Other Funds	-	2,695,609	2,695,609	-	-	-	-	-
Fund Balance:								
Designated for Revenue Bond Interest (Note 3)	823,738	-	823,738	232,628	-	-	232,628	855
Designated for Maximum Debt Service (Note 1 & 2)	-	218,723,227	218,723,227	-	76,768,461	-	76,768,461	87,023,043
Undesignated Fund Balance - Renewal Funds (Note 3)	-	-	-	-	-	2,526,516	2,526,516	-
Total Fund Balance	823,738	218,723,227	219,546,965	232,628	76,768,461	2,526,516	79,527,605	87,023,898
Total Liabilities and Fund Balance	823,738	221,418,836	222,242,574	232,628	76,768,461	2,526,516	79,527,605	87,023,898

CITY OF PHILADELPHIA
SINKING FUND RESERVES AND RENEWAL FUNDS - REVENUE BONDS
STATEMENT OF INVESTMENTS

Exhibit B-4a

June 30, 2017								Amounts in US\$
Type	Date of Maturity	Par Value	Interest Rate %	Purchase Price	Yield at Market	Market Value at 6/30/17	Interest Accrued at 6/30/17	
Water Fund:								
Sinking Fund:								
Short-Term Investments:								
Short Term Investment Pools	-	823,192	-	823,192	-	823,192	546	
Sinking Fund Reserve:								
Short-Term Investments:								
Short Term Investment Pools	-	546,144	-	546,144	0.66	546,144	222.00	
Corporate Debt Instruments	11/13/2017	5,000,000	-	4,950,683	1.34	4,975,250	-	
Corporate Debt Instruments	01/26/2018	5,000,000	-	4,943,211	1.55	4,959,200	-	
Corporate Debt Instruments	10/02/2017	5,000,000	-	4,970,258	1.31	4,983,450	-	
Corporate Debt Instruments	10/13/2017	5,000,000	-	4,948,640	1.41	4,981,450	-	
Corporate Debt Instruments	08/01/2017	4,000,000	-	3,976,068	1.21	3,996,000	-	
Corporate Debt Instruments	10/02/2017	5,000,000	-	4,969,151	1.35	4,983,450	-	
Corporate Debt Instruments	08/03/2017	5,000,000	-	4,960,625	1.37	4,994,550	-	
Corporate Debt Instruments	12/28/2017	5,000,000	-	4,945,079	1.50	4,966,150	-	
Corporate Debt Instruments	03/15/2018	5,000,000	-	4,945,656	1.50	4,947,950	-	
Corporate Debt Instruments	05/03/2018	4,951,000	1.000	4,933,721	1.00	4,933,077	7,977	
Corporate Debt Instruments	03/06/2018	5,000,000	1.305	5,002,705	1.31	4,996,950	20,844	
Corporate Debt Instruments	10/06/2017	6,000,000	1.875	6,031,734	1.87	6,006,540	26,563	
Corporate Debt Instruments	01/12/2018	6,000,000	1.600	6,013,140	1.60	6,003,300	45,067	
Federal Agency Obligations	12/15/2017	14,800,000	1.000	14,838,290	1.00	14,788,752	6,578	
Federal Agency Obligations	04/09/2018	11,400,000	0.750	11,409,234	0.75	11,357,250	19,475	
Federal Agency Obligations	06/13/2018	10,000,000	4.875	10,732,600	4.72	10,336,800	24,375	
Federal Agency Obligations	04/06/2018	20,000,000	0.700	19,985,200	0.70	19,923,400	9,722	
Federal Agency Obligations	01/19/2018	12,250,000	0.750	12,238,340	0.75	12,218,150	41,344	
Federal Agency Obligations	10/13/2017	7,400,000	-	7,364,861	0.97	7,377,800	-	
Total Short-Term Investments		142,347,144		142,705,340		142,275,613	202,165	
Corporate Debt Instruments								
Federal Agency Obligations	02/28/2019	5,000,000	1.686	4,998,038	1.68	5,003,500	27,942	
Federal Agency Obligations	10/01/2018	5,000,000	0.875	4,968,950	0.88	4,969,800	10,938	
Federal Agency Obligations	03/18/2019	6,000,000	1.375	5,983,440	1.38	5,997,360	25,438	
U.S. Government Securities	07/31/2018	12,500,000	0.750	12,428,656	0.75	12,426,750	39,106	
U.S. Government Securities	10/31/2018	11,500,000	0.750	11,414,648	0.76	11,411,105	14,611	
U.S. Government Securities	04/30/2019	15,000,000	1.250	14,974,805	1.25	14,963,100	31,762	
U.S. Government Securities	09/30/2018	13,000,000	1.375	13,136,094	1.37	13,005,070	45,173	
U.S. Government Securities	11/30/2018	1,400,000	1.375	1,405,359	1.38	1,400,434	1,674	
U.S. Government Securities	02/28/2019	9,500,000	1.500	9,531,173	1.50	9,519,665	47,629	
Total Long-Term Investments		78,900,000		78,841,163		78,696,784	244,272	
Total Sinking Fund Reserve		221,247,144		221,546,503		220,972,397	446,437	

CITY OF PHILADELPHIA
SINKING FUND RESERVES AND RENEWAL FUNDS - REVENUE BONDS
STATEMENT OF INVESTMENTS

Exhibit B-4a

June 30, 2017		Amounts in US\$					
Type	Date of Maturity	Par Value	Interest Rate %	Purchase Price	Yield at Market	Market Value at 6/30/17	Interest Accrued at 6/30/17
Aviation Fund:							
Sinking Fund:							
Short-Term Investments:							
Short Term Investment Pools							
		232,476		232,476		232,476	152
Aviation Fund:							
Sinking Fund Reserve:							
Short Term Investments:							
Short Term Investment Pools							
	-	1,530,114	-	1,530,114	-	1,530,114	-
U.S. Government Securities	04/15/2018	7,750,000	0.750	7,720,938	0.75	7,718,225	12,069
Corporate Debt Instruments	07/24/2017	2,250,000	-	2,247,140	0.89	2,248,380	-
Corporate Debt Instruments	02/28/2018	2,000,000	-	1,973,675	2.00	1,980,400	-
Corporate Debt Instruments	10/10/2017	1,350,000	-	1,336,334	1.39	1,345,140	-
Corporate Debt Instruments	09/13/2017	1,350,000	-	1,342,431	1.18	1,346,544	-
Corporate Debt Instruments	10/02/2017	550,000	-	548,142	1.30	548,180	-
Corporate Debt Instruments	07/06/2017	900,000	-	898,975	1.01	899,910	-
Corporate Debt Instruments	02/27/2018	2,250,000	-	2,226,471	1.45	2,228,040	-
Corporate Debt Instruments	09/19/2017	1,250,000	-	1,246,326	1.17	1,246,538	-
Corporate Debt Instruments	07/11/2017	2,000,000	-	1,998,277	0.95	1,999,440	-
Corporate Debt Instruments	03/02/2018	900,000	-	891,256	1.34	891,108	-
Corporate Debt Instruments	09/07/2017	2,000,000	-	1,996,416	0.93	1,996,520	-
Corporate Debt Instruments	05/03/2018	2,200,000	1.000	2,194,022	1.00	2,192,036	3,483
Corporate Debt Instruments	03/19/2018	450,000	1.700	452,039	1.70	450,585	2,146
Corporate Debt Instruments	05/25/2018	650,000	1.550	651,339	1.55	650,416	980
Total Short-Term Investments		29,380,114		29,253,894		29,271,575	18,678
Corporate Debt Instruments							
Corporate Debt Instruments	08/15/2018	800,000	1.150	799,904	1.15	797,128	3,450
Corporate Debt Instruments	11/03/2018	2,250,000	1.300	2,247,120	1.30	2,246,423	4,631
Corporate Debt Instruments	11/16/2018	1,200,000	1.790	1,205,808	1.78	1,203,672	2,625
Corporate Debt Instruments	11/28/2018	1,350,000	1.800	1,348,880	1.80	1,352,741	2,160
Corporate Debt Instruments	02/28/2019	850,000	1.686	850,000	1.68	850,595	4,658
Corporate Debt Instruments	03/15/2019	1,160,000	2.400	1,174,222	2.38	1,172,099	8,120
Corporate Debt Instruments	05/24/2019	750,000	1.750	749,813	1.75	748,545	1,313
Corporate Debt Instruments	07/23/2018	1,000,000	1.750	1,004,960	1.75	1,001,650	7,632
Corporate Debt Instruments	11/15/2018	2,200,000	2.000	2,218,320	1.99	2,214,124	5,500
Corporate Debt Instruments	01/14/2019	850,000	2.250	855,270	2.24	855,432	8,819
Corporate Debt Instruments	01/22/2019	1,200,000	1.950	1,205,388	1.94	1,205,076	10,270
U.S. Government Securities	11/30/2018	15,750,000	1.375	15,772,109	1.38	15,754,883	17,751
U.S. Government Securities	02/28/2019	18,000,000	1.125	17,917,031	1.13	17,931,780	67,133
Total Long-Term Investments		47,360,000		47,348,824		47,334,146	144,062
Total Sinking Fund Reserve		76,740,114		76,602,718		76,605,721	162,740

CITY OF PHILADELPHIA
SINKING FUND RESERVES AND RENEWAL FUNDS - REVENUE BONDS
STATEMENT OF INVESTMENTS

Exhibit B-4a

June 30, 2017 Amounts in USD

Type	Date of Maturity	Par Value	Interest Rate %	Purchase Price	Yield at Market	Market Value at 6/30/17	Interest Accrued at 6/30/17
Aviation Fund:							
Renewal Fund:							
Short Term Investment Pools	-	132,082	-	132,082	0.66	132,082	90
U.S. Government Securities	8/31/2017	100,000	0.625	99,641	0.63	99,938	209
U.S. Government Securities	10/31/2017	250,000	0.750	250,215	0.75	249,715	316
U.S. Government Securities	11/30/2017	100,000	0.625	99,898	0.63	99,794	53
U.S. Government Securities	2/28/2018	400,000	0.750	399,285	0.75	398,780	1,003
U.S. Government Securities	3/31/2018	150,000	0.875	150,100	0.88	149,573	332
U.S. Government Securities	5/31/2018	375,000	0.875	374,403	0.88	373,654	285
Federal Agency Obligations	8/1/2017	100,000	-	100,033	1.03	100,017	172
Federal Agency Obligations	12/8/2017	280,000	1.125	281,310	1.13	279,916	201
		<u>1,887,082</u>		<u>1,886,968</u>		<u>1,883,469</u>	<u>2,660</u>
Long-Term Investments:							
U.S. Government Securities	12/31/2018	200,000	1.375	200,406	1.37	200,078	8
U.S. Government Securities	5/31/2019	195,000	1.250	194,886	1.25	194,528	206
		<u>395,000</u>		<u>395,292</u>		<u>394,606</u>	<u>214</u>
		<u>2,282,082</u>		<u>2,282,260</u>		<u>2,278,075</u>	<u>2,874</u>
Total Renewal Fund							
Philadelphia Gas Works:							
Sinking Fund:							
Short Term Investments:	-	<u>754</u>	-	<u>754</u>	-	<u>754</u>	<u>102</u>
Short Term Investment Pools							
Sinking Fund Reserve:							
Short Term Investments:							
Short Term Investment Pools	-	255,880	-	255,880	-	255,880	127
Corporate Debt Instruments	11/13/2017	2,000,000	-	1,980,273	1.34	1,990,100	-
Corporate Debt Instruments	01/26/2018	2,000,000	-	1,977,284	1.55	1,983,680	-
Corporate Debt Instruments	10/02/2017	2,000,000	-	1,988,103	1.31	1,993,380	-
Corporate Debt Instruments	10/13/2017	2,000,000	-	1,979,456	1.41	1,992,580	-
Corporate Debt Instruments	08/01/2017	2,000,000	-	1,988,034	1.21	1,998,000	-
Corporate Debt Instruments	10/02/2017	2,000,000	-	1,987,661	1.35	1,993,380	-
Corporate Debt Instruments	08/03/2017	2,000,000	-	1,984,250	1.37	1,997,820	-
Corporate Debt Instruments	12/28/2017	2,000,000	-	1,978,032	1.50	1,986,460	-
Corporate Debt Instruments	03/15/2018	2,000,000	-	1,978,262	1.50	1,979,180	-
Corporate Debt Instruments	05/03/2018	2,000,000	1.000	1,993,020	1.00	1,992,760	3,222
Corporate Debt Instruments	03/06/2018	2,000,000	1.305	2,001,082	1.31	1,998,780	8,338
Corporate Debt Instruments	10/06/2017	2,250,000	1.875	2,261,900	1.87	2,252,453	9,961
Corporate Debt Instruments	01/12/2018	2,000,000	1.600	2,004,380	1.60	2,001,100	15,022

CITY OF PHILADELPHIA
SINKING FUND RESERVES AND RENEWAL FUNDS - REVENUE BONDS
STATEMENT OF INVESTMENTS

Exhibit B-4a

June 30, 2017

Amounts in US\$							
Type	Date of Maturity	Par Value	Interest Rate %	Purchase Price	Yield at Market	Market Value at 6/30/17	Interest Accrued at 6/30/17
Philadelphia Gas Works:							
Sinking Fund Reserve:							
Short Term Investments:							
Federal Agency Obligations	12/15/2017	6,950,000	1.000	6,964,171	1.00	6,944,718	3,089
Federal Agency Obligations	04/09/2018	5,000,000	0.750	5,004,050	0.75	4,981,250	8,542
Federal Agency Obligations	06/13/2018	2,250,000	4.875	2,414,835	4.72	2,325,780	5,484
Federal Agency Obligations	04/06/2018	8,750,000	0.700	8,743,525	0.70	8,716,488	4,253
Federal Agency Obligations	01/19/2018	5,000,000	0.750	4,995,241	0.75	4,987,000	16,875
U.S. Government Securities	09/30/2017	1,000,000	1.875	1,013,672	1.87	1,001,920	4,713
Total Short-Term Investments		55,455,880		55,493,111		55,372,708	79,626
Long-Term Investments:							
Corporate Debt Instruments	02/28/2019	2,000,000	1.686	1,999,418	1.68	2,001,400	11,177
U.S. Government Securities	07/31/2018	7,850,000	0.750	7,804,344	0.75	7,803,999	24,558
U.S. Government Securities	10/31/2018	4,200,000	0.750	4,168,828	0.76	4,167,534	5,336
U.S. Government Securities	04/30/2019	5,000,000	1.250	4,991,602	1.25	4,987,700	10,587
U.S. Government Securities	09/30/2018	5,250,000	1.375	5,304,961	1.37	5,252,048	18,243
U.S. Government Securities	11/30/2018	900,000	1.375	903,445	1.38	900,279	1,077
U.S. Government Securities	02/28/2019	3,850,000	1.500	3,862,634	1.50	3,857,970	19,303
Federal Agency Obligations	03/18/2019	2,500,000	1.375	2,493,100	1.38	2,498,900	10,599
Total Long-Term Investments		31,550,000		31,528,331		31,469,829	100,880
Total Sinking Fund Reserve		87,005,880		87,021,442		86,842,537	180,506

City of Philadelphia
Sinking Funds, Sinking Fund Reserves and Renewal Funds - Revenue Bonds
Statement of Revenues, Expenditures and Fund Balance
June 30, 2017

Exhibit B-5

<i>Amounts in USD</i>									
	Water Fund			Aviation Fund			Philadelphia Gas Works		
	Sinking Fund	Sinking Fund Reserve	Total	Sinking Fund	Sinking Fund Reserve	Renewal Fund	Sinking Fund	Sinking Fund Reserve	Total
Revenues:									
Contribution for Debt Service Payments									
Water Fund	204,649,608	-	204,649,608	-	-	-	-	-	-
Aviation Fund	-	-	-	118,789,516	-	-	-	-	-
Philadelphia Gas Works	-	-	-	-	-	-	-	-	-
Contribution from Bond Proceeds	-	-	-	-	-	-	28,938,558	-	28,938,558
Reserve for Revenue Bonds	-	-	-	-	-	-	-	-	-
Proceeds from Bond Sale	-	11,888,317	-	-	-	-	-	-	-
to be Capitalized	-	-	-	-	-	-	-	-	-
Contribution from Water Residual Fund	-	-	-	-	-	-	-	-	-
Interest Earnings	43,242	2,736,667	2,779,909	269,410	466,059	18,280	678	1,050,496	1,051,173
Total Revenues	204,692,850	14,624,984	207,429,517	119,058,926	466,059	18,280	28,939,236	1,050,496	29,989,732
Expenditures:									
Debt Service									
Principal	125,848,051	-	125,848,051	63,240,000	-	-	2,980,000	-	2,980,000
Interest	80,294,252	-	80,294,252	55,710,511	-	-	5,660,061	-	5,660,061
Bond Issuance Costs	-	-	-	-	-	-	16,279,593	-	-
Total Expenditures	206,142,302	-	206,142,303	118,950,511	-	-	24,919,654	-	8,640,061
Excess of Revenues Over (Under)	(1,449,451)	14,624,984	1,287,215	108,415	466,059	18,280	4,019,582	1,050,496	21,349,670
Expenditures									
Other Financing Sources (Uses):									
Issuance of Debt	-	-	-	-	-	-	-	-	-
Bond Issuance Premium	-	-	-	-	-	-	312,425,000	-	312,425,000
Transfer from Other Funds	-	-	-	-	31,000,000	250,000	57,188,109	-	57,188,109
Transfer to Other Funds	-	-	-	-	-	-	-	(4,132,666)	(4,132,666)
Increase (Decrease) in Market	-	-	-	-	-	-	-	-	-
Valuation Allowance (Note 19)	-	(332,357)	(332,357)	-	(35,800)	(7,223)	-	(82,515)	(82,515)
Gain (Loss) on Sale of Investments	-	(1,035,935)	(1,035,935)	-	(136,080)	(5,297)	-	(425,569)	(425,569)
Bond Defeasance	-	-	-	-	-	-	(373,632,014)	-	(373,632,014)
Total Other Financing Sources (Uses)	-	(1,368,291)	(1,368,291)	-	30,828,120	237,480	(4,018,904)	(4,640,750)	(8,659,655)
Excess of Revenues and Other Sources Over (Under) Expenditures and Other Uses	(1,449,452)	13,256,692	(81,077)	108,415	31,294,179	255,760	678	(3,590,254)	12,690,015
Fund Balance - July 1, 2016	2,273,190	219,162,143	221,435,333	124,341	45,474,282	2,270,756	177	90,613,297	90,613,474
Unadjusted Fund Balance, June 30, 2017	823,738	232,418,835	233,242,573	232,756	76,768,461	2,526,516	855	87,023,043	87,023,897
Adjustments to Fund Balance	-	-	-	(128)	-	-	-	-	-
Transfer of Excess Earnings Over Reserve Requirement	-	(13,695,609)	(13,695,609)	-	-	-	-	-	-
Fund Balance - June 30, 2017	823,738	218,723,226	219,546,964	232,628	76,768,461	2,526,516	855	87,023,043	87,023,897

Part C

Notes to the Report of Bonded Indebtedness

City of Philadelphia
Notes to the Report of Bonded Indebtedness
For the Fiscal Year Ended June 30, 2017

Exhibit C-1

- (1) Sinking Fund Reserves represent the legal requirements as stipulated in the General Bond Ordinance wherein it is stated that Fund Balances, including investments at Market Value, must be maintained at an amount at least equal to the Maximum Debt Service Requirements (MDSR) in any subsequent year of all bonds outstanding. Under the General Airport Ordinance, in lieu of the required deposits into the Sinking Fund Reserve, the City may obtain an unconditional and irrevocable surety bond or letter of credit in the required amount provided that the issuer meets the credit ratings threshold in the General Ordinance. At June 30, 2017 the Airport Series 1998 bonds met the \$27,953,667 Sinking Fund Reserve requirement with a letter of credit issued by Wells Fargo Bank. The Airport Series 2005C bonds met the \$18,690,850 requirement with a letter of credit issued by TD Bank, and the Airport Series 2007A and 2007B bonds met the \$23,966,374 requirement with a surety policy issued by Financial Security Assurance Inc. The following table represents the MDSR for the outstanding revenue bonds that are not associated with surety bonds:

<u>Water Fund</u>	
Water and Wastewater Revenue Bonds, Series 1997B	3,992,333
Water and Wastewater Revenue Bonds, PA Infrastructure Investment Authority, Series 1999	90,665
Water and Wastewater Revenue Refunding Bonds, Series 2005B	18,430,514
Water and Wastewater Revenue Refunding Bonds, Series 2007A	10,173,125
Water and Wastewater Revenue Refunding Bonds, Series 2007B	7,166,875
Water and Wastewater Revenue Bonds, Series 2009A	4,867,600
Water and Wastewater Revenue Refunding Bonds, Series 2010A	37,443,198
Water and Wastewater Revenue Bonds, Series 2009B, C, D & 2010B	11,409,441
Water and Wastewater Revenue Bonds, Series 2010C	39,090,325
Water and Wastewater Revenue Bonds, Series 2011A	6,737,000
Water and Wastewater Revenue Refunding Bonds, Series 2011B	9,229,750
Water and Wastewater Revenue Refunding Bonds, Series 2012	3,250,250
Water and Wastewater Revenue Refunding Bonds, Series 2013A	11,759,700
Water and Wastewater Revenue Bonds, Series 2014A	1,500,000
Water and Wastewater Revenue Refunding Bonds, Series 2014	10,324,625
Water and Wastewater Revenue Bonds, Series 2015A	13,791,000
Water and Wastewater Revenue Refunding Bonds, Series 2015B	6,810,100
Water and Wastewater Revenue Refunding Bonds, Series 2016	9,011,138
Water and Wastewater Revenue Bonds, Series 2017A	13,645,587
Total Water Fund	\$ 218,723,226
<u>Gas Works Fund</u>	
Gas Works Revenue Bonds, Fifth Series A-2	247,671
Gas Works Revenue Refunding Bonds, Seventh Series	8,900,777
Gas Works Revenue Refunding Bonds, Eighth Series	12,686,806
Gas Works Revenue Bonds, Ninth Series	3,227,812
Gas Works Revenue Refunding Bonds, Tenth Series	7,060,482
Gas Works Revenue Refunding Bonds, Thirteenth Series	28,329,859
Gas Works Revenue Refunding Bonds, Fourteenth Series	26,569,636
Total Gas Works Fund	\$ 87,023,043
<u>Aviation Fund</u>	
Airport Revenue Refunding Bonds, Series 2009A	1,471,656
Airport Revenue Bonds, Series 2010A	7,333,749
Airport Revenue Refunding Bonds, Series 2010D	10,366,864
Airport Revenue Refunding Bonds, Series 2011A	6,049,567
Airport Revenue Refunding Bonds, Series 2011B	1,018,519
Airport Revenue Refunding Bonds, Series 2015A	3,010,298
Airport Revenue Refunding Bonds, Series 2017A	47,517,808
Total Aviation Fund	\$ 76,768,461
Total Revenue Bond Reserves	\$ 382,514,730

City of Philadelphia
Notes to the Report of Bonded Indebtedness
For the Fiscal Year Ended June 30, 2017

Exhibit C-1

- (2) The General Obligation Sinking Fund contains \$0.3 million for the payment of future interest expenses of the Series 2009B Bonds.

In addition to the amounts available in the Sinking Fund Reserves for Revenue Bonds, \$0.8 million is available in the Water Sinking Fund for the payment of future interest expenses of the Series 1997B and 2005B variable rate bonds and the outstanding Pennvest Revenue bonds. The amounts remaining in the Airport Sinking Fund represent \$0.2 million available for the future interest expenses of the Series 2005C bonds.

The Aviation Renewal, Replacement and Contingency Fund has also been established in the amount of \$2.5 million that was originally funded from the proceeds of the First Series Airport Revenue Bonds. The amounts in the Renewal Fund may be decreased from time to time to cover the cost of unforeseen contingencies and emergencies arising from the operation of the airport system. Under the Airport's General Bond Ordinance, the Renewal Fund must be reimbursed for such uses through periodic payments in an aggregate amount not to exceed \$500,000 per year.

- (3) The Pennsylvania Intergovernmental Cooperation Authority (PICA), a body corporate and politic, was organized in June 1991 and exists under and by virtue of the Pennsylvania Intergovernmental Cooperation Act for Cities of the First Class (the Act). Pursuant to the Act, the Authority 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, the President Pro Tempore of the Senate, the Speaker of the State House of Representatives and the Minority Leader of the State 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 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 plan (which certification would require the Secretary of the Budget of the Commonwealth 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 its share of wage and earnings tax that it levies on City residents in order to provide a revenue stream to PICA. 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. At June 30, 2017 PICA bonds outstanding amounted to \$213.9 million. The debt service through maturity is as follows:

<u>Year</u>	<u>Principal</u>	<u>Interest</u>
2018	45.4	10.7
2019	38.8	8.4
2020	40.5	6.4
2021	32.9	4.4
2022	34.4	2.8
2023	21.9	1.1
Total	<u>\$ 213.9</u>	<u>\$ 33.8</u>

City of Philadelphia
Notes to the Report of Bonded Indebtedness
For the Fiscal Year Ended June 30, 2017

Exhibit C-1

- (4) The City has guaranteed certain debt payments of the following City component units. As such, the City has a potential financial obligation toward the extinguishment of this debt, either by replacing the various reserve funds, if used, or the actual payment of principal or interest. At June 30, 2017 the principal balances outstanding are as follows:

	(millions)
	<u>Principal</u>
Philadelphia Parking Authority	11.7
	<u>\$ 11.7</u>

- (5) As of 2010, the City of Philadelphia Water Department received authorization for up to \$214.9 million of low-interest loans from the Pennsylvania State Infrastructure Investment Authority (PENNVEST). During Fiscal Year 2017, PENNVEST's reimbursements totaled \$6.2 million, which represents an increase in bond issuance. The funding is through low-interest loans of 1.193% during the construction period and for the first five years of amortization (interest only payments are due during the construction period, up to three years) and 2.107% for the remaining fifteen years. Individual loan information is as follows:

<u>Date</u>	<u>Series</u>	<u>Amount Authorized</u>	<u>Amount Issued as of 6/30/2017</u>
October 2009	2009B	42,886,030	29,432,930
October 2009	2009C	57,268,193	49,157,776
March 2010	2009D	84,759,263	75,744,096
July 2010	2010B	30,000,000	28,500,000
	Totals	<u>\$ 214,913,486</u>	<u>\$ 182,834,802</u>

- (6) In February 2017, the City issued \$262.9 million of General Obligation Refunding Bonds Series 2017. The total proceeds were \$292.9 million (including a premium of \$30.0 million). The proceeds of the sale were used to refund the series 2006, 2007A, 2008A, 2009A and 2011 bonds. The interest rates of the Bonds that were refunded ranged from 4.75% to 6.5%. The interest rates of the newly issued bonds ranged from 4% to 5%. The transaction resulted in a total savings to the City of \$39.4 million over the next 26 years. The economic gain (the difference between the present value of debt service payments on the old versus the new debt) was \$15.6 million.
- (7) In April 2017, PMA issued \$83.2 million of City Service Agreement Revenue Refunding Bonds Series 2017. The total proceeds of the 2017 bonds were \$93.8 million (which includes a premium of \$10.6 million). The 2017 Bonds were issued to partially refund \$84.2 million of the Series 2009 Bonds and to pay the costs of issuing the 2017 Bonds. The interest rates for the 2017 Bonds range from 3.0% to 5.0%. The interest rates of the refunded bonds range from 6.0% to 6.5%. The transaction resulted in a total savings to the City of \$22.2 million over the next 22 years. The difference between the present value of the debt service payments on the old debt versus the new debt (economic gain) was \$15.6 million.
- (8) In August 2016, the City issued \$312.4 million of Philadelphia Gas Works Fourteenth Series Revenue Refunding Bonds. A portion of the proceeds were also used to pay the costs of issuance of the Fourteenth series bonds, refund portions of the outstanding Seventh, Eighth and Ninth Series bonds, (1998 General Ordinance Bonds). The total bonds refunded amounted to \$351.5 million.

City of Philadelphia
Notes to the Report of Bonded Indebtedness
For the Fiscal Year Ended June 30, 2017

Exhibit C-1

The total proceeds of the PGW Fourteenth Series Bonds were \$369.6 million (which includes a premium of \$57.2 million). The interest rates of the bonds that were refunded ranged from 3.675% to 5.250%. The interest rates of the newly issued bonds range from 2.0% to 5.0%.

- (9) In April 2017, the City issued \$125.0 million of Airport Revenue Bonds Series 2017 (Direct Purchase Federally Taxable Loan) to fund capital improvements for the Philadelphia Airport System. The interest rate of the newly issued Series 2017 Loan is 2.797%.
- (10) In November 2016, the City issued \$192.7 million of Water and Wastewater Revenue Bonds Series 2016 Bonds to refund the outstanding Series 2007A, 2009A and 2010C Bonds in the amount of \$216.4 million and to pay the costs of issuing the Series 2016 Bonds. The total proceeds of the 2016 Bonds were \$226.0 million (which includes a premium of \$33.3 million). The interest rates of the bonds that were refunded ranged from 4.0% to 5.25%. The interest rates of the newly issued bonds range 3.0% to 5.0%. The transaction resulted in a total savings to the City of \$51.4 million over the next 20 years. The economic gain was \$40.9 million.
- (11) In April 2017, the City issued \$279.9 million of Water and Wastewater Revenue Bonds Series 2017A Bonds to fund capital improvements for the Water Department and make a deposit into the Water Sinking Fund Reserve. The total proceeds of the 2017A Bonds were \$313.7 million (which includes a premium of \$33.8 million). The interest rates of the newly issued bonds range 5.0% to 5.25%.
- (12) General Obligation Maturities of \$67,890,000 were paid as follows: July 2016 – \$10,370,000; August 2016 - \$49,020,000; and December 2015 - \$8,500,000.
- (13) Revenue Bond Maturities of \$230,217,824 were paid as follows: July 2016 - \$13,228,897; August 2016 - \$94,693,913; September 2016 - \$848,929; October 2016 - \$3,828,945; November 2016 - \$6,748,961; December 2016 - \$848,977; January 2017 - \$8,408,993; February 2017 - \$849,009; March 2017 - \$849,026; April 2017 - \$2,459,042; May 2017 - \$849,058; and June 2017 - \$96,604,074.
- (14) In relation to the City's debt-incurring capacity statement, the Pennsylvania Constitution, Article IX, Section 12 states the following:

"The debt of the City of Philadelphia may be increased in such amount that the total debt of said city shall not exceed thirteen and one-half percent of the average of the annual assessed valuations of the taxable realty therein, during the ten years immediately preceding the year in which such increase is made, but said city shall not increase its indebtedness to an amount exceeding three percent upon such average assessed valuation of realty, without the consent of the electors thereof at a public election held in such manner as shall be provided by law. In ascertaining the debt-incurring capacity of the City of Philadelphia at any time, there shall be deducted from the debt of said city so much of such debt as shall have been incurred, or is about to be incurred, and the proceeds thereof expended, or about to be expended, upon any public improvement, or in construction, purchase or condemnation of any public utility, or part hereof, or facility therefore, if such public improvement or public utility, or part thereof, or facility therefore, may reasonably be expected to yield revenue in excess of operating expenses sufficient to pay the interest and sinking fund charges thereon. The method of determining such amount, so to be deducted, shall be as now prescribed, or which may hereafter be prescribed by law. In incurring indebtedness for any purpose the City of Philadelphia may issue its obligations maturing not later than fifty years from the date thereof, with provision for a sinking fund to be equal or graded annual or other periodical installments. Where any indebtedness shall be or shall have been incurred by said City of Philadelphia for the purpose of the construction or improvement of public works or utilities of any character, from which income or revenue is to be derived by said city, or for the reclamation of land to be used in the construction of wharves or docks owned or to be owned by said city, such obligations may be in an amount sufficient to provide for, and may include the amount of the interest and sinking fund charges accruing and which may accrue thereon throughout the period of construction, and until the expiration of one year after the completion of the work for which said indebtedness shall have been incurred. No debt shall be incurred by, or on behalf of, the County of Philadelphia."

City of Philadelphia
Notes to the Report of Bonded Indebtedness
For the Fiscal Year Ended June 30, 2017

Exhibit C-1

- (15) In August of 1990, the City sold the Philadelphia Port Corporation to the Regional Port Authority (State Authority). Indebtedness authorized for port related activities was considered self-sustaining. After the sale, the outstanding self-sustaining debt was reclassified as tax supported. At June 30, 2017 the outstanding reclassified debt amounted to \$400,479.15 of the total port debt of \$1,629,412.58.
- (16) Self-supporting General Obligation Bonds are outstanding at June 30, 2017 for the following major purposes: Veterans Stadium - \$97,084.15; Subways - \$573,948.70; and Hospitals Tri-Institutional Laundry \$48,185.51. Refer to Exhibit A-9.
- (17) Capitalized Interest related to enterprise funds will be reflected in the Sinking Fund Assets. For fiscal year 2017, there is no capitalized interest for any of the enterprise funds. Capitalized Interest related to lease and service obligations are deducted from the yearly interest payment amounts. At June 30, 2017, the 2012 PAID refunding bonds had a total of approximately \$33.1 million in General Fund Escrow.
- (18) Water and Wastewater Revenue Bonds, Series 1997B outstanding at June 30, 2017 in the amount of \$53,200,000 were issued as Variable Rate Bonds on November 25, 1997. At June 30, 2017, the total interest payable for the Series 1997B bonds are determined by the interest rate of 0.89%.
- Water and Wastewater Revenue Bonds, Series 2005B outstanding at June 30, 2017 in the amount of \$18,180,000 were issued as Variable Rate Bonds on May 4, 2005. At June 30, 2017, the Total Interest Payable for these bonds is determined by the interest rate of 4.53%
- Gas Works Revenue Bonds, Fifth Series A-2 outstanding at June 30, 2017 in the amount of \$30,000,000 were issued as Variable Rate Bonds on October 19, 2004. At June 30, 2017, the Total Interest Payable for the Fifth Series A-2 bonds is determined by the interest rate of 0.89%.
- Gas Works Revenue Bonds, Eighth Series B, C, D & E outstanding at June 30, 2017 in the amount of \$122,810,000 were issued as Variable Rate Bonds on August 20, 2009. At June 30, 2017, the Total Interest Payable for these bonds is determined by the interest rate of 3.6745%.
- General Obligation Bonds, Series 2009B outstanding at June 30, 2017 in the amount of \$100,000,000 were issued as Variable Rate Bonds on August 13, 2009. At June 30, 2017, the total interest payable for these 2009B bonds is determined by the interest rate of 3.829%.
- (19) The City is legally required by the General Bond Ordinance to present investments at market value for the satisfaction of debt service reserve requirements. Fund balances reflect this valuation basis and changes in the allowance for the reporting period are included in income determination. Actual gains and losses are recognized in the period in which disposition of the investment occurs.