NEW ISSUE BOOK-ENTRY ONLY

RATINGS: Moody's: "Baa1"
S&P: "A-"
Fitch: "BBB+"
See "Ratings" herein

In the opinion of Co-Bond Counsel, under existing statutes, regulations, rulings and court decisions, interest on the Bonds will not be includible in the gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the City with the requirements of the Internal Revenue Code of 1986, as amended. Interest on the Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax ("AMT"); however, interest on the Bonds held by corporations is included in the computation of "adjusted current earnings," a portion of which is taken into account in determining the AMT imposed on corporations. Under the laws of the Commonwealth of Pennsylvania, as enacted and construed on the date hereof, interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax and the Bonds are exempt from personal property taxes in Pennsylvania. See "Tax Matters" herein for a description of certain other tax consequences to holders of the Bonds.

$261,770,000
CITY OF PHILADELPHIA, PENNSYLVANIA
GAS WORKS REVENUE REFUNDING BONDS
THIRTEENTH SERIES
(1998 GENERAL ORDINANCE)

Dated: Date of Delivery **Due: August 1, as shown on the inside cover page**

Defined Terms All capitalized terms that are not otherwise defined on this cover page have the meanings provided to such terms in this Official Statement.

The Bonds The City of Philadelphia (the "City") is issuing the Gas Works Revenue Refunding Bonds, Thirteenth Series (the "Bonds"). The Bonds will be issued in denominations of $5,000 and integral multiples thereof.

Purpose The proceeds of the Bonds, together with other available moneys, will be used to (i) redeem, refund or defease all bonds currently outstanding under the General Gas Works Revenue Bond Ordinance of 1975, at which time the pledge and security interest granted by the 1975 General Ordinance will be terminated, (ii) redeem or defease all or a portion of certain series of bonds currently outstanding under the General Gas Works Revenue Bond Ordinance of 1998, (iii) make a deposit to the Sinking Fund Reserve established under the 1998 General Ordinance, and (iv) pay the costs of issuing the Bonds. See "Plan of Finance and Estimated Sources and Uses of Funds" herein.

Payment and Security The following is qualified in all respects by the information in this Official Statement under the caption "Security and Sources of Payment for the 1998 Ordinance Bonds" and the documents referenced under such caption.

The Bonds are being issued as Senior 1998 Ordinance Bonds on a parity with all other Senior 1998 Ordinance Bonds issued and Outstanding under the 1998 General Ordinance. The Bonds are secured by and payable by the City solely from the Gas Works Revenues and the Sinking Fund Reserve.

The Bonds are special obligations of the City payable solely from the sources described herein and neither the taxing power nor the general revenues of the City is pledged for the payment of the principal of, premium, if any, or interest on the Bonds, nor are the Bonds a general obligation of the City. The Bonds do not constitute debt of the City within the meaning of the Constitution of the Commonwealth of Pennsylvania.

Redemption The Bonds are subject to optional redemption prior to maturity. See "Description of the Bonds" herein.

Additional Bonds The City has the right to issue additional bonds under the 1998 General Ordinance under the circumstances and upon satisfaction of certain conditions established in the 1998 General Ordinance, as described herein. See "Security and Sources of Payment for the 1998 Ordinance Bonds – Authorized Additional 1998 Ordinance Bonds" herein.

Interest Payment Dates Interest on the Bonds is payable semiannually on each August 1 and February 1, commencing on February 1, 2016.

Tax Status For information on the tax status of the Bonds, see the italicized language at the top of this cover page and "Tax Matters" herein.

Delivery Date It is expected that the Bonds will be available for delivery to DTC on or about August 18, 2015.

This cover page contains certain information for quick reference only. It is not a summary of the Bonds or this Official Statement. Investors must read the entire Official Statement, including the Appendices, which are an integral part hereof, to obtain information essential to the making of an informed investment decision regarding the Bonds.

The Bonds are offered when, as and if issued and accepted by the Underwriters, subject to the prior sale, withdrawal, or modification of the offer without notice, and subject to the approval as to the legality of the issuance of the Bonds by Eckert Seamans Cherin & Mellott, LLC and Andre C. Dasent, P.C., Co-Bond Counsel, both of Philadelphia, Pennsylvania. Certain legal matters will be passed upon for the Underwriters by Ballard Spahr LLP of Philadelphia, Pennsylvania and Gonzalez Saggio & Harlan LLP of New York, New York, Co-Counsel to the Underwriters. Certain legal matters will be passed upon for the City by the City of Philadelphia Law Department. Certain legal matters will be passed upon for Philadelphia Gas Works by the Office of General Counsel of the Philadelphia Gas Works and by Eckert Seamans Cherin & Mellott, LLC of Harrisburg, Pennsylvania. Hawkins Delafield & Wood LLP, as Disclosure Counsel to the City, will deliver an opinion to the City and the Underwriters regarding certain matters.

Wells Fargo Securities
BofA Merrill Lynch
J.P. Morgan

Citigroup
Loop Capital Markets

PNC Capital Markets LLC
Goldman, Sachs & Co.
The Williams Capital Group, L.P.

Dated: August 5, 2015

MATURITY SCHEDULE

$261,770,000
CITY OF PHILADELPHIA, PENNSYLVANIA
GAS WORKS REVENUE REFUNDING BONDS
THIRTEENTH SERIES
(1998 GENERAL ORDINANCE)

Due (August 1)	Amount	Rate	Yield	Price	CUSIP No.[†]
2016	$16,300,000	3.00%	0.60%	102.276%	7178236Y9
2017	18,075,000	4.00	1.03	105.726	7178236Z6
2018	17,270,000	4.00	1.37	107.584	7178237A0
2019	16,435,000	5.00	1.68	112.644	7178237B8
2020	15,720,000	5.00	1.93	114.433	7178237C6
2021	19,630,000	5.00	2.24	115.300	7178237D4
2022	19,125,000	5.00	2.55	115.518	7178237E2
2023	19,290,000	5.00	2.74	116.050	7178237F9
2024	18,700,000	5.00	2.92	116.281	7178237G7
2025	12,620,000	5.00	3.07	116.442	7178237H5
2026	12,865,000	5.00	3.18[††]	115.421[††]	7178237J1
2027	9,730,000	5.00	3.31[††]	114.229[††]	7178237K8
2028	10,225,000	5.00	3.41[††]	113.322[††]	7178237L6
2029	10,735,000	5.00	3.49[††]	112.602[††]	7178237M4
2030	11,270,000	5.00	3.55[††]	112.066[††]	7178237N2
2031	11,835,000	5.00	3.58[††]	111.799[††]	7178237P7
2032	12,420,000	5.00	3.63[††]	111.356[††]	7178237Q5
2033	4,645,000	5.00	3.71[††]	110.651[††]	7178237R3
2034	4,880,000	5.00	3.75[††]	110.301[††]	7178237S1

[†] CUSIP is a registered trademark of American Bankers Association (the "ABA"). CUSIP data is provided by CUSIP Global Services, which is managed on behalf of the ABA by S&P Capital IQ, a division of McGraw-Hill Financial, Inc. The CUSIP numbers listed above are being provided solely for the convenience of Bondholders of the Bonds only at the time of original issuance of the Bonds and the City, the Philadelphia Gas Works ("PGW") and the Underwriters do not make any representation with respect to such CUSIP numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of such Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of such maturity of the Bonds.

[††] Yield and price to first par call date of August 1, 2025.

CITY OF PHILADELPHIA, PENNSYLVANIA

MAYOR
HONORABLE MICHAEL A. NUTTER

MAYOR'S CHIEF OF STAFF
Everett A. Gillison

MAYOR'S CABINET

Richard Negrin, Esq. ..... Managing Director
Rob Dubow ..... Director of Finance
Shelley R. Smith, Esq. ..... City Solicitor
John Elfrey ..... Acting Deputy Mayor for Transportation and Utilities
Alan Greenberger ..... Deputy Mayor for Planning and Economic Development and Commerce Director
Susan Kretsge ..... Deputy Mayor for Health and Opportunity
Michael DiBerardinis ..... Deputy Mayor for Environmental and Community Resources
Desiree Peterkin-Bell ..... Director of Communications and Strategic Partnerships/City Representative
Lori A. Shorr, Ph.D. ..... Chief Education Officer
Tumar Alexander ..... First Deputy Chief of Staff
Adel Ebeid ..... Chief Information Officer
Katherine Gajewski ..... Director of Sustainability
Eva Gladstein ..... Executive Director, Mayor's Office of Community Engagement & Opportunity
Helen Haynes ..... Chief Cultural Officer
Amy L. Kurland ..... Inspector General
Stephanie Tipton ..... Acting Chief Integrity Officer
Michael Resnick ..... Director of Public Safety
Robert Murken ..... Director, Legislative and Government Affairs
David G. Wilson ..... First Deputy Managing Director
Maia Jachimowicz ..... Director of Policy

City Treasurer
Nancy E. Winkler

PHILADELPHIA GAS WORKS
800 W. Montgomery Avenue
Philadelphia, Pennsylvania 19122

Craig E. White ..... President and Chief Executive Officer
Douglas A. Moser ..... Executive Vice President and Acting Chief Operating Officer
Joseph F. Golden, Jr. ..... Executive Vice President and Acting Chief Financial Officer
Charles J. Grant ..... Chief of Staff
Abby L. Pozefsky, Esq. ..... Chief Administrative Officer and General Counsel
Daniel P. Murray ..... Senior Vice President – Customer Affairs and Operations
Raymond M. Snyder, P.E. ..... Senior Vice President – Gas Management
Eloise N. Young ..... Chief Information Officer and Vice President – Information Services

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CITY CONTROLLER
Alan L. Butkovitz

CO-FINANCIAL ADVISORS
Public Financial Management, Inc.
Phoenix Capital Partners, LLP

FISCAL AGENT
U.S. Bank National Association

No dealer, broker, salesperson or other person has been authorized by the City, the Philadelphia Gas Works ("PGW") or the Underwriters to give any information or to make representations, other than as contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by the City, PGW or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person, in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The information set forth herein has been furnished by the City and PGW and includes information obtained from other sources, all of which are believed to be reliable. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any of the Bonds shall, under any circumstances, create any implication that there has been no change in the affairs of PGW or the City since the date hereof. Such information and expressions of opinion are made for the purpose of providing information to prospective investors and are not to be used for any other purpose or relied on by any other party.

The order and placement of materials in this Official Statement, including the Appendices, are not to be deemed a determination of relevance, materiality or importance, and this Official Statement, including the cover page, the inside cover page and the Appendices, must be considered in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provisions or sections of this Official Statement. The offering of the Bonds is made only by means of this entire Official Statement.

The statements contained in this Official Statement, including in the Appendices, and in any other information provided by PGW and the City and other parties to the transactions described herein that are not purely historical are forward-looking statements. Such forward-looking statements can be identified, in some cases, by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "illustrate," "example," and "continue," or the singular, plural, negative or other derivations of these or other comparable terms. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to such parties on the date hereof, and neither PGW nor the City assumes any obligation to update any such forward-looking statements. The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in various important factors. Accordingly, actual results may vary from the projections, forecasts and estimates contained in this Official Statement and such variations may be material, which could affect the ability of the City to fulfill some or all of the obligations under the Bonds.

The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

In connection with the offering of the Bonds, the Underwriters may overallot or effect transactions which stabilize or maintain the market price of the Bonds at levels above those which might otherwise prevail in the open market. Such stabilization, if commenced, may be discontinued at any time.

These securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.

This Official Statement is being provided to prospective purchasers either in bound printed form ("original bound format") or in electronic format on the following website: www.munios.com. This Official Statement may be relied upon only if it is in its original bound format or if it is printed in full directly from such website.

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OFFICIAL STATEMENT

$261,770,000
CITY OF PHILADELPHIA, PENNSYLVANIA
GAS WORKS REVENUE REFUNDING BONDS
THIRTEENTH SERIES
(1998 GENERAL ORDINANCE)

INTRODUCTION

This introduction is intended to provide a plain language overview of matters that are described in more detail in this Official Statement, and as such is qualified by reference to the entire Official Statement. The Official Statement includes the cover page, the inside cover page, the pages prior to and including the Table of Contents, this introduction, and all appendices to the Official Statement.

General

The City of Philadelphia, Pennsylvania (the "City") is issuing the City of Philadelphia, Pennsylvania Gas Works Revenue Refunding Bonds, Thirteenth Series (1998 General Ordinance) (the "Bonds"). This Official Statement describes the Bonds, the purposes for which they are being issued, the security and sources of payment of the Bonds, and other related matters.

Purpose; Use of Proceeds

The proceeds of the Bonds, together with other available moneys, will be used to (i) redeem, refund or defease all bonds currently outstanding under the General Gas Works Revenue Bond Ordinance of 1975, at which time the pledge and security interest granted by the 1975 General Ordinance will be terminated, (ii) redeem, refund or defease all or a portion of certain series of bonds currently outstanding under the General Gas Works Revenue Bond Ordinance of 1998, (iii) make a deposit to the Sinking Fund Reserve established under the 1998 General Ordinance, and (iv) pay the costs of issuing the Bonds. The refunding will result in debt service savings to the City. "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS."

The Bonds

The Bonds will be issued in the aggregate principal amount, the principal amounts per maturity, and at the interest rates, yields and prices shown on the inside cover page. Interest on the Bonds will be payable on each February 1 and August 1, commencing February 1, 2016.

The Bonds are being issued pursuant to: (i) the First Class City Revenue Bond Act of the Commonwealth of Pennsylvania (the "Act"); (ii) the General Gas Works Revenue Bond Ordinance of 1998, as amended and supplemented (the "1998 General Ordinance"); (iii) the Thirteenth Supplemental Ordinance to the General Gas Works Revenue Bond Ordinance of 1998 (the "Thirteenth Supplemental Ordinance"); and (iv) the Bond Authorization for the Bonds adopted by the Bond Committee of the City (consisting of the Mayor, the City Controller and the City Solicitor and acting by a majority thereof) (the "Bond Committee") (the "Thirteenth Series Bond Authorization").

The Bonds will be issued in book-entry form with no physical distribution of the Bonds being made to the public. The Depository Trust Company ("DTC") will act as securities depository for the Bonds. U.S. Bank National Association has been appointed as Fiscal Agent under the 1998 General Ordinance, and as such will also act as paying agent, registrar, and Sinking Fund Depositary of the Sinking Fund (as defined below).

Security and Sources of Payment

The Bonds will be issued as senior bonds under the 1998 General Ordinance ("Senior 1998 Ordinance Bonds"), and will be secured by a pledge of, lien on, and security interest in all Gas Works Revenues and the Sinking Fund Reserve. Gas Works Revenues are defined in the 1998 General Ordinance to include all operating and non-operating revenues of the Philadelphia Gas Works ("PGW" or the "Gas Works") derived from its activities and assets involved in the supply, manufacture, storage and distribution of gas. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE."

The Bonds will be secured on a parity with all other Senior 1998 Ordinance Bonds as described below under the caption "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS." The City is authorized to issue additional 1998 Ordinance Bonds, which may be either on a parity with or subordinate to the Senior 1998 Ordinance Bonds, subject to the satisfaction of certain conditions described below under the caption "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Authorized Additional 1998 Ordinance Bonds**" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE."

Rate Covenant

The City has covenanted in the 1998 General Ordinance that, for so long as the 1998 Ordinance Bonds are outstanding, the City will, at a minimum, impose, charge and collect in each Fiscal Year of PGW such gas rates and charges as shall, together with all other Gas Works Revenues to be received in such Fiscal Year, equal not less than an amount needed to pay, among other costs, the sum of (i) certain operating expenses of PGW (costs and expenses necessary and appropriate to operate and maintain the Gas Works in good operable condition), and (ii) 150% of debt service on Senior 1998 Ordinance Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Rate Covenant and Rate Requirements**" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE."

Sinking Fund; Sinking Fund Reserve

The Act requires that a bond ordinance authorizing the issuance of bonds must provide for "the establishment and maintenance of a sinking fund." The 1998 General Ordinance establishes a Sinking Fund, which operates as a debt service payment fund. The Sinking Fund is held in the name of the City separate and apart from all other accounts of the City, and the City deposits in the Sinking Fund from Gas Works Revenues the amounts needed to pay when due debt service on Senior 1998 Ordinance Bonds. See the third paragraph under "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Gas Works Revenues** – *Order of Application of Gas Works Revenues*" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE."

The 1998 General Ordinance also establishes a Sinking Fund Reserve as part of the Sinking Fund. The City is required to deposit in the Sinking Fund Reserve an amount sufficient to cause the amount therein to be equal to the Sinking Fund Reserve Requirement. Such deposits can be made from either the proceeds of each series of bonds secured by the Sinking Fund Reserve, available Gas Works Revenues or some combination of both. The Sinking Fund Reserve Requirement is equal to the greatest amount of debt service requirements on bonds secured by the Sinking Fund Reserve in any Fiscal Year. The Sinking Fund Reserve Requirement may be met by the use of letters of credit or other credit facilities. The Bonds and the other Senior 1998 Ordinance Bonds currently outstanding are secured by the Sinking Fund Reserve. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Sinking Fund Reserve**" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE."

Special Obligations

The Bonds are special obligations of the City payable solely from the sources described herein and neither the taxing power nor the general revenues of the City is pledged for the payment of the principal of, premium, if any, or interest on the Bonds, nor are the Bonds a general obligation of the City. The Bonds do not constitute debt of the City within the meaning of the Constitution of the Commonwealth of Pennsylvania (the "Commonwealth").

Philadelphia Gas Works

The information under this caption is derived, in principal part, from the Independent Consultant's Engineering Report, dated July 2, 2015, prepared by Black & Veatch Corporation ("Black & Veatch"), an independent engineer retained by the City to evaluate PGW (the "INDEPENDENT CONSULTANT'S ENGINEERING REPORT"), which is attached hereto as APPENDIX B, and to which the reader is referred for a more detailed presentation.

PGW is owned by the City and is accounted for in the City's audited financial statements as a component unit of the City. PGW prepares a CAFR that includes annual financial statements audited by an independent auditor and an unaudited statistical section.

PGW is the largest municipally-owned gas utility in the nation, and is responsible for the acquisition and storage of natural gas and is the sole distributer of natural gas within the limits of the City. Such limits also define the service area of PGW.

PGW is principally a gas distribution utility, with a distribution system of approximately 3,024 miles of gas mains and 475,800 service lines. In addition, PGW operates facilities for the liquefaction, storage, and vaporization of natural gas to supplement gas supply taken directly from interstate pipeline and storage companies. The principal PGW natural gas supply facilities include nine City gate stations, owned in large part by the interstate pipeline companies serving PGW (Spectra Energy ("Spectra") and Transcontinental Gas Pipe Line Corporation ("Transco-Williams")), and two liquefied natural gas ("LNG") plants owned by the City and operated by PGW.

PGW's operations are managed by the Philadelphia Facilities Management Corporation ("PFMC"), a Pennsylvania not-for-profit corporation whose Board is appointed by the Mayor. PFMC's responsibilities are set forth in a Management Agreement between the City and PFMC dated December 29, 1972, as subsequently amended ("Management Agreement"), which delegates responsibility for PGW's operation to an executive management team provided by PFMC. Under the Management Agreement, those responsibilities that are not specifically granted to PFMC are the responsibilities of the Philadelphia Gas Commission ("PGC" or the "Gas Commission"), except to the extent preempted by the Pennsylvania Public Utility Commission (the "PUC") pursuant to the Pennsylvania Natural Gas Choice and Competition Act ("Gas Choice Act"). The Gas Choice Act makes PGW subject to regulation by the PUC effective July 1, 2000, and provides that choice among natural gas suppliers will be provided to PGW's customers.

The following summary chart describes the management and governance of PGW:

Organization	Function
City	• Owns PGW property • City administration reviews certain transactions and processes (chiefly through the Director of Finance) • City Council enacts legislation for the functioning of PGW (e.g., the capital budget, real estate transactions, pension modifications and gas supply contracts)

PGC	• Consists of the City Controller, two members appointed by the City Council and two members appointed by the Mayor
	• Responsibilities include:
	  • approval of certain executive personnel provided by PFMC
	  • review of gas supply contracts for approval by City Council
	  • approval of PGW's operating budget
	  • review of PGW's capital budgets for approval by City Council
	  • review of real estate transactions for approval by City Council

PFMC	• Incorporated by the City in 1972 for the specific purpose of operating PGW • Is governed by a seven member board of directors • Provides executive management for PGW • Directs operation of PGW facilities and operations
PGW	• Manages construction, operation and maintenance of the gas system on a day-to-day basis • PGW executive management is responsible for hiring PGW staff
PUC	• Regulates rates, customer services and safety

Independent Consultant's Engineering Report

Black & Veatch, an independent engineer retained by the City to evaluate PGW, provided a report that made certain findings relating to the adequacy of Gas Works Revenues to pay debt service on all bonds and notes for which Gas Works Revenues are pledged. That report is the "Independent Consultant's Engineering Report," a copy of which is attached hereto as APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT." Also see "INDEPENDENT CONSULTANT'S ENGINEERING REPORT" below.

Certain Terminology

As used in this Official Statement, the terms "gas" and "natural gas" are interchangeable.

The Fiscal Year of PGW begins on September 1 and ends on August 31 of the following calendar year. For example, "Fiscal Year 2015" when used in connection with PGW refers to the Fiscal Year ending August 31, 2015. The City's Fiscal Year begins on July 1 and ends on June 30 of the following calendar year. For example, "Fiscal Year 2015" or "FY2015" when used in connection with the City refers to the fiscal year ending June 30, 2015.

When referred to individually, each Series of City of Philadelphia, Pennsylvania Gas Works Revenue Bonds (1998 General Ordinance) is referred to by its numerical designation, followed by the words "Series Bonds."

PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS

Plan of Finance

The proceeds of the Bonds, together with amounts to be released from the sinking fund reserve established under the General Gas Works Revenue Bond Ordinance of 1975, as amended and supplemented (the "1975 General Ordinance") and other available moneys, are to be used to (i) redeem, refund or defease all of the outstanding City of Philadelphia, Pennsylvania Gas Works Revenue Bonds (1975 General Ordinance) (the "1975 Ordinance Bonds"); (ii) redeem all of the Outstanding Fourth Series Bonds and Fifth Series A-1 Bonds and defease a portion of the Outstanding Seventh Series Bonds (the "1998 Refunded Bonds"); (iii) make a deposit to the Sinking Fund Reserve; and (iv) pay the costs of issuing the Bonds.

The City will redeem, refund or defease all outstanding 1975 Ordinance Bonds simultaneously with the issuance of the Bonds. Immediately after their redemption, refunding or defeasance, no 1975 Ordinance Bonds will be outstanding and the pledge and security interest granted by the 1975 General Ordinance will be terminated, and the City will no longer have the authority to issue any bonds under the 1975 General Ordinance. When such pledge and security interest are terminated, the interest of the 1975 Ordinance Bonds in Gas Works Revenues will terminate and the 1998 Ordinance Bonds will have the priority interest in Gas Works Revenues described in "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Closure of the 1975 General Ordinance**."

The refunding will result in debt service savings to the City.

Estimated Sources and Uses of Funds

The sources and uses of funds are estimated to be as follows:

Estimated Sources:	
Principal Amount of the Bonds	$261,770,000.00
Original Issue Premium	32,496,893.55
Amounts in the 1975 General Ordinance Sinking Fund Reserve	33,041,617.36
Other Available Moneys	11,489,725.01
Total Sources	$338,798,235.92
Estimated Uses:	
Redemption, Refunding or Defeasance of 1975 Ordinance Bonds	$131,446,451.57
Redemption or Defeasance of 1998 Refunded Bonds	188,240,827.58
Deposit to the 1998 General Ordinance Sinking Fund Reserve	16,644,108.89
Costs of Issuance[1]	2,466,847.88
Total Uses	$338,798,235.92

[1] Includes the fees and expenses of various counsel and the Fiscal Agent, consultant's fees, fees of accountants, fees of financial advisors, rating agency fees, printing and publication costs, contingency, underwriters' discount, and other expenses related to the issuance of the Bonds.

DESCRIPTION OF THE BONDS

General

The Bonds will be available in the denominations of $5,000 and integral multiples thereof and will mature on the dates and in the principal amounts, and will bear interest from their date of delivery at the interest rates, all as set forth on the inside cover page of this Official Statement. Interest on the Bonds is payable on February 1 and August 1, commencing February 1, 2016, and is calculated on the basis of a 360-day year of twelve 30-day months.

The Bonds are available only in book-entry form as fully-registered bonds without coupons. When issued, the Bonds will be registered in the name of Cede & Co., as nominee for DTC, to which payments of principal and interest will be made. Purchasers of the Bonds will not receive physical delivery of bond certificates representing their ownership interests during the period during which a nominee of DTC is owner of the Bonds. So long as DTC or its nominee is the registered owner of the Bonds, principal of and interest on the Bonds are payable directly to such nominee for redistribution to Participants and in turn to Beneficial Owners as described herein. For so long as any purchaser is the Beneficial Owner of Bonds, such purchaser must maintain an account with a broker or dealer who is, or acts through, a Participant to receive payment of the principal of and interest on such Bonds. See APPENDIX G – "BOOK-ENTRY ONLY SYSTEM" herein.

Optional Redemption of Certain of the Bonds at Par

The Bonds maturing on or after August 1, 2026 are subject to optional redemption, at the direction of the City, in whole or in part at any time on or after August 1, 2025, and in any order of maturity as may be designated by the City, at a redemption price equal to 100% of the principal amount of the Bonds so redeemed, plus accrued interest to the redemption date.

Optional Redemption of the Bonds at Make-Whole Redemption Price

The Bonds are subject to optional redemption, at the direction of the City, in whole at any time or in part from time to time, on any date and in any order of maturity as may be designated by the City, at the Make-Whole Redemption Price (defined below). The Make-Whole Redemption Price of the Bonds will be determined by a broker/dealer or registered municipal advisor selected by the City to calculate the Make-Whole Redemption Price.

The following capitalized terms, when used under this subheading, shall have the respective meanings set forth below:

"Make-Whole Redemption Price" means an amount equal to the greater of (a) one hundred percent (100%) of the Amortized Value of the Bonds to be redeemed, plus accrued and unpaid interest to the date of redemption; or (b) the sum of the present values of the remaining unpaid payments of principal and interest to be paid on such Bonds to be redeemed from and including the date of redemption to the stated maturity dates of the Bonds to be redeemed or as to Bonds subject to optional redemption, the optional redemption date at which the Bonds subject to optional redemption, are to be redeemed at par, on a semiannual basis at a discount rate equal to the Applicable Tax-Exempt Municipal Bond Rate plus 0.15%.

"Amortized Value" means the principal amount of the Bonds to be redeemed multiplied by the price of such Bonds expressed as a percentage, calculated based on the industry standard method of calculating bond prices, with a delivery date equal to the date of redemption, a maturity date equal to the stated maturity dates of such Bonds, or as to Bonds subject to optional redemption, the date on which such Bonds subject to optional redemption are to be redeemed at par, and a yield equal to such Bonds' original yields as set forth on the inside front cover page of this Official Statement.

"Applicable Tax-Exempt Municipal Bond Rate" means, the "Comparable AAA General Obligations" yield curve rate for the stated maturity dates of such Bonds to be redeemed as published by Municipal Market Data ("MMD") five business days prior to the date of redemption. If no such yield curve rate is established for the stated maturity dates, the "Comparable AAA General Obligations" yield curve rate for the two published maturities most corresponding to the applicable stated maturity date will be determined, and the "Applicable Tax-Exempt Municipal Bond Rate" will be interpolated or extrapolated from those yield curve rates on a straight-line basis. This rate is made available daily by Municipal Market Data and is available to its subscribers through its internet address: www.tm3.com.

In calculating the Applicable Tax-Exempt Municipal Bond Rate, should MMD no longer publish the "Comparable AAA General Obligations" yield curve rate, then the Applicable Tax-Exempt Municipal Bond Rate will equal the Consensus Scale yield curve rate for the applicable year. The Consensus Scale yield curve rate is made available daily by Municipal Market Advisors and is available to its subscribers through its internet address: www.mma-research.com.

In the further event Municipal Market Advisors no longer publishes the Consensus Scale, the Applicable Tax-Exempt Municipal Bond Rate will be determined by Wells Fargo Securities, LLC, or any other municipal market maker selected by the City as the quotation agent, based upon the rate per annum equal to the semiannual equivalent yield to maturity of those tax-exempt general obligation bonds if rated in the highest rating category by Moody's Investors Service and Standard & Poor's Financial Services LLC, with maturity dates equal to the stated maturity dates of the Bonds subject to optional redemption, having characteristics (other than the ratings) most comparable to the Bonds subject to optional redemption, in the reasonable judgment of the quotation agent. The quotation agent's determination of the Applicable Tax-Exempt Municipal Bond Rate shall be final and binding upon the Holder of any Bond in the absence of manifest error.

Selection of Bonds to be Called for Redemption

During the period when all of the Bonds are registered in the name of a nominee of DTC, if less than all of the Bonds of a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Participant in such maturity to be redeemed. ("Participants" is defined in APPENDIX G – "BOOK-ENTRY ONLY SYSTEM"). If the Bonds are not in book-entry form, then, if less than all of the Bonds are to be redeemed, the particular Bonds to be called for redemption will be selected by lot or by such other method as the Fiscal Agent deems fair and appropriate.

Notice of Redemption of Bonds

Notice of redemption of Bonds shall be made not less than thirty (30) days nor more than (60) days before the date fixed for redemption to the applicable Registered Owners appearing on the Bond Register of the Bonds to be redeemed. During the period when all of the Bonds are registered in the name of a nominee of DTC the Fiscal Agent will send all redemption notices to such nominee, and DTC will be responsible for notifying Participants, and Participants and Indirect Participants are responsible for notifying Beneficial Owners. Neither the Fiscal Agent, the City nor PGW is responsible for sending notices to Beneficial Owners or for the consequences of any action or inaction by the City or PGW as a result of the response or failure to respond by DTC or its nominee as Bondowner. ("Indirect Participants" and "Beneficial Owners" are defined in APPENDIX G – "BOOK-ENTRY ONLY SYSTEM.")

If the Bonds are not in book-entry from, notice of any redemption will be mailed, first class postage prepaid, addressed to the registered owners of the Bonds called for redemption at the addresses appearing in the registration books kept by the bond registrar. Not more than sixty days following the applicable redemption date, a further notice will be mailed as described above to the Bondholders of any Bonds called for redemption and not then presented for payment.

Any notice of redemption provided in accordance with the provisions described above shall be conclusively presumed to have been duly given, whether or not such notice is actually received by the Bondholders. No defect in the notice with respect to any Bond (whether in the form of notice or the providing thereof) shall affect the validity of the redemption proceedings for any other Bonds. A notice with respect to an optional redemption of the Bonds may state that it is conditioned upon the deposit of moneys with the Fiscal Agent on or before the date fixed for redemption and in such event, such notice shall be of no effect unless such moneys are deposited.

SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS[†]

Pledge of Revenues and Funds

The Bonds and each series of bonds or notes previously issued or to be issued under the 1998 General Ordinance (whether senior or subordinate) (collectively, "1998 Ordinance Bonds") are special obligations of the City secured by and payable by the City solely from (i) the Gas Works Revenues, and (ii) unless otherwise set forth in the Supplemental Ordinance authorizing such 1998 Ordinance Bonds, the Sinking Fund Reserve. The Bonds and all Outstanding Senior 1998 Ordinance Bonds are secured by the Sinking Fund Reserve. See "– **Gas Works Revenues**" and "– **Sinking Fund Reserve**" below.

The Bonds are special obligations of the City payable solely from the sources described herein and neither the taxing power nor the general revenues of the City are pledged for the payment of the principal of, premium, if any, or interest on the Bonds, nor are the Bonds a general obligation of the City. The Bonds do not constitute debt of the City within the meaning of the Constitution of the Commonwealth.

Outstanding 1998 Ordinance Bonds

Bonds and notes issued under the 1998 General Ordinance may be issued as Senior 1998 Ordinance Bonds or as Subordinate 1998 Ordinance Bonds ("Subordinate 1998 Ordinance Bonds"). As of July 1, 2015, the City has issued twelve Series of 1998 Ordinance Bonds in an aggregate principal amount of $1,847,080,000, of which $859,120,000 were Outstanding as of July 1, 2015. All of the 1998 Ordinance Bonds Outstanding as of such date were Senior 1998 Ordinance Bonds. Though there were no Subordinate 1998 Ordinance Bonds outstanding as of July 1, 2015, the City is authorized to issue, in a principal amount not to exceed $120,000,000 Outstanding at any time, Subordinate 1998 Ordinance Bonds in the form of CP Capital Project Notes (as defined below). As of the date of this Official Statement, there are no Outstanding draws of CP Capital Project Notes. See "– **Authorized Additional 1998 Ordinance Bonds**" and "COMMERCIAL PAPER PROGRAMS – **CP Capital Project Notes**" below.

Senior 1998 Ordinance Bonds

All Senior 1998 Ordinance Bonds (including the Bonds) are secured on a parity with all other Senior 1998 Ordinance Bonds and the obligations of the City to make, from Gas Works Revenues, payments (other than termination payments) due under any Qualified Swaps and Exchange Agreements related to Senior 1998 Ordinance Bonds. In accordance with the 1998 General Ordinance, Net Operating Expenses then payable are paid from Gas Works Revenues before debt service on Senior 1998 Ordinance Bonds and the other City obligations payable on a parity with Senior 1998 Ordinance Bonds. The Bonds and all other Senior 1998 Ordinance Bonds are senior in right of payment and security to any Subordinate 1998 Ordinance Bonds. See "– **Gas Works Revenues** – *Order of Application of Gas Works Revenues*" below.

[†] The information set forth under this heading describes the security and sources of payment for the 1998 Ordinance Bonds when no 1975 Ordinance Bonds are outstanding, which will occur concurrently with the issuance of the Bonds. See "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS" above.

Subordinate 1998 Ordinance Bonds

All Subordinate 1998 Ordinance Bonds are subject to the prior right of payment and security of the Senior 1998 Ordinance Bonds (including the Bonds), the other obligations of the City on a parity with Series 1998 Ordinance Bonds and payments to issuers of Credit Facilities related to Senior 1998 Ordinance Bonds. See "– *Senior 1998 Ordinance Bonds*" above and "– **Gas Works Revenues** – *Order of Application of Gas Works Revenues*" below. Any Subordinate 1998 Ordinance Bonds would be secured on a parity with all other Subordinate 1998 Ordinance Bonds and certain other obligations of the City. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**."

Gas Works Revenues

General

The 1998 General Ordinance defines Gas Works Revenues as:

> all operating and nonoperating revenues of the Gas Works derived from its activities and assets involved in the supply, manufacture, storage and distribution of gas, including all rents, rates and charges imposed or charged by the City upon the owners or occupants of properties connected to, and upon all users of, gas distributed by the Gas Works and all other revenues derived therefrom and all other income derived by the City from the Gas Works.

Revenues derived from activities unrelated to the supply, manufacture, storage and distribution of gas or assets related thereto are not included in Gas Works Revenues. If PGW receives fair payment for the use of gas related assets and personnel of PGW used in such unrelated activities, such payments are included in Gas Works Revenues.

Gas Works Revenues may be divided into separate components in one or more Supplemental Ordinances and any Series of 1998 Ordinance Bonds issued thereafter may be limited as to source of payment to one or more of such components as provided in the Supplemental Ordinance authorizing the particular Series of 1998 Ordinance Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Authorized Additional 1998 Ordinance Bonds**." As of the date of this Official Statement, no portion of the Gas Works Revenues has been divided as described above and all Gas Works Revenues secure and provide payment for all 1998 Ordinance Bonds. Only new sources of Gas Works Revenues may be so divided while the Bonds and all previously issued Series of 1998 Ordinance Bonds remain Outstanding.

Gas Works Revenues do not include any portions of PGW's rents, rates and charges derived from non-performing assets, if any, which are securitized and sold pursuant to the 1998 General Ordinance. PGW currently has no assets designated as "non-performing." See "PERMITTED SECURITIZATION OF REVENUES RELATED TO NON-PERFORMING ASSETS" below.

Order of Application of Gas Works Revenues

Gas Works Revenues are not exclusively available for payment of debt service on Senior 1998 Ordinance Bonds and deposits to the Sinking Fund Reserve. Gas Works Revenues are also the source of payment for PGW's operating costs, debt service on Subordinate 1998 Ordinance Bonds, payments required under Credit Facilities and Qualified Swaps and Exchange Agreements, and certain other obligations of the City related to PGW. For information concerning the City's existing Qualified Swaps and Exchange Agreements and Credit Facilities, see "– Qualified Swaps and Exchange Agreements" and "– Credit Facilities With Respect to 1998 Ordinance Bonds" below. APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**."

The 1998 General Ordinance establishes an order of application of Gas Works Revenues as and when collected in each Fiscal Year as follows: FIRST to Net Operating Expenses then payable; SECOND to debt service on Senior 1998 Ordinance Bonds and payments (other than termination payments) due to the issuers of Qualified Swaps and Exchange Agreements related to Senior 1998 Ordinance Bonds, and THEREAFTER to the other obligations of the City (including, but not limited to, debt service on Subordinate 1998 Ordinance Bonds and the replenishment of the Sinking Fund Reserve) described and in the order set forth in APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**."

The City transfers Gas Works Revenues available after the payment of Net Operating Expenses then payable from PGW's operating funds to the Sinking Fund to make payments due on Senior 1998 Ordinance Bonds. The 1998 General Ordinance requires such transfers to be made on or before the day that payments on Senior 1998 Ordinance Bonds are due. The Sinking Fund (including the Sinking Fund Reserve) is held by the Sinking Fund Depositary in the name of the City in an account or accounts separate and apart from all other accounts of the City. U.S. Bank National Association, the Fiscal Agent with respect to the 1998 Ordinance Bonds, also serves as the Sinking Fund Depositary. If the City elects to invest moneys in the Sinking Fund, such investments may be invested and reinvested on a consolidated basis with investments held in the Sinking Fund Reserve. See "– **Sinking Fund Reserve**" and "– **Covenant Against Commingling with Other City Funds"** below and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Sinking Fund**" and "– **Fiscal Agent**."

Any deficiency in the Sinking Fund Reserve shall be replenished with the Gas Works Revenues available after the payment of Net Operating Expenses then payable, debt service on 1998 Ordinance Bonds and the other obligations on a parity with 1998 Ordinance Bonds, payments due to Credit Facility Issuers and any Rebate Amount required to be paid to the United States. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**." The 1998 General Ordinance provides that any excess moneys (including investment earnings) in the Sinking Fund Reserve, to the extent not required to be retained in the fund or account to which such moneys related, shall be transferred to the operating accounts of PGW to be applied as Gas Works Revenues in accordance with the 1998 General Ordinance.

Net Operating Expenses

Net Operating Expenses are defined in the 1998 General Ordinance as Operating Expenses exclusive of City Charges.

Operating Expenses are defined in the 1998 General Ordinance as all costs and expenses of the Gas Works necessary and appropriate to operate and maintain the Gas Works in good operable condition during each Fiscal Year, and include, without limitation, the manager's fee, salaries and wages, purchases of service by contract, costs of materials, supplies and expendable equipment, maintenance costs, costs of any property or the replacement thereof or for any work or project, related to the Gas Works, which does not have a probable useful life of at least five years, pension and welfare plan and workmen's compensation requirements, provision for claims, refunds and uncollectible receivables and for City Charges, all in accordance with generally accepted municipal accounting principles consistently applied, but shall exclude depreciation and interest and sinking fund charges. The 1998 General Ordinance, however, excludes expenses which are unrelated to the supply, manufacture, storage and distribution of gas or assets related thereto from the definition of Operating Expenses. Gas Works are defined in the 1998 General Ordinance as all property, real and personal, owned by the City and used in the acquisition or manufacture, storage and distribution of natural, liquefied, synthetic or manufactured gas or in the maintenance, management or administration thereof and all activities ancillary and related thereto, and also means, as the context may require, the business entity managed by PFMC.

City Charges

City Charges are defined in the 1998 General Ordinance as the proportionate charges, if any, for services performed for the Gas Works by all officers, departments, boards or commissions of the City which are contained in the computation of operating expenses of the Gas Works including, without limitation, the expenses of the Gas Commission, and also means the base payments to the City contained in the Management Agreement and all other payments made to the City from Gas Works Revenues.

City Charges are payable from Gas Works Revenues provided, however, that such payments are subordinate to all other City obligations payable from the Gas Works Revenues. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE **– Order of Application of Gas Works Revenues**." The City has covenanted in the 1998 General Ordinance that it will not in any Fiscal Year pay from Gas Works Revenues any City Charges or debt service on any general obligation bonds of the City unless, among other things, there has been deposited in the Sinking Fund an amount sufficient to pay all sinking fund charges then payable with respect to all Outstanding 1998 Ordinance Bonds. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Covenants** – *Additional Covenants*." Assuming the satisfaction of the above referenced covenant, PGW's annual $18.0 million payment to the City under the Management Agreement is paid currently in equal installments on the first business day of February, March, April and May in each Fiscal Year. See "PHILADELPHIA GAS WORKS – **Management** – *Management Agreement*" and "GAS SERVICE TARIFF AND RATES – **Rates** – *Ratemaking Methodology to Account for Bond Covenants*."

Related Covenants

Prior to issuing any 1998 Ordinance Bonds, the Act and the 1998 General Ordinance require the City Council to adopt a Supplemental Ordinance that makes certain findings relating to the adequacy of Gas Works Revenues to pay debt service on all then-Outstanding 1998 Ordinance Bonds, the 1998 Ordinance Bonds to be issued thereunder and all other bonds or notes secured by the Gas Works Revenues. In connection with the adoption of the Thirteen Supplemental Ordinance and the issuance of the Bonds, such findings were based (in conformance with the Act and the 1998 General Ordinance) on a report of Black & Veatch, an independent engineer retained by the City to evaluate PGW. A copy of such report is available at the office of the Chief Clerk of the City Council, Room 402 City Hall, Philadelphia, Pennsylvania.

The 1998 General Ordinance requires the City to comply with a rate covenant (the "Rate Covenant"), which requires the City to impose, charge and collect, in each Fiscal Year, rates and charges which, together with all other Gas Works Revenues to be received in such Fiscal Year, shall be sufficient to meet, among other things, Net Operating Expenses then payable and the debt service coverage requirements (including those with respect to the 1998 Ordinance Bonds) specified in the 1998 General Ordinance. See "– Rate Covenant and Rate Requirements" below and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE" herein.

Sinking Fund Reserve

The 1998 General Ordinance establishes the Sinking Fund Reserve as a separate account in the Sinking Fund. Each Series of 1998 Ordinance Bonds (unless otherwise set forth in the Supplemental Ordinance authorizing such Series) is entitled to the benefit of the Sinking Fund Reserve. The City is required to deposit to the credit of the Sinking Fund Reserve from the proceeds of sale of each Series of 1998 Ordinance Bonds secured by the Sinking Fund Reserve and/or Gas Works Revenues an amount which, together with other amounts in the Sinking Fund Reserve, equal the greatest amount of debt service requirements required in any Fiscal Year to pay principal of and interest on the 1998 Ordinance Bonds of such Series coming due and payable in that Fiscal Year. In lieu of a deposit to the credit of the Sinking Fund Reserve or in substitution for amounts in the Sinking Fund Reserve, the City may provide one or more letters of credit or other Credit Facilities in the same aggregate amount, issued by a provider or providers whose Credit Facilities are such that bonds secured by such Credit Facilities are rated in one of the three (3) highest

rating categories by Moody's Investors Service, Inc. ("Moody's"), Fitch ICBA, Inc. ("Fitch") or Standard & Poor's Ratings Service, a Division of The McGraw Hill Companies, Inc. ("S&P"), all in the manner described in APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Sinking Fund Reserve**."

If, at any time and for any reason, the moneys in the Sinking Fund (other than the Sinking Fund Reserve) are insufficient to pay, as and when due, debt service on any 1998 Ordinance Bonds secured by the Sinking Fund Reserve, the Sinking Fund Depositary is required to pay over to the Fiscal Agent, from the Sinking Fund Reserve, the amount of the deficiency. If by reason of such withdrawal (including draws on any Credit Facilities held to satisfy the Sinking Fund Reserve Requirement) or for any other reason there shall be a deficiency in the Sinking Fund Reserve, the City has covenanted to restore such deficiency from Gas Works Revenues (either by a deposit of funds or the reinstatement of the cash limits of the Credit Facilities) within twelve (12) months.

The Sinking Fund Reserve is established solely for the benefit of the Holders of those 1998 Ordinance Bonds secured by the Sinking Fund Reserve. The Bonds and all Outstanding Senior 1998 Ordinance Bonds are secured by the Sinking Fund Reserve. Providers of Qualified Swaps or Exchange Agreements, issuers of Credit Facilities (other than those that become Bondholders as a result of a draw under a Credit Facility), the holders of any bonds or notes which are Subordinate 1998 Ordinance Bonds or on a parity with Subordinate 1998 Ordinance Bonds and the providers of any credit facilities related thereto do not have a lien on or security interest in the Sinking Fund Reserve.

Upon the issuance of the Bonds, the amount required to be on deposit in the Sinking Fund Reserve is $89,893,913.65. The City shall deposit $16,644,108.89 of the proceeds of the Bonds into the Sinking Fund Reserve so that the amount on deposit in the Sinking Fund Reserve on the date of issuance of the Bonds satisfies this requirement. See "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS" above.

The Sinking Fund Reserve is managed by, and invested and reinvested under the direction of, the City. The Sinking Fund Reserve is valued by the Sinking Fund Depositary promptly after any withdrawal from the Sinking Fund Reserve or any other event indicating a possible deficiency in the Sinking Fund Reserve and on August 31 of each Fiscal Year of PGW.

The 1998 General Ordinance establishes permitted investments and the terms of such investments for moneys held in the Sinking Fund, including the Sinking Fund Reserve. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Investment of Funds**." For information regarding such investments, which totaled approximately $72.8 million as of August 31, 2014, all of which were held in the 1998 Ordinance Sinking Fund Reserve, as well as investments held in the sinking fund reserve established under the 1975 General Ordinance (which totaled approximately $33.1 million as of August 31, 2014), see Note 3(b) in APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section**." All of the investments currently held in the sinking fund reserve established under the 1975 General Ordinance will be liquidated upon the expected redemption, refunding or defeasance of the 1975 Ordinance Bonds and applied as described under "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS" above.

For additional information concerning the Sinking Fund Reserve, see APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Sinking Fund Reserve."**

Rate Covenant and Rate Requirements

Pursuant to the Rate Covenant, the City has covenanted in the 1998 General Ordinance that, for so long as the 1998 Ordinance Bonds are outstanding, the City will, at a minimum, impose, charge and collect in each Fiscal Year of the Gas Works such gas rates and charges as shall, together with all other Gas Works Revenues to be received in such Fiscal Year, equal not less than the greater of (a) and (b) below:

(a) The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) 150% of the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Senior 1998 Ordinance Bonds;

(iii) the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Subordinate 1998 Ordinance Bonds and other obligations of the Gas Works on a parity with Subordinate 1998 Ordinance Bonds payable during such Fiscal Year;

(iv) the amount, if any, required to be paid into the Sinking Fund Reserve during such Fiscal Year;

(v) the Rebate Amount required to be paid to the United States during such Fiscal Year; and

(vi) the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year;

or

(b) The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) all Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding 1998 Ordinance Bonds and all amounts payable in respect of obligations of PGW which are on a parity with any of the 1998 Ordinance Bonds and in respect of general obligation bonds issued for improvements to the Gas Works and all amounts, if any, required during such Fiscal Year to be paid into the Sinking Fund Reserve;

(iii) the Rebate Amount required to be paid to the United States during such Fiscal Year; and

(iv) the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year.

In calculating the City's compliance with the Rate Covenant set forth above, required Sinking Fund deposits are calculated without regard to the effect of any Qualified Swap and Exchange Agreements. For a further discussion of the Rate Covenant and other rate requirements applicable to the City, including the PUC obligation to set rates, see "PGW BUDGETS AND FINANCES – **Debt Service Coverage Ratio**" and "GAS SERVICE TARIFF AND RATES – **Rates** – *Ratemaking Methodology to Account for Bond Covenants*."

Qualified Swaps and Exchange Agreements

The 1998 General Ordinance permits the City to enter into a Qualified Swap or Exchange Agreement with respect to a series of Senior 1998 Ordinance Bonds or Subordinate 1998 Ordinance Bonds or a portion thereof upon the enactment of an ordinance by the City Council authorizing such Qualified Swap or Exchange Agreement. Payments, other than termination payments, due to the provider of a Qualified Swap or Exchange Agreement are payable from Gas Works Revenues on a parity with debt service on, as applicable, Senior 1998 Ordinance Bonds (if such Qualified Swap or Exchange Agreement relates to a series of Senior 1998 Ordinance Bonds) or Subordinate 1998 Ordinance Bonds (if such Qualified Swap or Exchange Agreement related to a

series of Subordinate 1998 Ordinance Bonds). See "– **Gas Works Revenues** – *Order of Application of Gas Works Revenues*" above. The 1998 General Ordinance prohibits the provider of any Qualified Swap or Exchange Agreement from having any right or claim at any time to amounts on deposit in the Sinking Fund Reserve. There are four Qualified Swaps and Exchange Agreements in effect, each of which is related to a Series of Senior 1998 Ordinance Bonds and detailed in the table below.

Table 1
QUALIFIED SWAPS & EXCHANGE AGREEMENTS
RELATED TO SENIOR 1998 ORDINANCE BONDS
as of July 1, 2015

Related Senior 1998 Ordinance Bond Series	8b	8c	8d	8e
Initial Notional Amount	$313,390,000	$50,000,000	$50,000,000	$50,000,000
Current Notional Amount[1]	$50,260,000	$50,000,000	$75,000,000	$50,260,000
Termination Date	8/1/2028	8/1/2028	8/1/2028	8/1/2028
Product	Fixed Payer Swap	Fixed Payer Swap	Fixed Payer Swap	Fixed Payer Swap
Rate Paid by Provider	70% 1-month LIBOR	70% 1-month LIBOR	70% 1-month LIBOR	70% 1-month LIBOR
Rate Paid by City[2]	3.6745%	3.6745%	3.6745%	3.6745%
Provider	JPMorgan Chase Bank, N.A.[6]	JPMorgan Chase Bank, N.A.[6]	JPMorgan Chase Bank, N.A.[6]	JPMorgan Chase Bank, N.A.[6]
Net Present Value[3]	($8,411,848)	($8,368,003)	($12,552,370)	($8,411,848)
Credit Related Termination Events	For Provider: [4] For City: [5]	For Provider: [4] For City: [5]	For Provider: [4] For City: [5]	For Provider: [4] For City: [5]

(1) As of July 1, 2015. As of such date, the notional amount of each swap was equal to, as applicable, the principal outstanding amount of the related series.

(2) The City's fixed rate payments under each swap are insured by Assured Guaranty Municipal Corporation ("Assured").

(3) Net present values are as of June 30, 2015, and are shown from the City's perspective.

(4) Each swap may be terminated by the provider if (a) Assured's claims paying ability is rated below "A" by S&P and its financial strength rating is rated below "A2" by Moody's or if either rating is withdrawn or suspended and not reinstated within 30 days (provided that Assured maintains a rating of at least "AA" from S&P or "Aa2" from Moody's during such 30 day period), and (b) the Eighth Series Bonds are rated below "Baa2" by Moody's or below "BBB" by S&P. As of August 4, 2015, Assured was rated "A2" by Moody's and "AA" by S&P.

(5) Each swap may be terminated by the City if the senior long-term debt or deposits of the provider are rated below "A3" by Moody's or "A-" by S&P, unless the provider has (i) assigned or transferred the swap to a party acceptable to the City; (ii) provided a credit support provider acceptable to the City whose obligations are pursuant to a credit support document acceptable to the City; or (iii) executed a credit support annex, in form and substance acceptable to the City, providing for the collateralization by the provider of its obligations under the applicable swap.

(6) As of August 4, 2015, Moody's counterparty risk assessment rating of JPMorgan Chase Bank, N.A. ("JPMorgan") was "Aa2(cr)" and S&P's long term rating of JPMorgan was "A+."

For additional information regarding such Qualified Swap and Exchange Agreements as of August 31, 2014 see Note 8 in APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section**."

Credit Facilities With Respect to 1998 Ordinance Bonds

The 1998 General Ordinance permits the City to enter into a Credit Facility with respect to any Series of Senior 1998 Ordinance Bonds and Subordinate 1998 Ordinance Bonds. As of the date of this Official Statement, there is a Credit Facility in effect in the form of a letter of credit with respect to each of the five subseries of variable rate Senior 1998 Ordinance Bonds, which bonds (in the aggregate) have an Outstanding principal balance of $255,520,000 as of July 1, 2015. Such amount represents 29.74% of the Senior 1998 Ordinance Bonds Outstanding as of July 1, 2015. The coverage for principal payments under each letter of credit is equal to the outstanding principal amount of applicable subseries as of the date of this Official Statement. Each letter of credit expires prior to the final maturity date of the applicable series of Senior 1998 Ordinance Bonds. In connection with any scheduled expiration, the City may extend the scheduled expiration, provide an alternate liquidity facility to replace the expiring letter of credit, or convert the interest rates on the applicable 1998 Ordinance Bonds to fixed interest rates or to an interest rate mode that does not require a liquidity facility. There can be no assurance that the City will be able to extend any expiration date or to obtain an alternate Credit Facility on terms substantially similar to the terms of any expiring letter of credit.

Following an unreimbursed draw on a letter of credit, the applicable 1998 Ordinance Bonds, so long as they are owned by such issuer, are "bank bonds" and will bear an interest rate determined in accordance with the applicable Bond Authorization and letter of credit (a "bank bond rate"). This interest rate may be higher or lower than the rate that 1998 Ordinance Bonds of the same Series that are not bank bonds would otherwise bear. In addition, each bank bond rate may increase upon the occurrence of certain defaults (such increased bank bond rate is the "default rate").

The table below describes the existing letters of credit, and the issuers thereof, related to Senior 1998 Ordinance Bonds as of the date of this Official Statement. In accordance with the 1998 General Ordinance, the payment of interest on and principal of bank bonds that are Senior 1998 Ordinance Bonds is on a parity with debt service on all other Senior 1998 Ordinance Bonds.

Table 2
VARIABLE RATE SENIOR 1998 ORDINANCE BONDS
LETTERS OF CREDIT

Related Series	Bonds Outstanding ($000 omitted)[8]	Issuer	Expiration Date	Counterparty Risk Assessment Ratings (Moody's)[7]	Issuer Long Term and Short Term Ratings (S&P)[7]	Issuer Long Term and Short Term Ratings (Fitch)[7]
5A-2[1]	$30,000	JPMorgan[1]	12/31/15	Aa2(cr)/P-1(cr)	A+/A-1	AA-/F1+
8b[2]	50,260	Wells Fargo[2]	8/1/16	Aa1(cr)/P-1(cr)	AA-/A-1+	AA/F1+
8c[3][9]	50,000	Barclays[3]	8/1/16	A1(cr)/P-1(cr)	A-/A-2	A/F1
8d[4][9]	75,000	RBC[4]	8/1/16	Aa2(cr)/P-1(cr)	AA-[6]/A-1+	AA/F-1+
8e[5][9]	50,260	PNC[5]	8/30/16	A1(cr)/P-1(cr)	A/A-1	A+/F1

[1] JPMorgan Chase Bank, N.A ("JPMorgan"). The City is required to repay the principal component of bank bonds in six semi-annual installments beginning on the letter of credit expiration date. The bank bond rate is (i) for the period from and including the effective date of the letter of credit through and including the expiration date, the "base rate" (as defined below), (ii) after the expiration date to and including the date that the bank bonds are required to be paid pursuant to the terms of the letter of credit (the "extended loan period"), the base rate plus one percent (1.00%), and (iii) after the expiration of the extended loan period, the base rate plus two percent (2.00%) (the "default rate"). The

"base rate" is the higher of (a) the prime rate publically announced by JPMorgan in New York City, and (b) the federal funds rate plus one-half percent (0.5%). Notwithstanding the foregoing, from and after and during the continuation of an event of default under the letter of credit, the bank bond rate is the default rate.

(2) Wells Fargo Bank, National Association ("Wells Fargo"). The City is required to repay the principal component of the purchase price of bank bonds, assuming the satisfaction of certain conditions, in 180 days after the related unreimbursed draw in four semi-annual installments, beginning 6 months after the term loan is made. In no event will the bank bond rate exceed the lessor of (a) twenty-five percent (25%), and (b) the maximum lawful rate.

(3) Barclays Bank PLC ("Barclays"). The City is required to repay the principal component of the purchase price of bank bonds, assuming the satisfaction of certain conditions, in 10 equal quarterly installments beginning 6 months after the unreimbursed related draw. The bank bond rate is (i) for the first 90 days after Barclays has purchased the 1998 Ordinance Bonds, the "base rate" (as defined below), (ii) for days 91 through and including 180, the base rate plus (except for component (c) of the base rate) one percent (1.0%), and (iii) on and after the 181st day, the base rate plus (except for component (c) of the base rate) two percent (2.0%). The "base rate" is the highest of (a) the prime rate publically announced by Barclays in New York city plus two and one-half of one percent (2.50%), (b) the federal funds rate plus two and one-half of one percent (2.50%), (c) one hundred fifty percent (150%) of the yield on 30-year United States Treasury bonds, and (d) eight percent (8.0%). Notwithstanding the foregoing, immediately and automatically upon the occurrence of an event of default under the letter of credit, and during the continuation thereof, the bank bond rate shall be equal to the base rate plus three percent (3.0 %). In no event will the bank bond rate exceed the lessor of (a) twenty-five percent (25%), and (b) the maximum lawful rate.

(4) Royal Bank of Canada ("RBC"). The City is required to repay the principal component of the purchase price of bank bonds, assuming the satisfaction of certain conditions, in 12 quarterly installments beginning on the date three months after the 90th day following the related unreimbursed draw. The bank bond rate is (i) from the date that RBC has purchased the 1998 Ordinance Bonds to and including the 90th day thereafter, the "base rate" (as defined below), and (ii) from and after the earlier of the 91st day following such purchase and the stated expiration date, the base rate plus two percent (2.00%). The "base rate" is the highest of (a) the prime rate established by RBC, (b) the federal funds rate plus two percent (2.00%), and (c) 8.50%. Notwithstanding the foregoing, from and after the occurrence of an event of default under the letter of credit, but only so long as such event of default continues, bank bonds will bear interest at the base rate plus three percent (3.00%). In no event will the bank bond rate exceed the lessor of (a) twenty-five percent (25%), and (b) the maximum lawful rate.

(5) PNC Bank, National Association ("PNC"). The City is required to repay the principal component of the purchase price of bank bonds, assuming the satisfaction of certain conditions, in 10 equal semiannual installments payable in arrears beginning on the day that is 6 months after the date the term loan is made. Conversion to term loans is the earlier of 180 days after the purchase or the Letter of Credit expiration date. The bank bond rate is (i) for the first 180 days after PNC has purchased the 1998 Ordinance Bonds, the "base rate" (as defined below), and (ii) from and after the earlier of the 181st day following such purchase and the termination date of the letter of credit, the base rate plus two percent (2.00%). The "base rate" is the highest of (a) the prime rate publically announced by PNC effective in Pittsburg, Pennsylvania, (b) the sum of the federal funds rate plus three percent (3.00%), and (c) 7.50%. Notwithstanding the foregoing, from and after the occurrence and during the continuation of an event of default under the letter of credit, the bank rate shall be equal to the base rate plus three percent (3.0 %). In no event will the bank bond rate exceed the lessor of (a) twenty-five percent (25%), and (b) the maximum lawful rate.

(6) S&P's rating has been placed on negative credit watch.

(7) All ratings are as of August 4, 2015.

(8) As of July 1, 2015.

(9) Notwithstanding the establishment of the bank bond rate, bank bonds shall bear interest at the greater of the applicable bank bond rate or the rate of interest borne by 1998 Ordinance Bonds of the applicable series that are not bank bonds.

Pursuant to respective reimbursement agreements, JPMorgan Chase Bank National Association ("JPMorgan") and PNC Bank, National Association ("PNC") have each issued a direct pay irrevocable letter of credit in a stated amount of $50,000,000 and $70,000,000, respectively (each a "Stated Amount"), to pay the principal of and interest on maturing CP Capital Project Notes and Gas Works Notes, from time to time. In accordance with each letter of credit, the aggregate principal amount of the CP Capital Project Notes and Gas Works Notes subject to each letter of credit (and the interest thereon) plus any advances and unreimbursed drawings thereunder (and the interest thereon) cannot exceed the related Stated Amount, unless such amount is increased. Each letter of credit expires on August 14, 2017. The CP Capital Project Notes are Subordinate 1998 Ordinance Bonds and such letters of credit, solely as they relate to the CP Capital Project Notes, are Credit Facilities under the 1998 General Ordinance. The Gas Works Notes are junior in priority of payment to

the Senior 1998 Ordinance Bonds and payments due in respect of Gas Works Notes are on a parity with Subordinate 1998 Ordinance Bonds. See "COMMERCIAL PAPER PROGRAMS."

Issuers of Credit Facilities (other than those that are Bondholders) do not have any lien on or security interest in the Sinking Fund Reserve. See APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**" for a discussion of the respective payment priorities of amount due under a Credit Facility.

Authorized Additional 1998 Ordinance Bonds

The 1998 General Ordinance permits the issuance of additional 1998 Ordinance Bonds which, if and when issued, will be either Senior 1998 Ordinance Bonds or Subordinate 1998 Ordinance Bonds. The issuance of the Bonds and any additional 1998 Ordinance Bonds (other than any additional 1998 Ordinance Bonds issued pursuant to the Thirteenth Supplemental Ordinance, as described below) requires, among other things, the adoption by the City Council of a Supplemental Ordinance that makes the findings described under "– **Gas Works Revenues** – *Related Covenants*" above.

The Twelfth Supplemental Ordinance to the 1998 General Ordinance authorizes the City to issue one or more series of CP Capital Project Notes (as defined below). The CP Capital Project Notes are issued as Subordinate 1998 Ordinance Bonds. See "– Pledge of Revenues and Funds – *Subordinate 1998 Ordinance Bonds*" above and "COMMERCIAL PAPER PROGRAMS" below. See "– **Credit Facilities with respect to 1998 Ordinance Bonds**" for information regarding the letters of credit for the CP Capital Project Notes. Pursuant to the Twelfth Supplemental Ordinance, the CP Capital Project Notes are not secured by the Sinking Fund Reserve.

The Thirteenth Supplemental Ordinance authorizes the City to issue one or more series of Senior 1998 Ordinance Bonds (including the Bonds) in an aggregate principal amount not to exceed $1,026,000,000. After the issuance of the Bonds, additional Senior 1998 Ordinance Bonds may be issued pursuant to the Thirteenth Supplemental Ordinance without any additional City Council action (including the adoption of another supplemental ordinance that makes the findings described under "– **Gas Works Revenues** – *Related Covenants*" above) solely to refund any 1998 Ordinance Bonds previously issued pursuant thereto. If the City elects to issue any additional refunding 1998 Ordinance Bonds pursuant to the Thirteenth Supplemental Ordinance, such additional 1998 Ordinance Bonds must (i) not extend the final maturity of the 1998 Ordinance Bonds to be refunded and have debt service in each year lower than the debt service in each year on the bonds to be refunded, and (ii) be in a principal amount not to exceed the amount which accomplishes the foregoing, together with the amount necessary to pay the costs of issuance related to such refunding bonds. Any future Series of 1998 Ordinance Bonds issued pursuant to the Thirteenth Supplemental Ordinance will be entitled to the benefit of the Sinking Fund Reserve. After issuing the Bonds, the City will retain the authority to issue up to $764,230,000 of 1998 Ordinance Bonds pursuant to the Thirteenth Supplemental Ordinance.

As noted above under "– Gas Works Revenues," Gas Works Revenues, pursuant to a Supplemental Ordinance, may be divided into separate components and any Series of 1998 Ordinance Bonds issued thereafter may be limited as to source of payment to one or more such components. Since all current Gas Works Revenues are pledged for the security of and payment on all 1998 Ordinance Bonds, only new revenues that satisfy the definition of Gas Works Revenues could be so divided and pledged as security for and the only source of payment on one or more future Series of 1998 Ordinance Bonds.

The Act and the 1998 General Ordinance authorize the City to issue Senior 1998 Ordinance Bonds and Subordinate 1998 Ordinance Bonds in the form of revenue bond anticipation notes ("Anticipation Notes"). The principal of any Anticipation Notes is payable by exchange for, or out of the proceeds of the sale of, a designated Series of 1998 Ordinance Bonds referred to in the related Anticipation Notes. If such designated Series of 1998 Ordinance Bonds is offered for sale but cannot be sold, the sole remedy of the Holders of Anticipation Notes is to accept the 1998 Ordinance Bonds of the designated Series at their maximum interest

rate (which must be set forth in the related Anticipation Notes), or to extend the maturity of the Anticipation Notes for one or more specified additional periods of not less than six months during which additional offers of the designated Series of 1998 Ordinance Bonds may be made. As of the date of this Official Statement, the City has never issued Anticipation Notes.

See "POSSIBLE FUTURE PGW RELATED FINANCINGS" below for information concerning potential future issuances of 1998 Ordinance Bonds.

Covenant Against Commingling with Other City Funds

The City has covenanted that so long as any of the Bonds remain outstanding, all Gas Works Revenues, as applicable, shall be deposited and held in and disbursed from, one or more unsegregated accounts of PGW which shall be separate from and not commingled with the consolidated cash account of the City or any other account of the City not held exclusively for PGW purposes.

The effectiveness of the separation of proceeds of the Bonds and revenues from other City accounts may be limited under certain circumstances, including a bankruptcy filing by the City. See "REMEDIES OF BONDHOLDERS – **Limitation On Remedies of Bondholders**" below.

Senior 1998 Ordinance Bonds Debt Service Schedule

The table below reflects the debt service schedule for all Senior 1998 Ordinance Bonds outstanding as of July 1, 2015, as well as the debt service schedule for the Bonds.

Table 3
COMPARISON OF DEBT SERVICE PAYMENTS
WITH AND WITHOUT THE ISSUANCE OF THE BONDS
(THOUSANDS OF U.S. DOLLARS)

	WITHOUT THE ISSUANCE OF THE BONDS			WITH THE ISSUANCE OF THE BONDS				
	Outstanding 1975 Ordinance Bonds (as of July 1, 2015)	**Outstanding Senior 1998 Ordinance Bonds (as of July 1, 2015)[1][3]**	**Total 1975 Ordinance Bonds and Senior 1998 Ordinance Bonds (as of July 1, 2015)**	**Senior 1998 Ordinance Bonds Excluding the 1998 Refunded Bonds[3]**	**Bonds**			**Total Senior 1998 Ordinance Bonds (including the Bonds)[2][3]**
Fiscal Year Ending August 31		Existing Debt Service ($)[1][3]			Principal	Interest	Total Debt Service	Combined Total Debt Service[2][3]
2016	$ 22,653	$ 70,077	$ 92,730	$ 49,817	$ 16,300	$ 11,823	$ 28,123	$ 77,940
2017	21,125	69,977	91,102	57,814	18,075	11,920	29,995	87,809
2018	19,598	68,479	88,077	56,319	17,270	11,197	28,467	84,786
2019	18,070	68,514	86,583	56,351	16,435	10,506	26,941	83,293
2020	16,532	68,545	85,077	56,382	15,720	9,685	25,405	81,786
2021	15,006	68,587	83,593	51,773	19,630	8,899	28,529	80,301
2022	13,519	68,639	82,158	51,824	19,125	7,917	27,042	78,866
2023	12,733	68,678	81,411	51,866	19,290	6,961	26,251	78,117
2024	11,172	69,001	80,173	52,185	18,700	5,996	24,696	76,881
2025	4,159	69,175	73,334	52,359	12,620	5,061	17,681	70,041
2026	3,770	69,333	73,102	52,515	12,865	4,430	17,295	69,810
2027		69,964	69,964	53,152	9,730	3,787	13,517	66,669
2028		70,190	70,190	53,373	10,225	3,301	13,526	66,899
2029		41,249	41,249	24,433	10,735	2,789	13,524	37,957
2030		39,622	39,622	22,804	11,270	2,253	13,523	36,327
2031		39,619	39,619	22,805	11,835	1,689	13,524	36,329
2032		39,619	39,619	22,807	12,420	1,097	13,517	36,325
2033		31,220	31,220	22,805	4,645	476	5,121	27,926
2034		31,224	31,224	22,809	4,880	244	5,124	27,933
2035		45,100	45,100	45,100				45,100
2036		22,795	22,795	22,795				22,795
2037		22,789	22,789	22,789				22,789
2038		22,787	22,787	22,787				22,787
2039		9,937	9,937	9,937				9,937
2040		9,936	9,936	9,936				9,936
Total	**$158,337**	**$1,255,056**	**$1,413,392**	**$967,536**	**$261,770**	**$110,031**	**$371,801**	**$1,339,337**

(1) Includes the 1998 Refunded Bonds
(2) Excludes the 1998 Refunded Bonds.
(3) Interest on the Fifth Series A-2 bonds calculated at 0.05%. Interest on the Eighth Series B, C, D and E bonds calculated at the swap rate of 3.6745%. This table assumes that there will be no draws on the letters of credit. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Credit Facilities with Respect to 1998 General Ordinance.**"

COMMERCIAL PAPER PROGRAMS

The City is authorized to issue commercial paper to finance the costs of certain PGW capital projects, other project costs and working capital requirements.

CP Capital Project Notes

Pursuant to the Twelfth Supplemental Ordinance to the 1998 General Ordinance, the City may issue one or more series of commercial paper notes in installments in a principal amount not to exceed $120,000,000 Outstanding at any time (the "CP Capital Project Notes") to finance capital projects included in PGW's approved capital program. CP Capital Project Notes are issued as Subordinate 1998 Ordinance Bonds. The City previously issued a first installment of CP Capital Project Notes solely for the purpose of initiating its CP Capital Project Notes program, all of which were promptly repaid. As of the date of this Official Statement, no CP Capital Project Notes are Outstanding under the first installment. PGW may request the City to issue CP Capital Project Notes in PGW's Fiscal Year 2015 and in PGW's Fiscal Year 2016 to finance the cost of certain PGW capital projects if they are or have been approved by City Council as part of PGW's Fiscal Year 2015 and Fiscal Year 2016 capital budgets. CP Capital Project Notes are not secured by the Sinking Fund Reserve. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Pledge of Revenues and Funds** – *Subordinate 1998 Ordinance Bonds*" and "**– Sinking Fund Reserve**."

The Independent Consultant's Engineering Report incorporates forecasts by PGW of future issuances of CP Capital Project Notes and other debt obligations, all or a portion of which may also be in the form of CP Capital Project Notes. Such forecasts reflect the issuance in Fiscal Year 2015 and Fiscal Year 2016 of the CP Capital Project Notes described above. See "POSSIBLE FUTURE PGW RELATED FINANCINGS – **The Independent Consultant's Engineering Report**." In addition, in its most recent review of PGW, PUC staff identified the issuance of additional debt (which could include CP Capital Project Notes) as one possible means of financing PGW pipeline replacements. See "POSSIBLE FUTURE PGW RELATED FINANCINGS – **PUC April 2015 Report**" below.

Gas Works Notes

PGW's working capital requirements may be financed by the issuance of notes (the "Gas Works Notes") pursuant to The City of Philadelphia Municipal Utility Inventory and Receivables Financing Act of the Commonwealth (the "Inventory and Receivables Financing Act") and the General Inventory and Receivables Gas Works Revenue Note Ordinance of 2013 (the "Note Ordinance"). Gas Works Notes may be issued in installments in a principal amount (together with interest) not to exceed, in the aggregate, $150,000,000 at any one time outstanding. As of the date of this Official Statement, no Gas Works Notes are outstanding. The proceeds of Gas Works Notes may be used to finance or refund the costs of acquiring or funding certain inventory, accounts and other expenses of PGW or to refund Gas Works Notes.

Gas Works Notes are not 1998 Ordinance Bonds. Debt service on Gas Works Notes is payable from Gas Works Revenues on a parity with Subordinate 1998 Ordinance Bonds. The Bonds and all other Senior 1998 Ordinance Bonds are senior in right of payment and security to the Gas Works Notes. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Pledge of Revenues and Funds**" and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**." The holders of any Gas Works Notes and the issuers of any credit facilities related thereto do not have a lien on or a security interest in the Sinking Fund Reserve. "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Sinking Fund Reserve**." See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Credit Facilities with respect to 1998 Ordinance Bonds**" for information regarding the two current credit facilities in the form of direct pay irrevocable letters of credit in effect for the Gas Works Notes.

Letters of Credit

As described above under "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Credit Facilities with Respect to 1998 Ordinance Bonds**," pursuant to respective reimbursement agreements, JPMorgan and PNC have each issued a direct pay irrevocable letter of credit in a stated amount of $50,000,000 and $70,000,000, respectively (each a "Stated Amount"), to pay the principal of and interest on maturing CP Capital Project Notes and Gas Works Notes, from time to time. In accordance with each letter of credit, the aggregate principal amount of the CP Capital Project Notes and Gas Works Notes subject to each letter of credit (and the interest thereon) plus any advances and unreimbursed drawings thereunder (and the interest thereon) can not exceed the related Stated Amount, unless such amount is increased. Each letter of credit expires on August 14, 2017. Such letters of credit, solely as they relate to the CP Capital Project Notes, are Credit Facilities under the 1998 General Ordinance.

OTHER DEBT OBLIGATIONS PAYABLE FROM GAS WORKS REVENUES

Short-Term Borrowings

The City may issue Gas Works Notes to finance PGW's working capital requirements. See "COMMERCIAL PAPER PROGRAMS – **Gas Works Notes**" above.

PGW is authorized to make interfund loans from various consolidated accounts of PGW that do not secure 1998 Ordinance Bonds for payment, as necessary, of PGW obligations, including debt service on bonds issued under the 1998 General Ordinance. PGW must reimburse such accounts as revenues are received by the end of each Fiscal Year during which such withdrawals were made. No such interfund loans are outstanding.

Additional Bond Ordinances

The Act permits the City to enact new general bond ordinances that pledge, for the security and payment of any bonds and notes issued thereunder, the Gas Works Revenues. Prior to enacting any such bond ordinance, the City Council must adopt a supplemental ordinance that makes certain findings relating to the adequacy of Gas Works Revenues to pay debt service on all then-outstanding 1998 Ordinance Bonds, Gas Works Notes and the new series of bonds to be issued thereunder. Such findings are to be based on a report of the chief fiscal officer of the City, which in turn can be based on a report of an independent engineer employed by the City to evaluate PGW. The 1998 General Ordinances requires any such bonds and notes to be payable from Gas Works Revenues on a parity with debt service on Subordinate 1998 Ordinance Bonds and the other obligations on a parity therewith. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Order of Application of Revenues**" above and APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE – **Order of Application of Gas Works Revenues**."

As of the date of this Official Statement, the City does not expect to enact any bond ordinances that pledge all, or a portion of, the Gas Works Revenues for the security and payment of any bonds and notes other than the 1998 Ordinance Bonds and the Gas Works Notes, although, as described under "POTENTIAL LNG FACILITIES EXPANSION," proceeds of bonds issued under a new bond ordinance is a potential source of financing under consideration by PGW for the expansion of PGW's LNG facilities.

POSSIBLE FUTURE PGW RELATED FINANCINGS

Financing of Potential LNG Facility Expansion

PGW is exploring ways to expand its existing LNG facilities. One method of financing such expansion currently under consideration is using internally generated funds and the proceeds of borrowings. The Independent Consultant's Engineering Report incorporates forecasts by PGW of future debt issuances of: (1) $78.6 million aggregate principal amount of CP Capital Project Notes to provide additional funding for

capital improvements, (2) $24.0 million CP Capital Project Notes to finance the LNG expansion, (3) $250.0 million in Fiscal Year 2017 to repay outstanding notes and provide additional funds for capital improvements, (4) $100.0 million in Fiscal Year 2017 to finance LNG expansion and (5) $100.0 million in Fiscal Year 2020 to fund capital improvements. The prospective debt issuance bonds described in the preceding sentence could be in the form of 1998 Ordinance Bonds (including CP Capital Project Notes) or bonds issued pursuant to one or more new City ordinances as described above under "OTHER DEBT OBLIGATIONS PAYABLE FROM GAS WORKS REVENUES – **Additional Bond Ordinances**." See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT." Also see, "POTENTIAL LNG FACILITIES EXPANSION." If the CP Capital Project Notes are refinanced with Approved Bonds, then associated debt service would be included in the PUC rates under the 2010 PUC Policy Statement (as defined below). See "GAS SERVICE TARIFF AND RATES – **Rates** – *Ratemaking Methodology to Account for Bond Covenants*."

PUC April 2015 Report

In its most recent review of PGW, the PUC staff identified the issuance of additional debt as one possible means of financing PGW pipeline replacements. See "PHILADELPHIA GAS WORKS – **Governmental Oversight** – *PUC April 2015 Report*" below. Such debt, if any, may be issued as 1998 Ordinance Bonds (including CP Capital Project Notes) or pursuant to one or more new City ordinances as described above under "OTHER DEBT OBLIGATIONS PAYABLE FROM GAS WORKS REVENUES – **Additional Bond Ordinances**."

PERMITTED SECURITIZATION OF REVENUES RELATED TO NON-PERFORMING ASSETS

The 1998 General Ordinance permits the City to securitize and sell that portion of the Gas Works rents, rates and charges that relate to assets which are designated as non-performing by the PUC and as to which the PUC has designated specific rents, rates or charges.

Prior to any such securitization and sale, the City must deliver to the Fiscal Agent (1) an engineer's report including a statement that, for the three year period following such securitization and sale, the Gas Works rents, rates and charges (excluding those securitized and sold) are currently and will be sufficient to comply with the Rate Covenant described under the heading "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Rate Covenant and Rate Requirements**" above applied as if the percentage in subsection (a)(iii) thereof were 175% rather than 150% and (2) an opinion of bond counsel that such securitization and sale will not adversely affect the exclusion from gross income for federal income tax purposes of interest on any outstanding 1998 Ordinance Bonds the interest on which is intended to be so excluded. Proceeds received from any such securitization and sale shall be excluded from Gas Works Revenues in all calculations relating to the Rate Covenant and, notwithstanding any provision of the 1998 General Ordinance to the contrary, may be used to redeem or refund obligations issued to finance the related assets designated as non-performing.

Any and all Gas Works rates, rents and charges that are securitized and sold as described under this heading, do not constitute Gas Works Revenues and would not serve as security for or a source of payment of the 1998 Ordinance Bonds (including the Bonds). As of the date of this Official Statement, no PGW assets have been designated as "non-performing."

REMEDIES OF BONDHOLDERS

General

Remedies under the Act and the 1998 General Ordinance available to Holders of 1998 Ordinance Bonds, including Holders of the Bonds, and to any trustee for Bondholders appointed by the Holders of 25% in principal amount of any Series of 1998 Ordinance Bonds in default, are described in the summary contained in APPENDIX E hereto. In addition to the remedies described therein, Bondholders, the Fiscal Agent, as representative of the Bondholders, or a trustee for the Bondholders are entitled under the Pennsylvania

Uniform Commercial Code to all remedies of secured parties in respect of (i) the Gas Works Revenues and the funds on deposit in the Sinking Fund and (ii) the Sinking Fund Reserve if such bonds are secured by the Sinking Fund Reserve. So long as DTC or its nominee is the Registered Owner, the remedies of Beneficial Owners are exercisable through the procedures established by DTC.

Limitation on Remedies of Bondholders

The ultimate enforcement of Bondholders' rights upon any default by the City in the performance of its obligations under the 1998 General Ordinance will depend upon the application of remedies provided in the Act, the 1998 General Ordinance and other applicable laws. Litigation may be necessary to obtain relief in accordance with these remedies. Such litigation may be protracted and costly. Remedies such as mandamus, specific performance or injunctive relief are equitable remedies that are subject to the discretion of the courts.

The rights and remedies of Bondholders with respect to the City's obligations under the Bonds could be significantly limited by the provisions of Chapter 9 of the United States Bankruptcy Code ("Chapter 9"). Chapter 9 permits, under prescribed circumstances (and only after an authorization by the applicable state legislature or by a governmental office or organization empowered by state law to give such authorization), a "municipality" of a state to file a petition for relief in a bankruptcy court of the United States if it is insolvent or unable to meet its debts as they mature, and it desires to effect a plan to adjust its debt. Chapter 9 defines "municipality" as a "political subdivision or public agency or instrumentality of a State." Thus, for purposes of Chapter 9, except as may be limited by state law, the City would be considered a "municipality." As a result of the commencement of a federal bankruptcy case by the City, Bondholders could experience delays in receiving Bond payments, as well as partial or total losses of their investments in the Bonds.

The Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (Pa. P.L. 9, No.6 (1991)) (the "PICA Act"), prohibits the City from filing a petition for relief under Chapter 9 of the United States Bankruptcy Code so long as the Pennsylvania Intergovernmental Cooperation Authority ("PICA") has outstanding any bonds issued pursuant to the PICA Act. As of June 30, 2015, the principal amount of PICA bonds outstanding was $315,955,000, and the final maturity date of such bonds is June 15, 2023. Furthermore, if no PICA bonds are outstanding, the PICA Act requires approval in writing by the Governor of the Commonwealth for a filing under Chapter 9 by the City, and of the City's proposed plan, after holding a hearing as required by the PICA Act. If the Governor were to grant an approval for the City to file a petition under Chapter 9 and approve the City's plan, and the City were to so file, provisions of the United States Bankruptcy Code could limit the enforcement of Bondholders' rights and remedies. See "THE CITY OF PHILADELPHIA GOVERNMENT AND FINANCIAL INFORMATION – **Local Government Agencies** – *Non-Mayoral-Appointed or Nominated Agencies* – PICA" in APPENDIX C hereto.

The filing of a bankruptcy petition under Chapter 9 operates as an automatic stay of the commencement or continuation of any judicial or other proceeding against the debtor or its property. However, a petition filed under Chapter 9 does not operate as a stay of application of pledged "special revenues" (as defined in the United States Bankruptcy Code) to the payment of indebtedness secured by such revenues. Special revenues include receipts derived from the ownership or operation of systems that are used to provide utility services and the proceeds of borrowings to finance such systems. The Bankruptcy Code further provides that special revenues acquired by the debtor after commencement of a Chapter 9 case shall remain subject to any lien resulting from any security agreement entered into by the debtor before the commencement.

The lien on special revenues derived from a system, however, will be subject to the payment of the necessary operating expenses of that system. Therefore if Gas Works Revenues are determined by a bankruptcy court to constitute "special revenues" within the meaning of Chapter 9, then Gas Works Revenues acquired by the City before and after the filing of a Chapter 9 petition will remain subject to the lien and security interest of the 1998 General Ordinance in favor of Holders of the 1998 Ordinance Bonds, but would be subject to the payment of PGW's necessary operating expenses as determined by the City.

If the pledged Gas Works Revenues could not support both the debt service requirements and operating expenses of PGW, it is possible that payments to Holders of the Bonds could be reduced. ***No representation is made that a bankruptcy court will determine that the Gas Works Revenues constitute "special revenues" within the meaning of Chapter 9.***

Unless a debtor consents or the plan proposed under Chapter 9 provides, the bankruptcy court may not interfere with any of the property or revenues of a Chapter 9 debtor or with such debtor's use or enjoyment of any income producing property. Accordingly, if the City were permitted by State law to use the proceeds of the Bonds and the Gas Works Revenues pledged for the benefit of the Bondholders other than to benefit the Gas Works, and decided to do so, it is unclear whether a bankruptcy court would have the power to interfere with that decision. Even if a bankruptcy court had such power, the court, in the exercise of its equitable powers, could refuse to require the City to use the proceeds of the Bonds or the Gas Works Revenues to pay Holders of the Bonds, could permit a subordination of the liens to new bonds if the former were found more than "adequately protected" or could avail itself of a broad range of equitable remedies.

Regardless of any specific adverse determinations in a City bankruptcy proceeding, the existence of such a proceeding could have a materially adverse effect on the liquidity and value of the Bonds.

INDEPENDENT CONSULTANT'S ENGINEERING REPORT

The Independent Consultant's Engineering Report prepared by Black & Veatch, contained herein as APPENDIX B, has been included in reliance upon the expertise of that company as an independent consulting firm having broad experience in the design and analysis of the operation of gas works or gas distribution systems of the magnitude and scope of PGW and having skill in assessing assumptions used in the preparation of forecast financial statements of gas works systems.

As described in certain of the assumptions below, and as further detailed in the Independent Consultant's Engineering Report, in certain instances Black & Veatch has evaluated projections for the period only through Fiscal Year 2020 and has considered PGW's capital improvement program only through Fiscal Year 2020 in reaching the conclusions expressed in its opinions (described below).

Among the subjects of the Independent Consultant's Engineering Report are the issuance of the Bonds and the issuance of 1998 Ordinance Bonds to finance the expansion of PGW's current LNG facilities.

The following is a summary of certain assumptions and opinions of Black & Veatch, stated in their entirety in the Independent Consultant's Engineering Report. This section, "INDEPENDENT CONSULTANT'S ENGINEERING REPORT," is in all respects subject to the complete text of the Independent Consultant's Engineering Report, which is contained herein as APPENDIX B.

Assumptions

Black & Veatch stated that in preparing the Independent Consultant's Engineering Report it relied on PGW's financial planning model and PGW's assumptions contained within that model with several exceptions as noted in the Independent Consultant's Engineering Report. Black & Veatch stated that the analyses summarized in the Independent Consultant's Engineering Report were based on assumptions provided by or reviewed by PGW and others and it relied on currently available information and present circumstances. Black & Veatch stated that it did not conduct verification tests of this information. Black & Veatch stated that although it believes that these data and underlying assumptions are reasonable, actual results may materially differ from those projected, as influenced by conditions, events, and circumstances that may actually occur that are unknown at this time and/or which are beyond the control of Black & Veatch.

The following is a partial list of critical assumptions used by Black & Veatch in the development of the projections contained in the Independent Consultant's Engineering Report.

Revenues

1. The PUC will comply with its statutory obligations, requiring that the PUC, in determining PGW's revenue requirement and approving overall rates and charges, "follow the same rate-making methodology and requirements that were applicable to [PGW] prior to the assumption of [rate-setting] jurisdiction by the [PUC]" and permit PGW to "impose, charge and collect rates or charges as necessary to permit...PGW to comply with its covenants to the holders of any approved bonds."

2. The throughput and revenue figures are based on the assumption of normal weather.

3. Projected revenue figures are based on the assumption that PGW will recover, in a timely manner, 100 percent of all gas supply and customer assistance programs costs. To the extent that weather is warmer than normal, the resulting contribution margin will be maintained to the extent that the WNA (as defined below) remains in effect.

4. If PGW were unable to meet the rate covenants required under the 1998 General Ordinance, PGW would then have to reduce expenditures, develop other sources of Gas Works Revenues, and/or file for and receive timely rate relief.

5. If lost margins resulting from customers' reducing usage due to Demand Side Management programs are significant, PGW will file for additional base rate increases.

6. PGW's current DSIC (as defined below) surcharge will allow the recovery of $22.0 million in annual revenues to fund annual capital improvements and will increase to $33.0 million in Fiscal Year 2017 (assuming approval by the PUC). The PUC will continue to provide either rate increases or surcharges to fund these expenditures. If the PUC determines that PGW's cast iron main replacement should be accelerated above current levels, the PUC will also provide rate increases or surcharges to fund the additional expenditures.

7. PGW will realize $40.0 million in revenue enhancements, cost savings, or base rate increases on a levelized basis beginning in Fiscal Year 2018.

Operating Expenses

1. PGW's annual bad debt expense will range from $35.2 to $37.2 million and PGW's collection factor on billed revenues will be 96 percent during the projected Fiscal Years 2016-2020 period.

Debt Service

1. The debt service and interest costs reflect the refunding of all of the outstanding 1975 General Ordinance Bonds and the 1998 General Ordinance Fourth and Fifth Series Bonds and the new bond issues projected for 2017 and 2020. If PGW refunds additional bonds, it is assumed that such additional refunding will result in a reduction in interest costs and annual debt service from the levels reflected in the Independent Consultant's Engineering Report.

Capital Improvement Program (Fiscal Years 2015 - 2020)

1. The planned capital improvements will be completed at the levels budgeted, for the projects currently planned and within the time frame projected.

2. Projected levels of capital improvements that are paid for by internally generated funds are assumed to comply with PGW's internal policies for financing capital improvements with other funding sources.

3. PGW is currently studying a $120.0 million LNG liquefaction expansion project. It is assumed that PGW will have adequate incremental LNG sales to recover the operating and financing costs of such a facility. Any excess revenues associated with this project would be used to lower the $40.0 million base rate increase assumed for 2018, and any shortfall associated with this project would be recovered through additional base rate increases. Based on the costs and potential sales provided by PGW associated with this project, the incremental benefit (up to $10.0 million annually) or incremental cost (up to $5.0 million annually) associated with this project would have a relatively minor impact on base rates.

The City

1. PGW will make an annual payment to the City in Fiscal Years 2015 through 2020 of $18.0 million.

Opinions

In its Independent Consultant's Engineering Report, which is attached hereto as APPENDIX B, Black & Veatch has opined and concluded, based upon its investigation and assumptions set forth in the Independent Consultant's Engineering Report, that:

1. PGW is a competently managed and operated gas distribution utility. PGW and PGW's gas works system (the "System") are organized, operated, and maintained at a level equal to, or in excess of, regulatory requirements and generally accepted industry practices. The System is in good operating condition.

2. Based upon Black & Veatch's evaluation of financial projections and certain assumptions with respect to the System, which Black & Veatch believes to be reasonable, and on the basis of actual and estimated future annual financial operations of the System, the System should yield Gas Works Revenues (which are pledged under the 1998 General Ordinance) over the amortization periods of the outstanding 1998 Ordinance Bonds and the Bonds, which will be sufficient to: (a) pay all expenses of operation, maintenance, repair and replacement of the System, (b) satisfy the deposit and payment requirements of all reserve or special funds required to be established under the 1998 General Ordinance, (c) pay the principal of and interest on all 1998 Ordinance Bonds (including the Bonds) issued under the 1998 General Ordinance as the same shall become due and payable, and (d) provide such surplus requirements as are contained in the respective rate covenant of the 1998 General Ordinance. The Gas Works Revenues forming the basis of the opinion comply with the requirements of the definition of Project Revenues contained in Section 2 of the Act.

3. The Gas Works Revenues which are pledged as security for the bonds issued under the 1998 General Ordinance are currently, and are projected to be, sufficient to comply with the rate covenants set forth in Section 4.03(b) of the 1998 General Ordinance. See "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Rate Covenant and Rate Requirements**" and APPENDIX E – SUMMARY OF THE 1998 GENERAL ORDINANCE – **Rate Covenant**."

4. The capital improvements proposed during the projection period, September 1, 2015, through August 31, 2020, should, along with continued good operation and maintenance practices, enable PGW to maintain the System in good operating condition. Review of present management practices indicates that good operation and maintenance is likely to continue.

5. Contracted PGW gas supplies plus: (a) spot market purchases, (b) anticipated additional contracted supplies plus supplemental gas capacities, and (c) the pipeline transport capacity to move these supplies to PGW, appear adequate to meet PGW's projected demand on a day of maximum demand (a "design peak day"), in an hour of maximum demand (a "design peak hour"), and during a year of maximum demand (a "design peak year").

PHILADELPHIA GAS WORKS

General

PGW is principally a gas distribution facility. It is an unincorporated division of the City and is the largest municipally-owned gas utility in the nation. PGW sells natural gas within the City, its service territory, and is the exclusive distributor of natural gas within the limits of the City. PGW maintains a distribution system with approximately 3,024 miles of gas mains and service lines and approximately 475,800 service lines serving approximately 500,000 customers as of August 31, 2014.

PGW consists of real and personal property owned by the City and used for the acquisition, manufacture, storage, processing and distribution of natural gas in the City, and all property, books and records employed and maintained in connection with the operation, maintenance and administration of PGW. Included among such assets, in addition to an extensive distribution system, are facilities for the liquefaction, storage and vaporization of natural gas used to supplement the natural gas supply from pipeline transmission companies and facilities for storage. Such facilities include two LNG plants.

In addition to the information under this heading, additional information about PGW is found in other sections of this Official Statement:

For a discussion of PGW's facilities, see "THE GAS WORKS FACILITIES" and "THE CAPITAL IMPROVEMENT PROGRAM."

For a discussion of PGW's revenues and expenses, see "PGW BUDGETS AND FINANCES," "GAS SERVICE TARIFF AND RATES," "MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION FOR THE SIX MONTHS ENDED FEBRUARY 28, 2014 AND 2013 (UNAUDITED)" and APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section**."

For additional information regarding PGW, see APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT."

For information about the City, see APPENDIX C – "THE CITY OF PHILADELPHIA GOVERNMENT AND FINANCIAL INFORMATION." APPENDIX D – "THE CITY OF PHILADELPHIA SOCIOECONOMIC INFORMATION" includes information about the City and its residents. APPENDIX D includes information regarding the City's population, demographics, employment and unemployment conditions, median and average household incomes and cost-of-living index.

Management

Governance of the Gas Works

The Philadelphia Home Rule Charter (as defined in APPENDIX E) and the Management Agreement, which was adopted by an ordinance passed on December 29, 1972 (Bill No. 455, as subsequently amended), establishes the governance structure through legislation regarding the (i) ownership of PGW property and functioning of PGW by the City; (ii) approval by the Philadelphia City Council (the "City Council") of capital budgets and certain gas supply contracts for PGW; (iii) review and approval by the Gas Commission of certain personnel provided by PFMC and operating budgets, and recommendation by the Gas Commission to City Council of certain gas supply contracts, real estate matters and capital budgets; and (iv) provisions of executive management functions and directions for operation of PGW facilities by PFMC. PGW personnel are responsible for the day to day management of the construction, operation and maintenance of the gas system. PGW's management organization is set forth in the table "Philadelphia Gas Works Organization Chart" on page 14 of the Independent Consultant's Engineering Report attached hereto as APPENDIX B. Any changes in governance of PGW must be made pursuant to ordinances adopted by the City Council.

In addition, PGW's rates are regulated by the PUC under the Pennsylvania Natural Gas Choice and Competition Act No. 1999 21, PL. 122, 66 Pa. C.S. Section 2201 et seq. (the "Gas Choice Act"). See "- Governmental Oversight –*The PUC*."

Management Agreement

PFMC has operated PGW pursuant to the Management Agreement since January 1, 1973. The Management Agreement authorizes PFMC to manage and operate all the property, real and personal, collectively known as the Gas Works, for the sole and exclusive benefit of the City and establishes PFMC's primary obligation as applying the highest standards of management practice and diligence to the operation of the Gas Works.

The Management Agreement and any amendments thereto are authorized by ordinances of the City Council. The Management Agreement has a two-year term, which, upon execution, is automatically extended for another two-year term, provided the City has not exercised its right of cancellation. The City can cancel the Management Agreement at any time by providing PFMC a 90-day notice of cancellation. Any such cancellation, however, must be approved by resolution or ordinance of the City Council.

Under the Management Agreement, PFMC is responsible for providing executive management of PGW. Various aspects of PFMC's management of PGW are subject to review and approval by the Gas Commission, including approval of the PGW chief executive officer, chief operating officer and the chief financial officer, and, where authorization by the City Council is required, recommendation of the City's Director of Finance and/or the Gas Commission. The Management Agreement sets forth various responsibilities for the Gas Commission's oversight of the operations of PGW. The City's Director of Finance oversees certain financial practices of PGW. The Management Agreement designates the City's Law Department as the designated legal advisor to the Gas Commission and PGW. The Law Department has assigned the representation of PGW to the Office of General Counsel of PGW. See "— **Governmental Oversight** — *Gas Commission*" and "PGW BUDGETS AND FINANCES — **Budget Approval**" for additional discussions of the Gas Commission.

PFMC Board

The PFMC Board of Directors consists of seven members appointed by the Mayor of the City. Each member is appointed to a two-year term and serves until his successor is duly qualified and seated. The following are the current members of the PFMC Board of Directors:

Current Members	Title	Term Began
David W. Seltzer, Principal, Mercator Advisors LLC Member, Finance and Audit Committees	Chairman	2/20/2008
Clarence D. Armbrister, President, Girard College Chair, Audit and Finance Committees	Vice Chair	1/27.2012
Catherine M. Paster, First Deputy Director of Finance, City of Philadelphia Member, Audit and Finance Committees	Treasurer	1/27/2012
Sharmain Matlock-Turner – President and CEO, Urban Affairs Coalition Member, Workforce Development Committee	member	2/20/2008
Saskia Thompson, Deputy Director of Finance, City of Philadelphia	member	6/9/2015

PGW Senior Officers

The following are brief biographical descriptions of PGW's current senior officers:

Craig E. White, President and Chief Executive Officer. Mr. White is the President and Chief Executive Officer of the Philadelphia Gas Works. Mr. White started with the organization in 1980. During his 35 years of service, he served in many capacities, increasing in responsibility and seniority and in March of 2011 he was appointed to his present position as President and Chief Executive Officer. Mr. White received a Bachelor of Science Degree from Kutztown University. He is a graduate of Drexel University's MBA Program and has completed executive development programs at Drexel University and Harvard Business School. Mr. White is actively involved in his industry and professional organizations. He serves on the Board of Directors of the American Gas Association and the National Petroleum Council. He also serves on the Board of the Energy Association of Pennsylvania and is the past Chairman as well as former Executive Board Member of the American Public Gas Association.

Douglas A. Moser, Executive Vice President and Acting Chief Operating Officer. Mr. Moser started with the Philadelphia Gas Works in 1979. During his 36 years of service, he served in many capacities, increasing in responsibility and seniority and in 2012 he was appointed to his present position as Executive Vice President and Acting Chief Operating Officer. In this capacity he is responsible for gas management, supply chain, operations, information services, customer affairs and enterprise strategic services. Mr. Moser received his Bachelor of Science degree in Chemical Engineering from Pennsylvania State University and his Master in Business Administration degree from Widener University. He serves on the Gas Board of the Energy Association of Pennsylvania as Chairman and the Leadership Council of the American Gas Association.

Joseph F. Golden, Jr., Executive Vice President and Acting Chief Financial Officer. Mr. Golden was appointed Executive Vice President and Acting Chief Financial Officer in March 2012. In this capacity he is responsible for the treasury, accounting, budgeting, and gas planning functions. Prior titles held by Mr. Golden at PGW include: Controller, Treasurer, Manager Treasury Department, Senior Staff Accountant, and Staff Accountant. Mr. Golden started his career with PGW in August of 1986. Mr. Golden has prior work experience in public accounting, treasury accounting and cash management, and manufacturing. Mr. Golden holds a Bachelor of Science degree in Accounting from Villanova University, a Master of Business Administration degree from Drexel University, and received his Juris Doctor (*cum laude*) from Temple University School of Law.

Abby L. Pozefsky, Esq., Chief Administrative Officer and General Counsel. Ms. Pozefsky has served as General Counsel since 1998. In December 2012 she was also appointed Chief Administrative Officer, promoted from the position of Senior Vice President, Administration. She manages Human Resources, Risk Management, Technical Compliance, Ethics and Legal. Ms. Pozefsky previously held the

position of Chief Deputy City Solicitor of Regulatory Affairs for the City's Law Department, where she was also General Counsel for the Philadelphia Water Department and the Philadelphia International Airport. Having been licensed in four states, she has practiced law with a private law firm, community legal services and the Colorado Attorney General, and she has taught at Virginia Commonwealth University. She serves as a trustee for the PGW OPEB Trust and Secretary to the Philadelphia Facilities Management Corporation, and is a member of various legal and human resources professional associations. Ms. Pozefsky received her Juris Doctor from New York University Law School, and her Bachelor of Arts (*cum laude*) from the University of Pennsylvania.

Charles J. Grant, Chief of Staff. Mr. Grant was appointed Chief of Staff in the Office of the President and Chief Executive Officer in March 2011. He held the same position in the Office of the Executive Vice President and Chief Operating Officer when he joined PGW in June 2010. His responsibilities include oversight and enforcement of PGW's labor contracts and PGW security. He is also responsible for media relations, crisis communications, community partnerships, government affairs, internal communication, digital communication/social media and advertising campaign development. Prior to joining PGW, Mr. Grant was the owner and managing partner of the law firm Grant & Lebowitz, LLC. Mr. Grant also served as the Chief of the Homicide Unit for the Philadelphia District Attorney's Office and Deputy District Attorney in the Los Angeles County District Attorney's Office, and an adjunct professor at the Beasley School of Law, Temple University. Mr. Grant earned his Bachelor of Arts degree from the Honors College of Ohio University and his Juris Doctor degree from Georgetown University Law Center.

Daniel P. Murray, Senior Vice President – Customer Affairs and Operations. Mr. Murray was appointed Senior Vice President of Customer Affairs and Operations in December 2012. He is responsible for defining the strategy and the execution of all customer care, collections, field operations, and supply chain functions. Prior titles held by Mr. Murray at PGW include: Vice President Customer Affairs, Director of Resource Management for Field Operations, and Director of Special Projects. Prior to joining PGW, Mr. Murray was a Senior Manager in the Utility practice of global management consulting company Accenture. Mr. Murray holds a Bachelor of Science degree in Business Management from Providence College.

Raymond M. Snyder, P.E., Senior Vice President – Gas Management. Mr. Snyder was appointed Senior Vice President – Gas Management in March 2015. Mr. Snyder began his career at PGW almost 35 years ago in the Engineering Department. He continued in Engineering until he reached the level of Manager. Mr. Snyder moved into Operations as the Director of Systems Administration and then as Director of Gas Processing. In his current position, Mr. Snyder is responsible for Gas Processing, Engineering, Gas Acquisition, Transportation & Gas Control, as well as PGW-owned and -leased properties. Mr. Snyder received his Bachelor of Science in Civil Engineering from the Pennsylvania State University and his Master of Science in Engineering Management from Drexel University. He is a licensed professional engineer in Pennsylvania. Mr. Snyder serves as a member and former Vice-Chair of the AGA Supplemental Gas Committee.

Eloise N. Young, Chief Information Officer and Vice President, Information Services. Ms. Young has been the Chief Information Officer of PGW since August 2007. She brings more than 20 years of experience to the position. As CIO, Ms. Young is responsible for delivering information technology capabilities to PGW's approximately 1,600 employees. Prior to her appointment, she served in a number of positions in PGW's Information Services Department, including Director of Technical Strategy and Support, Manager of Systems Services, System Administrator in both the Unix and CICS environments, DBA, and applications developer. Ms. Young sits on the Philadelphia chapter's Corporate Advisory Council of the Philadelphia chapter of the Black Data Processing Professionals. She received a Bachelor of Science degree in Information Technology from the University of Phoenix in 2003 and a Generalist Master of Business Administration from Rosemont College in 2014.

Additional PGW Senior Staff

The following are brief biographical descriptions of current PGW senior staff:

Michael H. Jones, Vice President – Technical Compliance. Mr. Jones was appointed Vice President of Technical Compliance in January 2010. In this capacity, he is responsible for services to operations involving gas safety regulatory compliance, chemical laboratory analyses and environmental services. Mr. Jones's previous position was Director, Technical Compliance and before that Director, Engineering Design and Construction Planning. Mr. Jones has been with PGW since 1981. Mr. Jones is a member of the American Gas Association's Operations Safety Regulatory Action Committee, Environmental Regulatory Action Committee, and the Distribution and Transmission Engineering Committee. Mr. Jones is also a member of the Energy Association of Pennsylvania's Gas Transmission and Distribution Committee, and the National Society of Black Engineers. Mr. Jones has a Bachelor of Science degree in General Sciences from Lincoln University in Pennsylvania, and Bachelor of Science and Master of Science degrees in Civil Engineering from Drexel University. Mr. Jones is a registered professional engineer in Pennsylvania.

Raquel N. Guzman, Esq., Vice President – Legal and Associate General Counsel. Ms. Guzman was appointed Associate General Counsel in 2003 and Vice President – Legal in August 2005. She, together with the General Counsel, is responsible for PGW's Legal Department. Prior to joining PGW's legal staff, Ms. Guzman was a Deputy City Solicitor for Regulatory Affairs for the City of Philadelphia and also practiced at a major Philadelphia law firm in its real estate department. She holds a Bachelor of Arts *magna cum laude* from Harvard College and a Juris Doctor degree from the University of Pennsylvania Law School.

Raymond J. Welte, Vice President – Field Operations. Mr. Welte was appointed Vice President, Field Operations in November 2014. He is responsible for Philadelphia Gas Works Distribution and Field Services Departments. He previously held many positions at PGW in both departments since commencing employment in October 1978 including: Director Field Operations; Manager Field Service Department; Manager Meter Measurement/Pressure Force; Superintendent of Commercial & Industrial; Supervisor Field Service. He has been an active member of the American Gas Association, Society of Gas Operators and the Energy Association of Pennsylvania.

Governmental Oversight

Gas Commission

The Gas Commission was created by the Philadelphia Home Rule Charter. By Ordinance of City Council, the Gas Commission is a five-member body consisting of the City Controller, two members appointed by City Council and two members appointed by the Mayor. The Management Agreement vests in the Gas Commission the responsibility for overseeing the operation by PFMC of PGW. The City Controller serves during his incumbency as City Controller. The members appointed by the City Council and the Mayor each serve for terms of four years and hold office until their successors are appointed and qualified.

The ordinance authorizing the Management Agreement grants the Gas Commission certain specified powers and duties and other powers not specifically granted to PFMC including: approval of certain personnel provided by PFMC; review of gas supply contracts and contracts for the distribution or transmission of gas for approval by City Council; approval of changes in tests and standards of gas quality; approval of PGW-established gas pressure; initial approval of PGW's operating budget; review of PGW's capital budgets and recommendations thereon to City Council; approval of certain loans (but not issuance of bonds); access to and review of all books, records and accounts of PGW; prescription of insurance requirements; promulgation of standards for procurement and disposal of material, supplies and services and initial approval of all real property acquisitions, sales and leases for further approval by the City Council.

The PUC

The PUC was created by Pennsylvania statute and consists of five members appointed by the Governor of the Commonwealth, with the consent of the Pennsylvania Senate. Each member serves a five-year term and until his or her successor is appointed and qualified. The PUC conducts reviews of various aspects of PGW and the other utilities for which it establishes rates. The PUC has implemented various substantive and procedural regulations regarding the supervision of those utilities. PGW's rates are established by the PUC under the Commonwealth's Public Utility Code (the "Code") by virtue of the Gas Choice Act, subject to certain limits on the PUC's authority as described under "GAS SERVICE TARIFF AND RATES – **Rates** – *Ratemaking Methodology to Account for Bond Covenants*." Also see APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Organization and Management** – *Pennsylvania Public Utility Commission*."

PUC April 2015 Report

The most recent renewed PUC assessment of PGW is a Staff Report entitled "Inquiry into Philadelphia Gas Works' Pipeline Replacement Program," released on April 21, 2015 (the "PUC April 2015 Report"). The PUC April 2015 Report states that a renewed assessment of PGW's pipeline infrastructure and pipeline replacement program is necessary because approximately two-thirds of such infrastructure consists of aging cast iron and unprotected steel pipes, "both of which are high risk pipe that pose a potential risk to life and property…." The PUC April 2015 Report concludes that PGW's pipeline replacement efforts are not aggressive enough given the risk of the cast-iron and unprotected steel pipes. The PUC staff identifies several areas that PGW "should explore to increase its main replacement rate to ensure that its customers receive safe, adequate and reliable service." These areas include: increasing the Distribution System Improvement Change ("DSIC"), changing PGW's current timing for collecting DSIC payments, issuing additional debt to finance pipeline replacement, reducing PGW's cash liquidity by 25% and applying the released funds to pipeline replacement, increasing the funds available for pipeline replacement by having the City waive all or portion of its annual $18.0 million payment from PGW, streamlining PGW governance structure by eliminating the Gas Commission, and consolidating existing facilities.

PGW has met with the PUC to discuss the suggestions made in the PUC April 2015 Report, including matters summarized in this paragraph. PGW has proposed an increase in the DSIC to 7.5 percent and to levelize and annualize the DSIC. It expects to submit a formal request for such increase in the DSIC in August 2015, to be effective in Fiscal Year 2016. PGW believes that this could provide an increase from the current $22.0 million to up to $33.0 million per year to fund PGW's pipeline replacement program. PGW is considering requesting future increases to the DSIC once the 7.5 percent DSIC has been in place for a period of two years and PGW has had the opportunity to evaluate the effect of such increase on risk and customers and PGW's ability to effectively implement the level of pipeline replacement associated with the 7.5 percent DSIC (or higher levels). PGW also discussed liquidity as an important component of its operations. PGW is in the process of evaluating the consolidation of facilities and expects a report by the end of the summer.

See the following sections of this Official Statement for discussion of (i) PGW's infrastructure and pipeline replacement activities: "THE CAPITAL IMPROVEMENT PROGRAM," (ii) the DSIC and annual payment to the City: "GAS SERVICE TARIFF AND RATES –**Rates** – *Surcharge*" and "– *Ratemaking Methodology to Account for Bond Covenants*," (iii) PGW governance: "PHILADELPHIA GAS WORKS – **Governmental Oversight"** and (iv) operation of existing facilities: "THE GAS WORKS FACILITIES."

City Council's Special Committee on Energy Opportunities for Philadelphia

By resolution adopted January 29, 2015, the Philadelphia City Council created a Special Committee on Energy Opportunities for Philadelphia, the members of which are City Council members appointed by the Council President. The Committee's charge is to develop "strategies for developing Philadelphia and the region as an energy hub" including by "soliciting conceptual proposals, holding public hearings, and

conducting research." The resolution states that the Committee's "scope of work shall include, but not be limited to, identifying strategies for enhancing the Philadelphia Gas Works through such means as reforming its governance or entering into joint ventures and public-private partnerships." The Committee has conducted a hearing. No representation can be made regarding the future actions, if any, of the Committee or by the City Council.

Effect of Sale of PGW or its Facilities

No sale of all or substantially all of PGW, its gas operations or its gas facilities can be completed without providing for: (i) the payment and legal defeasance of the City's Outstanding 1998 Ordinance Bonds and Gas Works Notes, (ii) the termination of agreements, including interest rate exchange agreements, relating to such Bonds and Notes, and (iii) the satisfaction by the City of all of its obligations under such agreements, including the payment in full of associated termination costs. Any such sale would be subject to authorization by Philadelphia's City Council and approval by the PUC. (However, the City can sell PGW assets no longer useful for gas operations.)

On March 2, 2014, following a competitive bidding process, the City entered into an agreement to sell PGW to UIL Holdings Corporation, subject to authorization by City Council and the PUC. On December 4, 2014, UIL exercised its option to withdraw from the agreement after no authorizing ordinance was introduced in City Council.

Other Federal, Commonwealth and City Oversight

In addition to the Gas Service Tariff (the "Gas Service Tariff") and other rate related regulations promulgated by the PUC (see "– **Gas Service Tariff**" herein), PGW's operations and facilities are subject to laws and regulations, including permitting and approval requirements, promulgated by federal agencies such as the U.S. Department of Transportation, the U.S. Environmental Protection Agency ("USEPA") and the Federal Emergency Management Agency, state entities such as the Pennsylvania Department of Labor and Industry and the Pennsylvania Department of Environmental Protection ("PADEP"), the Pennsylvania Emergency Management Agency and local entities such as the Philadelphia Water Department, the Philadelphia Department of Public Health, the Philadelphia Air Management Services and the Philadelphia Office of Emergency Management. In addition, the prices of gas transportation and storage are subject to regulation by the Federal Energy Regulatory Commission ("FERC"), although PGW, its operations and its facilities, are not.

Labor Relations

As of May 31, 2015, PGW had 1,585 employees, approximately 72% of whom are represented by the Gas Works Employees' Union of Philadelphia Local 686, Utility Workers' Union of America, AFL-CIO ("Local 686"). On June 3, 2015, PGW and the Officers of Local 686 tentatively agreed upon a new, five-year Collective Bargaining Agreement. The tentative Collective Bargaining Agreement was approved by the PFMC Board on June 15, 2015 and was ratified by the members of Local 686 on June 17, 2015. The approved and ratified Collective Bargaining Agreement (the "Collective Bargaining Agreement") became effective retroactively to May 16, 2015.

The Collective Bargaining Agreement includes general wage increases of 2%, 2.5%, 2.5%, 2.5%, and 2.5% effective May 15, 2015, 2016, 2017, 2018, and 2019, respectively. The starting salaries for select entry level union positions will be increased 10%. Union covered employees on the payroll at May 15, 2015 will be protected from layoff for the term of the contract. The PGW employees in the Distribution Department and Field Services Department, combined, must include a minimum staffing level for field classifications of 590 union covered field classified employees. The current combined complement of applicable union covered field classified employees in these departments is approximately 650. Shift premiums will also be increased approximately $0.25 per hour.

The Collective Bargaining Agreement now permits PGW to freely employ outside contractors to perform work on coated and unprotected steel mains, cast iron mains, and service lines through which gas is flowing provided a base mileage of 22 miles of applicable main replacement is achieved through the course of a Fiscal Year. (See "THE CAPITAL IMPROVEMENT PROGRAM.") This work includes: installing mains of all types and diameters, installing service lines, and rebuilding meter sets, and relighting systems inside customer's properties after main installation. Further, outside contractors may be used to perform main abandonment projects regulated by the PUC, including shut-offs. Under the prior collective bargaining agreement, this work could only be performed by Local 686 employees.

Insurance, Loss Reserves and Cost Recovery

PGW is exposed to various risks of loss related to: torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees and natural disasters. While self-insured for many risks, PGW purchases insurance coverage when appropriate. PGW's real and personal property is insured against the risk of loss or damage in the amount of $250.0 million, subject to a $0.5 million per accident deductible at the Richmond and Passyunk facilities and a $0.1 million per accident deductible at all other locations. There are separate sublimits for flood and earth movement at select locations. PGW's property insurance includes coverage for damages incurred from a terrorist attack. PGW does not carry first party environmental coverage through which it could access direct payment of claims for environmental remediation costs. In addition, PGW maintains boiler and machinery, blanket crime, directors and officers, fiduciary liability and other forms of insurance.

PGW maintains $210.0 million in liability (including terrorism) coverage against the risk of damage to property or injury to the public with a per occurrence self-insured retention of $1.0 million. PGW is a qualified self-insured employer in the Commonwealth of Pennsylvania. In addition, PGW maintains Excess Workers' Compensation Liability coverage with a $0.5 million per occurrence retention and Privacy and Security (Cyber) insurance.

PGW maintains $30.0 million Public Officials Liability (Directors and Officers Liability) policy with a $0.5 million retention, as well as a $60.0 million Fiduciary Liability policy with a $0.2 million retention.

The above coverage descriptions are subject to the terms, conditions, and exclusions of the individual policies.

Although PGW is principally insured through insurance carriers, it is required to cover any settlements of claims that are excluded from coverage under the applicable insurance policies. PGW has established, in accordance with the Gas Commission regulations, an estimated liability for such settlements to be paid in Fiscal Year 2015.

See Notes 1(p) and 13 to PGW's audited financial statements included in APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section** – Notes to Financial Statements."

PGW has been deemed a "local agency" for purposes of the Pennsylvania Political Subdivision Tort Claims Act ("Tort Claims Act"), 42 Pa.C.S. § 8541 et seq. As such, it is entitled to all protections and immunities from liability provided under the Tort Claims Act.

Costs that exceed the applicable insurance coverage and liability reserves set aside for the applicable events and any retainage that is in excess of such reserve are eligible for inclusion in the Base Rate (see "GAS SERVICE TARIFF AND RATES – **Rates** – *Base Rate*") although any increase in the Base Rate must be approved by the PUC.

Pension Plans and Other Postemployment Benefits

PGW maintains pension plans covering all eligible employees of PGW and PFMC, which provide certain retirement, death and disability benefits. Retirement payments for vested employees commence (i) at age 65 and five years of credited service, (ii) age 55 and 15 years of credited service, or (iii) without regard to age, after 30 years of credited service. Union employees hired after May 21, 2011 and Non-union employees hired after December 21, 2011 must make an irrevocable choice within 30 days of hire to participate in either the defined benefit pension plan or the defined contribution plan. As of May 31, 2015, there were 1,585 full time employees. Of these 1,585 employees, approximately 359 were hired after the respective dates noted above. There are 299 Union employees and 60 Non-union employees in this group. The defined contribution plan was chosen by 189 Union employees and 49 Non-union employees for a total of 238 employees. The defined benefit plan was chosen by 110 Union employees and 11 Non-union employees for a total of 121 employees. However, this allocation may not be representative of the choices made by future employees.

PGW pays the full cost of medical, basic dental, and prescription coverage for employees and their beneficiaries who retired prior to December 1, 2001. Employees who retire active after December 1, 2001 are provided a choice of three plans at PGW's expense and can elect to pay toward a more expensive plan. PGW pays 100% of the cost of the prescription drug plan after drug co-pays. Union employees hired after May 21, 2011 and non-union employees hired after December 21, 2011 who retire are entitled to receive postretirement medical, prescription, and dental benefits for five years only. Retirees hired prior to those dates receive benefits until either their death or the death of their beneficiary, if such election is made.

See APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section** – Notes to Financial Statements – **(10) Pension Costs**" and "– Notes to Financial Statements – **(11) Other Postemployment Benefits**" and APPENDIX C – "THE CITY OF PHILADELPHIA GOVERNMENT AND FINANCIAL INFORMATION – **PGW Pension Plan**" and "– **PGW Post Employment Benefits**" for further information.

Treatment in Financial Statements

Under Governmental Accounting Standards Board Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* (GASB 27), a net pension obligation was recorded on a governmental employer's balance sheet, only to the extent the employer did not contribute at least the actuarially determined annual required contribution (ARC) each year. GASB 27 defines the ARC as the amount sufficient to pay (i) the normal cost and (ii) the amortization of the unfunded actuarial liability over a period not to exceed 30 years. Under GASB 27, PGW had no net pension obligation as of any of the years ended August 31 presented in the "PGW BUDGETS, RATES AND FINANCES" section below.

Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27* (GASB 68) is effective for PGW's Fiscal Years beginning on and after September 1, 2014. The Government Accounting Standards Board has stated that the primary objective of GASB 68 is to improve accounting and financial reporting by state and local governments for pensions. GASB 68 will result in PGW's net pension liability being reflected on its balance sheet, measured as the portion of the present value of projected benefit payments to be provided to current and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. PGW estimates that its net pension liability was approximately $200.0 million at September 1, 2014. PGW's audited financial statements as of and for the year ended August 31, 2015 will reflect the impact of GASB 68, and PGW expects to retrospectively apply its provisions to all periods presented, which will result in certain amounts presented in APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS" changing for the purposes of comparative analysis when they are presented alongside the audited 2015 financial statements.

The GASB approved on June 2, 2015 GASB Statement No. 75, which will replace GASB Statement No 45, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions* (GASB 45). Under GASB 45, PGW recognizes each year the difference between its annual other postemployment benefit ("OPEB") cost and contributions made to the plan, including contributions made from the OPEB surcharge in base bates (see "GAS SERVICE TARIFFS AND RATES – Rates – *Base Rate*" below) as an addition to its net OPEB obligation included in other non-current liabilities in its balance sheet. PGW's net OPEB obligation at August 31, 2014 was $102.0 million. GASB 75 parallels the requirements of GASB 68 and will be effective for years beginning after June 15, 2017, with earlier application encouraged. Under GASB 75, the difference net OPEB liability will be recognized, representing the portion of the present value of projected benefit payments to be provided to current and inactive employees that is attributed to those employees' past periods of service, less the amount of the OPEB plan's fiduciary net position.

Litigation

In the ordinary course of its business operations, PGW and PFMC are from time to time sued or threatened with litigation. Most frequently such litigation alleges property damage or personal injury to third parties. However, other forms of litigation also arise from time to time. Such litigation, among other possible subjects, may include environmental-related actions and proceedings in which it may be alleged that the PGW is liable for damages, including but not limited to property damage and bodily injury, or that the City should pay fines or penalties or the costs of response or remediation, because of the alleged generation, transport, or disposal of toxic or otherwise hazardous substances by the City, or the alleged disposal of such substances on or to City-owned property. Other than as described in the next paragraph, (1) PGW is aware of no litigation pending or threatened in which a final adverse determination, singly or in the aggregate, would have a material adverse effect on PGW's operations or financial condition and (2) PGW believes it has set aside sufficient reserves to meet liabilities arising out of litigation to the extent not covered by insurance.

Plaintiffs, purporting to represent a class of non-owner-occupied residential and commercial property owners, seek to enjoin the City from imposing or enforcing gas liens on their properties for unpaid charges incurred by their tenants or others living in or utilizing the properties (the "Landlord Lien Suit"). Plaintiffs allege that the City (which for this purpose includes the Philadelphia Gas Works) imposes such liens on their properties without meaningful and timely notice to them or opportunity to be heard beforehand, in alleged violation of their federal due process rights. Plaintiffs seek declaratory and injunctive relief, an order requiring the City to release all such existing liens, and "such other relief deemed by the Court to be necessary or appropriate." The parties are currently engaged in discovery. The City believes that it has strong and credible defenses to this suit and intends to defend the suit vigorously. The total amount of liens at issue far exceeds $2,500,000.

Competition

Although under the Gas Choice Act all of PGW's customers may choose among natural gas suppliers, to date, only commercial, industrial and municipal customers have been able to make such choice. Residential customers have not had the option to so choose because there has been no third-party gas supplier offering to serve PGW's residential customer base. PGW is developing a series of administration and payment billing and handling procedures designed to encourage gas suppliers to offer gas to residential customers. If a customer selects a gas provider other than PGW, such customer will be required to use PGW's distribution (also referred to as "transportation") system and pay a fee for such use.

Table 4 shows a breakdown of the components of the average annual bill for residential customers. Customers who select a provider other than PGW will pay the Distribution Rate and Universal Service and Energy Conservation Surcharge components. Note, though, the table does not reflect the costs of natural gas to a customer that selects a different provider.

Table 4
AVERAGE RESIDENTIAL COSTS FOR ALL CUSTOMERS IN A FISCAL YEAR[(1)(2)]

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Distribution Rate[(3)]	$560	$571	$554	$634	$658	$717	$682	$698	$785
Universal Service and Energy Conservation Surcharge	187	215	177	217	136	180	141	151	144
Gas Cost Rate	966	910	846	904	567	547	381	456	474
Total	$1,713	$1,696	$1,577	$1,755	$1,361	$1,444	$1,204	$1,305	$1,403

(1) Source: PGW's records.
(2) See "GAS SERVICE TARIFF AND RATES – **Rates**."
(3) Includes the Restructuring and Consumer Education, Efficiency Cost Recovery, OPEB and DSIC surcharges.

PGW customers are classified as residential, commercial, or industrial, with residential and commercial customers accounting for approximately 98% of PGW's non-heating customer base and approximately 85% of PGW's heating customer base for Fiscal Year 2014. PGW holds in excess of 90% of the home heating market in the City, with fuel oil constituting most of the remaining market share. PGW's residential and small to medium-sized commercial market shares are expected to remain stable due to the costs to customers of changing energy sources absent monetary incentives in the form of rebates and related financing mechanisms. Costs of new or replacement residential gas equipment can be affected by many factors such as the U.S. Department of Energy's proposed regulations that could require newly-manufactured gas furnaces have a higher efficiency rating than is currently required. The costs of acquiring such gas furnaces as well as any necessary duct work could affect the willingness of customers to convert to or maintain natural gas. Growth in PGW's market share is expected to be limited absent an expansion in PGW's service territory beyond the City and an investment in marketing or incentive programs.

The average number of firm residential non-heating customers (including CRP (herein defined) customers) is projected to decline from 22,988 in Fiscal Year 2015 to 12,972 in Fiscal Year 2020. The average number of firm residential heating customers (including CRP customers) is projected to decline from 449,458 in Fiscal Year 2015 to 447,019 in Fiscal Year 2020. See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Financial Feasibility for the Thirteenth Series Bonds** – Projected Revenues – *Projected Average Number of Customers*."

The historical average number of customers served monthly (for Fiscal Years 2011 through 2014) has been approximately 499,000. PGW's customer base is largest at the end of the peak heating season and decreases afterwards as customers terminate their service until the next heating season begins. The total average number of customers served is projected to decline from approximately 499,000 in Fiscal Year 2015 to approximately 490,000 in Fiscal Year 2020, a total decline of about 1.9% over five years, with most of this decline in the number of non-heating residential customers served. PGW expects that the decline in customers will not negatively impact PGW's operating revenue.

PGW experiences greater competition in the larger commercial and industrial markets, with interruptible customers (load balancing service, boiler and power plant service and interruptible transportation sale customers) having the ability to utilize alternate energies (such as oil, propane, electric or steam) if the equivalent price of natural gas is higher than the price of alternative energy. See "GAS SERVICE RATES AND TARIFFS – **Gas Service Tariff**" herein. Growth in the PGW's commercial and industrial customer base may also be affected by regulations of the Clean Air Act as use of natural gas (instead of fuel oil) may help such customers meet air emission operating permits. In addition, the lower cost of natural gas relative to alternative energy sources has resulted in large commercial and industrial customers switching to natural gas.

THE GAS WORKS FACILITIES

PGW maintains and operates a large number of facilities, including a distribution system of gas mains and service lines, and meters, gas supply facilities (including City gate stations where natural gas is received from pipeline transmission companies), centers to monitor and control gas flow and pressure, liquid natural gas liquefaction, vaporization and gas storage facilities. For additional information see "NATURAL GAS SALES, COSTS AND SUPPLIES **– Gas Supply, Storage and Transportation**." Also, the PGW facilities are described briefly below but more information about PGW's facilities can be found in APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **The PGW Gas System**."

Gate Stations

Natural gas is received through nine City gate stations, eight of which are owned by the two interstate pipeline companies serving PGW (Spectra Energy ("Spectra") and Transcontinental Gas Pipe Line Corporation ("Transco-Williams"). The supply facilities also include a gas control center. The pressure delivered to PGW's distribution system is controlled at each of the City gate stations. A gas control center monitors and controls gas flow and pressure from the nine City gate stations to the high-pressure distribution system and provides direction to the LNG production plant operators concerning startup, shutdown and gas flow output from the LNG facilities.

LNG Storage and Vaporization Facilities

There are two LNG facilities – one at the Passyunk Facility and one at the Richmond Facility. The smaller satellite facility at the Passyunk facility includes LNG storage and vaporization. It receives liquefied gas supply from the Richmond Plant via cryogenic trailer trucks. The Passyunk LNG facility consists of one LNG storage tank of 3,066,000 gallons gross capacity (i.e., the equivalent of 253,300 thousand cubic feet ("Mcf") of natural gas) and two LNG vaporizers, each having a capacity of 45,000 Mcf per day, resulting in 45,000 Mcf per day planned capacity and 45,000 Mcf per day reserve.

The Richmond LNG plant is one of the largest peak shaving facilities in the United States. It includes liquefaction, storage and vaporization facilities. Its liquefaction facility has a daily liquefaction capacity of 16,000 Mcf per day and utilizes open expander technology. This technology utilizes energy from the high pressure interstate pipeline system to run the expander/compressors, significantly reducing fuel requirements. In addition, this facility has the capability to liquefy natural gas year round providing greater operational flexibility. Further, this technology utilizes significantly fewer components than the older modified cascade facility and has resulted in lower operation and maintenance costs. The maximum capacity of the open expander liquefaction facility of 16,000 Mcf per day is not available during the summer months because the demand on the PGW system is not sufficient to create the throughput necessary to run at this capacity.

The two storage tanks at the Richmond Plant have a combined gross capacity of 48,970,000 gallons of LNG (4,045,800 Mcf). Regasification of the liquid natural gas is accomplished with six vaporizers having a total output of 463,000 Mcf per day plus 100,000 Mcf per day in reserve. The Richmond Plant also has facilities to receive LNG from and deliver LNG to cryogenic trailer trucks.

PGW is considering expanding its current LNG facilities. See "POTENTIAL LNG FACILITIES EXPANSION."

Gas Holder Storage Facilities

The Richmond Plant has a low pressure gas holder. The Richmond holder has an operating capacity of 1,000 Mcf. It was installed in the manufactured gas era and is in working order. It is used to enhance operational flexibility of the LNG Plant.

Distribution Facilities

The principal gas distribution facilities consist of approximately 3,024 miles of main, 475,800 service lines, 202 regulator stations, 573,052 meters (of which 511,872 are active) and miscellaneous valves, instruments, and other appurtenances. PGW operates eight different operating pressure systems; each system is connected to the other by control regulators. The majority of PGW customers are served from the low-pressure system (approximately 0.25 psig).

Approximately 50 percent (by length) of the gas mains are cast iron, 33 percent are steel, 4 percent are ductile iron, and 13 percent are plastic. Of the steel mains, approximately 50 percent are wrapped, coated, and cathodically protected. Approximately 31 percent of the service lines are steel (of which 17 percent are cathodically protected) and 69 percent are plastic. See "THE CAPITAL IMPROVEMENT PROGRAM" for information regarding PGW's gas main replacement program.

Data Center

A data center, including a new dedicated backup generator, two fully independent or redundant power supply circuits fed from two new fully redundant battery powered uninterruptible power supplies. The modular datacenter design allows for information technology equipment load growth such as future supervisory control and data acquisition equipment and telecom switching equipment and provides increased redundancy of cooling systems to essentially four systems.

Combined Heat and Power

A 200 kW natural gas-fired micro-turbine combined heat and power ("CHP") system produces electricity, heat and cooling for the 800 West Montgomery Avenue building. PGW estimates that approximately half of the building's electricity is produced by the CHP at approximately half the cost of that purchased from the local distribution grid. Waste heat from the micro-turbine's exhaust is converted via an absorber chiller into building cooling providing additional annual operating savings. The CHP system is also used by PGW marketing to demonstrate the advantages of CHP systems to customers in the growing CHP service segment.

Other Facilities

In addition to administrative offices, PGW has facilities for distribution and field service dispatching, gas control dispatching, equipment and automobile repair, training, telecommunications, warehousing and metal fabrication.

NATURAL GAS SALES, COSTS AND SUPPLIES

PGW Gas Sales and Natural Gas Costs

PGW serves residential, commercial and industrial customers with residential and commercial customers accounting for approximately 98% of PGW's non-heating customer base and approximately 85% of PGW's heating customer base for Fiscal Year 2014. Historical average number of customers (for Fiscal Years 2010 through 2014) has been approximately 498,000. References to gas "sales," "revenues" and "receipts" in this Official Statement generally refer to respectively, volume of gas, billings for gas delivered and payments received from billed customers. See "PHILADELPHIA GAS WORKS – **Competition**."

PGW provides three categories of heating or non-heating services: (1) firm service to residential, commercial or industrial customers who are given an applicable general service rate, municipal service rate or Philadelphia Housing Authority service rate, (2) interruptible service (mostly boiler and power plant service or load balancing service) to customers who must have an alternate energy source because their service may be

interrupted and (3) transportation service to approximately 3,786 customers, as of August 31, 2014, who do not use PGW as its gas provider. For Fiscal Year 2014, firm customers constituted approximately 99% of PGW's customer base and account for 95% of its sales volume (representing gas delivered to customers). For Fiscal Years 2015 through 2020, PGW projects that average firm non-heating customers will decline from 27,377 to 17,054, and total average heating customers will decline from 468,157 to 467,059 and total average transportation customers will increase from 3,786 to 5,655. See Table 9 in APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Financial Feasibility for the Thirteenth Series Bonds** – *Projected Revenues* – Historical and Projected Average Number of Customers."

For the twelve month period ended August 31, 2014, approximately 78.9% of gas revenues were derived from residential customers, approximately 18.6% were derived from commercial and industrial customers and approximately 2.5% were derived from municipal and housing authority customers. Gas revenues represent gas for which PGW has billed customers.

PGW's gas sales and gas costs reflect a variety of factors, including natural gas utilization, natural gas prices, pipeline demand charges and refunds, and exercise by customers of their rights under the Gas Choice Act to purchase natural gas from providers other than PGW, though such customers will be required to use PGW's distribution (also referred to as "transportation") system and pay a fee for such use. To date, gas choice has not been available to residential customers (see "PHILADELPHIA GAS WORKS – **Competition**"). Such choice has been available to commercial, industrial and municipal customers. Residential customers have not had the option to so choose because there has been no third-party gas supplier offering to serve PGW's residential customer base. See "Competition." The temperature and other weather conditions greatly affect the gas usage of PGW's heating customers. Colder than normal weather conditions result in a greater demand for natural gas and warmer than normal weather conditions result in a lower demand for natural gas.

Total sales by PGW's customer type, net of transportation sales, during each of the past five Fiscal Years ended August 31, are shown in the following Table 5:

Table 5
PERCENT OF GAS SALES[2]
BY CUSTOMER TYPE
THE FISCAL YEARS ENDED AUGUST 31[1]

	2014	2013	2012	2011	2010
Residential	78.9	78.4	78.0	77.5	77.0
Commercial and Industrial	18.6	19.1	19.3	19.8	20.3
Municipal and Housing Authority	2.5	2.5	2.7	2.7	2.7
TOTAL	100.0	100.0	100.0	100.0	100.0

[1] Source: PGW's records.
[2] Sales represent gas delivered to customers.

Total gas sales for PGW are comprised of sales to firm and interruptible customers. Firm customers receive gas service under various schedules which anticipate no interruptions in the delivery of natural gas. Firm sales represented 98% of total gas sales by volume in Fiscal Year 2014. Interruptible sales service is offered to customers under schedules or contracts which anticipate and permit interruptions on short notice, generally in peak load periods. Interruptible gas service, which is sold to high volume commercial and industrial customers, represented 2% of total gas sales in Fiscal Year 2014. For information regarding PGW's gas sales by customer and service type, see "PGW BUDGETS AND FINANCES – **Selected Operating Data Regarding Customers and Gas Sales** – Table 12 – Selected Operating Data Regarding Customers and Gas Sales."

During the five-year period Fiscal Year 2010 through Fiscal Year 2014, natural gas sales revenues were affected by the commodity price of natural gas and heating demand caused by weather. The price of natural gas affects sales revenue because a substantial portion of PGW's revenue is the recovery of natural gas costs. The commodity price of natural gas during this period was trending downward. The major cause of the downward pressure on natural gas prices was the volume of natural gas from additional supply coming on line from drilling activity in the Appalachian shale region, over the past several years. Degree days experienced during this period varied from a low of 3,037 (Fiscal Year 2012) to a high of 4,405 (Fiscal Year 2014). The 30-year average degree days for the period ending in Fiscal Year 2014 were 4,245. Fiscal Years with higher degree days would indicate more demand for heat and higher sales volumes. Sales volumes for the period range from a low of 43 Bcf in Fiscal Year 2012 to a high of 55 Bcf in Fiscal Year 2011.

The cost of natural gas is PGW's single largest expense. During the five-year period Fiscal Year 2010 through Fiscal Year 2014, natural gas expenses averaged $295.6 million, with a low of $233.7 million in Fiscal Year 2012 and a high of $354.0 million in Fiscal Year 2010. Information regarding PGW's natural gas costs and operating revenues during each of the past five Fiscal Years ended August 31, is shown in the following Tables. For information regarding PGW's natural gas sales volume, see the table entitled "Sales Volume" in APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Statistical Section**."

Table 6
NATURAL GAS COSTS FOR THE FISCAL YEARS ENDED AUGUST 31[1]

	2014	2013	2012	2011	2010
Natural Gas Costs ($ thousands)	$304,040	$255,496	$233,709	$330,926	$353,998
% Increase (Decline) from Prior Fiscal Year	19.0	9.3	(29.4)	(6.5)	(35.1)
% Natural Gas Utilization Increase (Decline) from Prior Fiscal Year Bcf[2]	2.8	7.2	(12.0)	3.2	(3.7)
% Natural Gas Price Increase (Decrease)	12.8	(6.3)	(9.7)	(12.0)	(30.6)
Pipeline Demand Charges ($ thousands)	$63,564	$65,901	$66,236	$72,091	$71,675
Pipeline Refunds ($ thousands)	$4,441	$86	$10	$123	$225

[1] Source: PGW's records.
[2] Billion cubic feet.

Table 7
OPERATING REVENUES
HEAT AND NON-HEAT CUSTOMERS
FISCAL YEARS 2010 THROUGH 2014[1] [5]
(THOUSANDS OF U.S. DOLLARS)

	2014	2013	2012	2011	2010
Firm non-heat	$ 30,324	$ 31,401	$ 33,282	$ 36,779	$ 37,932
Interruptible gas sales	9,068	4,703	3,338	14,431	12,503
Billed non-heating	39,392	36,104	36,620	51,210	50,435
GCR [2] non-heating adjustment	218	(841)	434	228	908
Total non-heating	39,610	35,263	37,054	51,438	51,343
Billed heating	660,942	605,761	519,950	659,681	630,970
GCR heating adjustment	6,174	(12,407)	4,244	5,360	16,742
Total billed heating	667,116	593,354	524,194	665,041	647,712
Weather normalization adjustment (WNA)	(11,810)	8,060	44,016	1,696	12,970
Total heating	655,306	601,414	568,210	666,737	660,682
Total gas sold	694,916	636,677	605,264	718,175	712,025
Firm transportation (FT) non-heat [3]	5,671	5,194	3,861	4,582	3,306
FT heating	23,330	19,665	14,037	14,541	13,254
WNA FT	(488)	331	1,412	128	455
Total heating FT	22,842	19,996	15,449	14,669	13,709
Total FT	28,513	25,190	19,310	19,251	17,015
Unbilled adjustment	5	1,398	(6,201)	2,393	3,457
GTS: transportation[4]	1,173	1,050	1,086	1,147	1,928
GTS (customer/customer choice)	10,278	9,372	7,955	8,333	7,421
GTS (supplier/customer choice)	11	478	170	(790)	(105)
GTS (firm supplier)	1,242	989	803	759	601
Total gas operating revenues	$ 736,138	$ 675,154	$ 628,387	$ 749,268	$ 742,342

[1] Source: PGW's records.
[2] GCR=Gas Cost Rate.
[3] Firm transportation (FT) program began in Fiscal Year 2007.
[4] GTS=Gas Transportation System.
[5] Also see Table 11 in APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Financial Feasibility for the Thirteenth Series Bonds** – Projected Revenues – Historical and Projected Revenues."

Gas Supply, Storage and Transportation

PGW uses models that project customer natural gas requirements for the coldest hour, day and year, using its records since the mid-1970s. These projections form the basis for PGW's decisions regarding capacity commitments for pipeline supply, storage and transportation contracting. In order to deliver gas to its customers, PGW must purchase gas and also arrange capacity on the gas pipelines that deliver gas from the suppliers, many of which can be as far away as the Gulf of Mexico, to the City gates.

The cost of gas supply is a function of the price paid and the quantity purchased, both of which are variable. While PGW can set the timing of gas purchases, the prices paid are largely determined in a very competitive and sometimes volatile marketplace. However, PGW uses offsite storage facilities and LNG storage to lower its supply costs.

PGW expects its supplies of natural gas and LNG to be adequate to meet its projected demand on the coldest peak day, hour and year. See Table 2 and Table 3 of APPENDIX B – "INDEPENDENT

CONSULTANT'S ENGINEERING REPORT – **PGW Gas Supply** – Supply and Demand Balance" for PGW's historical and projected peak day supply and demand and projected annual supply and demand.

Supply

To satisfy the projected natural gas requirements, PGW enters into winter-only and summer only supply arrangements with approximately a dozen gas suppliers. These arrangements are base load supply that PGW must purchase. The price of gas under these supply arrangements can be set in months prior to scheduled delivery if PGW determines there is an advantage to doing so, or the price can be set at an index for the month of delivery. For winter 2014-2015, PGW purchases under these winter supply arrangements provided approximately 46% of PGW's daily firm transportation entitlements. During that same period, approximately 25% of PGW's natural gas supply portfolio was purchased in the spot market on a one hundred percent gas daily pricing basis that allowed for daily volumetric changes. The source of the remaining 29% of the gas usage was gas in storage facilities, including from three servicers that store and can deliver natural gas through their pipelines and from PGW's LNG facilities, as an additional source of supply.

Transportation

All of PGW's gas purchases are ultimately transported from the sources of supply to the City gates through either Spectra pipelines or Transco-Williams pipelines. Injections and withdrawals of gas from off-system storage also rely on these two pipelines. Spectra and Transco-Williams each account for approximately half of PGW's total contract pipeline capacity of 436,295 Mcf per day. The major contracts for Spectra and Transco-Williams transportation services are being renewed automatically on a year-to-year basis. See Table 1 of APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **PGW Gas Supply** – Transportation and Storage Services" for a summary of PGW's existing transportation and storage agreements with Spectra and Transco-Williams.

Storage

Due to the highly seasonal nature of PGW's load (demand), gas purchased and delivered through the pipeline transportation service is supplemented by the use of storage services. The principal PGW natural gas supply facilities include nine City gate stations owned in large part by Spectra and Transco-Williams as well as two LNG plants owned by the City. PGW's supply facilities also include a gas control center, a deactivated propane/air plant, and one gas holder. During periods when PGW's load is less than the contracted transportation service, PGW may utilize the available capacity to purchase gas for delivery to off-system storage facilities or to liquefy such gas for storage in its LNG facilities. To the extent that PGW is able to withdraw gas from off-system storage and local LNG facilities its need to reserve capacity on pipelines to serve higher seasonal loads. In addition, gas purchased during the lower cost non-winter period, if it can be stored and redelivered from storage during the winter, will be less costly than gas purchased during the generally higher cost winter period. Further, market area storage provides PGW with increased security that gas will be available for customers when needed.

Of PGW's total contract daily storage withdrawal capacity of 264,067 thousand cubic feet ("Mcf") per day, services provided using the Spectra facilities account for 89,274 Mcf per day, or 34%, and services provided using the Transco-Williams facilities account for 174,793 Mcf per day, or 66%. Certain storage contracts do not include bundled transportation and volumes from these storages must be transported using a transportation contract from a different provider. In APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT," see "**The PGW Gas System** – Supply Facilities," Table 1 in " – PGW Gas Supply – Transportation and Storage Services," "– LNG Facilities" and Table 3 in " – Supply and Demand Balance."

Transportation and Storage Costs

During Fiscal Year 2015, transportation and storage capacity costs are estimated to account for approximately 25 percent of the total gas supply expenses of $243.0 million. The prices paid for these services are determined by long-term contracts and tariff rates regulated by the FERC. These components of the gas supply cost represent the purchase of capacity, which generally remains relatively fixed, and is not expected to vary directly with the volumes of gas purchased.

ENVIRONMENTAL MATTERS

General

PGW's operations and facilities are subject to numerous laws and regulations, including permitting and approval requirements, promulgated by federal agencies such as the US DOT, USEPA and the Federal Emergency Management Agency, by state entities such as the Pennsylvania Department of Labor and Industry and the PADEP, and by local entities such as the Philadelphia Water Department, the Philadelphia Department of Public Health, Air Management Services, and the Philadelphia Office of Emergency Management. These requirements are subject to change and additional or different requirements may be imposed upon PGW in the future. PGW's Technical Compliance Department routinely tracks and notifies relevant personnel regulatory compliance requirements. See APPENDIX B – "INDEPENDENT CONSULTANT'S REPORT – **The PGW Gas System** – *PGW Technical Compliance Department*." No assurances can be given that PGW will be able to fully comply with changes to existing laws or requirements, or that compliance with such changes in requirements will not materially increase PGW's capital or operating costs, or have a material adverse effect on Gas Works Revenues.

PGW (and its predecessors) has been in operation for more than 175 years, and many of its current facilities (the "Current Sites") and other locations where PGW had previously operated facilities ("Legacy Sites") were built decades ago. As a result of preliminary internal environmental evaluations of its Current Site, PGW believes that several Current Sites that had been used in gas manufacturing, contain contaminants from those operations or from other sources. Additionally, certain equipment and fixtures that PGW removed from service years ago may no longer comply with current environmental requirements. The Current Sites are comprised of the Tioga facility (the "Tioga Facility"), the Belfield station (the "Belfield Facility"), the Diamond meter shop (the "Diamond Facility"), the Richmond natural gas processing and distribution facility (the "Richmond Facility") and the Passyunk natural gas processing and distribution facility (the "Passyunk Facility"). In order to address these issues, PGW and the City voluntarily approached the Pennsylvania Department of Environmental Protection ("PADEP") and proposed to resolve these issues at the Current Sites under PADEP's Land Recycling and Environmental Remediation Standards Act ("Act 2").

To determine the extent necessary to remediate environmental conditions impacting its Current Sites, PGW commissioned environmental site assessment studies that were conducted by an environmental consulting firm (the "Firm") in 2002, 2003 and 2004. In 2004, PGW received a set of five remedial investigation reports by the Firm that were based upon the findings of the environmental site assessment studies. These Remedial Investigation Reports (as such term is defined in Act 2) concerned the characterization of site soil and/or groundwater contaminated with volatile organic compounds ("VOCs") and semi-VOCs at the Current Sites. In each case, the Remedial Investigation Reports documented site impacts and recommend remediation at the applicable site to meet the site-specific standards permitted under Act 2.

Based on the Remedial Investigation Reports, at the end of 2004, PGW submitted to the PADEP PGW's Notice of Intent to Remediate ("NIR") with copies of the Remedial Investigation Reports for review. The remediation actions anticipated by PGW at the time included, but were not limited to, additional site characterizations, risk screenings, groundwater monitoring, soil vapor studies, underground storage tank removals, above ground tank removal, removal of other above ground fixtures, impacted soil removal, and product recovery.

Beginning in 2005, PGW conducted a series of public meetings to inform the public of PGW's upcoming remediation projects at the Current Sites, and also to address any specific concerns raised by local residents regarding PGW's future remediation plans, as required by the Public Involvement Plan Process. As a result of the public meetings, PGW developed a project schedule and budget to address and conduct any necessary remedial work for the impacted Current Sites over the next five years. PGW expects that this will provide PGW with allocated resources in a manner calculated to avoid any material adverse effect on PGW or on PGW's revenues. Nevertheless, until the project schedule work plans are finalized with the PADEP, it is not possible to determine what the costs of several remediation projects will be.

PGW has budgeted $10.5 million to address and conduct remedial work for impacted PGW properties for Fiscal Year 2015 and Fiscal Years 2015 through 2020 to the extent such costs are not included in other budget line items. PGW expects that this will provide PGW with required resources without causing a material adverse effect on PGW or on PGW's revenues. However, until the work plans are finalized with the PADEP and other agencies with jurisdiction over PGW, and remediation activities are completed, costs of several remediation projects cannot be determined.

Current Activities

Currently, an air sparge soil vapor extraction system is under construction at the Passyunk Facility and similar engineering controls will be evaluated for other facilities. At this time, PGW does not plan to remove source material from the Passyunk Facility, the Richmond Facility or the Tioga Facility. The Passyunk Facility, Richmond Facility and Tioga Facility are being monitored on an ongoing basis for development of remedial action work plans for future submittal to PADEP in connection with its Act 2 program. Pursuant to the requirements of the Pennsylvania Storage Tank and Spill Prevention Act of 1989 (the "Spill Prevention Act"), PGW is currently conducting monitored natural attenuation as a remedial approach with respect to storage tanks at the Belfield Facility and the Diamond Facility with the goal of attaining site closure for past storage tank issues at both facilities by Fiscal Year 2018. The Spill Prevention Act establishes requirements, standards and procedures for removal and closure of storage tanks, to identify and contain existing contamination and to prevent future releases from storage systems no longer in service.

Estimates for Financial Statement Purposes

The remediation activities described above at the Current Sites are estimated at a net present value of $34.7 million (as of August 31, 2014) for the 30 year period beginning that date. See APPENDIX A – "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS – **Financial Section** – Note 1(s)" attached hereto for a description of PGW's method for estimating remediation obligations.

Other Estimate of Environmental Remediation Costs

For purposes of insurance settlement negotiations (see *Insurance Settlements* below), PGW also commissioned another study with different assumptions regarding the type and scope of necessary work and estimate of remediation costs with respect to the Current Sites and Legacy Sites. The higher estimate reflects what PGW considers could be needed at both Current Sites and Legacy Sites if source removal were necessary.

$333 Million Insurance Settlement Estimate of Remediation Costs

A second estimate for environmental remediation costs dated as of 2003 and updated as of October 2012, is for $333 million for the 30 year period beginning October 2012. It was initially prepared in 2003 by a consultant to PGW for insurance settlement purposes to be a "'reasonable worst case' or 'plausible worst case' scenario," rather than an approach that estimates the environmental remediation costs of scenarios thought most likely to occur or associated with a preferred remedy. It was updated in 2012 primarily to reflect current

remediation pricing. It generally includes all of the activities described under the lower cost estimate. However, recognizing that older processing for producing gas and older storage methods make it possible that contaminants exist at the Legacy Sites formerly associated with PGW or its predecessors and located throughout the City and at some of the Current Sites, it expands the properties included in the remediation costs estimate to both the Current Sites and the Legacy Sites. These more comprehensive and costly remediations than assumed in the lower estimate would include, as appropriate, removal or stabilization of contaminated soils, plus pumping and treating groundwater to remove contaminants and prevent migration, excavation as off-site thermal treatment of contaminated soils and attention to ground water contamination. PGW does not currently plan to undertake many of the activities detailed in this estimate.

Actual Costs May Differ Substantially from Estimates

Estimates of remediation costs may change substantially as additional information becomes available regarding the level of contamination at specific sites, available remediation methods, and changes in price, technology, proposed land use, or applicable regulations.

Other Environmental Activities

Clean Air Act

The Clean Air Act (as amended, the "Clean Air Act") requires the County of Philadelphia (which is coterminous with the City) to submit to the USEPA a State Implementation Plan (the "State Implementation Plan") revision demonstrating that the County has implemented all necessary Reasonably Available Control Technology (as defined in the Clean Air Act) controls on all major stationary sources of VOC and oxides of nitrogen. Based on reports submitted annually by PGW to the US DOT, PGW experienced an average of 2,645 main leaks per year from Fiscal Years 2010 through 2014. The Philadelphia Office of Sustainability currently includes the methane released during PGW's main leaks in the City's carbon budget. As part of PGW's capital improvement program, PGW is replacing portions of its mains with plastic pipes. See "THE CAPITAL IMPROVEMENT PROGRAM" for information regarding PGW's gas main replacement program.

On April 18, 2012, the USEPA finalized regulations under the federal Clean Air Act to reduce air pollution from the oil and natural gas industry. The final rules are expected to, among other things, reduce air toxics and emissions of methane, a potent greenhouse gas. Distribution lines such as PGW's mains have not been affected by the final rules.

Other Remediation Activities

PGW is conducting abatement of asbestos-containing materials, lead-based paint and mold at certain of its facilities. PGW is replacing customer gas regulators with mercury-free regulators. PGW conducts other remediation and abatement projects as needed in conjunction with construction and capital projects among PGW locations and facilities to ensure health and safety during operations and to meet federal, State, and City regulatory requirements. It is equally sharing the costs of remediation of a former storage facility with the present owner.

Voluntary Activities

No contaminants related to the manufacture of natural gas and other gas works operations were found at or above actionable levels in soil vapor tests conducted voluntarily by PGW at properties adjacent to the Passyunk Facility. Although the tests revealed the presence of chloroform, PGW does not believe that the chloroform was generated by PGW activities. Nonetheless, PGW voluntarily has been assisting USEPA's ongoing soil vapor studies of the affected properties.

Regulatory Actions and Suits

Current Sites

With respect to the Current Sites, except with respect to underground storage tanks which are subject to mandatory remediation, and minor fines included in "– **Violations**" below, PGW has not received any orders for mandatory remediation measures or been fined or sanctioned by any environmental regulatory agency, nor has it received any third-party claim for bodily harm or property damage based on environmental issues at the Current Sites. PGW is not aware of any river sediment claim or other natural resource claims.

Legacy Sites

PGW has not made any on-site investigation or data analysis of the Legacy Sites nor has it assessed the Legacy Sites for soil, ground water and soil vapor environmental impact. PGW has not conducted environmental remediation or been asked to conduct environmental remediation at any Legacy Site, other than a third-party claim which the claimant has not pursued. PGW is not aware of any river sediment claim or other natural resource claims. It has not been fined or sanctioned for any Legacy Site, nor has it received any third-party claim for bodily harm or property damage at the Legacy Sites.

Violations

From 2002, PGW has paid less than $175,000 in the aggregate in fines for notice of violations and penalties associated with permit and regulatory violations from the US EPA, the Philadelphia Water Department, and Air Management Services. The majority of such fines were incurred in connection with USEPA requests for settlements under the Comprehensive Environmental Response, Compensation, and Liability Act resulting from issues at off-site disposal facilities.

Insurance Settlements

PGW does not currently carry first party environmental coverage which it could use for environmental remediation costs. However, PGW's pre-1986 excess liability policies included certain coverage for environmental liability to third parties. In 2004, PGW began negotiating a buy-out of those policies with the various carriers, agreeing to forgo any future recovery for third party claims in exchange for obtaining funds for environmental remediation. Through January 2015, PGW has received $15.1 million in net negotiated settlements from various carriers.

Recovery of Environmental Remediation Costs

The costs of environmental remediation are included in the category of items eligible for inclusion in the Base Rate. See "GAS SERVICE TARIFF AND RATES – **Rates** – *Base Rate*."

Uncertainty

Any analysis of the costs and requirements of environmental impacts is subject to certain variables, including the possible future discovery of pre-existing unknown pollution conditions, assertions of claims by government agencies or private litigants, changes in laws, administrative policies, or judicial rulings that create new environmental liabilities or exacerbate existing ones. PGW reserves the right to all defenses of liability with respect to environmental impacts, including, without limitation, seeking contribution from previous operators and/or adjacent site owners.

GAS SERVICE TARIFF AND RATES

Gas Service Tariff

PGW recovers the costs of providing natural gas, including the cost of owning and operating its various facilities, funding its various programs, satisfying the Rate Covenant, and providing for amounts sufficient to operate on a day-to-day basis, together with appropriate coverage, through the rates set forth in its Gas Service Tariff approved by and on file with the PUC.

The following is a brief description of PGW's rate requests to the PUC and the results of those requests:

PGW RATE CHANGE REQUESTS TO PUC[1]

Date of Request	Type of Relief (Base Rate or Surcharge)	Amount of Relief Requested	Purpose	Date Relief Granted	Amount of Relief Granted
8/8/2000	Base Rate	$52 million	Interim Rate relief	11/22/2000	$11 million
1/5/2001	Base Rate	$65 million	Rate relief	10/12/2001	$22.6 million
2/25/2002	Base Rate	$60 million	Base rate relief	4/11/2002	$36 million
FY 2002	WNA	Charge/(Credit)	Weather Normalization Adjustment	8/8/2002	Approved
12/22/2006	Base Rate	$100 million	Rate relief	9/28/2007	$25 million
11/14/2008	Base Rate	$60 million	Extraordinary rate relief	12/18/2008	$60 million
12/18/2009	Base Rate	$60 million	Maintain extraordinary rate relief	7/29/2010	$60 million granted in 2008 made permanent
12/18/2009	Surcharge	$42.5 million annually	OPEB funding	7/29/2010	$16 million annually through 2015
12/18/2009	Surcharge	$58.3 million	5yr. Demand Side Management Phase I (DSM)[2]	7/29/2010	Cost recovery
1/18/2013	Surcharge	DSIC: 5% of non-gas revenues	Distribution system repair, improvement & replacement	5/9/2013	5% of non-gas revenues from 2010 base year estimated to generate $22 million
December 2014	Surcharge	Automatic adjustment clause extension	DSM Phase II	Hearing expected summer 2015	Under review with the PUC
February 2015	Surcharge	$16 million annually	Continued OPEB funding	Expected August 2015	Under review with the PUC
04/10/2015	Surcharge	$10.7 million	DSM Phase I; extend DSM Phase I until Order is rendered on Phase II	5/7/15	$10.7 million

[1] Does not include GCR changes.

[2] "DSM" is a PGW program offering services to assist its customers to get the best value for their energy expenses.

PGW's current Gas Service Tariff sets forth the rules and regulations and practices for gas service and the rates PGW is allowed to charge for such service, including the Base Rate, the Gas Cost Rate (herein defined) and various adjustments and surcharges. See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Existing Rates*" and Table 7 within such section.

PGW's rates are unbundled such that any customer may choose a commodity supplier that is different from its distribution provider. As described under "PHILADELPHIA GAS WORKS – **Competition**," to date, there has not been a third-party natural gas supplier available to residential customers. PGW's rates generally include a customer charge component, distribution charge component and Gas Cost Rate. Under the unbundled rates, PGW's margin from firm customers is not materially impacted by whether a customer chooses a third party supplier or elects to continue taking the fully bundled service. A customer will continue to pay the distribution, customer charges and surcharges even if the customer does not purchase gas service.

See Figure 3, "Components of PGW Gas Cost Rate" and Figure 4, "Components of PGW Surcharges," in APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT."

Rates

The following types of rates are set forth in the Gas Service Tariff. Each is discussed below in more detail.

- **Base Rate (Customer Charge):** the rate charged by PGW, using the cash flow method, to produce a targeted amount of revenue for PGW based on various assumptions, including projected revenues and expenses.

- **GCR (Gas Cost Rate):** the current cost of natural gas and all raw materials that are passed through to customers. GCR consists of the purchased gas costs, transportation costs and off-system storage costs, minus the cost directly paid by interruptible sales customers, all subject to various adjustments for actual versus projected values and certain credits.

- **Distribution Charge:** a component of a customer's rate regardless of whether a customer chooses to purchase its gas from PGW or an alternate supplier.

- **Surcharges:** Several surcharges are imposed for specific purposes:

    - Universal service and energy conservation (recovery of social program costs)
    - Restructuring and consumer education (recovery of transition costs to customer choice)
    - Efficiency cost recovery (recovery of energy efficiency programs)
    - Other post employment benefits (recovery of OPEB trust contribution costs)
    - Distribution system improvements charge (DSIC – recovery of capital costs associated with a portion of PGW's main replacement program)

- **Weather Normalization Adjustment ("WNA")**. Since 2002, the delivery charge (not including GCR or surcharges) has been subject to a WNA which mitigates the risk of a warmer than normal winter season. The WNA adjusts the customer bills upward or downward to reflect differences between actual Heating Degree Days ("HDD") and normal HDDs. (For PGW, a HDD is a measure of the deviation of daytime temperature from a predefined standard, which PGW has projected based on a standard that translates to a design day average temperature of 0° F. A "design day" is a 24-hour period of the greatest theoretical demand for gas.

Base Rate

The Base Rate is regulated by the PUC, which is obligated by the Gas Choice Act to use the cash flow methodology to determine PGW's "just and reasonable" rates. Pursuant to the PUC's April 2010 Order and

Final Policy Statement[†] (the "2010 PUC Policy Statement") with respect to PGW, the determination of just and reasonable rates includes satisfaction of the subsidiary obligation to provide revenue allowances from rates adequate to cover its reasonable and prudent operating expenses, depreciation allowances and debt service, as well as sufficient margins to meet bond coverage requirements and other internally generated funds over and above its bond coverage requirements, as the PUC deems appropriate and in the public interest, for purposes such as capital improvements, retirement of debt and working capital.

In determining just and reasonable rate levels for PGW, the PUC will consider, among other relevant factors: (1) PGW's test year-end and (as a check) projected future levels of non-borrowed year-end cash, (2) available short term borrowing capacity and internal generation of funds to fund construction, (3) debt to equity ratios and financial performance of similarly situated utility enterprises, (4) level of operating and other expenses in comparison to similarly situated utility enterprises, (5) level of financial performance needed to maintain or improve PGW's bond rating thereby permitting PGW to access the capital markets at the lowest reasonable costs to customers over time, (6) PGW's management quality, efficiency and effectiveness, (7) service quality and reliability and (8) the effect on universal service. See "GAS SERVICE TARIFF AND RATES – **Rates** – *Ratemaking Methodology to Account for Bond Covenants*".

To effect any increase to the Base Rate, PGW files a proposed revision to its existing Gas Service Tariff with the PUC setting forth the proposed new rates and effective date, and detailing the data supporting the necessity of the proposed change. In any proceeding upon the motion of the PUC involving any proposed or existing PGW rate or in any proceedings involving any proposed increase in rates, PGW has the burden of proof to show that the rate involved is just and reasonable. A requested rate increase is initially suspended for 60 days and may be suspended for up to seven additional months while the PUC investigates and determines whether the increase is justified. Part of the investigation includes hearings in which interested parties can participate. After the end of the suspension period required by the Public Utility Code, in its discretion, the PUC may adjust PGW's rate increase request on the basis of the data submitted and consistent with the requirements of the Public Utility Code and, in particular, the Gas Choice Act. If the PUC approves the Base Rate increase, it will determine how to allocate the increase among the different classes of customers.

Since coming under the PUC's jurisdiction in 2000, PGW has filed six requests seeking increases in the Base Rate totaling $337.0 million (which amount includes multiple requests for the same or similar costs) and the PUC has granted PGW Base Rate increases totaling approximately $154.6 million. Such increases have included requests to cover various financing costs incurred by PGW, including costs to improve its financial position, enhance its ability to access the financial markets, maintain its bond rating and provide liquidity and financial flexibility, and a portion of the costs of certain OPEB liabilities. See "PGW RATE CHANGE REQUESTS TO PUC" above. Also see APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Regulation*" for a description of cases and orders relating to PGW's Base Rate since 2008, including the requests for continuation of the annual OPEB surcharge.

Gas Cost Rate

The current cost of natural gas and all raw materials are passed through to customers through the Gas Cost Rate, which consists of the purchased gas costs, transportation costs and off-system storage costs, minus the cost directly paid by interruptible sales customers, all subject to various adjustments for actual versus projected values and certain credits. The Gas Cost Rate can change monthly and represents a substantial portion of a typical heating bill. The Gas Cost Rate factor is evaluated quarterly to reflect the cost PGW expects to pay its suppliers. Once actual gas supply costs are booked, any cost adjustments over or under are factored into the Gas Cost Rate factor, resulting in no profit to PGW. By law, the Gas Cost Rate factor is

[†] In the 2010 PUC Policy Statement, the PUC states that "unlike a regulation, [the 2010 PUC Policy Statement] is not enforceable and has no binding effect on [PUC], or on anyone else." However, it further states that the purpose of the 2010 PUC Policy Statement "is to provide guidance to PGW and all interested parties as to the Commission's view on the statutorily-mandated ratemaking criteria for PGW and the information that should be considered in determining just and reasonable rates" and, further, that the 2010 PUC Policy Statement "is grounded upon Pennsylvania case law."

passed on to customers without any profit or markup. See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Gas Cost Rate*."

Weather Normalization Adjustment

PGW's approved commodity charges (exclusive of the cost of gas) is subject to the WNA pursuant to which a customer's bill is adjusted upwards or downwards to reflect differences between the customer's actual heating degree-days and the normal heating degree-days, as calculated from data collected at the Philadelphia International Airport. The application of the WNA facilitates the stabilization of annual earnings and cash flow during the winter heating season; it is revenue neutral to PGW. The WNA will remain in effect until discontinued by the PUC. See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Weather Normalization Adjustment.*"

Surcharges

Several surcharges exist to fund various PGW programs and capital improvements. Depending on the surcharge, not all PGW customer classes are affected by the surcharge.

- Restructuring and Consumer Education Surcharge. Revenues from this surcharge finance the PUC approved costs incurred or to be incurred by PGW to meet requirements of the Gas Choice Act and applicable PUC regulations, orders, and other regulatory requirements.

- Universal Service and Energy Conservation Surcharge. Revenues generated from the application of this surcharge are used to finance discounts to customers in the CRP and the Senior Citizen Discount Program, the costs of the CRP Home Comfort program (the current iteration of the CRP program) and past due arrearages forgiven to certain CRP customers. The Universal Service and Energy Conservation Surcharge is applicable to all PGW customers (excluding interruptible customers) who are delivered natural gas through PGW's distribution system. PGW automatically adjusts the surcharge quarterly in connection with its Gas Cost Rate filing. PGW's Demand Side Management program ("DSM") is financed principally from this surcharge.

- Efficiency Cost Recovery Surcharge. Revenues generated from the application of this surcharge are used to fund the program costs and the administrative costs of the energy efficiency programs for the firm customers.

- OPEB Surcharge. Revenues generated from the application of this surcharge are designated for payment of PGW's OPEB obligations. See "– *Base Rate*" above for a description of PGW's filing for the continuation of the $16.0 million annual OPEB surcharge.

- DSIC Surcharge. Revenues generated from the application of this charge, which at 5.0 percent is expected to generate approximately $22.0 million per year, will be used to supplement the acceleration of the replacement of at-risk mains which is part of PGW's Long Term Infrastructure Improvement Plan. PGW expects that in August 2015 it will request an increase to its DSIC Surcharge from 5.0 percent of the customer's bill to 7.5 percent, effective during Fiscal Year 2016. See "THE CAPITAL IMPROVEMENT PROGRAM" and "PHILADELPHIA GAS WORKS —**Governmental Oversight** – *PUC April 2015 Report*."

Ratemaking Methodology to Account for Bond Covenants

PGW's rates, as set forth in its Gas Service Tariff, are regulated by the PUC pursuant to Section 2212(b) of the Pennsylvania Public Utility Code. Pursuant to Section 2212(e), in determining PGW's revenue requirement and approving overall rates and charges, the PUC is required to follow the same ratemaking methodology and requirements as set forth the Management Agreement and the City's bond and note

ordinances for PGW, and such obligation shall continue until the date on which all bonds, which are Approved Bonds, issued thereunder have been retired, redeemed, advance refunded or otherwise defeased. Section 2212(e) also states that (i) the PUC shall permit the City to impose, charge or collect rates or charges as necessary to permit the City to comply with its covenants to the holders of any Approved Bonds (herein defined) and (ii) the PUC shall not require the City to take action, or omit taking any actions, pursuant to this title if such action or omission would have the effect of causing the interest on tax-exempt bonds issued by the City to be includable in the gross income of the holders of such bonds for federal income tax purposes.

"Approved Bonds" consist of (1) bonds issued by the City under The First Class City Revenue Bond Act or The City of Philadelphia Municipal Utility Inventory and Receivables Financing Act that were issued and outstanding as of July 1, 2000, (2) bonds issued on or after July 1, 2000 by the City, unless the City Council declares otherwise in the authorizing ordinance, (3) bonds issued for the purpose of refunding, redeeming, repaying or otherwise defeasing Approved Bonds and (4) bonds issued by a municipal authority for PGW's benefit for purposes other than refunding, redeeming, repaying or otherwise defeasing Approved Bonds unless the PUC determines, at the time of the registration of a securities certificate, that the bonds should not be Approved Bonds. The Bonds are Approved Bonds.

Further, Section 2212(f) permits PGW to impose, charge or collect rates and charges as necessary to permit PGW to transfer or pay to the City, on an annual basis, such amount as may be specified from time to time in the applicable ordinances of the City or agreements of the City approved by ordinances; provided that if the amount specified exceeds 110% of the amount that was authorized for transfer or payment to the City at the close of the Fiscal Year of the City ending June 30, 2000, such additional amount shall be subject to review and approval of the PUC, which approval shall be given unless such additional amount would not be just and reasonable. The amount currently specified is $18.0 million, which is the same amount as was authorized for transfer at the close of the City's Fiscal Year 2000. See "GAS SERVICE TARIFF AND RATES – **Rates** – *Base Rate*" for a description of the 2010 PUC Policy Statement setting forth the factors to be considered in determining PGW rates and revenue allowances. See also "PHILADELPHIA GAS WORKS – **Governmental Oversight** – *PUC April 2015 Report*."

Assistance Programs and Grants

PGW participates in, or partially funds, several assistance programs to, among other things, increase cash flow to PGW and decrease accounts receivables and write-offs. Pursuant to its Gas Service Tariff, PGW recovers the costs of the discounts provided to customers pursuant to the Customer Responsibility Program (the "CRP") and the senior citizen discount program (the "Senior Citizen Discount Program"), arrearage forgiveness provided to CRP customers and certain other costs through the Universal Service and Energy Conservation Surcharge, which is applicable to all PGW customers (excluding interruptible customers) who are delivered natural gas through PGW's distribution system.

Customer Responsibility Program

The CRP is a customer assistance program for low-income residential customers who are at or below 150% of the federal poverty level. PGW will forgive 1/36 of the customer's original pre-CRP debt each month for each bill paid on time and in full. Participants in the CRP are also required to apply for the Low-Income Home Energy Assistance Program (as further described below, "LIHEAP"), if eligible, and designate PGW as the grant recipient. Approximately 61,300 customers were enrolled in the CRP as of December 2014. PGW projects that the number of CRP participants will increase to approximately 69,500 by the end of calendar year 2016. The table below sets forth the approximate aggregate discount and approximate amount of debt forgiveness granted by PGW to CRP participants in Fiscal Years 2010-2014.

Table 8
PGW DISCOUNTS AND
DEBT FORGIVENESS GRANTED TO CRP PARTICIPANTS
(THOUSANDS OF U.S. DOLLARS)

Fiscal Year	Discounts to Participants	Debt Forgiveness
2014	$65,100	$ 6,200
2013	70,600	6,900
2012	63,200	8,300
2011	88,700	10,000
2010	78,900	9,600

Source: PGW's records.

Pursuant to PGW's Universal Service and Energy Conservation Plan 2014-2016, the CRP will be modified during the term of the Plan (*i.e.*, 2014-2016) to include, among other things, (1) a stay-out provision pursuant to which PGW will not permit re-enrollment of a customer into the CRP for a one-year period, unless otherwise specified, if the customer commits two or more incidents of unauthorized usage, submits fraudulent enrollment or recertification information and certain other actions, (2) application of PGW's unauthorized usage policy to participants in the CRP, (3) the provision of conservation incentive credits and (4) modified arrearage forgiveness.

Senior Citizen Discount Program

The Senior Citizen Discount Program has been closed to new participants since September 1, 2003. The Senior Citizen Discount Program provides qualifying residential senior citizens with a discounted General Service Rate approximately equal to a 20% reduction in the participant's total gas bill each month. The number of participants in the Senior Citizen Discount Program decreased from approximately 70,000 in 2004 to 19,600 as of May 2015. PGW projects that the average monthly enrollment will decrease to approximately 17,000 by 2016, resulting in less supplemental revenue being required to fund the program over time. Discounts to participants in the Senior Citizen Discount Program are recovered through the Universal Service and Energy Conservation Surcharge. See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Senior Citizen Discount Program*" attached hereto.

Low-Income Home Energy Assistance Program

LIHEAP is a federally funded program that provides funds to households to ensure continued utility service available. Federal LIHEAP funds are allocated to individual states, which in turn allocate the amount to qualifying residents. PGW's share of LIHEAP funds allocated by the Commonwealth of Pennsylvania has ranged from approximately 12% to 17% since 2005. Funds received from LIHEAP are paid directly to PGW for a credit to the customer's account. Since 2005, LIHEAP funding has ranged from a low of $19.5 million in 2008 to a high of $41.5 million in 2010.

Additional Programs and Grants

See APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Other Programs and Grants*" and "– Five-Year Gas Demand-Side Management Plan," for a description of hardship funds that are financed by customer contributions, the Utility Emergency Services Fund, PGW matching grants, available payment programs and PGW's portfolio of conservation programs. Also see "GAS SERVICE RATES AND TARIFFS – **Collections**."

Collections

PGW utilizes various programs designed to improve collections, including a landlord cooperation program, a commercial lien notification program and a risk-based collections strategy (see APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Rates and Tariffs** – *Billings and Collections*"), in accordance with all applicable regulations with respect to collections, including Pennsylvania Act 201, entitled the "Responsible Utility Customer Protection Act" and codified in the Pennsylvania Public Utility Code under Title 66, Chapter 14, as amended ("Chapter 14"). See "PHILADELPHIA GAS WORKS – **Litigation**" for a description of the Landlord Liens Suit.

Chapter 14 specifies, among other things, the circumstances pursuant to which natural gas service may be terminated. Pursuant to Section 1406 of Chapter 14, (i) utility service may be terminated subsequent to the giving of a written notice (which notice will be given at least ten days prior to the date of the proposed termination and remain effective for 60 days) for nonpayment of an undisputed delinquent account, failure to comply with the material terms of a payment arrangement, failure to complete payment of a deposit, provide a guarantee of payment or establish credit or failure to permit access to meters, service connections or other property of the public utility for the purpose of replacement, maintenance, repair or meter reading, and (ii) service may be immediately terminated, without notice, for customer actions such as the unauthorized use of the service delivered on or about the affected dwelling, fraud or material misrepresentation of the customer's identity for the purpose of obtaining service or tampering with meters or other public utility's equipment.

In addition, Chapter 14 specifies that during the winter, (a) after November 30 and before April 1, gas service may be terminated to customers with household incomes exceeding 250% of the federal poverty level, and (b) from January 1 and before April 1 service may be terminated to a customer whose household income exceeds 150% of the federal poverty level but does not exceed 250% of the federal poverty level, who has not paid at least 50% of his charges for each of the prior two months; provided however that termination may not occur if the customer has proven in accordance with the PUC rules that there is someone age 65 or over or 12 or younger in the household, if the customer has obtained a medical certificate in accordance with the PUC rules, or if the customer has paid to PGW at least 15% of the customer's monthly household income for each of the last 2 months. Chapter 14 provisions are scheduled to expire on December 31, 2024.

For additional information about PGW's collections see "PGW BUDGETS AND FINANCES – **Accounts Receivable**" and "MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION FOR THE NINE MONTHS ENDED MAY 31, 2015 AND 2014 (UNAUDITED)."

THE CAPITAL IMPROVEMENT PROGRAM

Through its annual capital planning process, PGW identifies potential capital improvements based upon certain operating and economic assumptions, evaluates these requirements, and establishes priorities considering available financial resources. It considers these factors when developing its capital budget for a Fiscal Year. PGW then develops a Capital Improvement Program for a six-year period based upon the approved capital budget for that Fiscal Year and a forecast for the next five Fiscal Years.

The safety of PGW's operations and reliability of service are PGW's major concerns when establishing the priorities of need for capital resources. Also of major importance to PGW is ensuring funding to provide facilities to support new load opportunities. The highest two priorities are capital projects related to expenditures required for maintaining the safety and reliability of PGW's infrastructure. Priority 3 expenditures relate to enforced main relocations that are based on City, Commonwealth and Federal mandated underground infrastructure projects. Priority 4 expenditures relate to projects that will result in additional revenues from load growth opportunities, while Priority 5 are for those expenditures associated with business improvements that increase operational efficiencies and/or productivity.

PGW can make only those capital improvements that have been included in a PGW capital budget approved by the City Council.

PGW has been financing and expects to continue to finance its Capital Improvement Program through a combination of net proceeds of revenue bond and note sales (other than sales of refunding bonds), investment income, internally generated funds and DSIC surcharges. Internally generated funds consist of Gas Works Revenues available after payment of PGW Net Operating Expenses, principal and interest on bonds and notes issued by the City for PGW purposes, amounts due to Credit Facility issuers and under Qualified Swaps and Exchange Agreements, and City Charges. A decline in net revenues reduces internally generated funds and requires that the shortfall be funded from the issuance of bonds or other indebtedness or the incurrence of capital leases.

A significant part of the Capital Improvement Program is the replacement of PGW's cast iron mains, some of which date back to the 1890s, with more state-of-the-art plastic pipe at an estimated replacement cost of $1.0 million per mile for smaller diameter pipe, with cost increasing for larger diameter pipe. At the end of Fiscal Year 2014, PGW's balance of cast iron mains was 1,472 miles, with a further reduction of 27.6 miles forecasted during Fiscal Year 2015. PGW estimates, based on the current replacement rate, that full replacement will be completed by 2102. That replacement rate would accelerate if the DSIC is increased from its current 5.0% and continues to increase to reflect increased costs and inflation over time. PGW's optimal replacement strategy is to enhance the safety and performance of underground distribution structures. Also see "PHILADELPHIA GAS WORKS — **Governmental Oversight** – *PUC April 2015 Report*."

For further discussion of the Capital Improvement Program, see "PGW BUDGETS AND FINANCES – Budget Approval," "GAS SERVICE TARIFF AND RATES – **Rates** – *Surcharges* • DSIC Surcharge," APPENDIX B – "INDEPENDENT CONSULTANT'S ENGINEERING REPORT – **Capital Improvement Program**," "– Financial Feasibility for the Thirteenth Series Bonds – Capital Improvement Program Financing" and "– Assumptions and Opinions – Capital Improvement Program (2015-2020)".

The following Table 9 represents information regarding actual net capital expenditures for each of the five Fiscal Years 2010-2014 as well as unaudited information for the periods September 1 through May 31 for Fiscal Years 2014 through 2015, respectively:

Table 9
PHILADELPHIA GAS WORKS CAPITAL EXPENDITURES*
(THOUSANDS OF U.S. DOLLARS)

	PERIOD SEPTEMBER 1 THROUGH MAY 31 (UNAUDITED)		FISCAL YEARS ENDED AUGUST 31				
	2015	**2014**	**2014**	**2013**	**2012**	**2011**	**2010**
Gas Processing	$ 1,381	$ 1,769	$ 5,350	$ 3,095	$ 3,675	$ 4,077	$ 7,905
Distribution	43,478	37,118	61,768	57,394	44,751	44,736	41,554
Field Services	5,052	4,034	5,393	3,727	3,441	2,364	3,695
Fleet	2,059	1,660	2,233	1,111	1,552	2,670	2,290
Facilities	2,045	1,786	7,646	2,440	1,675	3,418	1,802
Information Services	181	149	683	4,093	864	962	724
Other Departments	552	27	258	515	1,174	599	989
Total[(1)]	$54,748	$46,543	$83,331	$72,375	$57,132	$58,826	$58,959
Capital Fund Drawdowns	-	22,135	33,294	45,018	34,044	38,737	41,000
Restricted Fund	10,000	-	-	-	-	-	-
DSIC	13,146	17,672	13,914	681	-	-	-
Internal Funds	31,602	6,736	36,123	26,676	23,088	20,089	17,959
Other Funding Sources for Capital Expenditures	$54,748	$46,543	$83,331	$72,375	$57,132	$58,826	$58,959

* Source: PGW's records.
(1) Net of reimbursements, contributions and salvage.

POTENTIAL LNG FACILITIES EXPANSION

PGW is studying the feasibility of expanding the liquefaction capacity of its Richmond plant. PGW contacted potential LNG customers seeking non-binding expressions of interest in purchasing LNG, if available. Since the solicitation was non-binding, the responses of the surveyed potential customers may not reflect their future actual purchases. However, the solicitation identified a potential market for LNG gas that PGW could serve by expanding PGW's liquefaction capacity at its Richmond plant. The expansion would also provide redundancy for PGW's existing facilities and additional capacity.

The Independent Consultant's Engineering Report states the Independent Consultant's opinion, based on a number of assumptions including the assumption that PGW will have adequate incremental LNG sales to recover the operating and financing costs of LNG expansion, that any excess revenues associated with the new LNG facility would be used to lower the $40.0 million Base Rate increase that PGW intends to request for 2018, and any shortfall associated with the LNG expansion would be recovered through additional Base Rate increases. The Independent Consultant concluded, based on the costs and potential additional sales provided by PGW associated with the new LNG facility, the incremental benefit (up to $10.0 million annually) or incremental cost (up to $5.0 million annually) associated with the new LNG facility would have a relatively minor impact on Base Rates. Any increases in Base Rate are subject to approval by the PUC. See "GAS SERVICE TARIFF AND RATES – **Rates** – *Base Rate*."

Before PGW can proceed with the construction and financing of such LNG expansion (or any capital project), several reviews and approvals must occur, the principal of which are:

(1) PGW must prepare a capital budget reflecting the construction and financing of such LNG expansion and submit it to the PFMC Board for its approval;

(2) The PFMC Board must determine whether to approve the capital budget and authorize its submission to the Gas Commission for its review;

(3) Upon receipt, the Gas Commission must review the capital budget, including conducting hearings in which interested parties participate, and determine whether to recommend adoption of the capital budget to the City Council. During this process there may be discussions between PGW and the Gas Commission regarding the capital budget;

(4) Upon receipt of the Gas Commission's recommendation to adopt the capital budget, the City Council must decide whether to adopt an ordinance approving the capital budget; and

(5) Proceeds of bonds and notes cannot be used to finance the LNG expansion unless the expansion is included in a capital budget approved by the City Council.

See APPENDIX B for additional information.

PGW BUDGETS AND FINANCES

PGW revenues used to pay debt service on its indebtedness and to fund its operations are derived primarily from the sale of gas distribution and related services to its customers. Rate and tariff charges for the sale of gas services are proposed by PGW based on, among other factors, anticipated revenues and expenses, required working capital, required debt service coverage and need for funds for capital expenditures.

Budget Approval

The Management Agreement requires PGW to prepare an annual operating budget and an operating forecast for the three years following the budget year. The operating budget and forecast are subject to the approval of the Gas Commission. PGW also prepares annually a proposed capital budget and a forecast for the five years following the budget year. The Gas Commission and the Director of Finance of the City review the capital budget and forecast and forward it, together with their recommendations, to the City Council for its approval by ordinance.

The Gas Commission holds public hearings on the budgets at which PGW and other interested parties are permitted to present evidence to support their positions. Community Legal Services of Philadelphia, Inc. has been appointed by the Gas Commission to serve as Public Advocate and represents residential customers in budget proceedings. The Gas Commission considers a number of factors before determining whether to accept, modify or reject the budgets proposed by PGW. Based on its findings, the Gas Commission issues an order regarding the operating budget. The Gas Commission order regarding the operating budget and the City Council ordinance regarding the capital budget may direct PGW to reduce expenses in certain areas or increase spending on certain items or to undertake specific projects. This process remains unchanged since passage of the Gas Choice Act which provides that the City continues to determine PGW's budget function.

Operating Budget

The Fiscal Year 2015 Operating Budget and Five-Year Forecast Fiscal Years 2016 through 2020, dated August 19, 2014, presented actual information for the Fiscal Year ending August 31, 2013 and budgeted information for the Fiscal Years 2014 and 2015 and forecasted information for Fiscal Years 2016-2020. The budget includes a statement of income with itemizations of the different categories of PGW operating revenues, expenses and interest income. It also includes a cash flow statement showing both sources and uses of expenditures, a debt service coverage analysis and a balance sheet reflecting assets and equity and liabilities.

It also describes the principal business assumptions that PGW made when preparing the budget and forecast. These assumptions included certain rate increases, weather–related costs projections, costs of certain commodities and personnel, increased LNG sales and capital improvement expenditures.

On May 22, 2015, PGW submitted its "Fiscal 2015-2016 Operating Budget" to the Gas Commission for its review and approval.

Capital Budget

PGW's Amended Fiscal 2016 Capital Budget has been approved by the City. It sets out budgeted and forecasted amounts for the capital expenditures that PGW expected to make in its classes of operations, a detailed breakdown of uses within each class of operations and identification of the expected sources of payment for the described capital expenditures. The capital budget reflected net total capital expenditures in Fiscal Year 2016 of approximately $110.8 million. The capital funding sources in 2016 included notes and commercial paper of approximately $48.6 million, DSIC receipts of approximately $27.1 million and internally generated funds of approximately $35.0 million.

The following is excerpted from PGW's Amended Fiscal 2016 Capital Budget.

Table 10
CAPITAL BUDGET
FISCAL YEAR 2016 AND FORECAST 2017 THROUGH 2021[1]
(THOUSANDS OF U.S. DOLLARS)

	2016 CAPITAL BUDGET	2017 - 2021 FORECAST	TOTAL 6 YEARS
GAS PROCESSING			
Additions	$ 324	$ 3,233	$ 3,557
Replacements	5,582	20,571	26,153
TOTAL	$ 5,906	$ 23,804	$ 29,710
DISTRIBUTION			
Additions	$ 10,300	$ 54,378	$ 64,678
Replacements	80,420	411,436	491,856
GROSS TOTAL	$ 90,720	$ 465,814	$ 556,534
FIELD SERVICES			
Additions	$ 1,745	$ 9,378	$ 11,123
Replacements	4,960	26,305	31,265
GROSS TOTAL	$ 6,705	$ 35,683	$ 42,388
FLEET OPERATIONS			
Additions	$ 750	-	$ 750
Replacements	7,412	$ 16,268	23,680
GROSS TOTAL	$ 8,162	$ 16,268	$ 24,430
OTHER DEPARTMENTS			
Additions	$ 4,733	$ 1,910	$ 6,643
Replacements	6,885	14,221	21,106
TOTAL	$ 11,618	$ 16,131	$ 27,749
TOTAL			
Additions	$ 17,852	$ 68,889	$ 86,751
Replacements	105,259	488,801	594,060
GROSS TOTAL	$ 123,111	$ 557,700	$ 680,811

[1] Reimbursement to PGW for relocating structures and equipment and/or load growth are not included in this Table 10.

Accounts Receivable

At the end of Fiscal Year 2014, net accounts receivable were $101.5 million, an increase of $3.7 million or 3.8% from Fiscal Year 2013 due to higher gas revenues and an increase in the collection rate (94.97%) as compared to Fiscal Year 2013 (91.88%). The accumulated provision for uncollectible accounts, totaling $107.3 million increased by $1.8 million at the end of Fiscal Year 2014 as additional accounts uncollectible were added to those uncollectible in Fiscal Year 2013. The reserve for bad debt is for accounts that have not yet been written off. When a receivable is written-off, the bad debt reserve will be reduced by the same amount.

Table 11
ACCOUNTS RECEIVABLE, RESERVE FOR BAD DEBT EXPENSE, NET WRITE-OFF EXPENSES, COLLECTION FACTORS AND REVENUE STATISTICS
(THOUSANDS OF U.S. DOLLARS) [1]

	FISCAL YEAR ENDED AUGUST 31				
	Actual 2014	**Actual 2013**	**Actual 2012**	**Actual 2011**	**Actual 2010**
Billed Gas Revenues[2]	$ 729,741	$ 687,005	$ 629,911	$ 741,287	$ 721,235
Accounts Receivable	208,806	203,326	179,754	198,857	195,773
Less: Reserve for Bad Debt	(107,349)	(105,577)	(97,757)	(99,932)	(103,600)
Net Accounts Receivable	$ 101,457	$ 97,749	$ 81,997	$ 98,925	$ 92,173
Bad Debt Reserve/Accounts Receivable	51.4%	51.9%	54.4%	50.3%	52.9%
Net Write-Offs	$ 37,056	$ 29,028	$ 38,401	$ 39,765	$ 54,990
Receivable/Billed Gas Revenues	28.6%	29.6%	28.5%	26.8%	27.1%
Bad Debt	38,848	39,971	36,702	36,027	35,000
Bad Debt/Billed Gas Revenues	5.3%	5.8%	5.8%	4.9%	4.9%
Bad Debt/Accounts Receivable	18.6%	19.7%	20.4%	18.1%	17.9%
Total Customer Receipts	$ 724,662	$ 657,125	$ 633,497	$ 731,622	$ 740,756
Total Customer Billings	$ 763,077	$ 715,196	$ 655,711	$ 769,504	$ 750,263
Collection Factor	94.97%	91.88%	96.61%	95.08%	98.73%
Five-Year Average Collection Factor (2010-2014)	95.45%				

(1) Source: PGW's records.

(2) This is calculated based on information in APPENDIX B – INDEPENDENT CONSULTANT'S ENGINEERING REPORT: Adjusted Total Gas Revenues (Table 11, Line 38) less Prior Year's Gas Cost Recovery (Table 11, Lines 26 and 15). Accounts receivable is partly driven by sales revenue. Higher sales revenue pushes higher accounts receivable balances. During the five year period between Fiscal Year 2010 and Fiscal Year 2014, the year-end net accounts receivable balance averaged 13.5% of billed revenue, with a low of 12.8% in Fiscal Year 2010 and the high of 14.2% in Fiscal Year 2013. Fiscal Year 2014 net accounts receivable was 13.9% of billed revenue. Along with billed revenue, accounts receivable is influenced by the collection rate. PGW calculates the collection rate by dividing the total gas receipts collected in a Fiscal Year by the total gas billings that were applied to PGW customers' accounts during the same time period. During the five-year period between Fiscal Year 2010 and Fiscal Year 2014 PGW averaged a 95.4% collection rate, with a high of 98.7% in Fiscal Year 2010 and the low of 91.9% in Fiscal Year 2013. The collection rate in Fiscal Year 2014 (94.9%) returned to normal historic levels.

PGW calculates the provision for uncollectible accounts based on a financial analysis and a collectability study performed as of the each Fiscal Year-end. The same methodology was used for all Fiscal Years between Fiscal Year 2010 and Fiscal Year 2014. This analysis is used to determine the adequacy of the accumulated provision for uncollected accounts. For each Fiscal Year during the stated period, management has provided an accumulated provision for uncollectible accounts in excess of the collectability study results

based on its analysis of historical aging data. The actual results of the PGW's collection efforts could differ significantly from PGW's estimate. Net write-offs are less than the reserve for bad debt each year due to the effects of the assistance programs and grants described under "GAS SERVICE TARIFF AND RATES – **Assistance Programs and Grants**."

Also see "GAS SERVICE RATES AND TARIFFS – **Collections**."

Selected Operating Data Regarding Customers and Gas Sales

The following table sets forth certain information regarding PGW customers, gas sales by classification and demand for gas.

Table 12
SELECTED OPERATING DATA
REGARDING CUSTOMERS AND GAS SALES[1]

	PERIOD SEPTEMBER 1 THROUGH MAY 31		FISCAL YEARS ENDED AUGUST 31				
	2015	**2014**	**2014**	**2013**	**2012**	**2011**	**2010**
Summary of Customers At End Of Period							
Residential	485,669	475,156	471,706	472,066	471,272	471,821	476,575
Industrial and Commercial:							
Firm	25,799	25,958	21,652	21,957	24,745	24,907	25,683
Interruptible	2	7	7	12	38	121	120
Municipal and PHA	2	2	2	2	2	2	2
Total Customers	511,472	504,759	493,367	494,037	496,057	496,851	502,380
Gas Sales by Classification (Mmcf)							
Residential:							
Heating	36,299	36,367	38,635	35,193	29,476	37,384	34,646
Non-Heating	435	457	529	559	585	627	663
Industrial and Commercial:							
Firm	8,620	8,555	9,370	8,994	8,284	10,004	9,482
Interruptible	512	866	1,096	890	192	1,004	1,049
Other (FT)	3,840	3,670	4,087	3,427	2,483	2,668	2,305
Total Gas Sales & Transport	49,706	49,915	53,717	49,063	41,020	51,687	48,145
Average Monthly Usage of Residential Customers (Mcf):							
Heating	9.0	9.1	7.3	6.7	5.6	7.1	6.8
Non-Heating	2.1	2.1	1.8	1.7	1.7	1.7	1.7
Average Monthly Bill of Residential Customers:							
Heating $	$131.94	$139.06	$ 114.99	$ 109.97	$ 99.92	$ 119.19	$ 118.77
Non-Heating $	$41.15	$40.91	$ 38.37	$ 37.36	$ 35.66	$ 37.94	$ 38.61
Degree Days	4,431	4,405	4,405	3,889	3,037	4,005	3,730
Normal Degree Days	4,256	4,268	4,268	4,332	4,360	4,392	4,412
	104%	103%	103%	90%	70%	91%	85%
Maximum 24-Hour Sendout (Mcf)	645,370	607,062	607,062	542,095	466,478	549,808	543,834
Peak-day Avg. Temperature (Degrees)	11	13	13	21	24	22	20

[1] Source: PGW's records.

Summary of Statements of Revenue and Expenses

Information for each of the past five Fiscal Years should be read in conjunction with and was derived from the audited financial statements and notes thereto. As discussed in "PHILADELPHIA GAS WORKS – Pension Plans and Other Postemployment Benefits," GASB 68 is effective for PGW's Fiscal Year beginning September 1, 2014. The interim financial information presented below is prepared on a consistent basis with the audited basic financial statements in APPENDIX A. *However, the interim financial information presented below is not intended to be a presentation in conformity with U.S. generally accepted accounting principles because it does not incorporate the impact of GASB 68.*

Table 13
SUMMARY OF STATEMENTS OF REVENUES AND EXPENSES
(THOUSANDS OF U.S. DOLLARS)

	PERIOD SEPTEMBER 1 THROUGH MAY 31 (UNAUDITED)		FISCAL YEARS ENDED AUGUST 31[1]				
	2015	2014	2014	2013	2012	2011	2010
Operating revenues:							
Gas revenues:							
Nonheating	$ 26,702	$ 30,795	$ 39,610	$ 35,262	$ 37,054	$ 51,437	$ 51,343
Gas transport service	34,390	38,034	41,217	37,078	29,324	28,700	26,860
Heating	550,854	584,490	655,311	602,814	562,009	669,131	664,139
Total gas revenues	611,946	653,319	736,138	675,154	628,387	749,268	742,342
Appliance and other revenues	6,238	5,967	8,317	8,333	8,240	8,400	8,959
Other operating revenues	10,402	11,404	14,681	9,984	8,356	8,611	7,931
Total operating revenues	628,586	670,690	759,136	693,471	644,983	766,279	759,232
Operating expenses:							
Natural gas	242,685	291,261	304,051	255,501	233,713	330,932	354,004
Gas processing	13,091	14,776	19,637	17,592	15,640	16,097	14,952
Field services	27,818	27,819	37,577	34,926	33,883	33,950	34,026
Distribution	28,842	26,414	36,929	30,259	27,750	27,990	23,426
Collection and account management	8,272	7,919	11,273	11,297	11,491	11,765	15,266
Provision for uncollectible accounts	35,345	33,103	38,848	39,971	36,702	36,027	35,000
Customer services	9,163	8,376	11,187	11,102	11,946	12,532	13,030
Marketing	5,202	5,717	7,783	6,789	6,664	4,378	3,900
Administrative and general	68,086	63,331	85,872	78,206	81,161	76,850	71,620
Pensions	20,701	19,047	24,521	23,614	23,972	22,597	24,633
Other post employment benefits	7,681	12,024	11,228	16,492	20,119	22,472	27,269
Taxes	6,005	5,862	7,687	7,220	7,122	7,135	6,990
Total operating expenses before depreciation	472,891	515,649	596,593	532,969	510,163	602,725	624,116
Depreciation	35,586	34,611	47,428	45,912	45,045	43,629	43,168
Less depreciation expense included in operating expenses above	4,328	4,328	5,771	4,870	4,870	4,714	4,690
Net depreciation	31,258	30,283	41,657	41,042	40,175	38,915	38,478
Total operating expenses	504,149	545,932	638,250	574,011	550,338	641,640	662,594
Operating income	124,437	124,758	120,886	119,460	94,645	124,639	96,638
Interest and other income	2,870	2,524	3,597	1,147	4,659	4,348	5,301
Income before interest expense	127,307	127,282	124,483	120,607	99,304	128,987	101,939
Interest expense:							
Long-term debt	33,830	36,403	48,261	49,655	53,012	57,225	52,527
Other	7,050	6,898	9,380	10,740	16,824	18,884	18,986
Allowance for funds used during construction	(526)	(356)	(506)	(430)	(292)	(427)	(390)
Total interest expense	40,354	42,945	57,135	59,965	69,544	75,682	71,123
Excess of revenues over (under) expenses prior to City Payment	86,953	84,337	67,348	60,642	29,760	53,305	30,816
Distribution to the City of Philadelphia	(13,500)	(13,500)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
Excess of revenues over expenses	73,453	70,837	49,348	42,642	11,760	35,305	30,816
Net position, beginning of the year	407,935	358,587	358,587	315,945	304,185	274,435	243,619
Net position, end of the year	$481,388	$429,424	$407,935	$358,587	$315,945	$309,740	$274,435

[1] During FY 2013, PGW implemented GASB Statement No. 65, Items Previously Reported as Assets and Liabilities, that amends or supersedes the accounting and financial reporting guidance for certain items previously required to be reported as assets or liabilities. The objective is to either properly classify certain items that were previously reported as assets and liabilities as deferred outflows of resources or deferred inflows of resources or recognize certain items that were previously reported as assets and liabilities as outflows of resources (expenses) or inflows of resources (revenues). This change was retroactive to FY 2012.

Debt Service Coverage Ratio

The annual operating budgets approved by the Gas Commission have estimated the level of revenues required to reach at least the minimum debt service coverage ratio mandated by the 1975 General Ordinance and the 1998 General Ordinance. The following table presents the historical revenues and debt service coverage calculated under the 1975 General Ordinance and the 1998 General Ordinance for the last five Fiscal Years. Payment of City Charges is subordinate to the payment of debt service on bonds issued under either the 1975 General Ordinance or the 1998 General Ordinance. Following the issuance of the Bonds, however, no bonds will remain outstanding under the 1975 General Ordinance.

Table 14
DEBT SERVICE COVERAGE[1]
(THOUSANDS OF U.S. DOLLARS)

	FISCAL YEARS ENDED AUGUST 31				
	2014	**2013**	**2012**	**2011**	**2010**
FUNDS PROVIDED					
Total Gas Revenues	$736,138	$675,154	$628,387	$749,268	$742,342
Other Operating Revenues	22,998	18,317	16,596	17,011	16,890
Total Operating Revenues	759,136	693,471	644,983	766,279	759,232
Other Income Incr. / (Decr.) Restricted Funds	4,079	196	8,311	13,175	3,660
City Grant	-	-	-	-	18,000
AFUDC (Interest)	506	430	292	427	390
TOTAL FUNDS PROVIDED	763,721	694,097	653,586	779,881	781,282
FUNDS APPLIED					
Fuel Costs	304,051	255,501	233,713	330,932	354,004
Other Operating Costs	334,199	318,510	316,625	310,708	308,590
Total Operating Expenses	638,250	574,011	550,338	641,640	662,594
Less: Non-Cash Expenses	50,346	48,103	47,619	47,854	70,404
TOTAL FUNDS APPLIED	587,904	525,908	502,719	593,786	592,190
Funds Available to Cover Debt Service	$175,817	$168,188	$150,867	$186,095	$189,092
1975 Ordinance Bonds Debt Service	$ 28,592	$ 30,163	$ 31,754	$ 30,691	$ 30,101
Debt Service Coverage 1975 Ordinance Bonds	**6.15**	**5.58**	**4.75**	**6.06**	**6.28**
Net Available after Prior Debt Service	$147,225	$138,026	$119,113	$155,404	$158,991
Equipment Leasing Debt Service	-	-	-	-	-
Net Available after Prior Capital Leases	$147,225	$138,026	$119,113	$155,404	$158,991
Senior 1998 Ordinance Bonds Debt Service	$ 69,749	$ 47,668	$ 67,874	$ 72,274	$ 65,095
Debt Service Coverage Senior 1998 Ordinance Bonds	**2.11**	**2.90**	**1.75**	**2.15**	**2.44**
Net Available after Senior 1998 Ordinance Debt Service	$ 77,476	$ 90,358	$ 51,239	$ 83,130	$ 93,896
Subordinate 1998 Ordinance Bond Debt Service	-	-	-	$ 1,988	$ 1,986
Debt Service Coverage Subordinate 1998 Ordinance Bonds	-	-	-	**41.82**	**47.28**
Aggregate Debt Service[2]	$ 98,341	$ 77,831	$ 99,628	$104,953	$ 97,182
Debt Service Coverage (Combined liens)[3]	1.79	2.16	1.51	1.77	1.95
Debt Service Coverage (Combined liens with $18.0M City Fee)[4]	1.60	1.93	1.33	1.60	1.76

(1) Source: Comprehensive Annual Financial Report for Fiscal Years Ended August 31, 2014 and 2013 of the Philadelphia Gas Works (attached as APPENDIX A) and PGW's records.
(2) Aggregate Debt Service = (Debt Service Coverage 1975 Ordinance Bonds + Debt Service Coverage 1998 Ordinance Bonds + Debt Service Coverage 1998 Subordinate Bonds)
(3) Debt Service Coverage (Combine liens) = Funds Available to Cover Debt Service / Aggregate Debt Service
(4) Debt Service Coverage (Combine liens with $18.0M City Fee) = Funds Available to Cover Debt Service - $18.0M / Aggregate Debt Service

MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION FOR THE NINE MONTHS ENDED MAY 31, 2015 AND 2014 (UNAUDITED)

The narrative overview and analysis of the financial statements of PGW for the nine months ended May 31, 2015 and 2014 have been prepared by PGW's management. The information presented below is unaudited and should be read in conjunction with additional information contained in PGW's audited financial statements as of and for the years ended August 31, 2014 and 2013 included in the attached APPENDIX A.

As discussed in "PHILADELPHIA GAS WORKS – Pension Plans and Other Postemployment Benefits," GASB 68 is effective for PGW's Fiscal Year beginning September 1, 2014. The interim financial information presented below is prepared on a consistent basis with the audited basic financial statements in APPENDIX A. *However, the interim financial information presented below is not intended to be a presentation in conformity with U.S. generally accepted accounting principles because it does not incorporate the impact of GASB 68.*

Financial Highlights

The nine month period ended May 31, 2015 was 4.1% cooler than normal (PGW's 30-year average temperature during the same period to date) and 0.6% cooler than the nine month period ended May 31, 2014. During these comparative periods, firm gas sales remained relatively constant. In addition, the WNA, which was in effect from October 2014 through May 2015, resulted in heating customers receiving credits totaling $11.6 million due to the colder than normal temperatures experienced during the period. The nine month period ended May 31, 2014 was 3.2% colder than normal and 13.3% colder than the same period the prior year. As a result, firm gas sales increased by 3.9 Bcf as compared to the nine months ended May 31, 2013. In addition, the WNA, which was in effect from October 2013 through May 2014, resulted in heating customers receiving credits totaling $13.4 million as a result of the colder than normal temperatures experienced during the period. The nine month period ended May 31, 2013 was 8.9% warmer than normal and customers were billed $8.3 million in WNA charges for the period.

PGW achieved a collection rate of 98.3% during the rolling twelve months ended May 31, 2015, as compared to 91.7% for the comparable period ended May 31, 2014. The collection rate of 98.3% is calculated by dividing the total gas receipts collected in a rolling 12-month period by the total gas billings that were applied to PGW customers' accounts during the same period. PGW achieved a collection rate of 93.3% for the rolling twelve month period ended May 31, 2013. The same methodology was utilized for all comparative periods.

Table 15
UNAUDITED
CONDENSED STATEMENTS OF REVENUES AND EXPENSES
(THOUSANDS OF U.S. DOLLARS)

	NINE MONTHS ENDED MAY 31		
	2015	**2014**	**2013**
Total gas revenues	$ 618,184	$ 659,286	$ 596,710
Other revenues	10,402	11,404	7,183
Total operating revenues	628,586	670,690	603,893
Fuel expense	242,685	291,261	238,025
All other operating expenses	261,464	254,671	240,492
Total operating expenses	504,149	545,932	478,517
Operating income	124,437	124,758	125,376
Interest and other income	2,870	2,524	(1,300)
Total interest expense	(40,354)	(42,945)	(45,455)
Distribution to the City of Philadelphia	(13,500)	(13,500)	(13,500)
Excess of revenues over expenses	$ 73,453	$ 70,837	$ 65,121

Operating Revenues

Operating revenues for the nine month period ended May 31, 2015 were $628.6 million, a decrease of $42.1 million or 6.3% compared to the same period ended May 31, 2014, primarily due to lower commodity natural gas prices. Operating revenues for the nine month period ended May 31, 2014 were $670.7 million, an increase of $66.8 million or 11.1% from the same period ended May 31, 2013, primarily due to colder weather. Operating revenues for the nine month period ended May 31, 2013 were $603.9 million.

Total sales volumes, including gas transportation deliveries, for the nine month period ended May 31, 2015 increased by 1.5 Bcf to 73.2 Bcf or 2.1% from the same period ended May 31, 2014. For the nine month period ended May 31, 2014 total sales volumes, including gas transportation deliveries, increased by 6.7 Bcf to 72.5 Bcf or 10.3% from the same period ended May 31, 2013.

The number of customers served by PGW as of May 31, 2015, May 31, 2014 and May 31, 2013 was approximately 511,000, 505,000 and 501,000, respectively. All three periods had approximately 25,000 commercial accounts and 700 industrial accounts. Residential customers as of May 31, 2015, May 31, 2014 and May 31, 2013 were 485,300, 479,300, and 475,300, respectively.

Operating Expenses

Total operating and maintenance expenses, including fuel costs, for the nine month period ended May 31, 2015 were $504.1 million, a decrease of $41.8 million or 7.7% from the same period ended May 31, 2014, primarily due to lower natural gas commodity prices. Total expenses increased by $67.4 million or 14.1% for the nine month period ended May 31, 2014 compared to the same period ended May 31, 2013, reflecting higher commodity prices and increased utilization. Total operating and maintenance expenses, including fuel costs, for the nine month period ended May 31, 2013 were $478.5 million.

Cost of Fuel

The cost of natural gas decreased by $48.6 million or 16.7% to $242.7 million for the nine month period ended May 31, 2015 compared to $291.3 million in the same period ended May 31, 2014. The

average commodity price per Mcf decreased by $0.71 or $34.4 million, the volume of natural gas utilized decreased by 2.2 Bcf, 4.3% or $10.0 million and demand charges decreased by $6.0 million. The nine month period ended May 31, 2014 included a refund of $1.8 million.

The cost of natural gas utilized increased by $53.3 million or 22.4% to $291.3 million for the nine month period ended May 31, 2014, compared to $238.0 million for the same period ended May 31, 2013. The average commodity price per Mcf increased by $0.83 or $42.3 million, the volume of gas utilized increased by 3.5 Bcf, or $13.2 million and demand charges decreased by $0.5 million. Refunds were $1.8 million during the nine month period ended May 31, 2014. Variations in the cost of purchased gas are passed through to customers under the GCR provision of PGW's rate schedules. Over recoveries or under recoveries of purchased gas costs are subtracted from or added to gas revenues and are included in current assets or current liabilities, thereby eliminating the effect that recovery of gas costs would otherwise have on net income.

The average natural gas commodity prices for utilized gas for the nine month periods ended May 31, 2015, 2014 and 2013 were $3.90, $4.60 and $5.04 per Mcf, respectively.

All Other Operating Expenses

Expenditures for street operations, infrastructure improvements, and plant operations for the nine month period ended May 31, 2015 totaled $69.7 million compared to $69.0 million for the same period ended May 31, 2014 mainly a result of higher labor costs. In addition, the cost for customer services, collections, account management, marketing, health insurance and the administrative areas increased by $4.9 million or 5.0% in the nine month period ended May 31, 2015 primarily due to costs associated with higher health insurance premiums, higher corporate consulting fees, and higher property insurance premiums. Expenditures for street operations, infrastructure improvements, and plant operations for the nine month period ended May 31, 2014 totaled $69.0 million compared to $59.8 million for the same period ended May 31, 2013. This increase is mainly as a result of higher costs associated with gas distribution and additional use of LNG. In addition, the cost for customer services, collections, account management, marketing, health insurance and the administrative areas increased by $6.8 million or 7.4% in the nine month period ended May 31, 2014.

Pension costs increased $1.7 million for the nine month period ended May 31, 2015 as compared to the period ended May 31, 2014. Pension costs decreased $0.9 million for the nine month period ended May 31, 2014 as compared to the period ended May 31, 2013. Pension costs for all years referenced are based on changes in applicable payroll and pension expense as a percentage of payroll which are based on an actuarial studies performed at the end of each fiscal year.

Other Postemployment Benefits (OPEB) costs decreased $4.3 million for the nine month period ended May 31, 2015 when compared to the same period ended May 31, 2014. OPEB costs decreased $3.0 million for the nine month period ended May 31, 2014 when compared to the same period ended May 31, 2013. OPEB costs decreased in both periods due to higher OPEB Trust investment income and lower unfunded liabilities, which are amortized over a 30-year period. These factors combined to lower OPEB costs over both periods referenced.

Provision for Uncollectible Accounts

Based on the most recent accounts receivable collectability evaluation, the provision for uncollectible accounts for the nine month period ended May 31, 2015 totaled $35.3 million, an increase of $2.2 million or 6.6% compared to the same period ended May 31, 2014, which totaled $33.1 million. The accumulated provision for uncollectible accounts at May 31, 2015 reflects a balance of $114.3 million, compared to the $113.0 million balance as of May 31, 2014. The provision for uncollectible accounts for the nine month period ended May 31, 2014 totaled $33.1 million an increase of $1.3 million or 4.1% compared to the same

period ended May 31, 2013, which totaled $31.8 million. The accumulated provision for uncollectible accounts at May 31, 2014 reflects a balance of $113.0 million compared to the $106.0 million balance as of May 31, 2013.

Net Depreciation Expense

Net depreciation expense increased by $1.0 million for the nine month period ended May 31, 2015 as compared to the same period ended May 31, 2014. Net depreciation expense increased $0.4 million for the nine month period ended May 31, 2014 as compared to the same period ended May 31, 2013. The change between periods is caused by increased utility plant balances.

Interest and Other Income

Interest and other income for the nine month period ended May 31, 2015 was $0.4 million higher than the same period ended May 31, 2014, primarily due to credits associated with PGW's interstate pipeline capacity release program. Interest and other income for the nine month period ended May 31, 2014 was $3.8 million higher than the same period ended May 31, 2013. This loss was primarily associated with the termination of the Guaranteed Investment Contract related to the 1998 General Ordinance bonds.

Total Interest Expense

Total interest expense was $40.4 million for the nine month period ended May 31, 2015 a decrease of $2.5 million when compared to the same period ended May 31, 2014. Interest expense was lower for the nine month period ended May 31, 2015, primarily due to lower principal debt balances. Total interest expense was $42.9 million for the nine month period ended May 31, 2014, a decrease of $2.5 million when compared to the same period ended May 31, 2013. Interest expense was lower for the nine month period ended May 31, 2014, primarily due to lower principal debt balances.

Table 16
UNAUDITED
CONDENSED BALANCE SHEETS
(THOUSANDS OF U.S. DOLLARS)

	NINE MONTHS ENDED MAY 31		
Assets	**2015**	**2014**	**2013**
Current assets:			
Accounts receivable (net of accumulated provision for uncollectible accounts of $114,274, $112,975 and $105,973 for 2015, 2014 and 2013, respectively	$ 127,550	$ 152,828	$ 134,694
Restricted investment funds	5,820	27,730	67,761
Other current assets and cash and cash equivalents, gas inventories, materials, and supplies	205,861	220,720	209,111
Total current assets	339,231	401,278	411,566
Non-current Assets:			
Utility plant, net	1,214,473	1,168,463	1,138,317
Unamortized bond insurance costs	12,996	14,528	15,646
Sinking fund, revenue bonds	106,268	105,501	105,475
Other assets	36,882	33,364	29,671
Total non-current assets	1,370,619	1,321,856	1,289,109
Total assets	1,709,850	1,723,134	1,700,675
Deferred outflows of resources			
Accumulated fair value of hedging derivatives	19,944	13,125	35,777
Unamortized losses on reacquired debt bonds	31,489	38,970	46,934
Total assets and deferred outflows of resources	$ 1,761,283	$ 1,775,229	$ 1,783,386
Net Position and Liabilities			
Net position	$ 481,388	$ 429,424	$ 381,066
Total long-term debt	968,026	1,028,267	1,077,704
Current liabilities:			
Current portion of long-term debt	57,091	49,318	37,103
Other current liabilities	81,704	92,640	202,332
Total current Liabilities	138,795	141,958	122,284
Other liabilities	173,074	175,580	202,332
Total net position and liabilities	$ 1,761,283	$ 1,775,229	$ 1,783,386

Assets

Utility Plant

Utility plant, net of depreciation, totaled $1,214.5 million as of May 31, 2015, an increase of $46.0 million or 3.9% compared with the May 31, 2014 balance of $1,168.5 million. Capital expenditures for construction of distribution facilities, purchase of equipment, information technology enhancements, and other general improvements were $54.7 million for the nine month period ended May 31, 2015, compared to $46.5 million for the same period ended May 31, 2014. PGW funded capital expenditures through drawdowns from the Capital Improvement Fund in the amounts of $0 and $22.1 million for the nine month periods ended May 31, 2015 and May 31, 2014, respectively. Utility plant, net of depreciation, totaled $1,168.5 million

as of May 31, 2014, an increase of $30.2 million or 2.7% compared with the May 31, 2013 balance of $1,138.3 million. Capital expenditures were $46.5 million for the nine month period ended May 31, 2014 compared to $44.2 million for the same period ended May 31, 2013. The major capital expenditures in both nine month periods were associated with PGW's distribution infrastructure, namely, gas mains and customer service lines.

Accounts Receivable

At May 31, 2015, accounts receivable (net) totaled $127.6 million, a decrease of $25.2 million or 16.5% from the May 31, 2014 total of (net) $152.8 million. The accumulated provision for uncollectible accounts totaling $114.3 million increased by $1.3 million for May 31, 2015 compared to May 31, 2014. The decrease in accounts receivable (net) was caused by lower revenues for the nine month period ended May 31, 2015 as compared to the same period ended May 31, 2014. The May 31, 2014 accounts receivable (net) total of $152.8 million was $18.1 million higher than the May 31, 2013 balance. This increase was caused primarily by an 11.1% increase in total operating revenues during the nine month period ended May 31, 2014 as compared to the same period ended May 31, 2013. The accumulated provision for uncollectible accounts totaled $113.0 million and $106.0 million on May 31, 2014 and May 31, 2013, respectively.

Other Current Assets, Cash and Cash Equivalents, Gas Inventories, Materials, and Supplies

As of May 31, 2015, cash and cash equivalents were $159.6 million, an increase of $1.8 million from May 31, 2014. As of May 31, 2015, the value of natural gas in storage decreased by $9.0 million or 24.0% compared to May 31, 2014. The decrease in gas inventory reflects a 1.7% increase in the volume of natural gas in storage as well as a $1.24 drop in commodity cost per Mcf of natural gas. Materials and supplies of $38.8 million, which principally include gas inventory, maintenance spare parts, and material decreased by $8.5 million compared to May 31, 2014. Other current assets totaled $7.5 million as of May 31, 2015, down $8.1 million from the same period the prior year, primarily due to a decrease in the deferred GCR recorded as an asset. As of May 31, 2014, cash and cash equivalents were $157.8 million, an increase of $25.2 million from May 31, 2013. As of May 31, 2014, the value of natural gas in storage decreased by $12.0 million or 24.3% compared to May 31, 2013. The primary cause of this change was a 25.1% decrease in the volume of natural gas in storage as of May 31, 2014 as compared to May 31, 2013. Storage volume was used during the nine month period ended May 31, 2014 to meet operational requirements. Other current assets totaled $15.6 million as of May 31, 2014, down $2.5 million from the same period the prior year, primarily due to a decrease in the receivable from the pension fund.

Other Non-Current Assets

As of May 31, 2015, other non-current assets included primarily unamortized bond insurance costs, the Sinking Fund, and a regulatory asset for environmental expenses totaled, $156.1 million, representing an increase of $2.7 million from May 31, 2014, mainly due to an increase in the underbilled GCR. As of May 31, 2014, other non-current assets including unamortized bond insurance costs, the Sinking Fund, and a regulatory asset for environmental expenses totaled, $153.4 million, representing an increase of $2.6 million from May 31, 2013.

Deferred Outflows of Resources

Deferred outflows of resources, which represent outflows of resources related to future periods, consist of an amount offsetting PGW's interest rate swap liability related to certain of its variable rate debt, and the unamortized loss on reacquired bonds, and decreased $0.7 million from $52.1 million at May 31, 2014 to $51.4 million at May 31, 2015 due to amortization of the loss on reacquired debt offset by an increase in the fair value of the interest rate swap liability. The May 31, 2014 balance of $52.1 million was $30.6 million less than the May 31, 2013 balance. This was primarily due to changes in the fair value of the interest rate swap liability.

Liabilities

Long-Term Debt

Long-term debt, including the current portion and unamortized discount and premium, totaled $1,025.1 million for the period ended May 31, 2015, $52.5 million less than the same period ended May 31, 2014. Long-term debt, including the current portion and unamortized discount and premium, totaled $1,077.6 million for the nine month period ended May 31, 2014, $37.2 million less than the same period ended May 31, 2013. The decrease in both periods is primarily the result of the scheduled amortization of bond principal.

Accounts Payable

In the period ended May 31, 2015 accounts payable totaling $38.4 million decreased $5.4 million or 12.3% compared with the same period ended May 31, 2014. The decrease between fiscal years is due to lower natural gas payables balances. In the period ended May 31, 2014, accounts payable totaling $43.8 million decreased $0.3 million or 0.7% compared with the same period ended May 31, 2013.

Other Current Liabilities

In the period ended May 31, 2015 other current liabilities totaling $24.8 million decreased $4.9 million or 16.5% compared with the period ended May 31, 2014. The decrease is due to lower liabilities for sales tax and seasonal demand. In the period ended May 31, 2014, other current liabilities totaling $29.7 million increased $8.9 million or 42.8% compared with the same period ended May 31, 2013. The increase was caused by an escrow deposit from a third party supplier and advanced receipts for an infrastructure project.

Other Liabilities

As of May 31, 2015 other liabilities totaling $173.1 million decreased $2.5 million compared to May 31, 2014 due primarily to a decrease in the OPEB liability. As of May 31, 2014 other liabilities totaling $175.6 million decreased $26.7 million compared to May 31, 2013 primarily due to a decrease in the liability recorded for the interest rate swap.

Liquidity/Cash Flow

PGW had no commercial paper outstanding as of May 31, 2015. As a result PGW had the ability to issue up to $120.0 million of commercial paper. The unrestricted cash balance as of May 31, 2015 was $159.6 million.

PGW Payment to City

PGW made a payment of $18.0 million to the City in each of the City's Fiscal Years 2015, 2014 and 2013. The City has the right to obtain such payment from PGW in any lawful manner, including set off against payments the City would otherwise make to PGW. The obligation of PGW to make the payment to the City is subject and subordinate to the pledge and application of Gas Works Revenues and Project Revenues, as such terms are defined in the 1998 General Ordinance, see "SECURITY AND SOURCES OF PAYMENT FOR THE 1998 ORDINANCE BONDS – **Order of Application of Revenues**" herein.

Short-Term Debt

Due to the highly seasonal nature of PGW's business, short-term debt may be utilized to meet working capital requirements. Pursuant to the provisions of the Note Ordinance, the City, may sell Gas Works Notes in a principal amount, which together with interest, may not exceed $150.0 million outstanding at any one time.

No short-term notes are presently outstanding. Payment of principal of and interest on short-term notes are secured by two letters of credit. Under no circumstances will the City issue notes, together with interest thereon, in excess of $120.0 million, unless the stated amount of the respective letter of credit is increased by the applicable bank.

THE CAFR

The "COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013 OF THE PHILADELPHIA GAS WORKS," (the "CAFR") is attached as APPENDIX A. The CAFR includes audited Financial Statements (as defined below), required supplemental information and unaudited Introductory and Statistical Section as reflected in the Table of Contents in APPENDIX A.

PGW is owned by the City, and is accounted for in the City's audited financial statements as a component unit of the City. See APPENDIX C – "THE CITY OF PHILADELPHIA GOVERNMENT AND FINANCIAL INFORMATION." The City Controller has examined and expressed opinions on the basic financial statements of the City contained in the City's Comprehensive Annual Financial Reports for Fiscal Year 2014 (the "City FY 2014 CAFR"). The City Controller has not participated in the preparation of this Official Statement nor in the preparation of the budget estimates and projections and cash flow statements and forecasts set forth in various tables contained in this Official Statement. Consequently, the City Controller expresses no opinion with respect to any of the data contained in this Official Statement other than what is contained in the City FY 2014 CAFR. Some of the information set forth in APPENDIX C – "THE CITY OF PHILADELPHIA GOVERNMENT AND FINANCIAL INFORMATION" was derived from the City FY 2014 CAFR.

Independent Auditors

The basic financial statements of the Philadelphia Gas Works as of and for the years ended August 31, 2014 and August 31, 2013, included in APPENDIX A to this Official Statement (the "Financial Statements"), have been audited by KPMG LLP, as stated in their report appearing therein, dated December 23, 2014, except for note 15, as to which the date is February 23, 2015 and note 8 (a), as to which the date is July 20, 2015. Any financial information other than in the Financial Statements has not been audited by any firm of independent auditors and no opinion on such information is expressed in this Official Statement.

Unaudited Statistical Section

PGW prepared the Statistical Section of the CAFR to present comparative information to assist readers to better understand the Financial Statements, note disclosure and required supplementary information that appear elsewhere in the CAFR and to more fully comprehend PGW's overall financial health. The information in the Statistical Section is presented for the past ten Fiscal Years.

The Statistical Section contains information regarding PGW's financial trends, revenue capacity, debt capacity, certain demographic and economic information and operating information.

As discussed in "PHILADELPHIA GAS WORKS – **Pension Plans and Other Postemployment Benefits**," GASB 68 is effective for PGW's Fiscal Year beginning September 1, 2014. The provisions of GASB 68 are expected to be retrospectively applied, which may result in changes to the basic financial statements in APPENDIX A when they are presented for comparative purposes alongside PGW's audited financial statements as of and for the year ended August 31, 2015.

TAX MATTERS

Federal

Exclusion of Interest from Gross Income

In the opinion of Co-Bond Counsel, under existing statutes, regulations, rulings and court decisions, interest on the Bonds will not be includible in the gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the City with the requirements of the Internal Revenue Code of 1986, as amended (the "Code"). Interest on the Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax ("AMT"); however, interest on the Bonds held by corporations is included in the computation of "adjusted current earnings," a portion of which is taken into account in determining the AMT imposed on corporations.

In rendering its opinion, Co-Bond Counsel have assumed compliance by the City with the covenants contained in the 1998 Ordinance and the Tax Compliance Agreement that are intended to comply with the provisions of the Code relating to actions to be taken by the City in respect of the Bonds after issuance thereof to the extent necessary to effect or maintain the exclusion from federal gross income of the interest on the Bonds. These covenants relate to, inter alia, the use of and investment of proceeds of the Bonds and the rebate to the United States Treasury of specified arbitrage earnings, if any. Failure to comply with such covenants could result in interest on the Bonds becoming includible in gross income for federal income tax purposes from the date of issuance of the Bonds.

Other Federal Tax Matters

Ownership or disposition of the Bonds may result in other federal tax consequences to certain taxpayers, including, without limitation, certain S corporations, foreign corporations with branches in the United States, property and casualty insurance companies, taxpayers who have an initial basis in the Bonds greater or less than the principal amount thereof, individual recipients of Social Security or Railroad Retirement benefits, and taxpayers, including banks, thrift institutions and other financial institutions subject to Section 265 of the Code, who may be deemed to have incurred or continued indebtedness to purchase or to carry the Bonds.

Co-Bond Counsel are not rendering any opinion as to any federal tax matters other than those described under the caption "Exclusion of Interest from Gross Income" and expressly stated in the form of the opinions of Co-Bond Counsel included as APPENDIX H hereto. Prospective purchasers of the Bonds should consult their independent tax advisors with regard to all federal tax matters.

Pennsylvania

In the opinion of Co-Bond Counsel, under the laws of the Commonwealth of Pennsylvania as presently enacted and construed, interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax and the Bonds are exempt from personal property taxes in Pennsylvania; however, under the laws of the Commonwealth, as enacted and construed on the date hereof, any profits, gains or income derived from the sale, exchange or other disposition of the Bonds will be subject to Pennsylvania taxes and local taxes within the Commonwealth.

Other

The Bonds and interest thereon may be subject to state and local taxes in jurisdictions other than the Commonwealth of Pennsylvania under applicable state or local tax laws.

Purchasers of the Bonds should consult their independent tax advisors with regard to all state and local tax matters.

Changes in Federal and Pennsylvania Tax Law

From time to time, there are legislative proposals in the Congress and in state legislatures that, if enacted, could alter or amend the treatment of the Bonds for federal and state tax purposes or adversely affect the market value or marketability of the Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to bonds issued prior to enactment. In addition, from time to time regulatory actions are announced or proposed, and litigation is threatened or commenced, which, if implemented or concluded in a particular manner, could adversely affect the market value or marketability of the Bonds. It cannot be predicted whether any such regulatory action will be implemented, whether any particular litigation or judicial action will be commenced or, if commenced, how it will be resolved, or whether the Bonds or the market value or marketability thereof would be affected thereby.

General

The foregoing is only a general summary of certain provisions of the Code and Pennsylvania law was enacted and in effect on the date of this Official Statement and does not purport to be complete. Holders of the Bonds, especially those subject to special rules, should consult their own tax advisors as to the effects, if any, of the Code and state and local tax matters, including any pending or proposed legislation, regulatory initiatives or litigation.

The opinions expressed by Co-Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of delivery of the Bonds, and Co-Bond Counsel will express no opinion as of any date subsequent thereto or with respect to any pending legislation, regulatory initiatives or litigation.

RATINGS

Moody's, S&P and Fitch have assigned the Bonds ratings of "Baa1," stable outlook," "A-," positive outlook, and "BBB+," stable outlook, respectively.

A rating, including any related outlook with respect to potential changes in such rating, reflects only the view of the rating agency giving such rating and is not a recommendation to buy, sell or hold the Bonds. An explanation of the procedure and methodology used by each rating agency and the significance of the rating it assigns to the Bonds may be obtained only from the rating agency furnishing the rating.

Ratings may be changed at any time, and no assurance can be given that they will not be revised downward or withdrawn entirely by any rating agency. Any such downward revision or withdrawal of a rating may have an adverse effect on the market price of the Bonds.

None of the City, PGW and the Underwriters has undertaken any responsibility to assure the maintenance of any particular rating on the Bonds and shall have no liability if a rating is lowered, withdrawn or suspended.

The City has agreed, in the Continuing Disclosure Agreement, to report actual rating changes on the Bonds. See "CONTINUING DISCLOSURE" herein.

NO LITIGATION

To the knowledge of the City of Philadelphia Law Department and, solely with respect to (E) below, based upon certain representations from PGW's General Counsel, after customary inquiry, no litigation is pending against the City before any court, public board or agency, or threatened in writing against the City (A) to restrain or enjoin the issuance, sale, execution or delivery of the Bonds, (B) which contests the validity or enforceability of the Bonds or any proceedings of the City taken with respect to the issuance, sale, execution or delivery thereof, (C) which contests the pledge or application of any moneys or security provided for the payment of the Bonds, (D) challenges the existence or powers of the City or (E) other than the Landlord Lien Suit (see "PHILADELPHIA GAS WORKS –**Litigation**") in which a final adverse determination, singly or in the aggregate, would have a material and adverse effect on PGW's operations or financial condition.

CERTAIN LEGAL MATTERS

All legal matters incident to the authorization, issuance and sale of the Bonds are subject to approval of the legality of the issuance of the Bonds by Eckert Seamans Cherin & Mellott, LLC and Andre C. Dasent, P.C., both of Philadelphia, Pennsylvania, Co-Bond Counsel. The proposed forms of such opinions are included herein as APPENDIX H. Certain legal matters will be passed upon for the Underwriters by Ballard Spahr LLP of Philadelphia, Pennsylvania and Gonzalez Saggio & Harlan LLP of New York, New York, Co-Counsel to the Underwriters. Certain legal matters will be passed upon for the City by the City Solicitor. Certain legal matters will be passed upon for PGW by the Office of General Counsel of Philadelphia Gas Works and Eckert Seamans Cherin & Mellott, LLC of Harrisburg, Pennsylvania. Hawkins Delafield & Wood LLP, as Disclosure Counsel to the City, will deliver an opinion to the City and the Underwriters regarding certain matters.

The various legal opinions to be delivered concurrently with the delivery of the Bonds express the professional judgment of the law firms rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the law firm does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction. These legal opinions, generally, are based on existing law and fact and each law firm expressly disclaims any obligation to update its opinions if there are changes in law or facts subsequent to the date of such opinions.

CO-FINANCIAL ADVISORS

Public Financial Management, Inc. and Phoenix Capital Partners, LLP both of Philadelphia, Pennsylvania, have served as financial advisors (the "Financial Advisors") to the City in respect of the issuance of the Bonds. The Financial Advisors assisted in the preparation of this Official Statement and in other matters relating to the planning, structuring and issuance of the Bonds.

The Financial Advisors have received and reviewed but have not independently verified information in this Official Statement for accuracy or completeness (except, as to each Financial Advisor, the information in this section). Investors should not draw any conclusions as to the suitability of the Bonds from, or base any investment decisions upon, the fact that the Financial Advisors have advised the City with respect to the Bonds. The Financial Advisors' fees for this issue are contingent upon the sale and issuance of the Bonds.

The Financial Advisors are financial advisory and consulting organizations and are registered municipal advisors and are not engaged in the business of the underwriting, marketing or trading of municipal securities or any other negotiable instruments.

CERTAIN RELATIONSHIPS

Public Financial Management, Inc., financial advisor to the City, acts as a consultant to PGW on certain management and labor relations issues and has provided testimony before the PUC on several PGW rate cases. Eckert Seamans Cherin & Mellott, LLC and Andre C. Dasent, P.C. each provides certain legal services to the City and to PGW. Ballard Spahr LLP provides certain legal services to the City and to PGW. Black & Veatch Corporation provides certain professional services (unrelated to the Independent Consultant's Engineering Report) to PGW.

UNDERWRITING

The underwriters listed on the cover page to this Official Statement (the "Underwriters") have agreed to purchase the Bonds from the City, subject to the terms and conditions of the Bond Purchase Agreement between the City and Underwriters, at a purchase price of $293,155,021.95 (which is equal to the par amount of $261,770,000.00, plus original issue premium of $32,496,893.55, less the underwriters' discount of $1,111,871.60).

The Underwriters may offer and sell the Bonds to certain dealers and others (including sales for deposit into investment trusts, certain of which may be sponsored or managed by one or more of the underwriters) at prices lower than the public offering prices stated on the inside cover page hereof. The Bonds may be offered and sold to certain dealers (including the Underwriters and other dealers depositing Bonds into investment trusts) at prices lower than such offering prices, and such public offering prices may be changed from time to time by the Underwriters without prior notice.

This paragraph has been supplied by Wells Fargo Bank, National Association. Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association. Wells Fargo Bank, National Association ("WFBNA"), the senior Underwriter of the Bonds, has entered into an agreement (the "Distribution Agreement") with its affiliate, Wells Fargo Advisors, LLC ("WFA"), for the distribution of certain municipal securities offerings, including the Bonds. Pursuant to the Distribution Agreement, WFBNA will share a portion of its underwriting compensation with respect to the Bonds with WFA. WFBNA also utilizes the distribution capabilities of its affiliate Wells Fargo Securities, LLC ("WFSLLC"), for the distribution of municipal securities offerings, including the Bonds. In connection with utilizing the distribution capabilities of WFSLLC, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

This paragraph has been supplied by Citigroup Global Markets Inc. Citigroup Global Markets Inc., an underwriter of the Bonds, has entered into a retail distribution agreement with each of TMC Bonds L.L.C. ("TMC") and UBS Financial Services Inc. ("UBSFS"). Under these distribution agreements, Citigroup Global Markets Inc. may distribute municipal securities to retail investors through the financial advisor network of UBSFS and the electronic primary offering platform of TMC. As part of this arrangement, Citigroup Global Markets Inc. may compensate TMC (and TMC may compensate its electronic platform member firms) and UBSFS for their selling efforts with respect to the Bonds.

The following paragraph has been supplied by J.P Morgan Securities LLC. J.P. Morgan Securities LLC ("JPMS"), one of the Underwriters of the Bonds, has entered into negotiated dealer agreements (each, a "Dealer Agreement") with each of Charles Schwab & Co., Inc. ("CS&Co.") and LPL Financial LLC ("LPL") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any Bonds that such firm sells."

The paragraph has been supplied by Loop Capital Markets LLC. Loop Capital Markets LLC ("Loop Capital Markets"), one of the Underwriters of the Bonds, has entered into distribution agreements (each a

"Distribution Agreement") with each of Deutsche Bank Securities Inc. ("DBS") and Credit Suisse Securities USA LLC ("CS") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Distribution Agreement, each of DBS and CS will purchase Bonds from Loop Capital Markets at the original issue prices less a negotiated portion of the selling concession applicable to any Bonds that such firm sells.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed and may in the future perform, various investment banking services for the City for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the City and PGW.

CONTINUING DISCLOSURE

In order to assist the Underwriters in complying with the requirements of Rule l5c2-12 promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, the City will enter into a Continuing Disclosure Agreement with Digital Assurance Certification, L.L.C., as dissemination agent for the benefit of the Registered Owners (as defined in such agreement) of the Bonds, to be dated the date of delivery of the Bonds, the form of which is attached hereto as APPENDIX F.

During the previous five years, the City has failed on occasion to timely file event notices related to certain changes to ratings assigned to bonds issued by or on behalf of the City including: (i) certain enhanced rating changes (related to changes to the credit quality of bond insurers and of banks providing credit and liquidity support for certain variable rate bonds); and (ii) certain underlying credit rating changes. In other instances, the City timely filed such notices but did not associate the notices with all specific relevant outstanding obligations or filed the notice through incorporation by reference of information in an offering document. The foregoing description of instances of non-compliance by the City with its continuing disclosure undertakings should not be construed as an acknowledgement by the City that any such instance was material. As of the date hereof, the City is currently in compliance in all material respects with its previous undertakings with regard to continuing disclosure for prior obligations issued. The City has reviewed and updated its disclosure policies and procedures to ensure that the City remains in compliance with its continuing disclosure undertakings in the future.

CERTAIN REFERENCES

All summaries of the provisions of the Bonds and the security therefor, the Act, the Gas Choice Act, the Constitution and other laws of the Commonwealth, the 1998 General Ordinance, the Thirteenth Supplemental Ordinance and the Bond Committee Determinations, set forth herein, including APPENDIX E hereto, and all summaries and references to other materials not purported to be quoted in full, are only brief outlines of certain provisions thereof and do not constitute complete statements of such documents or provisions. Copies of the Act, the 1998 General Ordinance and the Thirteenth Supplemental Ordinance are available from the Office of the Director of Finance, Municipal Services Building, 1401 John F. Kennedy Boulevard, Suite 1330, Philadelphia, Pennsylvania 19102. Reference is made hereby to the complete documents relating to such matters for the complete terms and provisions thereof. So far as statements are

made in this Official Statement involving matters of opinion, whether or not expressly so stated, they are made merely as such and not as representations of fact.

MISCELLANEOUS

This Official Statement is made available only in connection with the sale of the Bonds and may not be used in whole or in part for any other purpose. This Official Statement is not to be construed as a contract or agreement between the City, PGW or the Underwriters and the purchasers or owners of any of the Bonds. Any statements made in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended merely as opinions and not as representations of fact. No representation is made that any opinions or estimates herein will be realized. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of PGW or the City since the date hereof. The City will provide financial and other information regarding PGW from time to time to S&P, Moody's and Fitch in connection with securities ratings assigned by those rating agencies to obligations payable from Gas Works Revenues.

The attached Appendices are an integral part of this Official Statement and should be read in their entirety together with the foregoing statements.

This Official Statement has been duly executed and delivered by the following officer on behalf of the City of Philadelphia.

CITY OF PHILADELPHIA, PENNSYLVANIA

By: /s/ Rob Dubow
Rob Dubow
Director of Finance

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APPENDIX A

COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR FISCAL YEARS ENDED AUGUST 31, 2014 AND 2013
OF THE PHILADELPHIA GAS WORKS

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PATH TO A CLEANER FUTURE

www.pgworks.com
800 West Montgomery Avenue
Philadelphia, PA 19122

Philadelphia Gas Works
(A Component Unit of the City of Philadelphia)
Comprehensive Annual Financial Report
For Fiscal Years Ended August 31, 2014 and 2013

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PATH TO A CLEANER FUTURE

Benjamin Franklin Parkway

Philadelphia Gas Works
(A Component Unit of the City of Philadelphia)
Comprehensive Annual Financial Report
For Fiscal Years Ended August 31, 2014 and 2013

Michael A. Nutter
Mayor, City of Philadelphia, PA

David Seltzer
Chairman, Board of Directors
Philadelphia Facilities Management Corporation

Craig E. White
President & Chief Executive Officer,
Philadelphia Gas Works

Joseph F. Golden, Jr.
Executive Vice President &
Acting Chief Financial Officer,
Philadelphia Gas Works

Prepared by:
The Finance Organization
Philadelphia Gas Works
Philadelphia, PA

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PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

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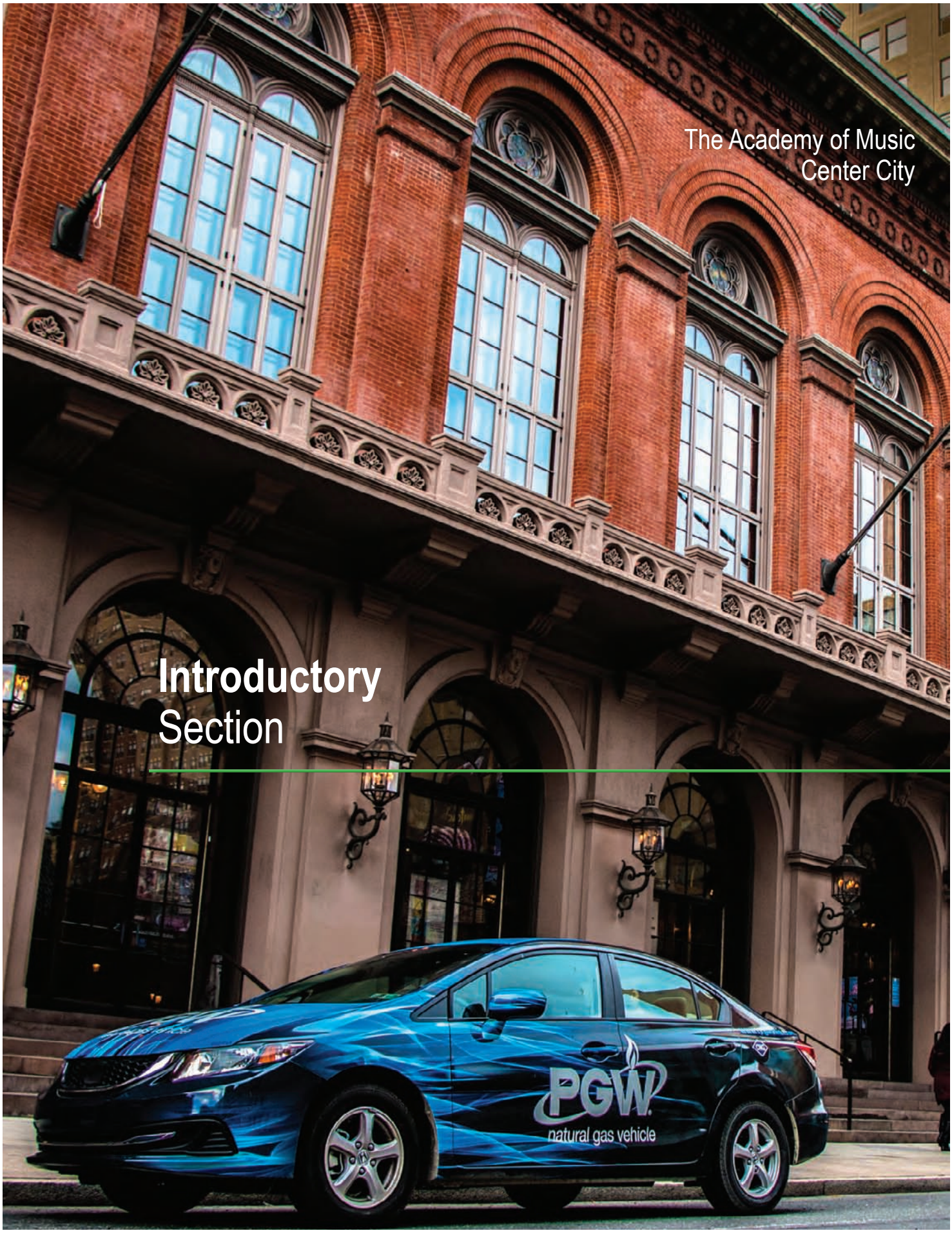

The Academy of Music
Center City

Introductory Section

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PHILADELPHIA GAS WORKS
Joseph F. Golden, Jr. • Executive Vice President and Acting Chief Financial Officer
800 West Montgomery Avenue • Philadelphia, PA 19122
Phone: 215-684-6464 • Fax: 215-684-6564
Email: JGolden@pgworks.com

The Chairman and Members of the Philadelphia Facilities Management Corporation Philadelphia, Pennsylvania:

The Comprehensive Annual Financial Report (CAFR) of the Philadelphia Gas Works (PGW or the Company) for the years ended August 31, 2014 and 2013 is hereby submitted. The financial statements were prepared in accordance with Generally Accepted Accounting Principles in the United States of America (U.S. GAAP). Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with PGW management.

The financial statements were audited by KPMG, a firm of licensed certified public accountants. The annual audit was conducted in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that KPMG plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, no such opinion was expressed. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. The audit provides a reasonable basis for KPMG's opinion.

In KPMG's opinion, the financial statements present fairly, in all material respects, the financial position of PGW as of August 31, 2014 and 2013, and the changes in its financial position and its cash flows for the years then ended, in conformity with U.S. GAAP. Accordingly, an unmodified opinion was rendered. This independent auditor's report is presented as the first component of the financial section of this report.

Management has provided a narrative to accompany the basic financial statements. This narrative is known as Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

PROFILE OF PHILADELPHIA GAS WORKS

PGW began providing gas service to the City of Philadelphia (the City) in 1836, when the City's first gas lights were turned on along Second Street, between Vine and South Streets. In 1841, PGW came under City ownership. In 1897, the City contracted for PGW to be managed by UGI Corporation (then United Gas Improvement Company). Effective January 1, 1973 the City contracted with Philadelphia Facilities Management Corporation to operate and manage PGW.

Prior to July 1, 2000, PGW was under the regulatory jurisdiction of the Philadelphia Gas Commission (PGC). The PGC had the authority to set PGW's rates and tariffs. The PGC also approved PGW's annual Operating Budget and reviewed PGW's Capital Budget prior to approval by the City Council of Philadelphia (City Council).

Effective July 1, 2000, and pursuant to the passage of the Pennsylvania Natural Gas Choice and Competition Act (the Act), PGW came under the regulatory jurisdiction of the Pennsylvania Public Utility Commission (PUC). Under the PUC's jurisdiction, PGW filed a restructuring plan on July 1, 2002, which among other things, provided for an unbundled tariff permitting customer choice of the commodity supplier by September 1, 2003. Under the Act, the PUC is required to follow the "same ratemaking methodology and requirements" that were previously applicable to the PGC when determining PGW's revenue requirements and approving overall rates and charges. The PGC continues to approve PGW's Operating Budget and review its Capital Budget. PGW's Capital Budget must be approved by City Council.

PGW, as of September 1, 2003, is operating under its Restructuring Compliance Tariff. The Restructuring Compliance Tariff Rates are designed to maintain revenue neutrality and the Tariff Rules and Regulations are designed to comport with the Pennsylvania Public Utility Code.

Management is responsible for establishing and maintaining internal controls designed to protect the assets of PGW from loss, theft or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with U.S. GAAP. The internal controls are subject to periodic evaluation by management in order to determine their adequacy. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

FACTORS AFFECTING FINANCIAL CONDITION

The information presented in this report is best understood in the context of the environment in which PGW operates. A more comprehensive analysis of these factors is available in PGW's Operating Budget and Five Year Forecast and Capital Budget and Five Year Forecast. These documents can be obtained online at www.pgworks.com.

The local economy is showing progress on several fronts despite continued fiscal challenges that arise from the demographic and economic changes that have occurred in recent Philadelphia history. PGW recognizes the challenges faced by our customers and has taken responsible action to assist our customers in need. PGW provides a discount on gas rates for senior citizens. There are approximately 21,000 customers receiving this discount on their current gas bills. PGW also provides a discounted payment plan with a possible forgiveness of arrearages over a three year time period. This program is offered to low income customers. There were approximately 62,000 customers enrolled in this program at the end of Fiscal Year (FY) 2014.

The single greatest operating expense is the cost of natural gas. The rate charged to PGW's customers to recover these costs is called the Gas Cost Rate (GCR). The GCR reflects the increases or decreases in natural gas costs and other costs. This GCR mechanism provides the flexibility to rapidly reflect current conditions without the time delay inherent in full base rate alteration. The intent is to achieve an annual balance between the costs incurred for fuel and their pass through to customers. In FY 2014, the average commodity price of

natural gas was $4.63 per thousand cubic feet (Mcf). This marks an increase in price from prior fiscal years and is reflected in a higher monthly bill passed through to customers.

The temperature and other weather conditions greatly affect the gas usage of heating customers of PGW. Colder than normal weather conditions results in a greater demand for natural gas and warmer than normal weather conditions results in a lower demand for natural gas. In FY 2014, the temperature in Philadelphia was slightly colder than normal resulting in an increased demand for natural gas. This increased demand for natural gas resulted in higher operating margins.

PGW has recognized the need to stabilize and normalize revenue due to variations in weather from one fiscal year to another fiscal year. PGW requested a Weather Normalization Adjustment Clause (WNA) to address fluctuating revenue due to weather conditions. The WNA was approved by the PUC in 2002. The purpose of the WNA is to neutralize the impact of weather on PGW's revenues. This allows PGW to achieve the recovery of appropriate costs as authorized by the PUC. The WNA results in neither a rate increase nor a rate decrease, but acts as a billing adjustment. The main benefits of the WNA are the stabilization of cash flow and the reduction of the need for short-term borrowing from year to year. The WNA is applied to customer invoices rendered during the period October 1 through May 31 of each year for each billing cycle.

At the end of FY 2014, PGW reported a net income of $49 million, 15.7% greater than net income reported in FY 2013. PGW also saw further reductions to long-term debt, and a 31.9 % decrease in Other Postemployment Benefits expense (OPEB), primarily due to continued funding of the OPEB trust. The challenge going forward is reducing the dependency on heating degree days, while continuing to increase revenue and positive cash flow. PGW intends to drive demand for natural gas in new markets, and capitalize on new revenue streams.

CAPITAL PROGRAM

PGW's annual capital program primarily supports an infrastructure investment plan to replace existing plant and facilities to ensure that PGW continues to operate the company's assets at a high standard of safety and reliability. The budget also supports PGW's efforts to provide for new load additions that offer economic advantages. This helps to spread PGW's fixed costs over a larger volume of customer usage, thereby positively impacting customer rates. Lastly, funds are requested for investment in systems and technology to improve customer service and the efficiency of its delivery.

The vast majority of PGW's capital program is dedicated to maintaining the integrity of underground distribution facilities. To this end, PGW implemented an annual program to reduce the inventory of cast iron main by 18 miles a year. On February 14, 2012, Act 11 was signed into law, providing Pennsylvania utility companies with a supplemental recovery mechanism (a Distribution System Improvement Charge, or DSIC) for costs related to incremental/accelerated distribution system repair, improvement and replacement. Act 11 permits gas utilities to recover 5.0% of their non-gas revenues via the recovery mechanism, approximately $22 million for PGW. In order for a utility company to establish such a recovery mechanism, it must submit, along with other requirements, a Long-Term Infrastructure Improvement Plan (LTIIP) and a DSIC petition to the PUC for review and approval. Accordingly, PGW submitted its LTIIP on December 3, 2012, and filed its DSIC petition on January 18, 2013. The PUC approved PGW's DSIC petition with an effective date of June 1, 2013 and PGW implemented the DSIC surcharge on July 1, 2013. This mechanism allows PGW to

its main replacement program by approximately $22 million without being dependent on long term debt to finance the entire amount.

MARKETING EFFORTS

PGW's Marketing department is focused on natural gas market growth and retention in the City of Philadelphia. Natural gas is Philadelphia's clean energy solution and Marketing is dedicated to promoting natural gas as the best value in today's competitive energy market. PGW supports and promotes viable solutions to the energy needs of all our customers.

Large commercial and industrial sales are managed by the Major Accounts sales group, responsible for 1.6 Bcf of new natural gas load in FY 2014. Major Accounts is focused on pursuing and developing new business and dedicated to developing energy solutions with operational and economic advantages. Major Accounts' management of a project for a leading manufacturer of petroleum and petrochemical products added approximately 0.5 Bcf of new load and was a significant highlight in FY 2014.

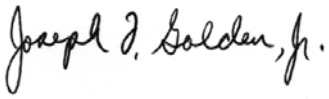
Small commercial and residential sales are managed by the Residential & Commercial sales group and are responsible for approximately 325,000 Mcf of new load in FY 2014. A highpoint for FY 2014 was the Residential & Commercial group's management of a new residential high rise project which added 27,000 Mcf of new load. The project consists of 98 luxury apartments containing natural gas heaters, ranges, grills, and a heated pool.

The Marketing department is also responsible for the advertising and sales of the Parts & Labor Plan (PLP) and residential conversion incentives. PLP serves to protect customers from parts and labor costs associated with repair or replacement of defective or worn parts as a result of normal usage of covered equipment. The program generated $6 million in revenue with over 44,000 plans sold in FY 2014. The residential conversion program incentivizes customers to convert their home heaters from an alternative fuel to natural gas. The program accounted for approximately 20,000 Mcf in new load for FY 2014.

ACKNOWLEDGEMENTS

PGW was awarded the prestigious Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association of the United States and Canada (GFOA) for its FY 2013 CAFR. This was the second straight year that PGW received this prestigious award. This report for FY 2014 is PGW's third submission to the program. The preparation of the CAFR on a timely basis was made possible by the dedicated service of the entire staff of the Finance organization as well as various other departments within the Company. Each has my sincere appreciation for their valuable contributions.

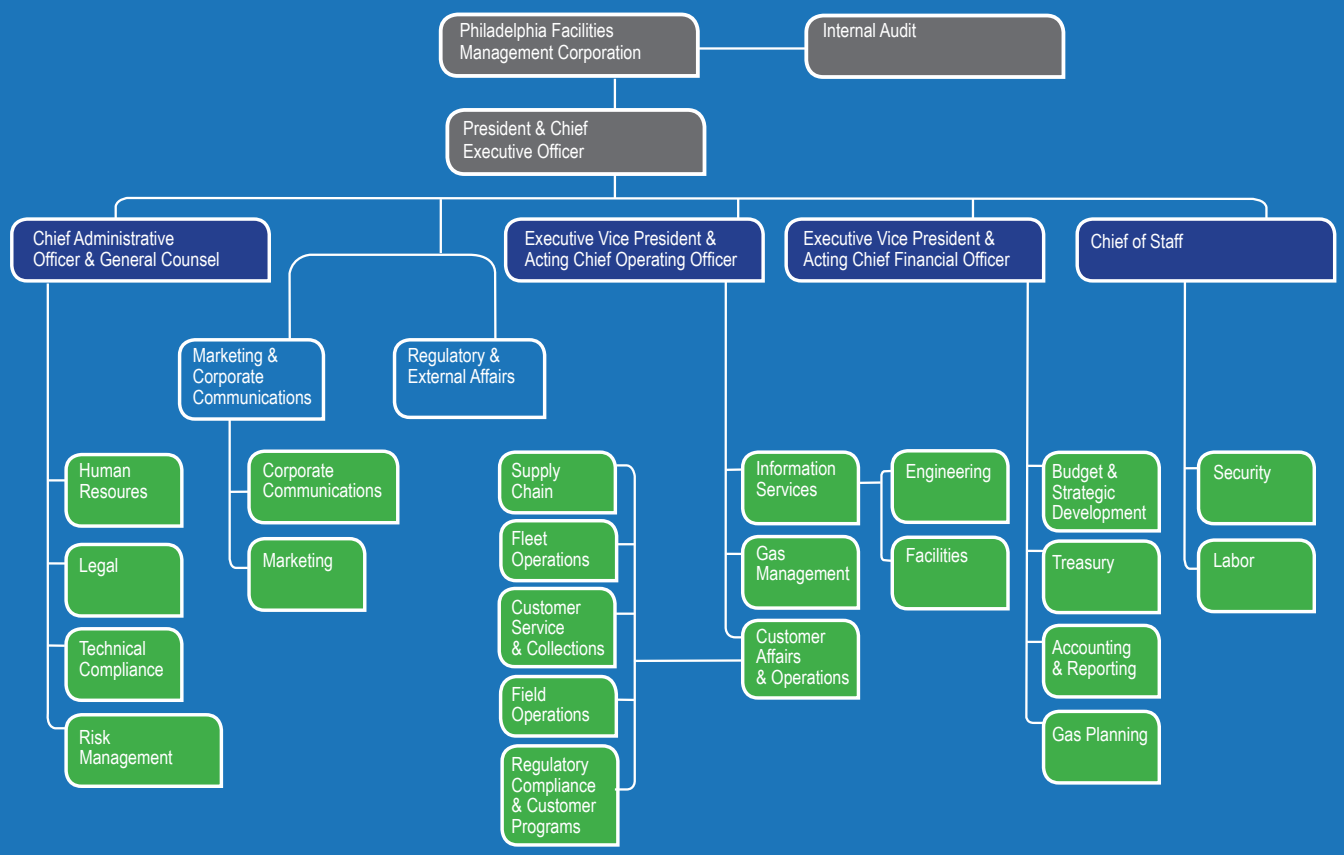
Respectfully submitted,



Joseph F. Golden, Jr.
Executive Vice President and Acting Chief Financial Officer
February 23, 2015

Philadelphia Gas Works

ORGANIZATIONAL CHART



LEADERSHIP

Craig E. White
President & Chief Executive Officer

Douglas A. Moser
Executive Vice President &
Acting Chief Operating Officer

Joseph F. Golden, Jr.
Executive Vice President &
Acting Chief Financial Officer

Abby L. Pozefsky, Esquire
Chief Administrative Officer &
General Counsel

Daniel P. Murray
Senior Vice President,
Customer Affairs & Operations

Douglas I. Oliver
Senior Vice President, Marketing &
Corporate Communications

Denise Adamucci
Vice President,
Regulatory Compliance &
Customer Programs

Bernard L. Cummings
Vice President,
Customer Service & Collections

William J. Gallagher
Vice President,
Budget & Strategic Development

Charles J. Grant
Chief of Staff

Raquel N. Guzmán, Esquire
Vice President,
Legal & Associate General Counsel

Steven P. Hershey
Vice President,
Regulatory & External Affairs

Michael H. Jones
Vice President,
Technical Compliance

Paul A. Mondimore
Vice President,
Field Operations

Raymond M. Snyder
Vice President,
Gas Management

Lorraine S. Webb
Vice President,
Human Resources

Eloise N. Young
Vice President &
Chief Information Officer

John C. Zuk
Vice President,
Marketing

Philadelphia Facilities Management Corporation

Board of Directors

David Seltzer
Principal, Mercator Advisors LLC
Board Chairman
Audit Committee
Chair, Business Development Committee
Finance Committee
Chair, Workforce Development Committee

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President, Girard College
Board Vice Chair
Chair, Audit Committee
Chair, Finance Committee

Suzanne R. Biemiller
Chief of Staff,
American Board of Internal Medicine
Business Development Committee

Catherine M. Paster
First Deputy Director of Finance,
City of Philadelphia
Board Treasurer
Audit Committee
Finance Committee

Sharmain Matlock-Turner
President and CEO,
Urban Affairs Coalition
Workforce Development Committee

Andrew Stober
Chief of Staff,
Office of Transportation & Utilities,
City of Philadelphia
Business Development Committee
Workforce Development Committee

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Philadelphia Gas Works
Pennsylvania

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

August 31, 2013

Executive Director/CEO

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The Italian Market
South Philadelphia

Financial Section

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KPMG LLP
1601 Market Street
Philadelphia, PA 19103-2499

Independent Auditors' Report

The Controller of the City of Philadelphia and
Chairman and Members of the Philadelphia
Facilities Management Corporation
Philadelphia, Pennsylvania:

We have audited the accompanying financial statements of Philadelphia Gas Works (the Company), a component unit of the City of Philadelphia, Pennsylvania, as of and for the years ended August 31, 2014 and 2013, and the related notes to the financial statements, which collectively comprise the Company's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Philadelphia Gas Works as of August 31, 2014 and 2013, and the changes in its financial position, and its cash flows for the years then ended, in accordance with U.S. generally accepted accounting principles.

KPMG LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3-14 and the schedules of pension funding progress and other postemployment benefits funding progress on pages 57 and 58 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

KPMG LLP

Philadelphia, Pennsylvania
December 23, 2014, except for note 15, as to which the date is February 23, 2015 and note 8 (a), as to which the date is July 20, 2015

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Required Supplementary Information (Unaudited)

Management's Discussion and Analysis

August 31, 2014 and 2013

The narrative overview and analysis of the financial statements of Philadelphia Gas Works (the Company or PGW) for the years ended August 31, 2014 and 2013 have been prepared by PGW's management. The information presented here is unaudited and should be read in conjunction with additional information contained in PGW's financial statements.

Financial Highlights

- The Fiscal Year (FY) 2014 reflected a 3.2% colder than normal winter. The FY 2014 period was 13.3% colder than the prior year and firm gas sales increased by 3.8 billion Cubic Feet (Bcf). In addition, the Weather Normalization Adjustment (WNA), which was in effect from October 2013 through May 2014, resulted in heating customers receiving credits totaling $12.3 million as a result of the temperatures experienced during the period. FY 2013 was 10.2% warmer than normal. However, the FY 2013 period was 28.1% colder than the prior year and firm gas sales increased by 6.4 Bcf. In addition, the WNA, which was in effect from October 2012 through May 2013, resulted in heating customers receiving charges totaling $8.4 million as a result of the temperatures experienced during the period.
- PGW achieved a collection rate of 94.9% in the current period, 91.9% in FY 2013, and 96.6% in FY 2012. The increase in the collection rate of 3.0% between FY 2014 and FY 2013 was a return to normal historic levels after a brief dip in FY 2013. The collection rate is calculated by dividing the total gas receipts collected in FY 2014 by the total gas billings that were applied to PGW customers' accounts from September 1, 2013 through August 31, 2014. The same methodology was utilized in FY 2013 and FY 2012.
- PGW continues to have various business initiatives that pertain to improving collections, productivity, and operational efficiencies throughout the Company. PGW, at the end of FY 2014 and FY 2013, had no tax-exempt commercial paper outstanding and a cash balance of $105.7 million and $100.9 million, respectively. This reflects overall increases of $4.8 million and $25.1 million at the end of FY 2014 and FY 2013, respectively. PGW had a cash balance of $75.8 million at the end of FY 2012.
- *Liquidity/Cash Flow* – At December 19, 2014, $120.0 million was available from the commercial paper program. The cash balance at December 19, 2014 was $80.6 million.
- The Company's FY 2015 Capital Budget was approved by the City Council of the City of Philadelphia and funding was provided to continue the implementation of an 18-mile Cast Iron Main Replacement Program. Main replacement cost for this program in FY 2015 is expected to be $21.4 million. The total six-year cost of the Cast Iron Main Replacement Program is forecasted to be $136.4 million.
- The Company's recent debt activity is as follows:
  - On August 28, 2012, the Company accelerated payment of $20.2 million of principal for bonds issued under the 1998 General Ordinance with internally generated funds. The defeased bonds were for these respective series and amounts: Fourth Series – $3.1 million, Fifth Series – $2.9 million, Seventh Series – $6.1 million, Eighth Series A – $5.3 million, and Ninth Series – $2.8 million.
  - On September 28, 2011, the City of Philadelphia (the City) issued:
    - Gas Works Revenue Bonds, Twentieth Series (1975 General Ordinance) in the amount of $16.2 million for the purpose of refunding the entire Sixteenth Series Bond (1975 General

Ordinance), and paying the costs of issuing the bonds. The Twentieth Series Bonds, with fixed interest rates that range from 2.0% to 5.0%, have maturity dates through 2015.

– Gas Works Revenue Bonds, Tenth Series (1998 General Ordinance) in the amount of $72.6 million for the purpose of refunding the entire First Series A, First Series C, Second Series, and Third Series Bonds (1998 General Ordinance), and paying the costs of issuing the bonds. The Tenth Series Bonds, with fixed interest rates that range from 3.0% to 5.0%, have maturity dates through 2026.

- On September 1, 2011, the City defeased $29.5 million of the Eighth Series variable rate Bonds utilizing internally generated funds. As a result of this defeasance, a portion of the related interest rate swap agreement was terminated. The termination payment was approximately $7.0 million. Concurrently, the letters of credit for the Eighth Series B, C, and D Bonds were extended and the Series E letter of credit was replaced. The remaining Eighth Series Bonds in the amount of $225.5 million were then remarketed, with the remaining aggregate principal being reallocated among the Eighth Series B Bonds ($50.3 million), the Eighth Series C Bonds ($50.0 million), the Eighth Series D Bonds ($75.0 million), and Eighth Series E Bonds ($50.2 million). The related swap agreement was amended to reflect these new notional amounts for each of the issuances.

- The Company's only derivative instruments within the scope of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, (GASB 53) are four interest rate swaps entered into to hedge the interest payments on its variable rate debt. These swaps originate from an interest rate swap used as a hedge of the Sixth Series Bonds. Because the hedges were effective at August 31, 2014, the change in the fair value of the swaps decreased $5.4 million for FY 2014 and has been recorded as an increase in the interest rate swap liability and the related deferred outflow of resources. The balance of the interest rate swap liability at August 31, 2014 is $38.8 million, and the related deferred outflow of resources balance is $18.9 million. The difference between the balances is due to the impact of refunding the Sixth Series Bonds, which the original swap previously hedged, during FY 2009, and establishing a hedging relationship between the portion of the original swap remaining after the refunding (divided into four swaps) and the refunding Eighth Series Bonds. Because the hedges were determined effective for both periods presented, there was no impact on the Statements of Revenues and Expenses and Changes in Net Position for either year other than swap settlement payments.

Overview of the Financial Statements

The discussion and analysis are intended to serve as an introduction and overview of PGW's basic financial statements. PGW's financial statements comprise the following:

Financial statements provide both long-term and short-term information about PGW's overall financial condition, results of operations, and cash flows.

The notes to financial statements provide additional information that is essential to a full understanding of the data presented in PGW's financial statements. The notes can be found immediately following the basic financial statements.

The financial statements report information about PGW as a whole using accounting methods similar to those used by private sector business. The three statements presented are as follows:

The statements of revenues and expenses and changes in net position present revenues and expenses and their effects on the change in net position during the fiscal year. These changes in net position are recorded as soon as the underlying event giving rise to the change occurs, regardless of when cash is received or paid.

The balance sheets include all of PGW's assets and liabilities, with the difference between the two reported as net position. Over time, increases or decreases in net position are indicators of whether PGW's financial position is improving or deteriorating.

The statements of cash flows provide relevant information about the cash receipts and cash payments of an enterprise during a period and the impact on PGW's financial position.

Condensed Statements of Revenues and Expenses

(Thousands of U.S. dollars)

	Years ended August 31		
	2014	**2013**	**2012**
Total gas revenues	$ 736,138	675,154	628,387
Other revenues	22,998	18,317	16,596
Total operating revenues	759,136	693,471	644,983
Fuel expense	304,051	255,501	233,713
All other operating expenses	334,199	318,510	316,625
Total operating expenses	638,250	574,011	550,338
Operating income	120,886	119,460	94,645
Interest and other income	3,597	1,147	4,659
Total interest expense	(57,135)	(59,965)	(69,544)
Distribution to the City of Philadelphia	(18,000)	(18,000)	(18,000)
Excess of revenues over expenses	$ 49,348	42,642	11,760

Operating Revenues

Operating revenues in FY 2014 were $759.1 million, an increase of $65.6 million or 9.5% from FY 2013. The increase in FY 2014 was mainly due to increased heating demand and increased revenues associated with gas transportation service. Operating revenues in FY 2013 were $693.5 million, an increase of $48.5 million or 7.5%

from FY 2012. The increase in FY 2013 was due to increased heating demand. Please see the discussion of the cost of fuel in the Operating Expenses Section below.

Total sales volumes, including gas transportation deliveries, in FY 2014 increased by 6.9 Bcf to 79.1 Bcf or 9.6% from FY 2013 sales volumes of 72.2 Bcf. In FY 2013, total sales volumes, including gas transportation deliveries, increased by 9.9 Bcf to 72.2 Bcf or 15.9% from FY 2012 sales volumes of 62.3 Bcf. In FY 2014, firm gas sales of 48.5 Bcf were 3.8 Bcf or 8.5% higher than FY 2013 firm gas sales of 44.7 Bcf, which were 6.4 Bcf, or 16.7% higher than FY 2012. Interruptible customer sales increased by 0.2 Bcf compared to FY 2013, which increased by 0.7 Bcf compared to FY 2012. Gas transportation sales in FY 2014 increased by 2.9 Bcf to 29.4 Bcf from the 26.5 Bcf level experienced in FY 2013. In FY 2013, the volume of gas transportation sales increased by 2.1 Bcf to 26.5 Bcf from the 24.4 Bcf level experienced in FY 2012.

In FY 2014, the number of customers served by PGW decreased from the previous year and was approximately 500,000 customers. The number of customers served by PGW at the end of FY 2013 and FY 2012 was approximately 501,000 and 503,000, respectively. Commercial accounts were approximately 25,000 customers, reflecting no change from the previous two fiscal years. Industrial accounts were unchanged, from the previous two fiscal years at 700 customers. The number of residential accounts in FY 2014 decreased to approximately 474,300 customers, a decrease of 1,000 customers from the FY 2013 level and 3,000 customers from the 2012 level.

Operating Expenses

Total operating expenses, including fuel costs, in FY 2014 were $638.3 million, an increase of $64.3 million or 11.2% from FY 2013. The increase for FY 2014 reflects higher natural gas demand and higher costs associated with the gas processing, field services, and distribution departments. Total operating expenses, including fuel costs, in FY 2013 were $574.0 million, an increase of $23.7 million or 4.3% from FY 2012. The increase for FY 2013 reflects higher natural gas demand.

Cost of Fuel – The cost of natural gas utilized increased by $48.6 million or 19.0% to $304.1 million in FY 2014 compared with $255.5 million in FY 2013. The average commodity price per Thousand Cubic Feet (Mcf) increased by $0.83 or $44.3 million, while the volume of gas utilized increased by 2.8 Bcf, 5.6% or $10.6 million. In addition, pipeline supplier refunds in FY 2014 increased by $4.4 million while demand charges decreased by $1.9 million, compared to FY 2013. Cost of fuel includes all commodity charges and demand charges net of pipeline refunds.

The cost of natural gas utilized increased by $21.8 million or 9.3% to $255.5 million in FY 2013 compared with $233.7 million in FY 2012. The average commodity price per Mcf decreased by $0.13 or $6.6 million, while the volume of gas utilized increased by 7.2 Bcf, 16.6%, or $28.1 million. In addition, pipeline supplier refunds in FY 2013 increased by $0.1 million while demand charges increased by $0.4 million, compared to FY 2012.

Variations in the cost of purchased gas are passed through to customers under the Gas Cost Rate (GCR) provision of PGW's rate schedules. Over-recoveries or under-recoveries of purchased gas costs are subtracted from or added to gas revenues and are included in other current assets or other current liabilities, thereby eliminating the effect that recovery of gas costs would otherwise have on net income.

The average natural gas commodity prices for utilized gas for FY 2014, FY 2013, and FY 2012 were $4.63, $3.80, and $3.91 per Mcf, respectively.

Other Operating Expenses – Expenditures for street operations, infrastructure improvements, and plant operations in FY 2014 were $94.1 million, an $11.3 million or 13.6% increase from the FY 2013 total of $82.8 million. The increase in FY 2014 was caused by higher labor costs for distribution, field services, and higher costs associated with running the liquefied natural gas plants. The FY 2013 total of $82.8 million was $5.5 million higher than the FY 2012 total of $77.3 million as a result of higher labor costs for distribution and higher costs associated with running the liquefied natural gas plants.

Additionally, expenses of $116.1 million related to collection and account management, customer services, marketing, and the administrative area increased by $8.8 million or 8.2% in FY 2014 primarily due to higher healthcare expenses and an increase in insurance costs. This category decreased by $3.9 million or 3.5% in FY 2013 compared to FY 2012 primarily due to lower healthcare expenses and an increase in the credit to operating expenses associated with capital spending.

Pension costs increased in FY 2014 due to an increase in the factor utilized as a percentage of covered payroll to calculate pension expense. Additionally, the covered payroll reflected a decrease of $1.9 million from the FY 2013 level of $106.0 million. The new payroll factor is based on a new actuarial study applicable to FY 2014. Pension costs increased by $0.9 million or 3.8% to $24.5 million in FY 2014 as compared to FY 2013. Pension costs decreased $0.4 million to $23.6 million in FY 2013 as compared to FY 2012.

Other Postemployment Benefits (OPEB) costs decreased $3.1 million to $37.1 million in FY 2014 when compared to FY 2013. OPEB costs decreased $3.6 million to $40.2 million in FY 2013 when compared to FY 2012. OPEB costs decreased in both fiscal years due to lower normal cost, lower unfunded liabilities, which are amortized over a 30-year period, and lower interest on the net OPEB obligation. For FY 2014, the Company utilized a discount rate of 7.95%. For FY 2013, the Company utilized a discount rate of 8.0% which are both driven by higher balances in the OPEB Trust Fund (the Trust). The higher Trust balances created higher investment income and lower unfunded liabilities, which are amortized over a 30-year period. These factors lowered OPEB costs.

The annual OPEB cost is recorded in the Statements of Revenue and Expenses and Changes in Net Position. For the year ended August 31, 2014, approximately $11.2 million was recorded to other postemployment benefits expense and $25.9 million was recorded to administrative and general expense. For the year ended August 31, 2013, approximately $16.5 million was recorded to other postemployment benefits expense and $23.7 million was recorded to administrative and general expense.

The net OPEB obligation was $101.8 million for the fiscal year ended August 31, 2014, a $7.3 million decrease from the $109.1 million obligation at August 31, 2013. This decrease was caused by a decrease in the annual OPEB cost and an increase of contributions made during the year. The net OPEB obligation for the fiscal year ended August 31, 2012 was $111.1, which was $2.0 higher than the August 31, 2013 net OPEB obligation.

Provision for Uncollectible Accounts – The provision for uncollectible accounts in FY 2014 totaled $38.8 million, a decrease of $1.2 million or 3.0% lower than FY 2013. The decrease in the provision for uncollectible accounts is mainly due to higher collection rates achieved in FY 2014. The provision for uncollectible accounts in FY 2013

totaled $40.0 million, an increase of $3.3 million or 9.0% higher than FY 2012. The accumulated provision for uncollectible accounts at August 31, 2014 reflects a balance of $107.3 million, compared to the $105.6 million balance in FY 2013 and $97.8 million in FY 2012. PGW is committed to continuing its collection efforts in an attempt to reduce outstanding delinquent account balances and to provide assistance to those customers who qualify for low-income grants and payment programs to help those customers maintain their gas service.

Net Depreciation Expense – Net depreciation expense increased by $0.7 million in FY 2014 compared with FY 2013. Net depreciation expense increased by $0.9 million in FY 2013 compared with FY 2012. The effective composite depreciation rates for FY 2014, FY 2013, and FY 2012 were 2.2%, 2.2%, and 2.3%, respectively. Cost of removal is charged to expense as incurred.

Interest and Other Income – Interest and other income in FY 2014 was $2.5 million higher than FY 2013, primarily due to the loss in FY 2013 as a result of the termination of the Guaranteed Investment Contract related to the 1998 General Ordinance Bonds. Interest and other income in FY 2013 was $3.6 million lower than FY 2012 due to the termination of the Guaranteed Investment Contract related to the 1998 General Ordinance Bonds.

Interest Expense – Total interest expense was $57.1 million in FY 2014 a decrease of $2.9 million or 4.8% when compared with FY 2013. Interest expense was lower in FY 2014 primarily due to lower principal debt balances. Total interest expense was $60.0 million in FY 2013 a decrease of $9.5 million or 13.7% when compared with FY 2012. In FY 2013, interest expense was lower primarily due to a swap termination payment made in FY 2012. Other interest costs decreased in FY 2014 by $1.3 million or 12.1%, primarily due to the reduction of expenses for losses on reacquired debt and other variable bond fees. Other interest costs decreased in FY 2013 by $6.1 million or 36.3% due to the swap termination payments made in FY 2012.

Excess of Revenues over Expenses – In FY 2014, the Company's excess of revenues over expenses was $49.3 million, an increase of $6.7 million from FY 2013. The Company had an excess of revenues over expenses of $42.6 million in FY 2013, an increase of $30.8 million from FY 2012.

Condensed Balance Sheets

(Thousands of U.S. dollars)

	Years ended August 31		
Assets	**2014**	**2013**	**2012**
Current assets:			
Accounts receivable (net of accumulated provision for uncollectible accounts of $107,349, $105,577, and $97,758 for 2014, 2013, and 2012, respectively)	$ 101,457	97,749	81,997
Restricted investment funds	5,820	49,875	94,657
Other current assets and deferred debits, cash and cash equivalents, cash designated for capital expenditures, gas inventories, materials, and supplies	204,944	197,363	183,851
Total current assets	312,221	344,987	360,505
Noncurrent assets:			
Utility plant, net	1,193,552	1,154,987	1,125,650
Unamortized bond insurance costs	14,136	15,736	17,417
Sinking fund, revenue bonds	105,909	105,280	105,312
Other assets	37,528	33,097	30,996
Total noncurrent assets	1,351,125	1,309,100	1,279,375
Total assets	1,663,346	1,654,087	1,639,880
Deferred outflows of resources			
Accumulated fair value of hedging derivatives	18,879	12,059	34,712
Unamortized losses on reacquired debt	37,051	44,868	53,241
Total assets and deferred outflows of resources	$ 1,719,276	1,711,014	1,727,833

Condensed Balance Sheets

(Thousands of U.S. dollars)

Net Position and Liabilities		Years ended August 31 2014	2013	2012
Net position	$	407,935	358,587	315,945
Total long-term debt		980,749	1,033,976	1,086,502
Current liabilities:				
Current portion of long-term debt		53,227	52,406	30,545
Other current liabilities		98,100	88,614	88,396
Total current liabilities		151,327	141,020	118,941
Other noncurrent liabilities		179,265	177,431	206,445
Total net position and liabilities	$	1,719,276	1,711,014	1,727,833

Assets

Accounts Receivable – In FY 2014, accounts receivable (net) of $101.5 million increased by $3.8 million or 3.9%, from FY 2013 due to higher gas billings during FY 2014, which resulted from a robust winter heating season. In FY 2013, accounts receivable (net) of $97.7 million increased by $15.7 million or 19.1%, from FY 2012 due to higher gas billings during FY 2013, which resulted from colder winter heating conditions. The accumulated provision for uncollectible accounts, totaling $107.3 million increased by $1.7 million in FY 2014 and totaled $105.6 million in FY 2013 and $97.8 million in FY 2012.

Cash and Cash Equivalents, Cash Designated for Capital Expenditures, Gas Inventories, Materials, and Supplies, and Other Current Assets – In FY 2014, cash and cash equivalents totaled $105.7 million, an increase of $4.8 million from the FY 2013 total of $100.9 million and totaled $75.8 million in FY 2012. In FY 2014, gas inventories, materials, and supplies totaled $70.0 million, a decrease of $10.2 million from the FY 2013 total of $80.2 million. Gas inventories, materials, and supplies totaled $81.1 million in FY 2012. In FY 2014, gas storage decreased by $10.6 million or 14.9% when compared to FY 2013. The decrease in gas inventory reflects a decrease in the volume of gas in storage and a decrease in the cost per Mcf. In FY 2013, gas storage decreased by $2.4 million or 3.3% compared to FY 2012. The decrease in gas inventory for FY 2013 reflects a decrease in the volume of gas in storage. Other current assets totaled $19.2 million in FY 2014, an increase of $3.0 million from FY 2013, primarily as a result of an increase in the deferred GCR. In FY 2013, other current assets totaled $16.2 million, a decrease of $10.7 from FY 2012, primarily as a result of a decrease in the deferred GCR.

Cash designated for capital expenditures was created in FY 2014 by designating $10.0 million of cash for capital spending only.

Capital Improvement Fund, Workers' Compensation Escrow Fund, and Health Insurance Escrow Fund – The Capital Improvement Fund decreased by $44.1 million in FY 2014 due to proceeds being drawn from the Capital Improvement Fund to fund capital expenditures. A drawdown of the accrued interest in the Capital Improvement Fund in the amount of $0.8 million was utilized for working capital purposes in FY 2014. Interest income on all funds, to the extent not drawn, is reflected as an increase of $0.4 million in FY 2014, $0.4 million in FY 2013, and $0.6 million in FY 2012. Pursuant to the Pennsylvania Department of Labor and Industry Bureau of Workers' Compensation Self Insurance policy, the Company has established and maintained a restricted trust account. As of August 31, 2014 and 2013, the trust account balances were $2.6 million. PGW is self-insured for the healthcare of active employees and retirees under the age of 65. Retirees over the age of 65 are insured on an experience rated basis. Per the terms of the self-insured program, PGW established a Health Insurance Escrow Fund that at August 31, 2014 was funded in the amount of $3.2 million.

Utility Plant, Non-Current Assets and Deferred Outflow of Resources – In FY 2014, noncurrent assets including utility plant, net, unamortized bond insurance costs, unamortized losses on reacquired debt and accumulated fair value of hedging derivatives totaled $1,407.1 million, an increase of $41.0 million from FY 2013. In FY 2013, noncurrent assets, including utility plant, net, unamortized bond insurance costs, unamortized losses on reacquired debt, and accumulated fair value of hedging derivatives totaled $1,366.1 million. Utility plant, net, totaled $1,193.6 million in FY 2014, an increase of $38.6 million or 3.3% compared with the FY 2013 balance of $1,155.0 million. The FY 2013 balance increased by $29.3 million or 2.6% compared with the FY 2012 balance of $1,125.7 million. Capital expenditures for construction of distribution facilities, purchase of equipment, information technology enhancements, and other general improvements were $80.2 million in FY 2014 compared to $70.4 million in FY 2013 and $54.7 million in FY 2012. PGW funded capital expenditures through drawdowns from the Capital Improvement Fund in the amounts of $34.1 million, $44.8 million, and $33.5 million in FY 2014, FY 2013, and FY 2012, respectively. The major capital expenditures are associated with PGW's gas supply infrastructure, namely, gas mains, and customer service lines, including capital expenditures for the Long-Term Infrastructure Improvement Plan for which PGW will request recovery through a Distribution System Improvement Charge (DSIC).

In early 2012, Act 11 was enacted by the Pennsylvania Legislature, which permitted public utilities to file a request with the PUC for the implementation of a DSIC. A DSIC permits natural gas distribution companies to recover the costs related to main and service replacement not already recovered in base rates. This legislation provides utility companies with a supplemental recovery mechanism for costs related to incremental/accelerated distribution system repair, improvement, and replacement. Act 11 permits gas utilities to recover 5.0% of their nongas revenues via the recovery mechanism and permits greater percentage increases if the PUC so permits. The Company started billing customers a DSIC surcharge as of July 1, 2013. In FY 2014, the Company billed customers $19.4 million for the DSIC surcharge. In FY 2013, the Company billed customers $0.7 million for the DSIC surcharge. The DSIC surcharge is fully reconcilable on a calendar year basis and at the fiscal year-end the over-billed or under-billed amount is recorded as an adjustment to revenue. For additional information, see note 1(h) *Revenue Recognition* of the Financial Statements.

Liabilities

Long-Term Debt – Long-term debt, including the current portion and unamortized discount and premium, totaled $1,034.0 million in FY 2014. This was $52.4 million less than the previous year primarily as a result of normal

debt principal payments. This represents 71.7% of total capitalization in FY 2014. Long-term debt, including the current portion and unamortized discount and premium, totaled $1,086.4 million in FY 2013, $30.6 million less than the previous year primarily as a result of normal debt principal payments. Long-term debt, including the current portion and unamortized discount and premium, totaled $1,117.0 million in FY 2012. Long-term debt represented 75.2% of total capitalization in FY 2013 and 77.7% of total capitalization in FY 2012. For additional information see note 8, *Long-Term Debt and Other Liabilities* of the Financial Statements.

Debt Service Coverage Ratio and Ratings – PGW has a mandatory debt service coverage ratio of 1.50 times debt service on both the 1975 and 1998 Ordinance Bonds. In FY 2014, the debt service coverage was at 6.15 times debt service on the outstanding 1975 Ordinance Bonds and at 2.11 times debt service on the Senior 1998 Ordinance Bonds compared to debt service coverage ratios of 5.58 and 2.90 times, respectively, in FY 2013, and 4.75 and 1.75 times, respectively, in FY 2012. PGW's current bond ratings are "Baa2" from Moody's Investors Service (Moody's), and "A-"from Standard & Poor's Rating Service (S&P).

Short-Term Debt – Pursuant to the provisions of the City of Philadelphia Note Ordinances, PGW may sell short-term notes to either support working capital requirements or pay the costs of certain capital projects and other project costs. PGW may sell short-term notes in a principal amount, which, together with interest, may not exceed $150.0 million outstanding to support working capital requirements. PGW may also sell additional short-term notes in an aggregate principal amount, which may not exceed $120.0 million outstanding at any time to pay the costs of certain capital projects and other project costs. All notes are supported by two irrevocable letters of credit and a security interest in PGW's revenues. The letters of credit supporting PGW's combined commercial paper programs fixed the maximum level of outstanding notes plus interest at $120.0 million in FY 2014. In FY 2013 and FY 2012, the letters of credit supporting PGW's working capital commercial paper program fixed the maximum level of outstanding notes plus interest at $60.0 million. There were no outstanding notes payable at August 31, 2014, 2013, and 2012.

Other Current Liabilities – In FY 2014, other current liabilities totaled $19.3 million, an increase of $10.2 million from FY 2013, mainly due to deposits from a third-party supplier and receipts for a project that will be paid for in FY 2015. In FY 2013, the total was $9.1 million, a decrease of $1.2 million from FY 2012.

Accounts Payable – In FY 2014, accounts payable totaled $58.9 million, a decrease of $0.5 million or 0.8% compared with FY 2013 primarily due to a decrease in natural gas payables of $4.5 million, which was offset by an increase in trade payables of $4.0 million. In FY 2013, accounts payable totaled $59.4 million, an increase of $2.3 million or 4.0% compared with FY 2012 primarily due to an increase in natural gas payables of $3.1 million, which was partially offset by a decrease in trade payables of $0.8 million.

Other Non-Current Liabilities – In FY 2014, other noncurrent liabilities totaling $179.3 million, an increase of $1.9 million compared to FY 2013. The increase in FY 2014 is primarily due to the change in the value of the swap. In FY 2013, other noncurrent liabilities totaling $177.4 million decreased $29.0 million compared to FY 2012. The decrease in FY 2013 is primarily due to the favorable change in the value of the swap.

Other Financial Factors

On March 2, 2014, following a competitive bidding process, the City entered into an agreement to sell PGW to UIL Holdings Corporation, subject to authorization by City Council and the Public Utility Commission. On December 4, 2014, UIL exercised its option to withdraw from the agreement after no authorizing ordinance was introduced in City Council.

Recent Rate Filings

On December 18, 2009, PGW submitted a base rate filing with the PUC (1) to maintain the $60.0 million base rate increase that the PUC granted in 2008; and (2) to fund PGW's OPEB liability in the amount of $42.5 million. PGW also moved to consolidate the Company's Demand Side Management Program, an energy efficiency and conservation plan, into the base rate filing. On May 19, 2010, PGW, along with all active parties to the proceeding, submitted a Petition for Proposed Settlement of the proceeding (the Settlement) and the PUC approved the Settlement on July 29, 2010. Under the Settlement, PGW will be permitted to maintain virtually all of the extraordinary base rate relief, will receive an incremental rate increase of $16.0 million annually, and will be required to fund $18.5 million of the OPEB liability in each of the years 2011 through 2015. The Settlement also permitted the implementation of the Demand Side Management Program.

Defeasance and Remarketing of Debt

On August 28, 2012, the Company defeased $20.2 million of principal for bonds issued under the 1998 General Ordinance with internally generated funds. The defeased bonds were for these respective series and amounts: Fourth Series – $3.1 million, Fifth Series – $2.9 million, Seventh Series – $6.1 million, Eighth Series A – $5.3 million, and Ninth Series – $2.8 million.

On September 1, 2011, the City defeased $29.5 million of the Eighth Series variable rate Bonds utilizing internally generated funds. As a result of this defeasance, a portion of the related interest rate swap agreement was terminated. The termination payment was approximately $7.0 million. Concurrently, the letters of credit for the Eighth Series B, C, and D Bonds were extended and the Series E letter of credit was replaced. The remaining Eighth Series Bonds in the amount of $225.5 million were then remarketed, with the remaining aggregate principal being reallocated among the Eighth Series B Bonds ($50.3 million), the Eighth Series C Bonds ($50.0 million), the Eighth Series D Bonds ($75.0 million), and Eighth Series E Bonds ($50.2 million). The related swap agreement was amended to reflect these new notional amounts for each of the issuances.

Refunding of Bonds

On September 28, 2011, the City issued Gas Works Revenue Bonds, Twentieth Series (1975 General Ordinance) in the amount of $16.2 million for the purpose of refunding the entire Sixteenth Series Bond (1975 General Ordinance), and paying the costs of issuing the bonds. The Twentieth Series Bonds, with fixed interest rates that range from 2.0% to 5.0%, have maturity dates through 2015.

On September 28, 2011, the City issued Gas Works Revenue Bonds, Tenth Series (1998 General Ordinance) in the amount of $72.6 million for the purpose of refunding the entire First Series A, First Series C, Second Series, and

Third Series Bonds (1998 General Ordinance), and paying the costs of issuing the bonds. The Tenth Series Bonds, with fixed interest rates that range from 3.0% to 5.0%, have maturity dates through 2026.

Impact of New Accounting Pronouncement

As discussed in note 10 to the financial statements, the Company currently does not reflect a net pension obligation on its balance sheet because the annual required contribution has been made each year. GASB No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*, is effective for the Company's fiscal year ending August 31, 2015. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for pensions. This Statement will result in the Company's net pension liability being reflected on the balance sheet, measured as the portion of the present value of projected benefit payments to be provided to current and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. Under this new pronouncement, the unfunded actuarial liability for the plan is approximately $205.2 million at August 31, 2014.

Contacting the Company's Financial Management

This financial report is designed to provide the citizens of Philadelphia, customers, investors, and creditors with a general overview of PGW's finances and to demonstrate PGW's accountability for the money it receives. If you have questions pertaining to this report or need additional financial information, please contact Philadelphia Gas Works, 800 W. Montgomery Avenue, Philadelphia, PA 19122 or on the Web at www.pgworks.com.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Balance Sheets

August 31, 2014 and 2013

(Thousands of U.S. dollars)

Assets		2014	2013
Current assets:			
Cash and cash equivalents	$	105,734	100,933
Cash designated for capital expenditures		10,000	—
Accounts receivable (net of provision for uncollectible accounts of $107,349 and $105,577 for 2014 and 2013, respectively)		101,457	97,749
Gas inventories, materials, and supplies		69,989	80,234
Capital improvement fund		—	44,055
Workers' compensation escrow fund		2,597	2,597
Health insurance escrow fund		3,223	3,223
Other current assets		19,221	16,196
Total current assets		312,221	344,987
Noncurrent assets:			
Utility plant, at original cost:			
In service		2,018,234	1,951,546
Under construction		57,206	44,409
Total		2,075,440	1,995,955
Less accumulated depreciation		881,888	840,968
Utility plant, net		1,193,552	1,154,987
Unamortized bond insurance costs		14,136	15,736
Sinking fund, revenue bonds		105,909	105,280
Other noncurrent assets		37,528	33,097
Total noncurrent assets		1,351,125	1,309,100
Total assets		1,663,346	1,654,087
Deferred outflows of resources			
Accumulated fair value of hedging derivatives		18,879	12,059
Unamortized losses on reacquired debt		37,051	44,868
Total assets and deferred outflows of resources	$	1,719,276	1,711,014

(Continued)

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Balance Sheets

August 31, 2014 and 2013

(Thousands of U.S. dollars)

Liabilities and Net Position		2014	2013
Current liabilities:			
Current portion of revenue bonds	$	53,227	52,406
Accounts payable		58,888	59,379
Customer deposits		2,245	2,305
Other current liabilities		19,321	9,107
Accrued accounts:			
Interest, taxes, and wages		14,646	14,823
Distribution to the City		3,000	3,000
Total current liabilities		151,327	141,020
Noncurrent liabilities:			
Long-term revenue bonds		980,749	1,033,976
Other noncurrent liabilities		179,265	177,431
Total noncurrent liabilities		1,160,014	1,211,407
Net position:			
Net investment in capital assets		159,576	112,660
Restricted (debt service)		111,729	111,100
Unrestricted		136,630	134,827
Total net position		407,935	358,587
Total liabilities and net position	$	1,719,276	1,711,014

See accompanying notes to basic financial statements.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Statements of Revenues and Expenses and Changes in Net Position

Years ended August 31, 2014 and 2013

(Thousands of U.S. dollars)

	2014	2013
Operating revenues:		
Gas revenues:		
Nonheating	$ 39,610	35,262
Gas transport service	41,217	37,078
Heating	655,311	602,814
Total gas revenues	736,138	675,154
Appliance and other revenues	8,317	8,333
Other operating revenues	14,681	9,984
Total operating revenues	759,136	693,471
Operating expenses:		
Natural gas	304,051	255,501
Gas processing	19,637	17,592
Field services	37,577	34,926
Distribution	36,929	30,259
Collection and account management	11,273	11,297
Provision for uncollectible accounts	38,848	39,971
Customer services	11,187	11,102
Marketing	7,783	6,789
Administrative and general	85,872	78,206
Pensions	24,521	23,614
Other postemployment benefits	11,228	16,492
Taxes	7,687	7,220
Total operating expenses before depreciation	596,593	532,969
Depreciation	47,428	45,912
Less depreciation expense included in operating expenses above	5,771	4,870
Net depreciation	41,657	41,042
Total operating expenses	638,250	574,011
Operating income	120,886	119,460
Interest and other income	3,597	1,147
Income before interest expense	124,483	120,607
Interest expense:		
Long-term debt	48,261	49,655
Other	9,380	10,740
Allowance for funds used during construction	(506)	(430)
Total interest expense	57,135	59,965
Distribution to the City of Philadelphia	(18,000)	(18,000)
Excess of revenues over expenses	49,348	42,642
Net position, beginning of year	358,587	315,945
Net position, end of year	$ 407,935	358,587

See accompanying notes to basic financial statements.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Statements of Cash Flows

Years ended August 31, 2014 and 2013

(Thousands of U.S. dollars)

		2014	2013
Cash flows from operating activities:			
Receipts from customers	$	724,500	657,900
Payments to suppliers		(458,344)	(406,932)
Payments to employees		(114,366)	(109,260)
Claims paid		(2,965)	(3,307)
Other receipts		17,300	9,700
Net cash provided by operating activities		166,125	148,101
Cash flows from noncapital financing activities:			
Interest and fees		1,049	(2,084)
Distribution to the City of Philadelphia		(18,000)	(18,000)
Net cash used in noncapital financing activities		(16,951)	(20,084)
Cash flows from capital and related financing activities:			
Purchases of capital assets		(80,222)	(70,380)
Principal paid on long-term debt		(49,800)	(27,720)
Interest paid on long-term debt		(48,540)	(50,111)
Drawdowns on capital improvement fund		34,055	44,783
Interest income (loss) on capital improvement fund		(23)	132
Interest income (loss) on sinking fund		(349)	(44)
Other investment income		506	430
Net cash used in capital and related financing activities		(144,373)	(102,910)
Net increase in cash and cash equivalents		4,801	25,107
Cash and cash equivalents at the beginning of the year		100,933	75,826
Cash and cash equivalents at the end of the year	$	105,734	100,933
Reconciliation of operating income to net cash provided by operating activities:			
Operating income	$	120,886	119,460
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation and amortization expense		41,658	41,042
Provision for uncollectible accounts		38,848	39,971
Change in assets and liabilities:			
Receivables, net		(42,556)	(55,723)
Gas inventories, materials, and supplies		10,245	852
Other current assets		(3,026)	10,744
Other assets		(11,250)	20,552
Accounts payable		(491)	2,253
Customer deposits		(60)	(144)
Other current liabilities		10,214	(1,159)
Accrued accounts		(177)	(732)
Other liabilities		1,834	(29,015)
Net cash provided by operating activities	$	166,125	148,101

See accompanying notes to basic financial statements.

(1) Summary of Significant Accounting Policies

The accounting methods employed by the Philadelphia Gas Works (the Company or PGW) are in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and are in conformity with City of Philadelphia (the City) reporting requirements.

As described in note 2, the Company is a component unit of the City, and consequently follows accounting principles promulgated by the Governmental Accounting Standards Board (GASB) as they apply to proprietary fund-type activities. Under the Regulated Operations guidance within GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements (GASB 62)*, assets or liabilities may be created by certain actions of regulatory bodies.

The principal accounting policies within this framework are described as follows:

(a) Regulation

Prior to July 1, 2000, the Company was under the regulatory jurisdiction of the Philadelphia Gas Commission (PGC). The PGC had the authority to set the Company's rates and tariffs. The PGC also approved the Company's annual Operating Budget and reviewed the Company's Capital Budget prior to approval by the City Council of the City (City Council).

Effective July 1, 2000, and pursuant to the passage of the Pennsylvania Natural Gas Choice and Competition Act (the Act), the Company came under the regulatory jurisdiction of the Pennsylvania Public Utility Commission (PUC). Under the PUC's jurisdiction, the Company filed a restructuring plan on July 1, 2002, which among other things, provided for an unbundled tariff permitting customer choice of the commodity supplier by September 1, 2003. Under the Act, the PUC is required to follow the "same ratemaking methodology and requirements" that were previously applicable to the PGC when determining the Company's revenue requirements and approving overall rates and charges. The PGC continues to approve the Company's Operating Budget and review its Capital Budget. The Company's Capital Budget must be approved by City Council.

The Company, as of September 1, 2003, is operating under its Restructuring Compliance Tariff. The Restructuring Compliance Tariff Rates are designed to maintain revenue neutrality and the Tariff Rules and Regulations are designed to comport with the Pennsylvania Public Utility Code.

(b) Operating Budget

On May 23, 2014, PGW filed a proposed Fiscal Year (FY) 2015 Operating Budget with the PGC. The PGC Hearing Examiners conducted Informal Discovery (ID) sessions beginning on June 9, 2014 and an additional ID meeting took place on June 24, 2014. On July 23, 2014, a public hearing was convened by the Hearing Examiners to address PGW's Operating Budget. On August 19, 2014, a recommended decision was rendered by the Hearing Examiners, which proposed adjustments to the Operating Budget as filed. At the PGC meeting held on September 23, 2014, the PGC approved, with adjustments, PGW's FY 2015 Operating Budget. PGW filed a Compliance Budget with the PGC on October 3, 2014.

On May 24, 2013, PGW filed a proposed FY 2014 Operating Budget. After appropriate discovery and hearings, the PGC approved the FY 2014 Operating Budget on September 17, 2013.

On May 24, 2012, PGW filed a proposed FY 2013 Operating Budget. After appropriate discovery and hearings, the PGC approved the FY 2013 Operating Budget on January 16, 2013.

(c) Capital Budget

On January 2, 2014, PGW filed with the PGC its proposed FY 2015 Capital Budget in the amount of $89.2 million. The PGC's review culminated in deliberations taken at a public meeting held on April 8, 2014 whereby the PGC endorsed a FY 2015 Capital Budget in an amount not to exceed $89.5 million. The endorsed budget was approved by City Council on June 12, 2014. The Bill was signed by the Mayor on June 19, 2014.

On January 2, 2013, PGW filed with the PGC its proposed FY 2014 Capital Budget in the amount of $110.5 million. The PGC's review culminated in deliberations taken at a public meeting held on April 15, 2013 whereby the PGC endorsed a proposed FY 2014 Capital Budget in an amount not to exceed $102.5 million. The endorsed budget was approved by City Council on June 6, 2013. The ordinance was signed by the Mayor on June 17, 2013.

Subsequent to City Council's approval, the PGC endorsed a FY 2014 Capital Budget amendment in the amount of $0.4 million to support the purchase of 24 Compressed Natural Gas (CNG) sedans and a CNG refueling station. This amendment to the FY 2014 Capital Budget was approved by City Council on October 17, 2013. The Mayor signed the ordinance on October 30, 2013.

On January 6, 2014, PGW filed with the PGC a request to further amend the FY 2014 Capital Budget by $3.4 million to provide for the incremental replacement of approximately three additional miles of small diameter cast iron main. The PGC endorsed an amendment to the FY 2014 Capital Budget that inserted a new line item, Long-Term Infrastructure Plan – Accelerated Cast Iron Main for $3.4 million, and concurrently reduced two other line items that resulted in no increase in the FY 2014 Capital Budget. This second amendment was approved by City Council on June 12, 2014 and signed by the Mayor on June 19, 2014.

On January 3, 2012, PGW filed with the PGC a proposed FY 2013 Capital Budget of $93.3 million. At a public meeting held on April 19, 2012, the PGC endorsed a FY 2013 Capital Budget in the amount of $90.9 million. City Council approved PGW's FY 2013 Capital Budget on June 21, 2012. The Mayor signed the ordinance on June 27, 2012.

(d) Base Rates

On December 18, 2009, PGW submitted a base rate filing with the PUC (1) to maintain the $60.0 million base rate increase that the PUC granted in 2008 and (2) to fund PGW's Other Postemployment Benefits (OPEB) liability in the amount of $42.5 million. PGW also moved to consolidate the Company's Demand Side Management Program, an energy efficiency and conservation plan, into the base rate filing. On May 19, 2010, PGW, along with all active parties to the proceeding, submitted a Petition for Proposed Settlement of the proceeding (the Settlement) and

the PUC approved the Settlement on July 29, 2010. Under the Settlement, PGW will be permitted to maintain virtually all of the extraordinary base rate relief, will receive an incremental rate increase of $16.0 million annually, and will be required to fund $18.5 million of the OPEB liability in each of the fiscal years 2011 through 2015. The new rates were effective September 1, 2010. The Settlement also permitted the implementation of the Demand Side Management Program.

(e) Weather Normalization Adjustment Clause

The Weather Normalization Adjustment Clause (WNA) was approved by PUC Order dated August 8, 2002. The purpose of the WNA is to neutralize the impact of weather on the Company's revenues. This allows the Company to achieve the recovery of appropriate costs as authorized by the PUC. The WNA results in neither a rate increase nor a rate decrease, but acts as a billing adjustment. The main benefits of the WNA are the stabilization of cash flow and the reduction of the need for short-term borrowing from year to year. The WNA is applied to customer invoices rendered during the period of October 1st through May 31st of each year for each billing cycle. The adjustment for the year ended August 31, 2014 was a decrease in billings of $12.3 million. The WNA resulted in an increase in billings of $8.4 million for the year ended August 31, 2013.

(f) Gas Cost Rate

The Company's single greatest operating expense is the cost of natural gas. The rate charged to the Company's customers to recover these costs is called the Gas Cost Rate (GCR). The GCR reflects the increases or decreases in natural gas costs and other costs. This GCR mechanism provides the flexibility to rapidly reflect current conditions without the time delay inherent in full base rate alteration. The intent is to achieve an annual balance between the costs incurred for fuel and their pass through to customers.

At the end of the fiscal year, costs recovered through the GCR and surcharges adjustment are compared to the actual cost of fuel and other specific costs. Customers are then credited or charged for the over-recovery or under-recovery of costs. The GCR and surcharges charge/credit may be updated quarterly or in the subsequent fiscal year to reflect the under-recovery or over-recovery. Changes in the GCR impact the reported amounts of gas revenues but do not affect operating income or net income because they are passed through to the customer without markup. At August 31, 2014, approximately $15.2 million was recorded in other current assets for the GCR and surcharges under-recovery. At August 31, 2013, approximately $8.8 million was recorded in other current assets for the GCR and surcharges under-recovery. The GCR is comprised of the purchased gas costs plus the gas adjustment charge minus the interruptible revenue credit.

GCR effective dates and rates

(Amounts in U.S. dollars)

Effective date	GCR rate per Mcf*	Change
December 1, 2014	$ 5.9976	0.1306
September 1, 2014	5.8670	(0.6972)
June 1, 2014	6.5642	0.5626
March 1, 2014	6.0016	0.5543
December 1, 2013	5.4473	0.0214
September 1, 2013	5.4259	(0.6450)
June 1, 2013	6.0709	(0.3282)
March 1, 2013	6.3991	0.6668
December 1, 2012	5.7323	0.5076
September 1, 2012	5.2247	0.5118

* Mcf – thousand cubic feet

(g) Utility Plant

Utility plant is stated at original cost. The cost of additions, replacements, and betterments of units of property is capitalized and included in the utility plant accounts. The cost of property sold or retired is removed from the utility plant accounts and charged to accumulated depreciation. Normal repairs, maintenance, the cost of minor property items, and expenses associated with retirements are charged to operating expenses as incurred.

In a previous rate order, the PGC disallowed the accrual of the net negative salvage component in depreciation. Cost of removal in the amounts of $2.7 million and $2.9 million was charged to expense as incurred in FY 2014 and FY 2013, respectively, and is included in depreciation expense in the statements of revenues and expenses and changes in net position. Depreciation is calculated on an asset-by-asset basis on the estimated useful lives of plant and equipment on a straight-line method. The composite rate for FY 2014 and FY 2013 was 2.2%. The composite rates are supported by a depreciation study of utility plant as of August 2009. The effective composite depreciation rates, as a percentage of cost, for FY 2014 were as follows:

Production plant	2.19%
Transmission, distribution, and storage	2.05
General plant	3.33

The next depreciation study is scheduled to be completed in FY 2015 for the plant activity subsequent to the last depreciation study and through FY 2014.

Allowance for Funds Used During Construction (AFUDC) is an estimate of the cost of funds used for construction purposes. The AFUDC, as calculated on borrowed funds, reduces interest expense. The AFUDC rate applied to construction work in progress was 4.93% and 5.16% in FY 2014 and FY 2013, respectively.

The following is a summary of utility plant activity for the fiscal years ended August 31, 2014 and 2013 (thousands of U.S. dollars):

	August 31, 2014			
	Beginning balance	Additions and transfers	Retirements and transfers	Ending balance
Land	$ 5,595	—	—	5,595
Distribution and collection systems	1,481,218	61,971	(3,965)	1,539,224
Buildings and equipment	464,733	8,682	—	473,415
Total utility plant, at historical cost	1,951,546	70,653	(3,965)	2,018,234
Under construction	44,409	83,449	(70,652)	57,206
Less accumulated depreciation for:				
Distribution and collection systems	(701,621)	(32,274)*	3,847	(730,048)
Buildings and equipment	(139,347)	(12,493)*	—	(151,840)
Utility plant, net	$ 1,154,987	109,335	(70,770)	1,193,552

* Cost of removal of approximately $2.7 million was charged to expense as incurred in FY 2014 and is not included in accumulated depreciation.

	August 31, 2013			
	Beginning balance	Additions and transfers	Retirements and transfers	Ending balance
Land	$ 5,595	—	—	5,595
Distribution and collection systems	1,435,353	67,419	(21,554)	1,481,218
Buildings and equipment	453,181	14,438	(2,886)	464,733
Total utility plant, at historical cost	1,894,129	81,857	(24,440)	1,951,546
Under construction	53,851	72,416	(81,858)	44,409
Less accumulated depreciation for:				
Distribution and collection systems	(691,151)	(31,018)*	20,548	(701,621)
Buildings and equipment	(131,179)	(12,019)*	3,851	(139,347)
Utility plant, net	$ 1,125,650	111,236	(81,899)	1,154,987

* Cost of removal of approximately $2.9 million was charged to expense as incurred in FY 2013 and is not included in accumulated depreciation.

(h) Revenue Recognition

The Company is primarily a natural gas distribution company. Operating revenues include revenues from the sale of natural gas to residential, commercial, and industrial heating and nonheating customers. The Company also provides natural gas transportation service. Appliance and other revenues primarily consist of revenue from the Company's parts and labor repair program. Revenue from this program is recognized on a monthly basis for the life of the individual parts and labor plans. Additional revenue is generated from collection fees, reconnection charges, and bulk Liquefied Natural Gas (LNG) sales contracts. Other operating revenues primarily consist of finance charges assessed on delinquent accounts.

In early 2012, Act 11 was enacted by the Pennsylvania Legislature, which permitted public utilities to file a request with the PUC for the implementation of a Distribution System Improvement Charge (DSIC). A DSIC permits natural gas distribution companies to recover the costs related to main and service replacement not already recovered in base rates. This legislation provides utility companies with a supplemental recovery mechanism for costs related to incremental/accelerated distribution system repair, improvement, and replacement. Act 11 permits gas utilities to recover 5.0% of their nongas revenues via the recovery mechanism and permits greater percentage increases if the PUC so permits. The Company started billing customers a DSIC surcharge as of July 1, 2013. In FY 2014, the Company billed customers $19.4 million for the DSIC surcharge. In FY 2013, the Company billed

customers $0.7 million for the DSIC surcharge. The DSIC surcharge is fully reconcilable on a calendar year basis and at the fiscal year-end, the over-billed or under-billed amount is recorded as an adjustment to revenue.

The Company bills customers for the cost of natural gas and the related costs incurred through the processing, distribution, and delivery of natural gas to residential, commercial, and industrial heating and nonheating customers.

Revenue includes amounts related to gas that has been used by customers but has not yet been billed. Revenues are recognized as gas is distributed. Estimated revenues from gas distributed and unbilled, less estimated uncollectible amounts, are accrued and included in operating revenues and were $7.3 million for the years ended August 31, 2014 and 2013, respectively.

(i) Operating Expenses

The Company recognizes costs incurred as part of the Company's regular business activities on the statements of revenue and expenses and changes in net position as operating expenses. These costs include distribution, marketing, gas processing, and other similar costs.

Costs incurred that do not involve normal business operations are recognized as nonoperating expenses.

(j) Provision for Uncollectible Accounts

The Company estimates its accumulated provision for uncollectible accounts based on a financial analysis and a collectibility study performed as of the fiscal year-end. The methodology used in performing the collectibility study has been reviewed by the PGC. For FY 2014 and FY 2013, management has provided an accumulated provision for uncollectible accounts in excess of the collectibility study results based on its analysis of historical aging data. The actual results of the Company's collection efforts could differ significantly from the Company's estimate.

Due to the seasonal nature of the business, the Company carries credit balances in accounts receivable primarily as a result of prepayment by budget customers. Credit balances of $16.5 million and $17.0 million for FY 2014 and FY 2013, respectively, have been reclassified to accounts payable.

(k) Gas Inventories, Materials, and Supplies

Gas inventories, materials, and supplies, consisting primarily of fuel stock, gases stored to meet peak demand requirements, and spare parts, are stated at average cost at August 31, 2014 and 2013, as follows (thousands of U.S. dollars):

		2014	2013
Gas inventory	$	60,089	70,638
Material and supplies		9,900	9,596
Total	$	69,989	80,234

(l) Unamortized Bond Insurance Costs, Debt Discount, and Premium

Discounts or premiums and bond insurance costs arising from the sale of revenue bonds are amortized using the interest method over the term of the related bond issue. Other costs of bond issuance are expensed as incurred.

(m) Unamortized Losses on Reacquired Debt

Losses on reacquired debt are recorded as deferred outflows of resources and amortized, using the interest method, to interest expense over the shorter of the life of the refunding bond issue or the remaining original amortization period.

(n) Pensions and Postemployment Benefits

The City sponsors a single employer defined-benefit pension plan, the Philadelphia Gas Works Pension Plan (the Pension Plan) to provide pension benefits for all of PGW's employees. In December 2011, the Pension Plan was amended by Ordinance and a new deferred compensation plan was authorized by Ordinance as well. Newly hired employees have an irrevocable option to join either a new deferred compensation plan created in accordance with Internal Revenue Code Section 401 or the existing defined benefit plan. The defined-contribution plan provides for an employer contribution equal to 5.5% of applicable wages. The defined benefit plan provides for a newly hired employee contribution equal to 6.0% of applicable wages. The Ordinance did not affect the retirement benefits of active employees, current retirees and beneficiaries, or terminated employees entitled to benefits but not yet receiving them. The Pension Plan covers all employees and provides for retirement payments for vested employees at age 65 or earlier under various options, which includes a disability pension provision, a preretirement spouse or domestic partner's death benefit, a reduced pension for early retirement, various reduced pension payments for the election of a survivor option, and a provision for retirement after 30 years of service without penalty for reduced age. In accordance with Resolutions of the PGC, Ordinances of City Council, and as prescribed by the City's Director of Finance, the Pension Plan is being funded with contributions by the Company to the Sinking Fund Commission of the City. Management believes that the Pension Plan is in compliance with all applicable laws.

The Company sponsors a single employer defined benefit healthcare plan and provides postemployment healthcare and life insurance benefits in accordance with their retiree medical program to 2,053 and 2,044 retirees, their beneficiaries, and dependents for FY 2014 and FY 2013, respectively. The Company also offers such benefits to 1,631 and 1,636 active employees and their dependents for FY 2014 and FY 2013, respectively, by charging the annual insurance premiums to expense.

The difference between the annual OPEB cost (AOC) and the Company's contributions results in an increase or decrease to the net OPEB obligation, which is recorded in other noncurrent liabilities and expensed.

(o) Cash and Cash Equivalents

For the purpose of reporting cash and cash equivalents, all highly liquid investments with original maturities of three months or less are considered cash equivalents, except those held for long-term purposes in the Sinking Fund, Capital Improvement Fund, Workers' Compensation Escrow Fund, and Health Insurance Escrow Fund as described in note 3.

Cash designated for capital expenditures consisted of cash held by the Company, which was segregated into separate accounts that are not contractually restricted but, based on the Company's intention, are not available for the payment of general corporate obligations. These amounts will be utilized by the Company in the future for capital expenditures.

(p) Reserve for Injuries and Damages

The Company is principally insured through insurance carriers. However, the Company is required to cover settlement of claims, which are excluded under the provisions of such insurance policies. An estimated liability has been established, in accordance with PGC regulations, for settlements to be paid by the Company in the next fiscal year.

Estimated losses from claims for occurrences not covered by insurance, which will not be paid in the next fiscal year, have been accrued. Such liabilities have been established based upon Company history and consultation with counsel. Such expenses are expected to be recovered through future rates. Reductions to the reserve are made as claims are settled.

(q) Segment Information

All of the Company's assets and operations are employed in only one segment, local transportation and distribution of natural gas in the City.

(r) Estimates

In preparing the financial statements in conformity with U.S. GAAP, management uses estimates. The Company has disclosed in the financial statements all estimates where it is reasonably possible that the estimate will change in the near term and the effect of the change could be material to the financial statements.

(s) Pollution Remediation

Under Pennsylvania Act 2*, Land Recycling and Environmental Remediation Standards Act of 1995* (Act 2), the Notice of Intent to Remediate (NIR) process was conducted by the Company in October 2004 and a total of four Public Involvement Plan meetings were conducted at multiple City Recreation Centers throughout Philadelphia during February and March 2005. In March 2005 (after the public meetings were conducted), the Company submitted a series of five Remedial Investigation Reports (RIRs) to the Act 2 for review. In July 2005, the Act 2 program approved all five RIRs submitted in March 2005.

The Company estimates its pollution remediation obligations using the effective cash flow method, in which measurement is based on the outlays expected to be incurred as a sum of probability-weighted

amounts in a range of possible estimated amounts. The Company's liability is based on a combination of internal and external cost estimates for the specific remediation activities agreed to as part of Act 2 and Pennsylvania Act 32, *Storage Tank and Spill Prevention Act of 1989* (Act 32).

Estimated site liabilities are determined based upon existing remediation laws and technologies, specific site consultants' engineering studies, or by extrapolating experience with environmental issues at comparable sites. Estimates may change substantially as additional information becomes available regarding the level of contamination at specific sites, available remediation methods, and changes in price, technology, proposed land use, or applicable regulations.

The Company recorded an additional liability for pollution remediation obligations of $4.0 million and $0.5 million for FY 2014 and FY 2013, respectively. The pollution remediation liability is reflected in other noncurrent liabilities and in other current liabilities. In accordance with U.S. GAAP for regulated entities, the Company has also recognized the long-term portion of its environmental remediation liability as a regulatory asset because based on available evidence it is probable that the previously incurred costs will be recovered through rates.

(t) Reclassifications

Certain prior-year amounts have been reclassified for comparative purposes. Specifically, the annual distribution to the City has been reclassified from an equity reduction to a nonoperating expense.

(u) New Accounting Pronouncements

As discussed in note 10, the Company currently does not reflect a net pension obligation on its balance sheet because the annual required contribution has been made each year. GASB No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*, is effective for the Company's fiscal year ending August 31, 2015. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for pensions. This Statement will result in the Company's net pension liability being reflected on the balance sheet, measured as the portion of the present value of projected benefit payments to be provided to current and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. Under this new pronouncement, the unfunded actuarial liability for the plan is approximately $205.2 million at August 31, 2014.

(2) Ownership and Management and Related-Party Transactions and Balances

The Company is a component unit of the City. As of January 1, 1973, under the terms of a two-year agreement automatically extended for successive two-year periods unless canceled upon 90 days notice by the City, the Company is being managed by the Philadelphia Facilities Management Corporation (PFMC). The agreement, as amended, provides for reimbursement to PFMC of actual costs incurred in managing the Company, not to exceed a total of the prior fiscal year's maximum amount adjusted to reflect the percentage change in the Consumer Price Index for All Urban Consumers (CPI-U) All Items Index, Philadelphia, Pennsylvania, United States Department of Labor, Bureau of Labor Statistics, as most recently published and available to the Director of Finance of the City on March 1 of each such fiscal year. In FY 2014 and FY 2013, the applicable maximum amount was calculated to be $1.2 million. The agreement requires the

Company to make annual payments of $18.0 million to the City. In FY 2014 and FY 2013, the Company made the annual payment of $18.0 million to the City.

The Company engages in various other transactions with the City. The Company provides gas service to the City. Operating revenues include $7.5 million and $7.3 million in FY 2014 and FY 2013, respectively, relating to sales to the City. Net amounts receivable from the City were $0.2 million at August 31, 2014 and 2013. Water and sewer services and licenses are purchased from the City. Such purchases totaled $1.4 million and $0.9 million in FY 2014 and FY 2013, respectively.

Certain activities of the PGC are paid for by the Company. Such payments totaled $0.8 million in both FY 2014 and FY 2013.

(3) Cash and Cash Equivalents, and Investments

(a) Cash and Cash Equivalents

Cash and cash equivalents consist primarily of bank deposits, money market accounts, and investments purchased through various brokerage relationships. Bank balances of such deposits, accounts, and investments at August 31, 2014 and 2013 were $105.3 million and $100.8 million, respectively. Book balances of such deposits and accounts at August 31, 2014 and 2013 were $105.7 million and $100.9 million, respectively. Federal depository insurance on these balances at August 31, 2014 and 2013 was $0.5 million. The remaining balances are not insured. Investments are primarily in money market accounts, U.S. Treasury bills, U.S. government agencies and instrumentalities, and corporate obligations (short-term investments).

The highest balance of short-term investments during FY 2014 and FY 2013 was $102.6 million and $85.0 million, respectively. Short-term investments with a carrying amount (at fair value) of $102.6 million and $84.2 million at August 31, 2014 and 2013, respectively, are included in the balances presented above.

PGW transferred $10.0 million from short-term investments to cash designated for capital expenditures at the end of FY 2014. These unexpended funds were designated for the purchase of utility plant. In FY 2014 and FY 2013, the Company utilized the Capital Improvement Fund to provide liquidity for the additions to utility plant.

(b) Sinking Fund, Capital Improvement Fund, Workers' Compensation Escrow Fund, and Health Insurance Escrow Fund

The investments in the Company's Sinking Fund, Capital Improvement Fund, Workers' Compensation Escrow Fund, and Health Insurance Escrow Fund consist primarily of U.S. Treasury and government agency obligations, corporate obligations, and money market accounts. These investments are maintained by the City or in the Company's name by its agent. The balance of the Capital Improvement Fund at August 31, 2014 and 2013 was $0.0 million and $44.1 million, respectively.

Investments are recorded at fair value except for certain money market funds recorded at amortized cost. The adjustment to market value for the Capital Improvement Fund resulted in no gain or loss in

FY 2014 and a loss of $0.1 million in FY 2013. The adjustment to market value for the Sinking Fund resulted in a gain of $0.3 million in FY 2014 and a loss of $0.2 million in FY 2013.

Pursuant to the Pennsylvania Department of Labor and Industry Bureau of Workers' Compensation Self-Insurance policy, the Company has established and maintained a restricted trust account. As of August 31, 2014 and 2013, the trust account balances were $2.6 million.

PGW is self-insured for the healthcare for active employees and retirees under the age of 65. Retirees over the age of 65 are insured on an experience rated basis. The self-insured model requires the Company to establish and maintain a restricted escrow account.

The balance in the Health Insurance Escrow Fund was $3.2 million as of August 31, 2014 and 2013.

The following is a schedule that details the Company's investments in the Capital Improvement Fund for FY 2013 (thousands of U.S. dollars). There was no balance at the end of FY 2014:

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
U.S. government obligations:				
U.S. Treasury notes	$ 1,700	0.0333	AAA/AA+	Moody's/S&P
U.S. government agencies and instrumentalities:				
Federal National Mortgage Association medium term notes	6,313	0.3000	AAA/AA+	Moody's/S&P
Federal Home Loan Bank bonds	8,962	0.1881	AAA/AA+	Moody's/S&P
Federal Home Loan Mortgage Corporation medium term notes	6,629	0.3698	AAA/AA+	Moody's/S&P
Federal Farm Credit Bank bonds	2,311	0.4917	AAA/AA+	Moody's/S&P
Federal Home Loan Banks discount notes	100	0.0889		Moody's/S&P
Federal National Mortgage Association discount notes	1,980	0.0285	AAA/AA+	Moody's/S&P
Total U.S. government agencies and instrumentalities	26,295			

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Corporate obligations:				
New York Life Global Funding	$ 924	0.2861	AAA/AA+	Moody's/S&P
Berkshire Hathaway Financial	281	0.3203	AA2/AA+	Moody's/S&P
Massmutual Global Funding	254	0.3203	AA2/AA+	Moody's/S&P
XTO Energy Inc	913	0.2917	AAA/AAA	Moody's/S&P
Walmart Stores	283	0.3697	AA2/AA	Moody's/S&P
Microsoft	500	0.2917	AAA/AAA	Moody's/S&P
Total corporate obligations	3,155			
Foreign issues:				
Shell International Financial	734	2.5623	AA1/AA	Moody's/S&P
Total fair value of investments	31,884			
Money market:				
First American Prime Obligations Class Z	12,010	—	*	*
Morgan Stanley Prime Portfolio Institutional Class	100	—	*	*
Total money market	12,110			
Other	61	—	*	*
Total fair value of investments, including cash deposits	$ 44,055			
Portfolio weighted modified duration		0.2752		

* The credit of this investment is unrated.

The following is a schedule that details the Company's investments in the Sinking Fund (thousands of U.S. dollars):

	August 31, 2014			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
U.S. government obligations:				
U.S. Treasury notes	$ 26,837	7.1615	AAA/AA+	Moody's/S&P
U.S. government agencies and instrumentalities:				
Federal National Mortgage Association medium term notes	9,390	0.6125	AAA/AA+	Moody's/S&P
Federal Home Loan Mortgage Corporation medium term notes	7,513	1.3230	AAA/AA+	Moody's/S&P
Federal Home Loan Bank bonds	5,770	0.1889	AAA/AA+	Moody's/S&P
Federal Home Loan Bank discounted notes	915	0.1763	AAA/AA+	Moody's/S&P
Federal Farm Credit Bank bonds	11,304	0.6389	AAA/AA+	Moody's/S&P
Federal National Mortgage Corporation Debt Securities	7,525	1.6167	AAA/AA+	Moody's/S&P
Total U.S. government agencies and instrumentalities	42,417			
Total fair value of investments	69,254			
Corporate obligations:				
Walmart Stores	1,269	2.5036	AA2/AA	Moody's/S&P
National Australia Bank NY	2,598	3.3868	AA2/AA	Moody's/S&P
General Electric Capital Corporation	1,596	5.8879	A1/AA+	Moody's/S&P
Berkshire Hathaway Financial	537	1.4311	AA2/AA	Moody's/S&P
Total corporate obligations	6,000			

	August 31, 2014			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Foreign issues:				
Bank of Nova Scotia	$ 2,961	1.9396	AA2+/A+	Moody's/S&P
Total Capital S.A.	3,070	5.7167	AA1+/AA-	Moody's/S&P
Westpac Banking Corporation	1,788	2.7128	AA2+/AA-	Moody's/S&P
Total foreign issues	7,819			
State Obligations:				
Pennsylvania ST Second Ser	762	—	AA3/AA	Moody's/S&P
Cash and cash equivalents:				
Credit Agricole N A commercial paper	2,250	—	*	*
BNP Paribus Finance Inc commercial paper	2,074	—	*	*
Rabobank USA Financial Corporation commercial paper	2,124	—	*	*
UBS Finance Delaware commercial paper	2,072	—	*	*
Toyota Motor Credit Corporation commercial paper	1,798	—	*	*
HSBC Americas Inc commercial paper	3,225	—	*	*
JP Morgan Securities commercial paper	2,748	—	*	*
Societe Generale NA C P	2,900	—	*	*
Deutsche Bank Financial LLC commercial paper	2,574	—	*	*
Money market:				
First American Government Obligations Fund Class Z	131	—	*	*
Total cash and cash equivalents	21,896			

	August 31, 2014			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Other	$ 177	—	*	*
Total fair value of investments, including cash deposits	$ 105,908			
Portfolio weighted modified duration		0.7673		

* The credit of this investment is unrated.

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
U.S. government obligations:				
U.S. Treasury notes	$ 60,705	0.9007	AAA/AA+	Moody's/S&P
U.S. government agencies and instrumentalities:				
Federal National Mortgage Association medium term notes	12,979	1.4567	AAA/AA+	Moody's/S&P
Federal Home Loan Bank bonds	9,689	1.1265	AAA/AA+	Moody's/S&P
Federal Farm Credit Bank bonds	4,005	1.5111	AAA/AA+	Moody's/S&P
Total U.S. government agencies and instrumentalities	26,673			
Total fair value of investments	87,378			

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Corporate obligations:				Moody's/S&P
Walmart Stores	$ 2,302	0.1906	AA2/AA	
Berkshire Hathaway Financial	550	0.1696	AA2/AA	Moody's/S&P
General Electric Capital Corporation	1,840	0.1938	A1/AA+	Moody's/S&P
Total corporate obligations	4,692			
State obligations:				
Pennsylvania ST Second Ser	797	—	AA2/AA	Moody's/S&P
Cash and cash equivalents:				
Bank of Tokyo Mitsubishi commercial paper	2,802	—	*	*
BNP Paribus Finance Inc commercial paper	2,074	—	*	*
Rabobank USA Financial Corporation commercial paper	2,818	—	*	*
UBS Finance Delaware commercial paper	2,072	—	*	*
Toyota Motor Credit Corporation commercial paper	1,199	—	*	*
General Electric Capital Corporation commercial paper	1,275	—	*	*
Money market:				
First American Government Obligations Fund Class Z	173	—	*	*
Total cash and cash equivalents	12,413			
Total fair value of investments, including cash deposits	$ 105,280			
Portfolio weighted modified duration		1.0442		

* The credit of this investment is unrated.

The following is a schedule that details the Company's investments in the Workers' Compensation Escrow Fund (thousands of U.S. dollars):

	August 31, 2014			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Money market:				
Fidelity Governmental Fund	$ 2,597	—	*	*
Total fair value of investments, including cash deposits	$ 2,597			

* The credit of this investment is unrated.

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Money market:				
Fidelity Governmental Fund	$ 2,597	—	*	*
Total fair value of investments, including cash deposits	$ 2,597			

* The credit of this investment is unrated.

The following is a schedule that details the Company's investments in the Health Insurance Escrow Fund (thousands of U.S. dollars):

	August 31, 2014			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Money market:				
Fidelity Governmental Fund	$ 3,223	—	*	*
Total fair value of investments, including cash deposits	$ 3,223			

* The credit of this investment is unrated.

	August 31, 2013			
Investment type	**Fair value**	**Weighted average maturity (years)**	**Credit rating**	**Rating agency**
Money market:				
Fidelity Governmental Fund	$ 3,223	—	*	*
Total fair value of investments, including cash deposits	$ 3,223			

* The credit of this investment is unrated.

(c) Interest Rate Risk

It is the policy of the City to diversify its investment portfolios. Portfolio diversification is employed as a way to control risk. Investments shall be diversified as to maturities, and as to kind of investments to minimize the risk of loss, which might result from over concentration of assets in a specific maturity, in a specific kind of a security, or from a specific issuer or industry.

(d) Credit Risk

The City has adopted an investment policy relating to the investments of the Company. Per the investment policy, the Company's allowable investments are: (1) bonds or notes of the U.S. government; (2) U.S. Treasury obligations, including separate trading of registered interest and

principal securities (STRIPS); receipts indicating an undivided interest in such U.S. Treasury obligations; and stripped coupons held under book-entry with the New York Federal Reserve Bank; (3) obligations of the following U.S. government-sponsored agencies; Government National Mortgage Association, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, Federal Farm Credit System, Federal Home Loan Bank, Resolution Funding Corporation, and Tennessee Valley Authority; (4) collateralized banker's acceptances and certificate of deposit denominated in U.S. dollars and issued by a city code authorized depository certificate of deposit must be secured by acceptable collateral with a total market value equal to 102.0% of the deposit; (5) commercial paper with a stated maturity of 270 days or less, which is rated P1 by Moody's or A1+ by Standard & Poor's (S&P). The senior long-term debt of the commercial paper issuer, or the entity providing and explicit guarantee, must be rated not lower than A2 by Moody's or A by S&P; (6) asset-backed commercial paper (ABCP), which does not have a long-term rating, is an allowable investment if it meets the short-term rating requirements but is only allowed up to the ABCP sublimit; (7) general obligation bonds of corporations rated Aa2 or better by Moody's or AA or better by S&P with a final maturity of two years or less; (8) collateralized mortgage obligations and pass-through securities directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States and with a final maturity of two years or less, the rating must be no lower than Aa2 by Moody's or AA by S&P; (9) money market mutual funds, as defined by the Securities and Exchange Commission money markets funds must have assets over $15 billion, have the highest rating from Moody's, S&P, and Fitch, and contain only government securities; (10) repurchase agreements that are fully collateralized in bonds or notes of the U.S. government pledged to the City and held in the City's name and deposited at the time the investment is made with an entity or a third party selected and approved by the City the market value of the collateral shall be at least 102.0% of the funds being disbursed; and (11) obligations of the Commonwealth of Pennsylvania (the Commonwealth) or any municipality or other political subdivision of the Commonwealth with a final maturity of two years or less and a rating of at least AA by Moody's or S&P.

Authorized investments for Sinking Fund Portfolios are dictated by the First Class City Revenue Bond Act of the General Assembly of the Commonwealth of Pennsylvania, approved October 18, 1972. This also includes any investment vehicle permitted for any Commonwealth state agency.

The Company's investment policy provides for the following percentage limitations of authorized investments, valued at market:

	Percent of portfolio allowed	Percent of portfolio per issuer	Percent of outstanding securities per issuer
U.S. government	100%	100%	N/A
U.S. Treasury	100	100	N/A
U.S. Agencies	100	33	N/A
Certificates of Deposit			
Banker's Acceptances, Eurodollar Deposits, and Euro Certificates of Deposit	15	3	—
Commercial Paper	25	3	3%
Corporate Bonds	25	3	3
Collateralized Mortgage Obligation and Passthroughs	5	3	3
Money Market Mutual Funds	25	10	3
Repurchase Agreements	25	10	N/A

More than 47.2% of the Company's investments as of August 31, 2014 are in the following: Federal Home Loan Mortgage Corporation medium term notes (12.2%), Freddie Discounts (14.0%), and Federal Home Loan Bank bonds (21.0%). These investments are in accordance with the City's investment policy.

(e) Custodial Credit Risk

The Company has selected, as custodial bank, a member of the Federal Reserve System to hold its investments. Delivery of the applicable investment documents to the Company's custodian is required for all investments. For secured transactions, such as repurchase agreements, either the title to or a perfected security interest in the securities, along with any necessary transfer documents, must be transferred to the custodian. Such transactions will always use delivery versus payment procedures.

(4) Recoverable Costs

In compliance with orders issued by the PGC, the cost of projects that produce benefits over an extended period is recorded on the balance sheet as a recoverable cost in other assets. There is no return on the asset being charged to the customers. There were no unamortized costs included in other assets as of August 31, 2014 and 2013. There were no unamortized costs in other current assets at August 31, 2014. The unamortized costs included in other current assets were $0.2 million as of August 31, 2013.

In accordance with U.S. GAAP for regulated entities, the Company has recognized the long-term portion of its environmental remediation liability as a regulatory asset because based on available evidence it is probable that the previously incurred costs will be recovered through rates. In FY 2014, settlements by the

Company's insurance carriers provided less than $0.1 million associated with environmental remediation costs. Environmental remediation costs of approximately $0.6 million in FY 2014 were offset by these insurance settlements, and the remainder was recorded on the balance sheet as a recoverable cost in other assets. The Company estimates additional expenditures to be approximately $34.7 million.

(5) Deferred Compensation Plan

The Company offers its employees a deferred compensation plan (the Plan) created in accordance with Internal Revenue Code Section 457. The Plan, available to all Company employees with at least 30 days of service, permits them to defer a portion of their salary until future years. The Company provides an annual 10.0% matching contribution of applicable wages that immediately vests to the employee. The Company contributed $0.4 million in FY 2014 and $0.3 million in FY 2013.

(6) Notes Payable

Pursuant to the provisions of certain ordinances and resolutions of the City, the Company may sell short-term notes in a principal amount that, together with interest, may not exceed $150.0 million outstanding at any time. These notes are intended to provide additional working capital. They are supported by irrevocable letters of credit and a subordinated security interest in the Company's revenues.

The commitment amount is $120.0 million under the current credit agreements. The expiration date of the credit agreements is August 14, 2017.

There were no outstanding notes payable at August 31, 2014 and 2013.

Commercial paper activity for the year ended August 31, 2014 was as follows (thousands of U.S. dollars):

	Year ended August 31, 2014			
	Beginning balance	Additions	Deletions	Ending balance
Commercial paper	$ —	400	400	—

(7) GCR Tariff Reconciliation

During the fiscal year ended August 31, 2014, the Company's actual gas costs were above its billed gas costs by approximately $13.4 million. This amount was recorded in other current assets for FY 2014. Actual gas costs were $6.9 million lower than billed gas costs in FY 2013.

Natural Gas Pipeline Supplier Refund

The Company received refunds including interest of approximately $4.5 million in FY 2014 and $0.1 million in FY 2013, related to Federal Energy Regulatory Commission (FERC)/Pipeline Rate Cases. This amount was utilized as a reduction in the cost of gas for reconciliation purposes in the calculation of the applicable GCR.

(8) Long-Term Debt and Other Liabilities

The following summary of long-term debt consists primarily of bonds issued by the City under agreements whereby the Company must reimburse the City for the principal and interest payments required by the bond ordinances for the fiscal years ended August 31, 2014 and 2013 (thousands of U.S. dollars):

	August 31, 2014			August 31, 2013		
	Current portion	Long-term	Total	Current portion	Long-term	Total
Revenue bonds	$ 50,975	964,945	1,015,920	49,800	1,015,920	1,065,720
Unamortized discount	(234)	(1,926)	(2,160)	(248)	(2,160)	(2,408)
Unamortized premium	2,486	17,730	20,216	2,854	20,216	23,070
Total revenue bonds	$ 53,227	980,749	1,033,976	52,406	1,033,976	1,086,382

The following is a summary of activity related to revenue bonds and other liabilities and the respective balances for the fiscal years ended August 31, 2014 and 2013 (thousands of U.S. dollars):

	Year ended August 31, 2014			
	Beginning balance	Additions	Reductions	Ending balance
Revenue bonds	$ 1,065,720	—	(49,800)	1,015,920
Other liabilities:				
Claims and judgments	5,486	—	(270)	5,216
Environmental clean-up	29,522	3,977	—	33,499
Other postemployment benefits	109,060	—	(7,272)	101,788
Interest rate swap liability	33,363	5,399	—	38,762
Other current liabilities	9,107	10,214	—	19,321
Total other liabilities	186,538	19,590	(7,542)	198,586
Less current portion	9,107	10,214	—	19,321
Total other non-current liabilities	$ 177,431	9,376	(7,542)	179,265

	Year ended August 31, 2013			
	Beginning balance	Additions	Reductions	Ending balance
Revenue bonds	$ 1,093,440	—	(27,720)	1,065,720
Other liabilities:				
Unamortized balance of Guaranteed Investment Contract in Sinking Fund	5,309	—	(5,309)	—
Claims and judgments	3,438	2,048	—	5,486
Environmental clean-up	29,195	327	—	29,522
Other postemployment benefits	111,068	—	(2,008)	109,060
Interest rate swap liability	57,435	—	(24,072)	33,363
Other current liabilities	10,265	—	(1,158)	9,107
Total other liabilities	216,710	2,375	(32,547)	186,538
Less current portion	10,265	—	(1,158)	9,107
Total other non-current liabilities	$ 206,445	2,375	(31,389)	177,431

(a) Principal maturities and scheduled interest and swap payments

Principal maturities and scheduled interest payments for revenue bonds and estimated payments on the interest rate swaps are as follows (thousands of U.S. dollars):

	Revenue bonds			
	Principal	Interest	Net swap amount	Total
Fiscal year ending August 31:				
2015	$ 50,975	38,030	8,039	97,044
2016	49,155	35,365	8,039	92,559
2017	49,895	32,997	8,039	90,931
2018	49,355	30,575	7,978	87,908
2019	50,190	28,736	7,497	86,423
2020 - 2024	266,245	116,922	28,627	411,794
2025 - 2029	241,000	77,231	9,385	327,616
2030 - 2034	139,770	41,505	—	181,275
2035 - 2039	109,895	13,516	—	123,411
2040 - 2041	9,440	496	—	9,936
Total	$ 1,015,920	415,373	77,604	1,508,897

Future debt service is calculated using rates in effect at August 31, 2014 for variable rate bonds which ranged from 0.03% to 0.04%. The variable rate received under the swaps is 70.0% of one month LIBOR until maturity, which was 0.10990% at August 31, 2014.

Revision of Previously Reported Amounts

The Company revised previously reported future amounts in the table above to remove net swap amounts incorrectly included as future interest payments and to correct future variable rate interest payments using the variable interest rate in effect at the end of the fiscal year.

The effect of the correction of this error was to reduce total future interest payments by approximately $90 million.

(b) Bond Issuances

In September 2011, the underlying variable rate bonds were remarketed and were backed by letters of credit. As of August 31, 2014, the Company's Eighth Series variable rate debt was backed by letter of credit agreements, which either extend to August 1, 2016 (Eighth Series B, C, and D) or August 30, 2016 (Eighth Series E).

Interest rates and maturities of the outstanding revenue bonds are detailed as follows (thousands of U.S. dollars):

	Interest rates	Maturity date (fiscal year)	Balance outstanding August 31, 2014	Balance outstanding August 31, 2013
4th Series	4.00% – 5.25%	2032	$ 77,825	81,075
17th Series	4.00% – 5.38%	2026	101,160	110,940
5th Series	4.00% – 5.25%	2034	106,310	109,310
5th Series A-2	Variable*	2035	30,000	30,000
18th Series	5.00% – 5.25%	2021	27,050	30,360
19th Series	5.00%	2024	14,450	14,450
20th Series	2.00% – 5.00%	2015	2,725	9,595
7th Series	4.00% – 5.00%	2038	179,685	183,460
7th Series Refunding	5.00%	2029	28,360	28,385
8th Series A	4.00% – 5.25%	2017	37,905	48,035
8th Series B	Variable	2028	50,260	50,260
8th Series C	Variable	2028	50,000	50,000
8th Series D	Variable	2028	75,000	75,000
8th Series E	Variable	2028	50,260	50,260
9th Series	2.00% – 5.25%	2040	138,895	141,835
10th Series	3.00% – 5.00%	2026	46,035	52,755
			$ 1,015,920	1,065,720

* As of August 31, 2014, the interest rate was 0.03%.

(c) Debt Coverage and Sinking Fund Requirements

Under the terms of both general ordinances, the City is required to maintain rates to allow the Company to satisfy 1975 and 1998 revenue bond debt coverage ratio requirements.

Also provided by both general ordinances is the establishment of a sinking fund into which deposits are made to meet all principal and interest requirements of the bonds in an amount equal to the maximum annual debt service requirement on the bonds of each respective general ordinance in any fiscal year.

Funds in the Sinking Fund Reserve are to be applied to the payment of debt service if, for any reason, other funds in the Sinking Fund should be insufficient.

The revenue bonds are, and will be, equally and ratably collateralized by a security interest in all of the Company's project revenues, as defined in the general ordinances, and monies in the Sinking Fund.

Portions of certain revenue bonds were issued as zero coupon securities. Interest on these securities is accrued and compounded on the payment dates of the current interest bonds within the issue. The accrued interest in the amount of $10.5 million and $10.8 million in FY 2014 and FY 2013, respectively, is reported as a component of accrued accounts.

(d) Interest Rate Swap Agreements

In January 2006, the City entered into a fixed rate payer, floating rate receiver interest rate swap to create a synthetic fixed rate for the Sixth Series Bonds. The interest rate swap was used to hedge interest rate risk.

The swaps have a maturity date of August 1, 2031 and require the City to pay a fixed rate of 3.6745% and receive a variable rate equal to 70.0% of one-month LIBOR until maturity.

In August 2009, the City terminated approximately $54.8 million of the notional amount of the swap, issued fixed rate refunding bonds related to that portion and kept the remaining portion of the swap to hedge the Eighth Series variable rate refunding bonds backed with letters of credit. The Company paid a swap termination payment of $3.8 million to the counterparty to partially terminate the swap.

The original swap confirmation was amended and restated on August 12, 2009 to reflect the principal amount of the Eighth Series B Bonds, with all other terms remaining the same. The remainder of the notional amount was divided among separate trade confirmations with the same terms as the original swap that was executed with the counterparty for the Eighth Series C Bonds through the Eighth Series E Bonds.

In September 2011, the underlying variable rate bonds were remarketed with new letters of credit. During the remarketing, PGW partially redeemed portions of the longest three maturities of the bonds, and reallocated remaining principal amongst the bond subseries. At the same time, the City terminated an aggregate notional amount of $29.5 million of the swaps, keeping the remaining portion of the swap to hedge the remaining variable rate bonds backed with letters of credit. The partial termination was competitively bid, with the winning swap counterparty providing the lowest cost of termination/assignment. PGW paid a swap termination payment of $7.0 million to partially terminate the swaps. The remaining notional amounts of each of the swaps were adjusted to match the reallocation of the underlying bonds.

In April 2013, each of the swaps was amended to include additional language specifying the exact process to be used to calculate a termination amount in the event of an optional termination at the request of the City on or before April 1, 2015.

In August 2013, two subseries of the underlying variable rate bonds (8th Series C and 8th Series D) were remarketed with new letters of credit. The letters of credit for the remaining two subseries (8th Series B and 8th Series E) were extended with the existing providers.

As of August 31, 2014, the swaps had a notional amount of $225.5 million and the associated variable rate debt had a $225.5 million principal amount, broken down by series as follows:

- The Series B swap had a notional amount of $50.3 million and the associated variable rate bonds had a $50.3 million principal amount. The interest rate at August 31, 2014 for the underlying bonds is approximately 0.04%.
- The Series C swap had a notional amount of $50.0 million and the associated variable rate bonds had a $50.0 million principal amount. The interest rate at August 31, 2014 for the underlying bonds is approximately 0.04%.
- The Series D swap had a notional amount of $75.0 million and the associated variable rate bonds had a $75.0 million principal amount. The interest rate at August 31, 2014 for the underlying bonds is approximately 0.04%.
- The Series E swap had a notional amount of $50.2 million and the associated variable rate bonds had a $50.2 million principal amount. The interest rate at August 31, 2014 for the underlying bonds is approximately 0.04%.

The final maturity date for all swaps is on August 1, 2028.

As of August 31, 2014, the swaps had a combined negative fair value of approximately $38.8 million. The fair values of the interest rate swaps were estimated using the zero coupon method. That method calculates the future net settlement payments required by the swap, assuming current forward rates are implied by the current yield curve for hypothetical zero coupon bonds due on the date of each future net settlement on the swaps.

As of August 31, 2014, the City is not exposed to credit risk because the swaps had a negative fair value. Should interest rates change and the fair value of the swaps become positive, the City would be exposed to credit risk in the amount of the swaps' fair value. The swaps include a termination event additional to those in the standard ISDA master agreement based on credit ratings. The swaps may be terminated by the City if the rating of the counterparty falls below A3 or A – (Moody's/S&P), unless the counterparty has (i) assigned or transferred the swap to a party acceptable to the City; (ii) provided a credit support provider acceptable to the City whose obligations are pursuant to a credit support document acceptable to the City; or (iii) executed a credit support annex, in form and substance acceptable to the City, providing for the collateralization by the counterparty of its obligations under the swaps.

The swaps may be terminated by the counterparty if the rating on the Company's bonds falls below Baa2 or BBB (Moody's/S&P). However, because the City's swap payments are insured by Assured Guaranty Municipal Corporation, as long as Assured Guaranty Municipal Corporation is rated at or above A2 or A (Moody's/S&P), the termination event based on the City's ratings is stayed. At the present time, the rating for Assured Guaranty Municipal Corporation is at A2/AA – (Moody's/S&P).

The City is exposed to (i) basis risk, as reflected by the relationship between the rate payable on the bonds and 70.0% of one-month LIBOR received on the swap, and (ii) tax risk, a form of basis risk, where the City is exposed to a potential additional interest cost in the event that changes in the federal tax system or in marginal tax rates cause the rate paid on the outstanding bonds to be greater than the 70.0% of one-month LIBOR received on the swap.

The impact of the interest rate swaps on the financial statements for the years ended August 31, 2014 and 2013 is as follows (thousands of U.S. dollars):

		Interest rate swap liability	Deferred outflow of resources
Balance, August 31, 2013	$	33,363	12,059
Change in fair value through August 31, 2014		5,399	6,820
Balance, August 31, 2014	$	38,762	18,879

		Interest rate swap liability	Deferred outflow of resources
Balance, August 31, 2012	$	57,435	34,712
Change in fair value through August 31, 2013		(24,072)	(22,653)
Balance, August 31, 2013	$	33,363	12,059

The interest rate swap liability is included in other noncurrent liabilities on the balance sheet.

There are no collateral posting requirements associated with the swap agreements.

(e) Guaranteed Investment Contracts in Sinking Fund

On August 23, 2002, the City entered into Guaranteed Investment Contracts (GICs) in connection with a portion of its 1975 and 1998 Ordinance Sinking Fund Reserves for the Company. At settlement, approximately 65.0% of the Sinking Fund Reserves, from the two ordinances, totaling $61.4 million were invested in the GICs. In exchange for this investment, the Company received an up-front payment of $21.8 million in lieu of receiving interest payments over the life of the GICs.

In March 2013, the City terminated the GICs in connection with 1975 and 1998 Ordinance Sinking Fund Reserves for the Company. At settlement, the Company paid $4.8 million to terminate the portion

related to the 1975 Ordinance and $4.2 million to terminate the portion related to the 1998 Ordinance Sinking Fund Reserves for the Company. As a result of the termination of the GICs, in FY 2013 the Company expensed $4.2 million to Interest and Other Income.

(9) Defeased Debt

Defeased debt of the Company (bonds issued by the Company payable from the proceeds of irrevocably pledged assets) at August 31, 2014 was as follows (thousands of U.S. dollars):

	Latest date maturing to	Interest rate	Bonds outstanding
12th Series B	5/15/20	7.00%	$ 28,755

Defeased debt of the Company (bonds issued by the Company payable from the proceeds of irrevocably pledged assets) at August 31, 2013 was as follows (thousands of U.S. dollars):

	Latest date maturing to	Interest rate	Bonds outstanding
12th Series B	5/15/20	7.00%	$ 32,510

The investments held by the trustee and the defeased bonds are not recognized on the Company's balance sheets in accordance with the terms of the Indentures of Defeasance. The investments pledged for the redemption of the defeased debt have maturities and interest payments scheduled to coincide with the trustee cash requirements for debt service.

The assets pledged, primarily noncallable U.S. government securities, had a market value of $30.3 million at August 31, 2014, bearing interest on face value from 0.00% to 5.89%.

The assets pledged, primarily noncallable U.S. government securities, had a market value of $34.1 million at August 31, 2013, bearing interest on face value from 0.00% to 7.74%.

(10) Pension Costs

(a) Plan Description

The Pension Plan sponsored by the City provides pension benefits for all eligible employees of the Company and other eligible class employees of PFMC and the PGC. The Company's annual covered payroll was $104.1 million and $106.0 million at August 31, 2014 and 2013, respectively.

At September 1, 2014, the beginning of the plan year of the last actuarial valuation, the Pension Plan membership consisted of:

Retirees and Beneficiaries Currently receiving benefits and terminated employees entitled to benefits, but not yet receiving them	2,343
Participants:	
Vested	1,140
Nonvested	251
Total participants	1,391
Total membership	3,734

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

- 1.25% of the first $6,600 of Final Average Earnings plus 1.75% of the excess of Final Average Earnings over $6,600, times years of credited service, with a maximum of 60.0% of the highest annual earnings during the last 10 years of credited service or
- 2.0% of total earnings received during the period of credited service plus 22.5% of the first $1,200 annual amount, applicable only to participants who were employees on or prior to March 24, 1967.

Final Average Earnings are the employee's average pay, over the highest five years of the last 10 years of credited service. Employees with 15 years of credited service may retire at or after age 55 and receive a reduced retirement benefit. Employees with 30 years of service may retire without penalty for reduced age.

Covered employees are not required to contribute to the Pension Plan. The Company is required by statute to contribute the amounts necessary to fund the Pension Plan. Benefit and contribution provisions are established by City Ordinance and may be amended only as allowed by City Ordinance.

In December 2011, the Pension Plan sponsored by the City was amended by Ordinance and a new deferred compensation plan was authorized by Ordinance as well. Newly hired employees will have an irrevocable option to join either a new deferred compensation plan created in accordance with Internal Revenue Code Section 401 or the existing defined benefit plan. The deferred compensation plan provides for an employer contribution equal to 5.5% of applicable wages. The defined benefit plan provides for a newly hired employee contribution equal to 6.0% of applicable wages. The Ordinance did not affect the retirement benefits of active employees, current retirees and beneficiaries, or terminated employees entitled to benefits but not yet receiving them.

The City issues a publicly available financial report that includes financial statements and required supplementary information for the Pension Plan. The report may be obtained by writing to the Office of the Director of Finance of the City.

(b) Annual Pension Cost, Contributions Required, and Contributions Made

The normal cost, amortization of the unfunded balance, and annual required and actual contributions for FY 2014 and the two preceding fiscal years were as follows (thousands of U.S. dollars):

		Normal cost	Amortization of the underfunded balance	Annual required and actual contributions
Fiscal year ended August 31:				
2014	$	8,533	15,988	24,521
2013		8,782	14,832	23,614
2012		8,171	15,801	23,972

Beneficiary payments of $43.2 million were made in FY 2014. Withdrawals from the pension assets of $21.8 million were utilized to meet these beneficiary payments. Additionally, $0.8 million was due to the Company from the pension fund at the end of FY 2014.

The Company's annual pension cost is equal to its annual required contribution (ARC). The ARCs were determined based on an actuarial study, or updates thereto, using the projected unit credit method. Significant actuarial assumptions used for the above valuation include a rate of return on the investment of present and future assets of 7.95% per year compounded annually; with salary increases assumed to reach 4.5% per year; and retirements that are assumed to occur prior to age 62, at a rate of 10.0% at ages 55 to 61 and 100.0% at age 62. The assumptions did not include postretirement benefit increases. These actuarial assumptions are consistent with the prior fiscal year.

The actuarial asset value is equal to the value of the fund assets as reported by the City with no adjustments. The unfunded actuarial accrued liability is being amortized over 20 years.

The Pension Plan funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. Level percentages of payroll employer contribution rates are determined using the Projected Unit Credit actuarial funding method. The actuarial value of assets, actuarial accrued liability, unfunded actuarial accrued liability, funded ratio, covered payroll and the unfunded actuarial accrued liability of covered payroll for FY 2014, and the two preceding fiscal years were as follows (thousands of U.S. dollars):

Actuarial valuation date	(a) Actuarial value of assets	(b) Actuarial accrued liability (AAL)	(b)-(a) Unfunded AAL (UAAL)	(a/b) Funded ratio	Covered payroll	UAAL as a percent of covered payroll
September 1, 2013	$ 462,691	623,612	160,921	74.2%	$ 104,123	154.5%
September 1, 2012	437,780	585,632	147,852	74.8	106,000	139.5
September 1, 2011	421,949	572,190	150,241	73.7	106,308	141.3

The ARCs, contributions made, and net pension obligation for FY 2014 and the two preceding fiscal years were as follows (thousands of U.S. dollars):

	2014	2013	2012
Annual required contribution	$ 24,521	23,614	23,972
Contributions made	(24,521)	(23,614)	(23,972)
Net pension obligation	$ —	—	—

(11) Other Postemployment Benefits

(a) Plan Description

The Company sponsors a single employer defined-benefit healthcare plan and provided postemployment healthcare and life insurance benefits to approximately 2,053 and 2,044 participating retirees and their beneficiaries and dependents in FY 2014 and FY 2013, respectively, in accordance with their retiree medical program. The annual covered payroll (which was substantially equal to total payroll) was $115.2 million and $110.1 million at August 31, 2014 and 2013, respectively.

The Company pays the full cost of medical, basic dental, and prescription coverage for employees who retired prior to December 1, 2001. Employees who retire after December 1, 2001 are provided a choice of three plans at the Company's expense and can elect to pay toward a more expensive plan. Retirees may also contribute toward enhanced dental plan and life insurance coverage. PGW pays 100% of the cost for the prescription drug plan after drug co-pays. Union employees hired on or after May 21, 2011 and Non-Union employees hired on or after December 21, 2011 are entitled to receive postretirement medical, prescription, and dental benefits for five years only. Currently, the Company provides for the cost of healthcare and life insurance benefits for retirees and their beneficiaries on a pay-as-you-go basis.

Total expense incurred for healthcare and life insurance related to retirees amounted to $25.9 million and $23.7 million in FY 2014 and FY 2013, respectively. In addition, the Company expensed $18.5 million of funding for the OPEB Trust and retirees contributed $0.4 million towards their healthcare in both FY 2014 and FY 2013. These contributions represent the additional cost of healthcare plans chosen by retirees above the basic plan offered by the Company. Total premiums for group life insurance were $2.2 million in both FY 2014 and FY 2013, which included $1.8 million and $1.7 million for retirees. Retirees contributed $0.1 million towards their life insurance in both FY 2014 and FY 2013.

(b) Annual Postemployment Benefit Cost, Contributions Required, and Contributions Made

The amount paid by the Company for retiree benefits in FY 2014 was $44.4 million, consisting of $24.3 million of healthcare expenses, $1.6 million of life insurance expenses, and $18.5 million contributed to the OPEB trust. In FY 2013, the Company paid $42.2 million, consisting of $22.2 million of healthcare expenses, $1.5 million of life insurance expenses, and $18.5 million contributed to the OPEB trust. The difference between the AOC and the Company's contributions resulted in a decrease in the OPEB obligation of $7.3 million and $2.0 million in FY 2014 and FY 2013, respectively, which was recorded to other noncurrent liabilities and expensed.

Funded Status

The actuarial accrued liability for benefits at August 31, 2014 and 2013 was $450.3 million and $436.5 million, respectively. The ratio of the unfunded actuarial accrued liability to the covered payroll was 312.1% as of August 31, 2014 and 340.3% as of August 31, 2013.

Historical trend information reflecting funding progress and contributions made by the Company is presented in the Schedule of Other Postemployment Benefits Funding Progress (Required Supplementary Information).

Assumptions

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and are subject to continual revision as actual amounts are compared to past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The assumptions used to determine the AOC for the current year and the funded status of the plan include:

Actuarial cost method	Projected unit credit
Method(s) used to determine the actuarial value of assets	Fair value of plan assets held in the OPEB trust
Investment return assumption (discount rate)	7.95%, which represents the long-term expected investment return on OPEB trust assets
Mortality	2014 Static Annuitant and Non-Annuitant Mortality Table
Amortization method	Level dollar amount
Amortization period	Open period of 30 years

Healthcare cost trend rates are as follows:

	Healthcare cost trend rates			
Year	**Medical (pre-65)**	**Medical (post-65)**	**Prescription**	**Dental**
2014	9.0%	7.0%	7.0%	4.5%
2015	8.0	6.0	6.0	4.5
2016	7.0	5.0	5.0	4.5
2017	6.5	4.5	4.5	4.5
2018	6.0	4.5	4.5	4.5
2019	5.5	4.5	4.5	4.5
2020	5.0	4.5	4.5	4.5
2021+	4.5	4.5	4.5	4.5

The following table shows the components of the Company's annual OPEB cost for FY 2014 and FY 2013, the amount actually contributed to the plan, and the Company's net OPEB obligation (thousands of U.S. dollars):

		2014	**2013**
Annual required contribution	$	38,062	41,216
Interest on net OPEB obligation		8,670	8,885
Adjustment to the annual required contribution		(9,642)	(9,866)
Annual OPEB cost		37,090	40,235
Contributions made		(44,362)	(42,242)
Net OPEB obligation as of prior year		109,060	111,067
Net OPEB obligation as of August 31	$	101,788	109,060

The annual OPEB cost is recorded in the Statements of Revenue and Expenses and Changes in Net Position. For the year ended August 31, 2014, approximately $11.2 million was recorded to other postemployment benefits expense and $25.9 million was recorded to administrative and general expense. For the year ended August 31, 2013, approximately $16.5 million was recorded to other postemployment benefits expense and $23.7 million was recorded to administrative and general expense.

The Company's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for FY 2014 and the two preceding fiscal years were as follows (thousands of U.S. dollars):

	Annual OPEB cost	Percentage of annual OPEB cost contributed	Net OPEB obligation
Fiscal year ended August 31:			
2014	$ 37,090	119.6%	$ 101,788
2013	40,235	105.0	109,060
2012	46,105	96.5	111,067

(c) Other Coverage Information

PGW is self-insured for the healthcare of active employees and retirees under the age of 65. Retirees over the age of 65 are insured on an experience rated basis. At August 31, 2014, the Company has in place $192.3 million of group life insurance coverage for both active and retired employees, which is retrospectively rated on a monthly basis.

(12) Pollution Remediation

The pollution remediation obligations at August 31, 2014 and 2013 were $34.7 million and $30.8 million, respectively, which reflect the impact of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*.

(13) Risk Management

The Company is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets, errors and omissions, injuries to employees, and natural disasters. While self-insured for many risks, the Company purchases insurance coverage where appropriate. The Company's real and personal property is insured against the risk of loss or damage in the amount of $250.0 million, subject to a $0.5 million per accident deductible at the Richmond and Passyunk Plants and a $0.1 million per accident deductible at all other locations. There are separate sublimits for flood and earth movement at select locations. The Company's Property Insurance includes coverage for damage incurred from a terrorist attack. In addition, the Company maintains Blanket Crime, which is a form of Property Insurance.

The Company maintains $210.0 million in liability (including terrorism) coverage, insuring against the risk of damage to property or injury to the public with a per occurrence self-insured retention of $1.0 million.

The Company maintains statutory limits for Workers' Compensation (including terrorism) with a $0.5 million per occurrence self-insured retention.

The Company maintains a $30.0 million Public Officials Liability (Directors and Officers Liability) policy with a $0.5 million retention as well as a $60.0 million Fiduciary Liability policy with a $0.2 million self-insured retention.

The Company has evaluated all open claims as of August 31, 2014 and has appropriately accrued for these claims on the balance sheet.

Claims and settlement activity for occurrences excluded under the provisions of insurance policies for injuries and damages are as follows (thousands of U.S. dollars):

	Beginning of year reserve	Current year claims and adjustments	Claims settled	End of year reserve	Current liability amount
Fiscal year ended August 31:					
2014	$ 10,411	2,498	(2,965)	9,944	4,728
2013	11,102	2,616	(3,307)	10,411	4,925
2012	10,697	3,725	(3,320)	11,102	7,664

(14) Commitments and Contingencies

Commitments for major construction and maintenance contracts were approximately $25.1 million and $21.6 million, as of August 31, 2014 and 2013, respectively.

The Company is committed under various noncancelable operating lease agreements to pay minimum annual rentals as follows (thousands of U.S. dollars):

Fiscal year ending August 31:	
2015	$ 654
2016	379
2017	334

Rent expense for the fiscal years ended August 31, 2014 and 2013 amounted to $1.5 million and $1.4 million, respectively.

The Company, in the normal course of conducting business, has entered into long-term contracts for the supply of natural gas, firm transportation, and long-term firm gas storage service. The Company's cumulative obligations for demand charges for all of these services are approximately $5.0 million, per month.

The Company has entered into seasonal contracts with suppliers providing the Company the ability to fix the price of the purchase of natural gas during the period from November 1, 2014 through March 31, 2015.

The Company's amended FY 2015 Capital Budget was approved by City Council in the amount of $89.5 million. Within this approval, funding was provided to continue the implementation of an 18-mile Cast Iron Main Replacement Program. Main replacement cost for this program in FY 2015 is expected to be $21.4 million. The total six-year cost of the Cast Iron Main Replacement Program is forecasted to be $136.4 million. In addition to this program, the FY 2015 Capital Budget includes funding for an incremental Cast Iron Main Replacement Program for which PGW will request recovery through a DSIC. This incremental program in FY 2015 is expected to cost $17.3 million. The total six-year cost of this incremental program is forecasted to be $128.6 million. The FY 2015 Capital Budget also includes $2.3 million for the purchase of replacement Automatic Meter Reading (AMR) units. The total six-year cost of this program to replace AMR units is approximately $15.9 million.

(15) Subsequent Events

The Company has evaluated events and transactions that occurred between August 31, 2014 and December 23, 2014, which is the date the financial statements were originally available to be issued, and between December 23, 2014 and February 23, 2015, the date the financial statements were reissued, for possible disclosure and recognition in the financial statements and noted the following:

On March 2, 2014, following a competitive bidding process, the City entered into an agreement to sell PGW to UIL Holdings Corporation, subject to authorization by City Council and the Public Utility Commission. On December 4, 2014, UIL exercised its option to withdraw from the agreement after no authorizing ordinance was introduced in City Council.

On October 21, 2014, Standard & Poor's Rating Services raised the rating on PGW revenue bonds, issued under its 1975 (closed senior lien) and 1998 ordinances (subordinate working lien) to "A-"from "BBB+". Rationale sited for the rating upgrades included improving trends related to coverage of fixed costs, liquidity, debt ratios and collections, as well as the adoption of a number of credit supportive policies and procedures.

The Company's 5th Series A-2 variable rate bonds are backed by irrevocable letters of credit, which were extended on November 1, 2014 for a term of one year expiring on December 31, 2015.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Required Supplementary Information (Unaudited)

Schedule of Pension Funding Progress

(Thousands of U.S. dollars)

Actuarial valuation date	(a) Actuarial value of assets	(b) Actuarial accrued liability (AAL)	(b)-(a) Unfunded AAL (UAAL)	(a/b) Funded ratio	Covered payroll	UAAL as a percent of covered payroll
September 1, 2013*	$ 462,691	623,612	160,921	74.2%	$ 104,123	154.5%
September 1, 2012**	437,780	585,632	147,852	74.8	106,000	139.5
September 1, 2011***	421,949	572,190	150,241	73.7	106,308	141.3
September 1, 2010+	381,975	533,630	151,655	71.6	106,125	142.9
September 1, 2009++	355,499	519,773	164,274	68.4	106,003	155.0
September 1, 2008+++	430,390	495,155	64,765	86.9	107,918	60.0

* The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2013 through August 31, 2014, updated for contributions and additional accrued benefits in the subsequent fiscal year.

** The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2012 through August 31, 2013, updated for contributions and additional accrued benefits in the subsequent fiscal year.

*** The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2011 through August 31, 2012.

\+ The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2009 through August 31, 2010, updated for contributions and additional accrued benefits in the subsequent fiscal year.

++ The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2009 through August 31, 2010.

+++ The required supplementary information is based on an actuarial valuation of the pension fund for the plan year September 1, 2007 through August 31, 2008, updated for contributions and additional accrued benefits in the subsequent fiscal year.

See accompanying independent auditors' report.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Required Supplementary Information (Unaudited)

Schedule of Other Postemployment Benefits Funding Progress

(Thousands of U.S. dollars)

Actuarial valuation date	(a) Actuarial value of assets	(b) Actuarial accrued liability (AAL)	(b)-(a) Unfunded AAL (UAAL)	(a/b) Funded ratio	Covered payroll	UAAL as a percent of covered payroll
August 31, 2014*	$ 90,838	450,289	359,451	20.2%	$ 115,174	312.1%
August 31, 2013**	61,796	436,527	374,731	14.2	110,120	340.3
August 31, 2012***	38,860	443,982	405,122	8.8	106,308	381.1
August 31, 2011+	17,886	485,722	467,836	3.7	106,125	440.8

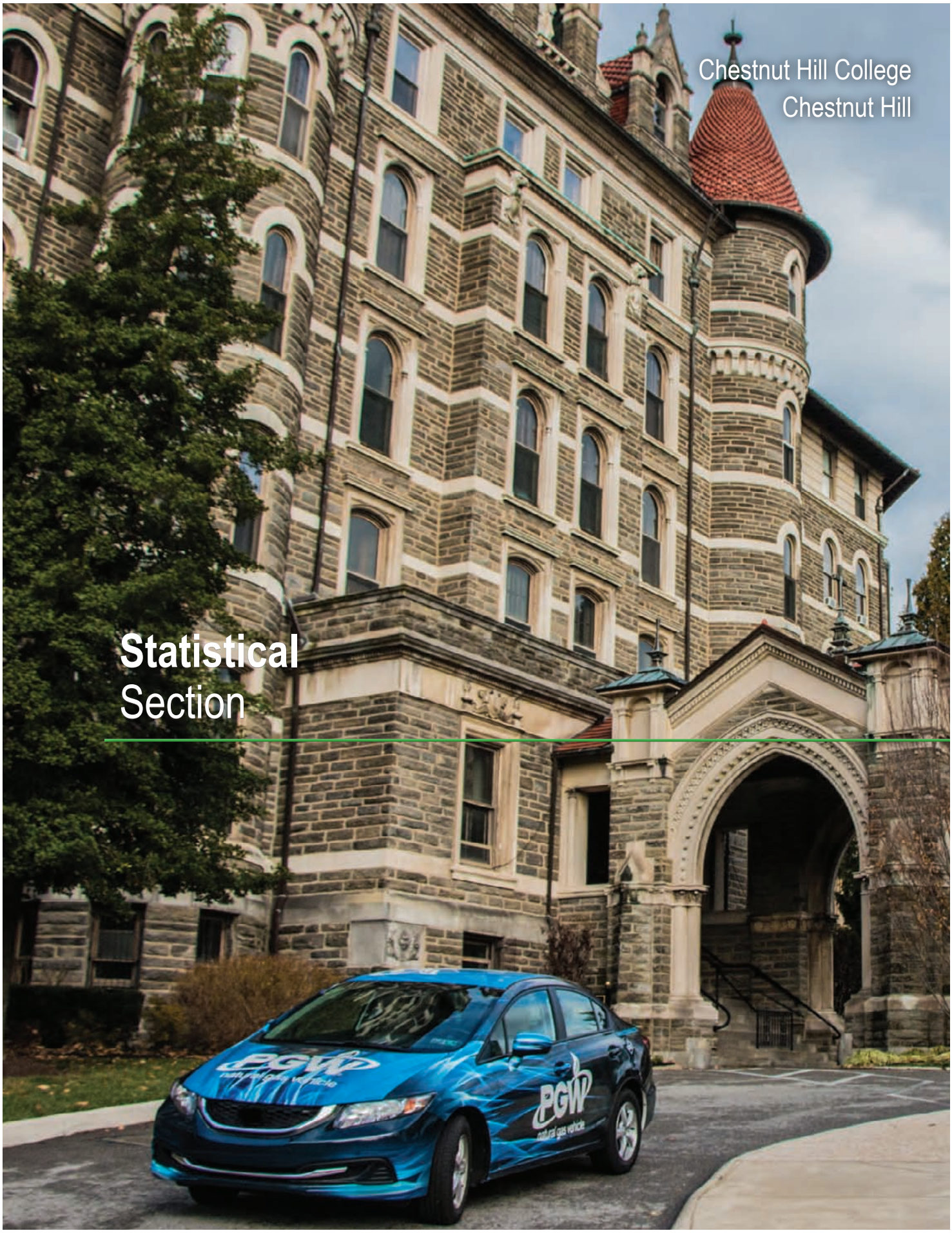
* The required supplementary information is based on an actuarial valuation of the OPEB fund for the plan year September 1, 2013 through August 31, 2014.

** The required supplementary information is based on an actuarial valuation of the OPEB fund for the plan year September 1, 2012 through August 31, 2013.

*** The required supplementary information is based on an actuarial valuation of the OPEB fund for the plan year September 1, 2011 through August 31, 2012.

\+ The required supplementary information is based on an actuarial valuation of the OPEB fund for the plan year September 1, 2010 through August 31, 2011.

See accompanying independent auditors' report.



Statistical Section

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PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)

Statistical Section

Description of Schedules

August 31, 2014

This section of the Company's comprehensive annual financial report presents comparative information in order to better understand the financial statements, note disclosures, and required supplementary information and to more fully comprehend the Company's overall financial health.

Financial Trends

These schedules contain trend information to help the reader understand how the Company's financial performance and well being have changed over time.

Revenue Capacity

These schedules contain information to help the reader assess the Company's revenue.

Debt Capacity

These schedules present information to help the reader assess the affordability of the Company's current levels of outstanding debt and its ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Company's financial activities take place.

Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the Company's financial report relates to the services the Company provides and the activities it performs.

Sources

Unless otherwise noted, the information in these schedules is derived from the audited financial statements for the relevant year.

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Balance Sheets
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

Assets	**2014**	**2013**	**2012**
Current assets:			
Cash and cash equivalents	105,734	100,933	75,826
Cash designated for capital expenditures	10,000	-	-
Accounts receivable (net of provision for uncollectible accounts)	101,457	97,749	81,997
Gas inventories, materials, and supplies	69,989	80,234	81,086
Capital improvement fund	-	44,055	88,838
Workers' compensation escrow fund	2,597	2,597	2,597
Health insurance escrow fund	3,223	3,223	3,222
Other current assets and deferred debits	19,221	16,196	26,939
Total current assets	312,221	344,987	360,505
Non-current assets			
Utility plant, at original cost:			
In service	2,018,234	1,951,546	1,894,129
Under construction	57,206	44,409	53,851
Total	2,075,440	1,995,955	1,947,980
Less accumulated depreciation	881,888	840,968	822,330
Utility plant, net	1,193,552	1,154,987	1,125,650
Unamortized bond issuance costs * (1)	14,136	15,736	17,417
Unamortized losses on reacquired debt	-	-	-
Sinking fund, revenue bonds	105,909	105,280	105,312
City of Philadelphia		-	-
Other assets and deferred debits	37,528	33,097	30,996
Total non-current assets	1,351,125	1,309,100	1,279,375
Total assets	1,663,346	1,654,087	1,639,880
Deferred outflows of resources			
Accumulated fair value of hedging derivatives	18,879	12,059	34,712
Unamortized losses on reacquired debt (1)	37,051	44,868	53,241
Total assets and deferred outflows of resources	1,719,276	1,711,014	1,727,833

* For Fiscal Years 2014, 2013 and 2012 this category includes only bond insurance costs.

(1) During FY 2013, the Company implemented GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* , that amends or supersedes the accounting and financial reporting guidance for certain items previously required to be reported as assets or liabilities. The objective is to either properly classify certain items that were previously reported as assets and liabilities as deferred outflows of resources or deferred inflows of resources or recognize certain items that were previously reported as assets and liabilities as outflows of resources (expenses) or inflows of resources (revenues). This change was retroactive to FY 2012.

Source - PGW's Audited Financial Statements

2011	2010	2009	2008	2007	2006	2005
105,386	79,052	13,750	49,338	51,698	6,697	15,221
-	-	-	-	-	-	-
98,925	92,173	105,496	99,304	88,618	74,360	87,634
85,993	103,133	125,023	187,539	147,770	149,438	129,984
122,332	170,809	62,714	111,207	172,134	39,636	102,701
2,596	2,595	2,593	2,383	1,924	1,637	1,579
-	-	-	-	-	-	-
35,523	27,212	4,895	5,626	5,615	25,259	2,632
450,755	474,974	314,471	455,397	467,759	297,027	339,751
1,856,303	1,794,277	1,754,297	1,685,593	1,633,300	1,555,669	1,515,463
40,555	46,339	30,953	46,969	48,013	65,122	57,883
1,896,858	1,840,616	1,785,250	1,732,562	1,681,313	1,620,791	1,573,346
785,780	746,607	708,783	670,467	640,940	613,143	591,624
1,111,078	1,094,009	1,076,467	1,062,095	1,040,373	1,007,648	981,722
24,585	27,066	27,516	38,738	42,086	42,089	39,094
62,039	70,873	79,945	47,902	53,359	55,859	38,494
112,038	111,409	110,227	106,198	102,438	94,352	104,530
-	-	-	-	643	-	-
30,640	22,925	23,465	33,125	8,282	9,035	16,231
1,340,380	1,326,282	1,317,620	1,288,058	1,247,181	1,208,983	1,180,071
1,791,135 -	1,801,256 -	1,632,091 -	1,743,455 -	1,714,940 -	1,506,010 -	1,519,822
25,360	25,906	-	-	-	-	-
-	-	-	-	-	-	-
1,816,495	1,827,162	1,632,091	1,743,455	1,714,940	1,506,010	1,519,822

(continued)

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Balance Sheets
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

Fund Equity and Liabilities	**2014**	**2013**	**2012**
Fund equity:			
Excess (deficiency) of capital assets, net of related debt			
Restricted			
Unrestricted			
Total fund equity			
Current liabilities:			
Notes payable	-	-	-
Current portion of revenue bonds	53,227	52,406	30,545
Subordinate lease obligations	-	-	-
Note payable – City Loan	-	-	-
Accounts payable	58,888	59,379	57,127
Customer deposits	2,245	2,305	2,449
Other current liabilities and deferred credits	19,321	9,107	10,265
Accrued accounts:			
Interest, taxes, and wages	14,646	14,823	15,555
Distribution to the City	3,000	3,000	3,000
Total current liabilities	151,327	141,020	118,941
Non-current liabilities:			
Long-term revenue bonds	980,749	1,033,976	1,086,502
Other liabilities and deferred credits	179,265	177,431	206,445
Note payable – City Loan	-	-	-
Total non-current liabilities	1,160,014	1,211,407	1,292,947
Total liabilities	1,311,341	1,352,427	1,411,888
Total fund equity and liabilities			
Net position			
Net investment in capital assets	159,576	112,660	97,442
Restricted (debt service)	111,729	111,100	111,131
Unrestricted (1)	136,630	134,827	107,372
Total net position	407,935	358,587	315,945
Total liabilities and net position	1,719,276	1,711,014	1,727,833

(1) During FY 2013, the Company implemented GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* , that amends or supersedes the accounting and financial reporting guidance for certain items previously required to be reported as assets or liabilities. The objective is to either properly classify certain items that were previously reported as assets and liabilities as deferred outflows of resources or deferred inflows of resources or recognize certain items that were previously reported as assets and liabilities as outflows of resources (expenses) or inflows of resources (revenues). This change was retroactive to FY 2012.

Source - PGW's Audited Financial Statements

2011	2010	2009	2008	2007	2006	2005
		1,019	(4,466)	(5,690)	(7,754)	24,739
		112,820	108,581	105,005	95,989	106,109
		129,780	122,293	123,986	151,170	91,798
		243,619	226,408	223,301	239,405	222,646
-	-	-	90,000	51,600	55,000	49,900
50,549	42,537	48,175	76,030	43,995	39,591	42,271
-	-	-	-	-	-	-
-	-	-	-	43,000	-	-
55,893	59,303	46,205	67,508	60,615	40,316	63,918
2,869	3,998	4,224	7,325	9,049	8,628	6,280
12,098	12,185	16,203	32,581	15,524	8,137	18,342
17,476	16,743	15,948	15,821	15,088	13,773	13,452
3,000	3,000	3,000	3,000	3,000	3,000	3,000
141,885	137,766	133,755	292,265	241,871	168,445	197,163
1,166,992	1,224,987	1,114,488	1,127,163	1,201,792	1,031,131	1,030,830
197,878	189,974	140,229	97,619	47,976	22,029	24,183
-	-	-	-	-	45,000	45,000
1,364,870	1,414,961	1,254,717	1,224,782	1,249,768	1,098,160	1,100,013
1,506,755	1,552,727	1,388,472	1,517,047	1,491,639	1,266,605	1,297,176
		1,632,091	1,743,455	1,714,940	1,506,010	1,519,822
15,869	(2,706)					
114,634	114,004					
179,237	163,137					
309,740	274,435					
1,816,495	1,827,162					

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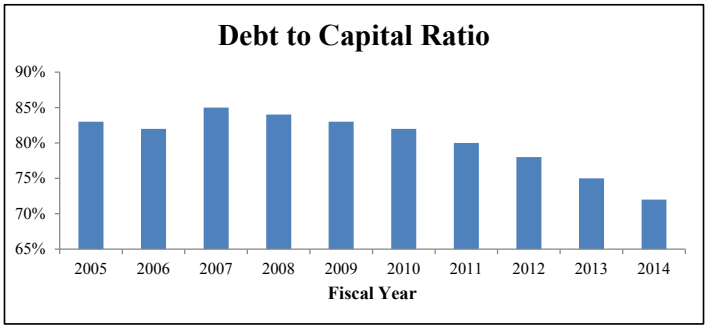
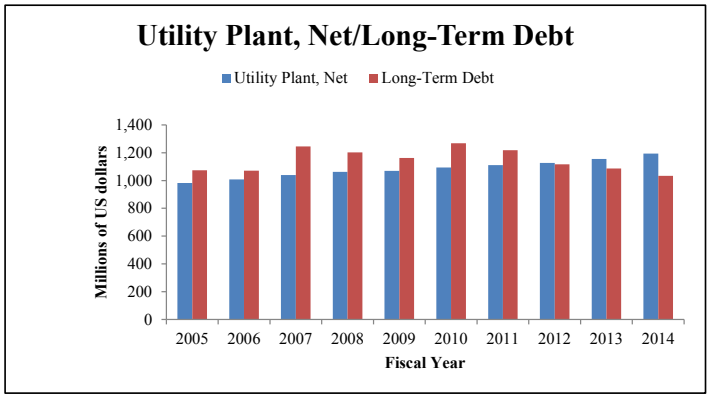
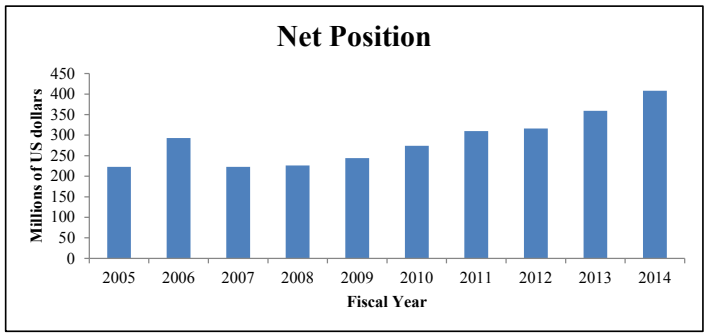
PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Debt to Capital Ratio, Utility Plant, Net vs. Long-Term Debt, and Net Position
Fiscal Years 2005 through 2014







PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Statements of Revenues and Expenses
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

	2014	2013	2012
Operating revenues:			
Gas revenues:			
Nonheating	39,610	35,262	37,054
Gas transport service	41,217	37,078	29,324
Heating	655,311	602,814	562,009
Total gas revenues	736,138	675,154	628,387
Appliance and other revenues	8,317	8,333	8,240
Other operating revenues	14,681	9,984	8,356
Total operating revenues	759,136	693,471	644,983
Operating expenses:			
Natural gas	304,051	255,501	233,713
Gas processing	19,637	17,592	15,640
Field services	37,577	34,926	33,883
Distribution	36,929	30,259	27,750
Collection and account management	11,273	11,297	11,491
Provision for uncollectible accounts	38,848	39,971	36,702
Customer services	11,187	11,102	11,946
Marketing	7,783	6,789	6,664
Administrative and general	85,872	78,206	81,161
Pensions	24,521	23,614	23,972
Other postemployment benefits	11,228	16,492	20,119
Taxes	7,687	7,220	7,122
Total operating expenses before depreciation	596,593	532,969	510,163
Depreciation	47,428	45,912	45,045
Less depreciation expense included in operating expenses above	5,771	4,870	4,870
Net depreciation	41,657	41,042	40,175
Total operating expenses	638,250	574,011	550,338
Operating income	120,886	119,460	94,645
Interest and other income	3,597	1,147	4,659
Income before interest expense	124,483	120,607	99,304
Interest expense:			
Long-term debt	48,261	49,655	53,012
Other	9,380	10,740	16,824
Allowance for funds used during construction	(506)	(430)	(292)
Total interest expense	57,135	59,965	69,544
Excess (deficiency) of revenues over (under) expenses prior to City Payment	67,348	60,642	29,760
Distribution to the City of Philadelphia	(18,000)	(18,000)	(18,000)
Grant back of distribution from the City of Philadelphia	-	-	-
Excess (deficiency) of revenues over (under) expenses	49,348	42,642	11,760
Net position, beginning of the year (1)	358,587	315,945	304,185
Net position, end of the year	407,935	358,587	315,945

(1) During FY 2013, the Company implemented GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* , that amends or supersedes the accounting and financial reporting guidance for certain items previously required to be reported as assets or liabilities. The objective is to either properly classify certain items that were previously reported as assets and liabilities as deferred outflows of resources or deferred inflows of resources or recognize certain items that were previously reported as assets and liabilities as outflows of resources (expenses) or inflows of resources (revenues). This change was retroactive to FY 2012.

Source - PGW's Audited Financial Statements

2011	2010	2009	2008	2007	2006	2005
51,437	51,343	67,295	78,687	90,798	113,356	114,880
28,700	26,860	24,913	19,215	12,949	6,459	4,679
669,131	664,139	818,249	733,526	736,358	810,146	710,991
749,268	742,342	910,457	831,428	840,105	929,961	830,550
8,400	8,959	9,311	8,607	9,398	10,482	10,895
8,611	7,931	9,673	9,592	9,848	13,525	21,912
766,279	759,232	929,441	849,627	859,351	953,968	863,357
330,932	354,004	545,846	511,976	539,300	625,093	509,704
16,097	14,952	16,779	14,436	16,240	15,234	18,584
33,950	34,026	37,727	37,126	36,100	35,667	28,455
27,990	23,426	21,059	17,319	17,119	15,179	15,115
11,765	15,266	16,248	15,447	15,221	17,289	18,666
36,027	35,000	42,000	37,000	40,000	40,132	70,424
12,532	13,030	12,897	12,305	11,783	11,083	12,512
4,378	3,900	3,436	2,628	2,418	2,467	2,592
76,850	71,620	63,820	60,716	56,819	59,484	60,995
22,597	24,633	15,425	14,258	26,421	17,563	14,702
22,472	27,269	25,952	25,834	15,217	-	-
7,135	6,990	6,588	5,677	6,730	6,124	6,218
602,725	624,116	807,777	754,722	783,368	845,315	757,967
43,629	43,168	42,200	42,868	39,708	37,955	39,547
4,714	4,690	4,419	3,344	3,328	3,230	4,502
38,915	38,478	37,781	39,524	36,380	34,725	35,045
641,640	662,594	845,558	794,246	819,748	880,040	793,012
124,639	96,638	83,883	55,381	39,603	73,928	70,345
4,348	5,301	12,240	15,732	13,073	8,518	4,778
128,987	101,939	96,123	71,113	52,676	82,446	75,123
57,225	52,527	63,602	56,075	52,146	51,799	53,856
18,884	18,986	15,558	12,269	17,042	14,869	10,902
(427)	(390)	(248)	(338)	(408)	(981)	(907)
75,682	71,123	78,912	68,006	68,780	65,687	63,851
53,305	30,816	17,211	3,107	(16,104)	16,759	11,272
(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
-	18,000	18,000	18,000	18,000	18,000	18,000
35,305	30,816	17,211	3,107	(16,104)	16,759	11,272
274,435	243,619	226,408	223,301	239,405	222,646	211,374
309,740	274,435	243,619	226,408	223,301	239,405	222,646

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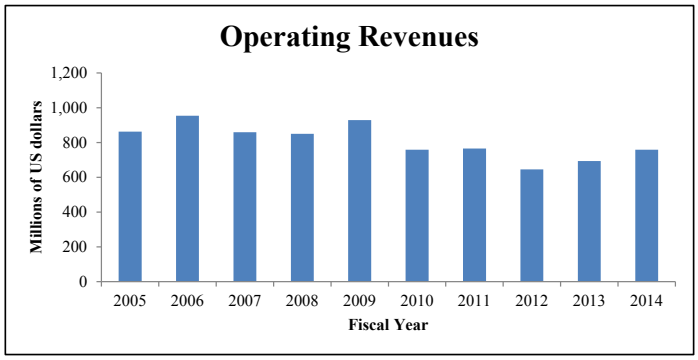
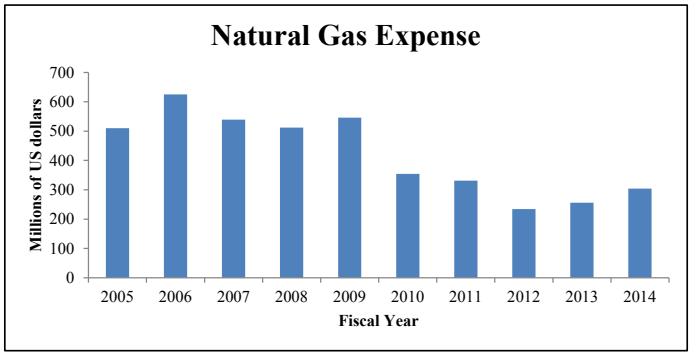
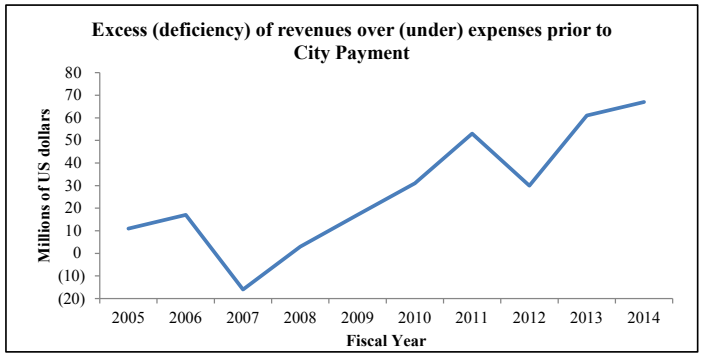
PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Operating Revenues, Natural Gas Expense, and Net Income
Fiscal Years 2004 through 2013



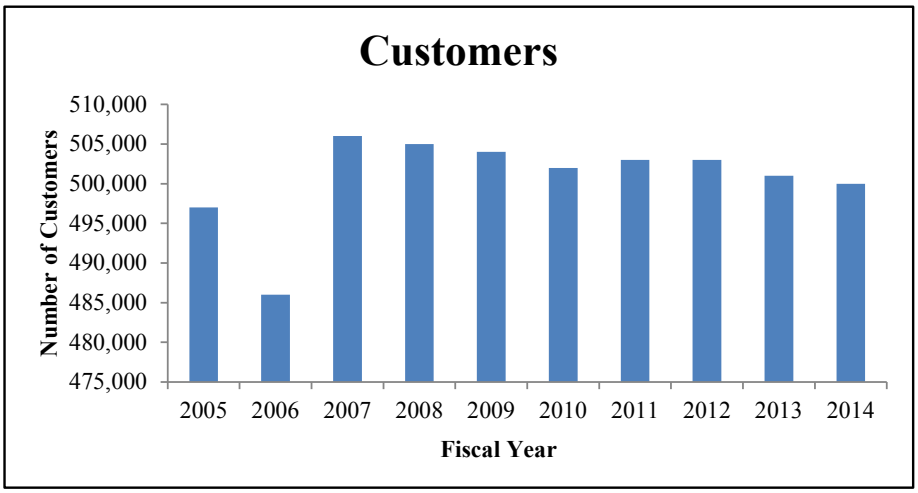




PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Average Number of Customers Billed by System
Fiscal Years 2005 through 2014

	2014	2013	2012	2011	2010
Residential	474,300	475,300	477,300	477,300	476,200
Commercial	25,000	25,000	25,000	25,000	25,000
Industrial	700	700	700	700	800
Total	500,000	501,000	503,000	503,000	502,000

Source - PGW Records



2009	2008	2007	2006	2005
478,200	479,200	480,100	460,000	471,000
25,000	25,000	25,000	25,000	25,000
800	800	900	1,000	1,000
504,000	505,000	506,000	486,000	497,000

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Operating Revenues
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

	2014	2013	2012	2011
Firm non-heat	30,324	31,401	33,282	36,779
Interruptible gas sales	9,068	4,703	3,338	14,431
Billed non-heating	39,392	36,104	36,620	51,210
GCR non-heating adjustment	218	(841)	434	228
Total non-heating	39,610	35,263	37,054	51,438
Billed heating	660,942	605,761	519,950	659,681
GCR heating adjustment	6,174	(12,407)	4,244	5,360
Total billed heating	667,116	593,354	524,194	665,041
Weather normalization adjustment (WNA)	(11,810)	8,060	44,016	1,696
Total heating	655,306	601,414	568,210	666,737
Total gas sold	694,916	636,677	605,264	718,175
Firm transportation (FT) non-heat (1)	5,671	5,194	3,861	4,582
FT heating (1)	23,330	19,665	14,037	14,541
WNA - FT (1)	(488)	331	1,412	128
Total heating FT (1)	22,842	19,996	15,449	14,669
Total FT (1)	28,513	25,190	19,310	19,251
Unbilled adjustment	5	1,398	(6,201)	2,393
GTS: transportation	1,173	1,050	1,086	1,147
GTS - customer/customer choice	10,278	9,372	7,955	8,333
GTS - supplier/customer choice	11	478	170	(790)
GTS - firm supplier	1,242	989	803	759
Total gas revenues	736,138	675,154	628,387	749,268

(1) Firm transportation (FT) program began in FY 2007

Source - PGW Records

2010	2009	2008	2007	2006	2005
37,932	50,172	52,528	61,729	76,865	71,415
12,503	16,493	26,679	31,439	33,509	44,678
50,435	66,665	79,207	93,168	110,374	116,093
908	631	(521)	(2,037)	2,210	(1,212)
51,343	67,296	78,686	91,131	112,584	114,881
630,970	810,704	731,942	756,032	768,935	727,322
16,742	8,991	(8,407)	(23,948)	24,792	(14,164)
647,712	819,695	723,535	732,084	793,727	713,158
12,970	445	11,923	6,438	13,406	(1,365)
660,682	820,140	735,458	738,522	807,133	711,793
712,025	887,436	814,144	829,653	919,717	826,674
3,306	2,857	2,120	928		
13,254	12,265	8,205	3,111		
455	60	315	60		
13,709	12,325	8,520	3,171		
17,015	15,182	10,640	4,099		
3,457	(1,893)	(1,931)	(2,497)	3,785	(803)
1,928	1,948	2,228	2,480	2,335	2,249
7,421	6,813	6,177	6,017	4,115	2,407
(105)	842	85	220	9	23
601	129	85	133	-	-
742,342	910,457	831,428	840,105	929,961	830,550

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Sales Volumes
Fiscal Years 2005 through 2014
(Sales in Mcf)*

	2014	2013	2012	2011
Firm non-heat	1,955,220	2,003,583	2,148,736	2,218,768
Interruptible gas sales	1,096,381	890,383	192,058	1,004,185
Billed non-heating	3,051,601	2,893,966	2,340,794	3,222,953
GCR non-heating adjustment	-	-	-	-
Total non-heating	3,051,601	2,893,966	2,340,794	3,222,953
Billed heating	46,577,983	42,741,706	36,196,469	45,795,915
GCR heating adjustment	-	-	-	-
Total billed heating	46,577,983	42,741,706	36,196,469	45,795,915
Weather normalization adjustment (WNA)	-	-	-	-
Total heating	46,577,983	42,741,706	36,196,469	45,795,915
Total gas sold	49,629,584	45,635,672	38,537,263	49,018,868
Firm transportation (FT) non-heat (1)	795,971	701,712	542,271	629,683
FT heating (1)	3,291,193	2,725,563	1,941,019	2,038,726
WNA - FT (1)	-	-	-	-
Total heating FT (1)	3,291,193	2,725,563	1,941,019	2,038,726
Total FT (1)	4,087,164	3,427,275	2,483,290	2,668,409
Unbilled adjustment	95,656	62,646	(633,531)	204,694
GTS: transportation	12,069,664	10,708,926	11,429,993	12,024,712
GTS - customer/customer choice	13,201,076	12,346,548	10,459,723	10,581,753
GTS - supplier/customer choice	-	-	-	-
GTS - firm supplier	-	-	-	-
Utility Use	350,974	410,193	394,574	465,505
Unaccounted for gas	1,051,828	1,492,946	2,067,268	2,563,662
Total sendout	80,485,946	74,084,206	64,738,580	77,527,603
Unaccounted for gas as a % of total sendout	1.3%	2.0%	3.2%	3.3%

(1) Firm transportation (FT) program began in FY 2007
* Mcf = Thousand cubic feet

Source - PGW Records

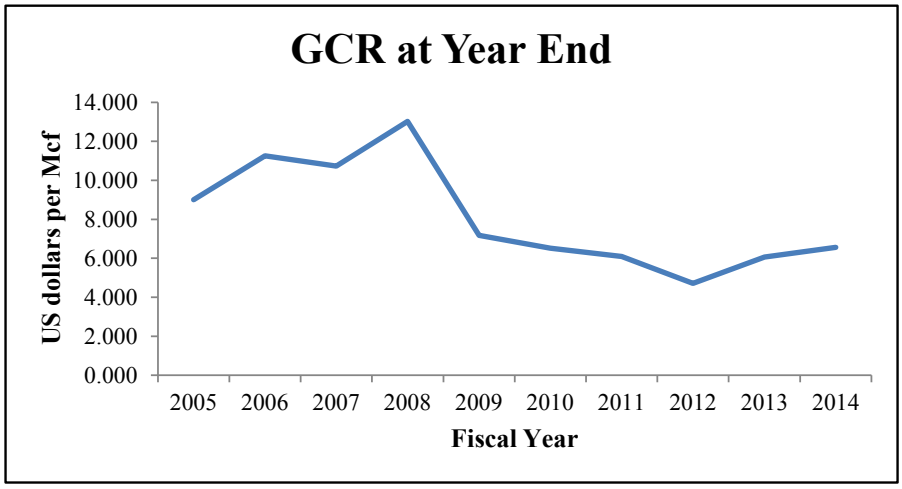
2010	2009	2008	2007	2006	2005
2,186,030	2,440,758	2,585,001	3,104,220	3,745,664	4,314,816
1,049,318	1,170,128	1,790,721	2,704,526	2,425,862	4,510,515
3,235,348	3,610,886	4,375,722	5,808,746	6,171,526	8,825,331
-	-	-	-	-	-
3,235,348	3,610,886	4,375,722	5,808,746	6,171,526	8,825,331
42,604,640	45,584,417	42,940,365	44,812,203	42,497,852	49,492,929
-	-	-	-	-	-
42,604,640	45,584,417	42,940,365	44,812,203	42,497,852	49,492,929
-	-	-	-	-	-
42,604,640	45,584,417	42,940,365	44,812,203	42,497,852	49,492,929
45,839,988	49,195,303	47,316,087	50,620,949	48,669,378	58,318,260
456,675	392,965	333,800	134,583		
1,848,085	1,700,319	1,272,881	434,865		
-	-	-	-		
1,848,085	1,700,319	1,272,881	434,865		
2,304,760	2,093,284	1,606,681	569,448		
276,161	(12,364)	61,729	(130,643)	116,676	628,810
12,390,748	12,651,292	9,928,058	7,144,953	7,279,955	9,014,203
8,440,368	7,879,560	7,497,327	5,424,466	3,447,532	2,610,192
-	-	-	-	-	-
-	-	-	-	-	-
632,040	737,720	716,683	859,493	680,633	94,731
2,097,817	2,357,825	1,476,092	2,552,999	1,940,046	2,037,791
71,981,882	74,902,620	68,602,657	67,041,665	62,134,220	72,703,987
2.9%	3.1%	2.2%	3.8%	3.1%	2.8%

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Gas Cost Rate
Fiscal Years 2005 through 2014
(U.S. dollars)

	2014	2013	2012	2011	2010
June 1	6.5642	6.0709	4.7129	6.0930	6.5139
March 1	6.0016	6.3991	4.9783	6.5400	7.3455
January 1					
December 1	5.4473	5.7323	6.1270	6.2753	7.2497
October 7					
September 1	5.4259	5.2247	6.0594	6.9050	7.0900

Shown in dollars per thousand cubic feet

Source - PGW Records



2009	2008	2007	2006	2005
7.1815	13.0236	10.7251	11.2558	8.9980
8.4192	10.7226	10.4338	12.5632	8.1120
10.7007				
	10.5779	10.9119	12.5632	9.8857
			12.5632	
12.6527	10.1108	11.2558	9.7056	8.3085

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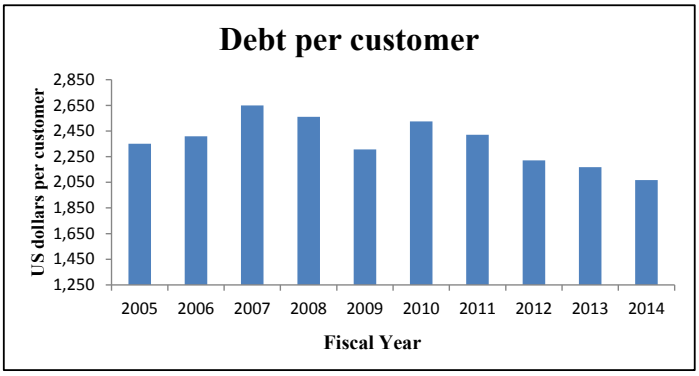
PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Ratios of Outstanding Debt by Type
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

	Revenue Bonds	Subordinate lease obligations	Commercial Paper	City Loan	Grand Total	Ratio to Operating Revenue	Operating Revenue	Number of Customers	Debt per Customer (1)
2014	1,033,976	-	-	-	1,033,976	136%	759,136	500,000	2,068
2013	1,086,382	-	-	-	1,086,382	157%	693,471	501,000	2,168
2012	1,117,047	-	-	-	1,117,047	173%	644,983	503,000	2,221
2011	1,217,541	-	-	-	1,217,541	159%	766,279	503,000	2,421
2010	1,267,524	-	-	-	1,267,524	167%	759,232	502,000	2,525
2009	1,162,663	-	-	-	1,162,663	125%	929,441	504,000	2,307
2008	1,203,193	-	90,000	-	1,293,193	152%	849,627	505,000	2,561
2007	1,245,787	-	51,600	43,000	1,340,387	156%	859,351	506,000	2,649
2006	1,070,722	-	55,000	45,000	1,170,722	123%	953,968	486,000	2,409
2005	1,073,101	-	49,900	45,000	1,168,001	135%	863,357	497,000	2,350

(1) Per customer data in whole dollars

Source - PGW's Audited Financial Statements and PGW Records



PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Debt Service
Through Fiscal Year 2040
(Thousands of U.S. dollars)

Year	17th Series	18th Series	19th Series	20th Series	Total 1975 Ordinance	4th Series	5th Series	5th Series Variable
2015	14,127	9,220	723	2,834	26,904	7,349	8,416	531
2016	18,176	3,755	723	-	22,654	3,744	8,419	531
2017	16,621	3,781	723	-	21,125	3,744	8,419	531
2018	15,068	3,807	723	-	19,598	3,744	8,416	531
2019	13,507	3,840	723	-	18,070	3,744	8,418	531
2020	11,947	3,862	723	-	16,532	3,744	8,420	531
2021	10,390	3,894	723	-	15,007	8,399	8,416	531
2022	8,833	-	4,685	-	13,518	8,400	8,416	531
2023	7,276	-	5,457	-	12,733	8,397	8,415	531
2024	5,719	-	5,452	-	11,171	8,400	8,417	531
2025	4,159	-	-	-	4,159	8,399	8,417	531
2026	3,770	-	-	-	3,770	8,400	8,418	531
2027	-	-	-	-	-	8,396	8,416	531
2028	-	-	-	-	-	8,398	8,419	531
2029	-	-	-	-	-	8,399	8,417	531
2030	-	-	-	-	-	8,398	8,419	530
2031	-	-	-	-	-	8,396	8,419	530
2032	-	-	-	-	-	8,395	8,417	530
2033	-	-	-	-	-	-	8,416	530
2034	-	-	-	-	-	-	8,415	530
2035	-	-	-	-	-	-	-	30,265
2036	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-
2040	-	-	-	-	-	-	-	-
Total	129,593	32,159	20,655	2,834	185,241	126,846	168,345	40,880

Source - PGW Records

7th Series New Money	7th Series Refunding	8th Series A	8th Series B-E	9th Series	10th Series	Total 1998 Ordinance	Grand Total
12,855	1,442	15,695	8,287	9,937	6,316	70,828	97,732
12,856	5,049	13,531	8,287	9,934	8,243	70,594	93,248
12,857	5,043	12,462	9,997	9,937	7,503	70,493	91,618
12,857	5,042	-	21,709	9,938	6,757	68,994	88,592
12,856	5,042	-	22,483	9,938	6,018	69,030	87,100
12,857	5,045	-	23,256	9,934	5,275	69,062	85,594
12,855	391	-	24,046	9,936	4,529	69,103	84,110
12,855	391	-	24,840	9,938	3,785	69,156	82,674
12,856	391	-	25,616	9,938	3,050	69,194	81,927
12,853	1,390	-	25,693	9,935	2,300	69,519	80,690
12,853	1,441	-	26,554	9,935	1,561	69,691	73,850
12,853	1,481	-	26,856	9,934	1,376	69,849	73,619
12,855	1,468	-	28,875	9,938	-	70,479	70,479
12,854	1,550	-	29,018	9,935	-	70,705	70,705
12,854	1,630	-	-	9,935	-	41,766	41,766
12,854	-	-	-	9,935	-	40,136	40,136
12,853	-	-	-	9,937	-	40,135	40,135
12,855	-	-	-	9,938	-	40,135	40,135
12,853	-	-	-	9,936	-	31,735	31,735
12,858	-	-	-	9,937	-	31,740	31,740
12,856	-	-	-	2,243	-	45,364	45,364
12,857	-	-	-	9,938	-	22,795	22,795
12,855	-	-	-	9,934	-	22,789	22,789
12,853	-	-	-	9,934	-	22,787	22,787
-	-	-	-	9,936	-	9,936	9,936
-	-	-	-	9,935	-	9,935	9,935
308,520	36,796	41,688	305,517	250,645	56,713	1,335,950	1,521,191

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Debt Service Coverage
Fiscal Years 2005 through 2014
(Thousands of U.S. dollars)

	2014	2013	2012	2011
Funds Provided				
Total gas revenues	736,138	675,154	628,387	749,268
Other operating revenues	22,998	18,317	16,596	17,011
Total operating revenues	759,136	693,471	644,983	766,279
Other income increase restricted funds	4,079	196	8,311	13,175
City grant	-	-	-	-
AFUDC (Interest)	506	430	292	427
Total funds provided	763,721	694,097	653,586	779,881
Funds Applied				
Fuel costs	304,051	255,501	233,713	330,932
Other operating costs	334,199	318,510	316,625	310,708
Total operating expenses	638,250	574,011	550,338	641,640
Capital lease cost	-	-	-	-
Less: non-cash expenses	50,346	48,103	47,619	47,854
Total funds applied	587,904	525,908	502,719	593,786
Funds available to cover debt service	175,817	168,189	150,867	186,095
Add-back lease costs	-	-	-	-
Funds available excluding lease costs	175,817	168,189	150,867	186,095
1975 ordinance bonds debt service	28,592	30,163	31,754	30,691
Debt service coverage 1975 bonds	6.15	5.58	4.75	6.06
Net available after prior debt service	147,225	138,026	119,113	155,404
PMA & other capital leases	-	-	-	-
Net available after prior capital leases	147,225	138,026	119,113	155,404
1998 ordinance bonds debt service	69,749	47,668	67,874	72,274
Debt service coverage 1998 bonds	2.11	2.90	1.75	2.15
Net available after 1998 debt service	77,476	90,358	51,239	83,130
1998 ordinance subordinate bond debt service	-	-	-	1,988
Debt service coverage subordinate bonds	-	-	-	41.82

Source - PGW's Audited Financial Statements and PGW Records

2010	2009	2008	2007	2006	2005
742,342	910,457	831,428	840,105	929,961	830,550
16,890	18,984	18,199	19,246	24,007	32,807
759,232	929,441	849,627	859,351	953,968	863,357
3,660	12,434	3,881	6,423	11,969	1,513
18,000	18,000	18,000	18,000	18,000	18,000
390	247	338	408	981	907
781,282	960,122	871,846	884,182	984,918	883,777
354,004	545,846	511,976	539,300	625,093	509,704
308,590	299,712	282,270	280,448	254,947	283,308
662,594	845,558	794,246	819,748	880,040	793,012
-	-	-	-	-	-
70,404	67,897	68,898	66,246	38,197	39,338
592,190	777,661	725,348	753,502	841,843	753,674
189,092	182,461	146,498	130,680	143,075	130,103
-	-	-	-	-	-
189,092	182,461	146,498	130,680	143,075	130,103
30,101	32,313	34,225	35,359	41,949	38,806
6.28	5.65	4.28	3.70	3.41	3.35
158,991	150,148	112,273	95,321	101,126	91,297
-	-	-	-	-	1,998
158,991	150,148	112,273	95,321	101,126	89,299
65,095	70,569	59,695	47,611	32,838	45,999
2.44	2.13	1.88	2.00	3.08	1.94
93,896	79,579	52,578	47,710	68,288	43,300
1,986	1,990	1,986	1,987	1,986	1,987
47.28	39.99	26.47	24.01	34.38	21.79

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Demographic and Economic Statistics
Principal Employers
Current Calendar Year and Nine Years Ago

2013	2004
Albert Einstein Medical	Albert Einstein Medical
Children's Hospital of Philadelphia	City of Philadelphia
City of Philadelphia	Hospital of the University of Pennsylvania
Comcast Corporation	School District of Philadelphia
Hospital of the University of Pennsylvania	SEPTA
School District of Philadelphia	Temple University
SEPTA	Tenet Health System
Temple University	Thomas Jefferson University Hospitals
Thomas Jefferson University Hospitals	United States Postal Service
University Of Pennsylvania	University Of Pennsylvania

Listed Alphabetically
Source - City of Philadelphia

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Demographic and Economic Statistics
Calendar Years 2004 through 2013

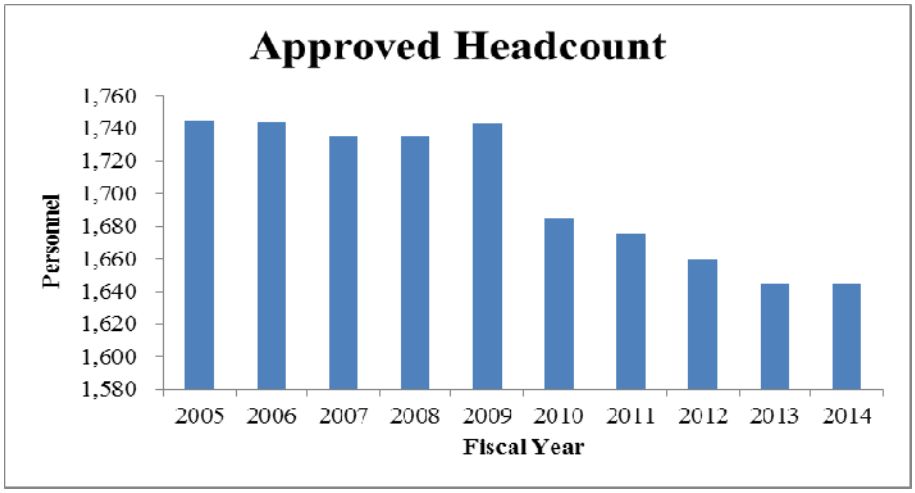
Calendar Year	Population (1)	Personal Income (Thousands of US Dollars) (2)	Per Capita Personal Income (US Dollars)	Unemployment Rate (3)
2013	1,553,165	63,473,002	42,155	10.0%
2012	1,547,607	54,151,742	41,452	10.5%
2011	1,538,567	62,632,520	40,708	10.8%
2010	1,526,006	56,970,074	37,333	10.8%
2009	1,547,297	54,061,223	34,939	9.6%
2008	1,540,351	54,262,716	35,228	7.1%
2007	1,530,031	50,672,227	33,118	6.0%
2006	1,520,251	47,566,075	31,288	6.2%
2005	1,517,628	44,944,207	29,615	6.7%
2004	1,514,658	43,463,015	28,695	7.3%

Sources:
(1) US Census Bureau
(2) US Department of Commerce, Bureau of Economic Analysis
(3) US Department of Labor, Bureau of Labor Statistics

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Budgeted Full-Time Personnel by Department
Fiscal Years 2005 through 2014

Departments	2014	2013	2012	2011
President & Chief Executive Officer	3	3	3	2
Chief Operating Officer	2	2	2	3
Chief Financial Officer	2	2	2	-
Gas processing	123	125	119	119
Field services	372	366	371	371
Distribution	472	468	467	467
Collection	31	31	35	36
Customer service	189	190	198	207
Marketing	44	46	41	34
Administrative and general	442	445	454	463
PGW Total	1,680	1,678	1,692	1,702
Personnel savings	(40)	(38)	(37)	(32)
Philadelphia Gas Commission	5	5	5	5
Grand Total	1,645	1,645	1,660	1,675

Source - PGW's Annual Operating Budget



2010	2009	2008	2007	2006	2005
2	2	2	2	3	4
2	2	2	7	5	6
-	-	-	-	-	-
119	123	133	133	141	141
341	342	342	342	359	359
467	467	470	470	476	476
91	104	110	92	132	128
207	208	194	214	199	193
34	30	30	30	32	30
459	460	465	463	457	451
1,722	1,738	1,748	1,753	1,804	1,788
(42)	-	(18)	(23)	(65)	(48)
5	5	5	5	5	5
1,685	1,743	1,735	1,735	1,744	1,745

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Operating Indicators
Fiscal Years 2005 through 2014

	2014	2013	2012
Financial			
Debt service ratio (1975 Ordinance)	6.15	5.58	4.75
Debt service ratio (1998 Ordinance)	2.11	2.90	1.75
Debt to total capital ratio	71.7%	75.2%	78.0%
Bad debt as a % of revenue	5.1%	5.8%	5.7%
Bad debt reserve as a % of accounts receivable	51.4%	51.9%	54.4%
Collection factor (receipts/billings)	94.9%	91.9%	96.6%
Cash balance (Thousands of US dollars)	105,734	100,933	75,826
Natural Gas (NG) storage (Thousands of US dollars)	60,089	70,638	73,086
Payroll			
Total payroll (Thousands of US dollars)	115,174	110,120	106,308
Overtime (Thousands of US dollars)	13,629	9,495	7,948
Overtime as a % of Total Payroll	11.8%	8.6%	7.5%
Liquefied Natural Gas (LNG)			
LNG to storage (Mcf)*	1,821,935	1,677,268	1,422,440
LNG from storage (Mcf)	3,210,133	1,537,601	974,238
Net to (from) storage (Mcf)	(1,388,198)	139,667	448,202
Off-system sales contributed to GCR (Thousands of US dollars)	321	743	748
Natural Gas Cost			
Gas utilized (Mcf)	52,961,786	50,178,147	43,017,936
Gas utilized (Thousands of US dollars)	304,040	255,496	233,709
Cost per Mcf ($)	5.74	5.09	5.43
Natural Gas Sales Information			
Firm gas sold (Mcf)	48,533,203	44,745,289	38,345,205
Interruptible gas sold (Mcf)	1,096,381	890,383	192,058
Total gas sold (Mcf)	49,629,584	45,635,672	38,537,263
Transportation gas – GTS (Mcf)	29,357,904	26,482,749	24,373,006
Other (Mcf)	1,498,458	1,965,785	1,828,311
Total gas sendout (Mcf)	80,485,946	74,084,206	64,738,580
Unaccounted for gas as a % of total gas sendout	2.0%	2.0%	3.2%
Transportation gas – GTS as a % of total gas sendout	36.5%	35.7%	37.6%
Firm gas sold as a % of total gas sold	97.8%	98.0%	99.5%
Degree Days			
Fiscal Year	4,405	3,889	3,037

* Mcf = Thousand cubic feet

Source – PGW Records

2011	2010	2009	2008	2007	2006	2005
6.06	6.28	5.65	4.28	3.70	3.41	3.35
2.15	2.44	2.13	1.88	2.00	3.08	1.94
79.7%	82.2%	82.7%	84.2%	84.8%	81.7%	82.8%
4.7%	4.6%	4.5%	4.4%	4.7%	4.2%	8.2%
50.3%	52.9%	53.8%	58.6%	62.9%	69.4%	70.3%
95.1%	98.7%	93.8%	95.5%	95.8%	96.6%	96.0%
105,386	79,052	13,750	49,338	51,698	6,697	15,221
78,579	96,097	117,889	179,750	138,388	139,870	121,266
106,125	106,003	107,918	105,596	106,018	102,544	102,500
9,700	8,494	10,171	10,115	10,684	10,342	10,239
9.1%	8.0%	9.4%	9.6%	10.1%	10.1%	10.0%
1,286,742	1,354,605	562,629	2,034,715	1,831,202	1,471,653	1,988,627
1,428,896	1,117,628	1,545,034	1,280,180	1,948,310	1,083,873	2,199,046
(142,154)	236,977	(982,405)	754,535	(117,108)	387,780	(210,419)
867	274	27	887	148	298	-
55,023,503	51,820,468	55,471,710	53,516,593	58,089,383	55,106,496	64,967,340
330,926	353,998	545,859	511,938	539,296	625,076	509,701
6.01	6.83	9.84	9.57	9.28	11.34	7.85
48,014,683	44,790,670	48,025,175	45,525,366	47,916,423	46,243,516	53,807,745
1,004,185	1,049,318	1,170,128	1,790,721	2,704,526	2,425,862	4,510,515
49,018,868	45,839,988	49,195,303	47,316,087	50,620,949	48,669,378	58,318,260
25,274,874	23,135,876	22,624,136	19,032,066	13,138,867	10,727,487	11,624,395
3,233,861	3,006,018	3,083,181	2,254,504	3,281,849	2,737,355	2,761,332
77,527,603	71,981,882	74,902,620	68,602,657	67,041,665	62,134,220	72,703,987
3.3%	2.9%	3.1%	2.2%	3.8%	3.1%	2.8%
32.6%	32.1%	30.2%	27.7%	19.6%	17.3%	16.0%
98.0%	97.7%	97.6%	96.2%	94.7%	95.0%	92.3%
4,005	3,730	4,190	3,746	3,773	3,819	4,333

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Capital Asset Information
Calendar Years 2005 through 2014

	2014	2013	2012	2011
Gas main (Miles)	3,023	3,025	3,026	3,027
Services (Miles)	2,860	2,779	2,736	2,772
Number of meters				
Residential/Small commercial	499,375	498,765	501,250	497,151
Large diaphragm	2,695	2,579	2,401	2,298
Rotary	9,883	9,778	9,690	9,551
Turbine	291	288	289	287
Total	512,244	511,410	513,630	509,287

Source - Gas Annual Report of PGW to the Pennsylvania Public Utility Commission

2010	2009	2008	2007	2006	2005
3,029	3,029	3,022	3,023	3,019	3,016
2,815	2,984	2,829	2,794	2,699	2,775
502,145	503,201	497,472	503,737	505,716	503,879
2,245	2,185	2,113	2,047	2,040	2,753
9,513	9,479	9,322	9,336	9,256	8,541
297	291	291	290	286	291
514,200	515,156	509,198	515,410	517,298	515,464

PHILADELPHIA GAS WORKS
(A Component Unit of the City of Philadelphia)
Ten Largest Customers
Current Fiscal Year and Nine Years Ago
(Thousands of U.S. dollars)

2014		2005	
Customer 1 (A)	5,035	Customer 1 (C)	9,905
Customer 2	4,434	Customer 2 (A)	6,547
Customer 3 (B)	4,353	Customer 3 (B)	5,531
Customer 4 (C)	3,639	Customer 4 (D)	4,036
Customer 5	2,675	Customer 5	1,736
Customer 6	1,998	Customer 6	1,618
Customer 7	1,993	Customer 7	1,463
Customer 8 (D)	1,918	Customer 8 (E)	936
Customer 9	1,724	Customer 9	914
Customer 10 (E)	1,202	Customer 10	846
Total	28,971	Total	33,532

Note - A letter designation indicates a repeat customer from the Fiscal Year 2005 list identified on the fiscal year 2014 list.

Source - PGW Records

APPENDIX B

INDEPENDENT CONSULTANT'S ENGINEERING REPORT

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Independent Consultant's Engineering Report

Independent Consultant's
Engineering Report

City of Philadelphia, Pennsylvania
Gas Works Revenue Refunding Bonds
Thirteenth Series (1998 General Ordinance)

Philadelphia Gas Works
Philadelphia, Pennsylvania

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BLACK & VEATCH CORPORATION
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2 July 2015

Mr. Rob Dubow
Director of Finance
City of Philadelphia
13th Floor, Municipal Services Building
1401 John F. Kennedy Boulevard
Philadelphia, PA 19102

Dear Mr. Dubow:

In accordance with our agreement with the Philadelphia Gas Works ("PGW") through the Philadelphia Facilities Management Corporation, the management entity for PGW, we submit herewith our independent consulting engineer's report (the "Report") to be included as an appendix to the official statement or official statements ("Official Statements") prepared in connection with the issuance of the City of Philadelphia, Pennsylvania (the "City") Gas Works Revenue Refunding Bonds, (1998 General Ordinance) which have been authorized to be issued from time to time, pursuant to Ordinance of Philadelphia City Council. The bonds to be issued may be issued as Thirteenth Series Bonds or as Bonds of subsequent series in an aggregate amount not to exceed $891,000,000. The Thirteenth Series Bonds proceeds will be used to achieve the refunding of all of PGW's outstanding 1975 General Ordinance Gas Works Revenue Bonds and a portion of PGW's outstanding 1998 General Ordinance Gas Works Revenue Bonds.

The purpose of this Report is to present the findings of our evaluation of PGW's gas works system (the "System") and to set forth information concerning financial factors relating to the Thirteenth Series Bonds. This Report is based on our analysis of the records and capital improvement programs of PGW, discussions with key PGW personnel in January and June 2015, physical inspections of predominately above-ground facilities conducted in January 2015, and such other investigations as we have deemed necessary.

The evaluation of the System, which includes a discussion of organization, management, and staffing; system service area; supply facilities; distribution facilities; and the Capital Improvement Program (the "CIP") for fiscal years 2015 through 2020, is presented in the first part of the Report. The second part of the Report contains: (a) financial feasibility information, including analyses of gas rates and rate methodology, (b) projection of future operation and maintenance expenses, (c) CIP financing plans, (d) projection of revenue requirements as a determinant of future revenues, and (e) an assessment of PGW's ability to satisfy the covenants in the General Gas Works Revenue Bond Ordinance of 1998, as amended and supplemented (the "1998 General Ordinance") authorizing the issuance of the Bonds (as defined below). "Prior Bonds" are defined as the outstanding bonds issued under the General Gas Works Revenue Bond Ordinance of 1975, as amended and supplemented ("1975 General Ordinance") and the 1998 General Ordinance. Together, the Prior Bonds and Thirteenth Series Bonds are collectively referred to as the "Bonds". A listing of our principal assumptions and opinions developed as a result of our studies is presented at the end of the Report.

This Report was prepared for the City by Black & Veatch Corporation ("Black & Veatch") and is based on information not within the control of Black & Veatch. In conducting our studies, we reviewed the books, records, agreements, capital improvement programs, and customers, sales and financial projections of PGW and investigated such physical properties of PGW as we deemed necessary to express our opinion of PGW's operating results and projections. While we consider such books, records, documents, and projections to be reliable, Black & Veatch has not verified the accuracy of these documents or the validity of the information provided by others. This Report is subject to the limitations set forth herein.

Black & Veatch is one of the oldest, largest and most diversified engineering, procurement, and construction companies in the United States. Black & Veatch operates and maintains a global network of regional, marketing, and project offices. Founded in 1915, Black & Veatch employs over 10,000 people performing financial, economic, and engineering studies and design and construction of facilities for clients in government and industry in the fields of energy, water, wastewater, and telecommunications. Black & Veatch has extensive experience in the design and analysis of the operation and financing of electric, natural gas, water, and wastewater systems serving communities ranging in size from small cities to large metropolitan systems of the magnitude of the System.

In this Report, where standards or requirements are indicated as being applicable, being fulfilled, or to be attained, such standards or requirements are those promulgated by the Pennsylvania Public Utility Commission (the "PUC") and other Federal, State, and local agencies, in accordance with the provisions of Federal laws and the laws of the Commonwealth of Pennsylvania governing the storage, delivery, and sale of natural gas. Capitalized terms not otherwise defined herein have the same meanings as ascribed to them in the 1975 General Ordinance or the 1998 General Ordinance. References made herein to specific years are for the fiscal years of PGW ending August 31, unless otherwise noted.

The Report includes our assessment of the condition of PGW's physical plant, including PGW's existing storage and distribution facilities, based upon site inspections of certain PGW facilities as deemed appropriate during January 2015. We also reviewed and evaluated existing and planned natural gas transportation and supply contracts with respect to volumes of natural gas to be delivered. The general physical condition of the System's facilities has been evaluated using three rating categories - good, adequate, and poor - as described below.

- **Good:** The facility is in condition to provide reliable operation in accordance with design parameters and requires only routine maintenance.
- **Adequate:** The facility is operating at or near design levels, however, non-routine renovation, upgrading, and repairs are needed for continued reliable operation. Significant expenditures for these improvements may be required.
- **Poor:** The facility cannot be operated within design parameters. Major renovations are required to restore the facility to reliable operating condition. Major expenditures for these improvements may be required.

The ratings assigned in this Report are the result of physical inspections of individual above-ground facilities at existing sites conducted in January 2015.

An evaluation of a gas storage and distribution system of the magnitude and complexity of PGW's requires an assessment of each of the System's various components. The evaluation described in this Report is based on estimates of the degree of improvement that has been or will be provided by the projects in the current CIP and their impact in meeting service requirements.

The projections set forth in this Report are "forward-looking statements." In formulating these projections, Black & Veatch has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodologies utilized by Black & Veatch in performing these analyses follow generally accepted practices for such projections. Such assumptions and methodologies are summarized in this Report and are reasonable and appropriate for the purpose for which they are used. While Black & Veatch believes the assumptions are reasonable and appropriate and the projection methodology valid, actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur that are unknown at this time and/or which are beyond the control of Black & Veatch. Such factors may include PGW's ability to execute the capital improvement plan as scheduled and within budget, regional climate and weather conditions affecting the demand for gas, and adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting PGW's ability to operate the System.

Based on these analyses and the assumptions set forth or referred to in this Report, we offer the following opinions to indicate PGW's conformance with specific requirements which must be met for the issuance of the Thirteenth Series Bonds as provided in the 1998 General Ordinance:

1. PGW is a competently managed and operated gas distribution utility. PGW and the System are organized, operated, and maintained at a level equal to, or in excess of, regulatory requirements and generally accepted industry practices. The System is in good operating condition.

2. Based upon Black & Veatch's evaluation of financial projections and certain assumptions with respect to the System which Black & Veatch believes to be reasonable, and on the basis of actual and estimated future annual financial operations of the System, the System should yield Gas Works Revenues (which are pledged under the 1998 General Ordinance) over the amortization periods of the Bonds issued under the 1998 General Ordinance which will be sufficient to: (a) meet all expenses of operation, maintenance, repair and replacement of the System, (b) meet all reserve or special funds required to be established under the 1998 General Ordinance, (c) meet the principal of and interest on all Bonds issued under the 1998 General Ordinance as the same shall become due and payable, and (d) provide such surplus requirements as are contained in the rate covenant of the 1998 General Ordinance. The Gas Works Revenues forming the basis of this opinion comply with the requirements of

the definition of Project Revenues contained in Section 2 of the First Class City Revenue Bond Act (the "Act").

3. The Gas Works Revenues which are pledged as security for the Bonds issued under the 1998 General Ordinance are currently, and are projected to be, sufficient to comply with the rate covenant set forth in Section 4.03(b) of the 1998 General Ordinance.

4. The capital improvements proposed during the projection period, September 1, 2015, through August 31, 2020, should, along with continued good operation and maintenance practices, enable PGW to maintain the System in good operating condition. Review of present management practices indicates that good operation and maintenance is likely to continue.

5. Contracted PGW gas supplies plus: (a) spot market purchases, (b) anticipated additional contracted supplies plus supplemental gas capacities, as well as, (c) the pipeline transport capacity to move these supplies to PGW, appear adequate to meet PGW's projected demand on a day of maximum demand (a "design peak day"), in an hour of maximum demand (a "design peak hour"), and during a year of maximum demand (a "design peak year").

Very truly yours,
BLACK & VEATCH CORPORATION

Russell A. Feingold
Vice President

Enclosure

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Acronym List

AFUDC	Allowance for Funds Used During Construction
AMR	Automatic Meter Reading Program
Bcf	Billion cubic feet
BPS	Boiler and Power Plant Service
CDS	Comprehensive Delivery Service
CG	Cogeneration Service
CHP	Combined Heat and Power
CIP	Capital Improvement Program
CLNP	Commercial Lien Notification Program
CNG	Compressed Natural Gas
CRP	Customer Responsibility Program
CSC	Customer Service Centers
CWP	Conservation Works Program
DB	Daily Balancing Service
DSIC	Distribution System Improvement Charge
DSM	Demand-Side Management
dt or Dth	Dekatherms
ECA	Energy Coordinating Agency of Philadelphia
ELIRP	Enhanced Low Income Retrofit Program
FERC	Federal Energy Regulatory Commission
FPL	Federal Poverty Level
FT	Firm Transportation
FY	Fiscal year beginning September 1 through August 31
GCR	Gas Cost Rate
GS	General Service
GSS	General Storage Service

GTS	Gas Transportation Service
HDD	Heating Degree-Day
IRC	Interruptible Revenue Credit
IT	Interruptible Transportation
IVR	Interactive Voice Response
LBS	Load Balancing Service
LCP	Landlord Cooperation Program
LIHEAP	Low-Income Home Energy Assistance Program
LNG	Liquefied Natural Gas
LTIIP	Long Term Infrastructure Improvement Plan
Mcf	Thousand Cubic Feet
MS	Municipal Service
NGS	Natural Gas Supplier
Notes	Gas Works Revenue Capital Projects Commercial Paper Notes
OPEB	Other Post-employment Benefits
OSBA	Office of Small Business Advocate
PFMC	Philadelphia Facilities Management Corporation
PGC	Philadelphia Gas Commission
PGW	Philadelphia Gas Works
PHA	Philadelphia Housing Authority
PSFT	Peaking Service Firm Transportation
Psig	Pounds per Square Inch Gauge
PUC	Pennsylvania Public Utility Commission
PWD	Philadelphia Water Department
SCADA	Supervisory Control and Data Acquisition
SEIU	Service Employees International Union
SS	Storage Service

UAAL	Unfunded Actuarial Accrued Liability
UESF	Utility Emergency Services Fund
UWUA	Utility Workers Union of America
W.C.	Water Column
WNA	Weather Normalization Adjustment
WSS	Washington Storage Service

Introduction

The Philadelphia Gas Works ("PGW") is a gas distribution utility owned by the City of Philadelphia, Pennsylvania (the "City"). PGW acquires, stores, distributes, and sells gas to residents and other customers within the City.

Under the terms of certain current revenue bond covenants, PGW is obligated to charge and collect rents, rates and charges to maintain net revenues at or above certain specified levels in excess of annual debt service requirements. In addition, prior to the authorization of the issuance of bonds under the General Gas Works Revenue Bond Ordinance of 1975, as amended and supplemented ("1975 General Ordinance") or the General Gas Works Revenue Bond Ordinance of 1998, as amended and supplemented ("1998 General Ordinance"), a financial report from the City's Chief Fiscal Officer, which may be given in reliance on an engineering report, is required.

Purpose

The purpose of this Independent Consultant's Engineering Report ("Report") is to summarize findings of engineering studies performed by Black & Veatch Corporation ("Black & Veatch") related to the gas system of PGW and to set forth information concerning the financial factors relating to the issuance of up to $891,000,000 in Gas Works Revenue Refunding Bonds (1998 General Ordinance) which have been authorized to be issued from time to time, pursuant to Ordinance of Philadelphia City Council. The bonds to be issued may be issued as Thirteenth Series Bonds or as Bonds of subsequent series.

The Thirteenth Series Bonds will be issued in one or more series with the proceeds assumed for the purposes of this Report to be used to achieve the refunding of all of PGW's outstanding 1975 General Ordinance Bonds and a portion of PGW's outstanding 1998 General Ordinance Bonds.

"Prior Bonds" are defined as the outstanding bonds issued under the 1975 General Ordinance and the 1998 General Ordinance. Together, the Prior Bonds and Thirteenth Series Bonds are collectively referred to as the "Bonds". "Notes" constitute Bonds within the meaning of the 1998 Ordinance and are issued as Subordinate Bonds constituting Interim Debt under the 1998 General Ordinance.

Scope

This Report addresses the organization and management, regulation, physical condition, adequacy of system capacity, operation and maintenance practices, and staffing levels of PGW's facilities. Black & Veatch performed inspections of PGW's facilities in January 2015. This Report provides a review of the proposed capital improvement program ("CIP") for fiscal years 2015 through 2020 and includes the results of engineering studies regarding the financial requirements of the System. Evaluation of the projected financing of future capital improvement needs is based upon a review of historical operating and financial data and projected capital program and operating budget information provided by PGW. Projections of revenues and revenue requirements are presented for the fiscal years 2016 through 2020. The financial feasibility of the issuance of the Thirteenth Series Bonds should be evaluated taking into account the results of these analyses and PGW's projected compliance with applicable revenue bond covenants.

PGW representatives and others have provided certain historical data and other information presented in this Report. Black & Veatch has not conducted verification tests of this information. In

conducting our analysis and preparing our opinions and the projections, Black & Veatch has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodologies utilized by Black & Veatch in performing these analyses follow generally accepted practices for such projections. Such assumptions and methodologies are summarized in this Report and are reasonable and appropriate for the purpose for which they are used. While Black & Veatch believes the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur. Such factors may include PGW's ability to execute the CIP as scheduled and within budget, regional climate and weather conditions affecting the demand for gas, and adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting PGW's ability to operate the System.

Black & Veatch Qualifications

Black & Veatch is one of the largest and most experienced engineering companies in the United States specializing in utility engineering. Our experience includes the planning, design, operation analysis, and construction of gas, electric, water, wastewater, and telecommunications systems. In addition, the firm has extensive experience in assisting utilities with management and financial aspects of their operations. The company has been engaged in several thousand projects with a range of clients that include utilities owned by municipalities ranging in size from small communities to large metropolitan regions, investor-owned utilities, industrial and commercial businesses, local and state agencies, and the United States and various foreign governments. Black & Veatch performed the Independent Consultant's Engineering Report ("2001 Report") for PGW's (1998 General Ordinance) Third Series Bonds issued in 2001, the Independent Consultant's Engineering Report ("2002 Report") for PGW's (1998 General Ordinance) Fourth Series Bonds issued in 2002, the Independent Consultant's Engineering Report ("2003 Report") for PGW's (1975 Bond Ordinance) Gas Works Revenue Refunding Bonds, Seventeenth Series issued in 2003, the Independent Consultant's Engineering Report ("2004 Report") for PGW's (1998 General Ordinance) Fifth Series A-1 and A-2 issued in 2004, the Independent Consultant's Engineering Report ("2006 Report") for PGW's (1998 General Ordinance) Sixth Series Bonds issued in 2006, the Independent Consultant's Engineering Report ("2007 Report") for PGW's (1998 General Ordinance) Seventh Series Bonds issued in 2007, the Independent Consultant's Engineering Report ("2009 Report") for PGW's (1998 General Ordinance) Eighth Series Bonds issued in 2009, the Independent Consultant's Engineering Report ("2010 Report") for PGW's (1998 General Ordinance) Ninth Series Bonds issued in 2010, the Independent Consultant's Engineering Report ("2011 Report") for PGW's (1975 General Ordinance) Twentieth Series Bonds and (1998 General Ordinance) Tenth Series issued in 2011, and the Independent Consultant's Engineering Report ("2013 Report") for PGW's Commercial Paper Notes. Since 1972, the Philadelphia Water Department ("PWD") also has engaged Black & Veatch for various consulting services. These consulting services have included engineering evaluation reports for all Water and Wastewater System Revenue Bonds sold by the City since 1974 and various projects involving the development of water and wastewater rates.

Experienced personnel from Black & Veatch have performed the physical evaluation of PGW's gas supply and distribution systems. In performing our engineering assessment of PGW, Black & Veatch reviewed the current condition, operation and maintenance of the gas supply and distribution systems. We conducted inspections of PGW's major facilities in January 2015, including PGW's city

gate stations and liquefied natural gas facilities. We also interviewed key members of PGW's management team in January 2015 regarding operations and maintenance issues and practices.

The financial feasibility review has been performed by personnel assigned to Black & Veatch Management Consulting, which provides services in such areas as utility rates, utility property valuation, depreciation rate studies, financial analysis and planning, non-audit accounting, management and operations analysis, and the preparation of independent engineering reports for official statements.

Organization and Management

PGW is owned by the City and is responsible for the acquisition, storage, and distribution of natural gas within the limits of the City. PGW is accounted for as a component unit of the City. As described in greater detail herein (*See The PGW Gas System*), PGW is the largest municipally-owned gas utility in the nation.

PGW's operations are managed by the Philadelphia Facilities Management Corporation ("PFMC"), a not-for-profit corporation whose Board is appointed by the Mayor. PFMC's responsibilities are set forth in a Management Agreement between the City and PFMC dated December 29, 1972, as subsequently amended ("Management Agreement"), which delegates responsibility for PGW's operation to an executive management team provided by PFMC. Under the Management Agreement, those responsibilities that are not specifically granted to PFMC fall under the domain of the Philadelphia Gas Commission ("PGC"), except to the extent preempted by the Pennsylvania Public Utility Commission ("PUC") pursuant to the Pennsylvania Natural Gas Choice and Competition Act ("Gas Choice Act"). The Gas Choice Act provides that PGW is subject to regulation by the PUC effective July 1, 2000, and that choice among natural gas suppliers will be provided to PGW's customers.

On March 31, 2003, the PUC approved PGW's restructuring plan, which among other things, provided for an unbundled tariff permitting customer choice of the commodity supplier. On September 1, 2003, PGW began operating under its Restructuring Compliance Tariff. PGW's Restructuring Compliance Tariff Rates are designed to maintain revenue neutrality and the Tariff Rules and Regulations are designed to comport with the Pennsylvania Public Utility Code.

City of Philadelphia

The City was founded in 1682 and merged with the County of Philadelphia in 1854. There are two principal governmental entities in Philadelphia: (1) the City, which performs ordinary municipal functions as well as traditional county functions, and (2) the School District, which has boundaries coterminous with the City and has responsibility for all public primary and secondary education. The court system in Philadelphia, consisting of Common Pleas, Municipal, and Traffic Courts, is part of the Commonwealth of Pennsylvania (the "Commonwealth") Judicial System. Although the Commonwealth pays judges and top level administrators, the City pays all other court costs, with partial reimbursement from the Commonwealth.

The City is governed primarily under the Philadelphia Home Rule Charter ("Home Rule Charter")[1], which provides for the election, organization, powers, and duties of the legislative branch (the "City Council"); the powers and duties of the executive and administrative branches; and the City's fiscal and budgetary matters, contracts, procurement, property, and records.

Philadelphia Gas Works

In March 1835, a City ordinance was passed authorizing private ownership and operation of a public gas utility under trustee management. This ordinance also contained an option clause permitting the City to take ownership of the gas utility properties by issuing City bonds to the

[1] Philadelphia Home Rule Charter, 351 Pa. Code §1.1-100 et seq., adopted pursuant to authorization of the First Class City Home Rule Act approved April 21, 1949, P.L. 665, §1 et seq. (53 P.S. §13101 et seq.).

private stockholders. The City exercised this option, initiating City ownership of gas utility properties to ultimately form PGW, on March 1, 1841. The City has owned the gas system continuously since that date. Manufactured gas production commenced February 8, 1836, and service was inaugurated February 10, 1836, to 46 gas lamps along Second Street.

During its more than 175 years of existence, the operation and management of PGW has evolved to its present configuration through a variety of arrangements. Initially the private owners managed it. In 1841, a Board of Trustees assumed management of PGW in accordance with an enabling City ordinance. This arrangement continued through April 1887, when the City, under the Director of Public Works, assumed direct management and operation of PGW. Serious financial and operating problems led to a change in this arrangement on November 12, 1897. At that time, the City, unable to sell PGW, contracted with the United Gas Improvement Company, now UGI Corporation, for the operation and management of PGW under authority granted by the Home Rule Charter. Operation and management by UGI Corporation continued through December 31, 1972.

On December 5, 1972, the City caused the incorporation of the Philadelphia Facilities Management Corporation as a not-for-profit Pennsylvania corporation for the specific purpose of operating PGW. PFMC currently manages PGW in accordance with the Management Agreement. The relationship between the City, PGC, PFMC, and PGW as originally detailed in the Management Agreement and as revised by the Gas Choice Act *(See Pennsylvania Public Utility Commission and Regulation)* is summarized below:

Organization	Function
City of Philadelphia	• The City owns PGW property. • The City Administrator reviews certain transactions and processes (chiefly through the Director of Finance). • City Council enacts legislation for the functioning of PGW (e.g., the capital budget, real estate transactions, pension modifications and certain gas supply contracts).

Philadelphia Gas Commission	• The Commission consists of the City Controller, two members appointed by the City Council and two members appointed by the Mayor.
	• Responsibilities include:
	  • Approval of certain executive personnel provided by PFMC.
	  • Review of gas supply contracts for approval by City Council.
	  • Approval of PGW's operating budget.
	  • Review of PGW's capital budgets for approval by City Council.
	  • Review of real estate transactions for approval by City Council.

PFMC	• Incorporated by the City in 1972 for the specific purpose of operating PGW. • Is governed by a seven member board of directors. • Provides executive management for PGW. • Directs operation of PGW facilities and operations.
PGW	• Manages construction, operation and maintenance of the gas system on a day-to-day basis. • PGW executive management is responsible for hiring PGW staff.
PUC	• Regulates rates, customer service and safety.

The Management Agreement states that for the operation of PGW, PFMC shall provide:

- A Chief Executive Officer,
- A Chief Operating Officer,
- A Chief Financial Officer, and

- Other personnel as deemed appropriate by PFMC.

All PFMC personnel are subject to the approval of the PGC. The PGC consists of five members: the City Controller, two Mayoral appointees, and two City Council appointees. The PGC has the general responsibility to oversee operation of PGW by PFMC and retains all powers not specifically granted to PFMC. In addition, the Management Agreement specifies certain functions of the PGC, mainly:

- Approval of PFMC personnel,
- Review and make recommendations regarding gas supply contracts for City Council approval,
- Approval of PGW's annual operating budget,
- Review and make recommendations regarding PGW capital budgets for City Council approval,
- Approval of short-term loans, and
- Review and approval of all PGW real estate acquisitions, sales, or leases for submittal to City Council for approval by ordinance, and power to establish procurement standards and to fix and regulate rates and charges[2] for supplying gas to customers other than the City and the Board of Education, which will annually produce revenues sufficient to:
    - Pay all operating and maintenance expenses of PGW and the interest and amortization expense of its debt,
    - Maintain debt coverage ratios,
    - Pay $18 million to the City each year, and
    - Provide such other funds as may be approved by the PGC and City Council for debt reduction or capital additions.

In preparing this Report, Black & Veatch interviewed key PGW officers[3] and a number of its managers. The interviews were supplemented with reviews of PGW's policies, practices, procedures, and field observations of employees at various facilities performing their daily activities. Based on these interviews, reviews, and observations, it is our opinion that PGW is suitably organized, managed, and operated by qualified personnel.

As of May 31, 2015, PGW employed 1,585 people. There were a large number of retirements at the beginning of 2015. At December 31, 2014, PGW had employed 1,685 people. PGW has been aware that the number of eligible retirees has been building for years. In anticipation of a high number of retirements, different organizational programs have been instituted over the last ten years including an active succession planning process.

For engineers and information services professionals, PGW created job ladders that reward performance on an accelerated basis. In addition, a rotational program has been implemented for engineers so that they have a better understanding of the various career paths within PGW. Because of this program, PGW has been able to promote many of the engineers who started with PGW ten years ago into more senior level positions such as superintendents and directors.

[2] As of July 1, 2000, the PUC became responsible for regulating rates pursuant to the Gas Choice Act.
[3] For the purpose of this report, PGW officers and management include individuals provided by PFMC.

Further, PGW has identified several senior employees who have a wealth of institutional knowledge and who are respected within the organization. These individuals actively serve as mentors to more junior staff members to facilitate the knowledge transfer process. From fiscal year 2014 to present, PGW has filled over 300 positions either through internal promotions or external hires.

As of May 31, 2015, approximately 72 percent of PGW's employees were represented by the Gas Works Employees' Union of Philadelphia Local 686, Utility Workers' Union of America, AFL-CIO ("Local 686"). On June 3, 2015, PGW and the Officers of Local 686 tentatively agreed upon a new, five-year Collective Bargaining Agreement to replace the previous agreement that expired on May 15, 2015, with no work stoppage in the interim. The agreement was subsequently approved by the PFMC Board on June 15, 2015 and by bargaining unit members on June 17, 2015. This agreement expires on May 15, 2020. Notable terms and provisions of the agreement include general wage increases of 2%, 2.5%, 2.5%, 2.5% and 2.5% effective May 15, 2015, 2016, 2017, 2018, and 2019, respectively. The starting salaries for select entry level union positions will be increased 10%. Union covered employees on the payroll at May 15, 2015 will be protected from layoff for the term of the contract. A minimum staffing level for field classifications of 590 union covered employees was established for the combined complement of Distribution Department and Field Services Department employees. The current combined complement of union covered employees in these departments is approximately 650. Shift premiums will also be increased approximately $0.25 per hour.

A major change in work conditions includes PGW's ability to freely employ outside contractors to perform work on coated and unprotected steel mains, cast iron mains, and service lines through which gas is flowing provided a base mileage of 22 miles of applicable main replacement is achieved through the course of a fiscal year. PGW anticipates exceeding 22 miles of applicable main replacement on an annual basis. This work includes: installing mains of all diameters, connecting mains of all diameters to one another, installing service lines, and rebuilding meter sets, and relighting systems inside customer's properties after main installation. Further, outside contractors may be used to perform main abandonment projects regulated by the PUC, including non-payment shut-offs, cold weather surveys, shut-offs of accounts involving theft and inactive service accounts. Previously, this work was restricted to Local 686 employees.

The following are brief biographical descriptions of the current PFMC/PGW senior officers:

Craig E. White, President and Chief Executive Officer

Craig White is the President and Chief Executive Officer of the Philadelphia Gas Works, the nation's largest municipally owned natural gas company, serving some 500,000 residential, commercial and industrial customers in the City of Philadelphia. Mr. White started with the organization in 1980. During his 35 years of service, he progressed through the ranks and in March of 2011 he was moved to his present position as President and Chief Executive Officer. Mr. White received a Bachelor of Science Degree from Kutztown University. He is a graduate of Drexel University's MBA Program and has completed executive development programs at Drexel University and Harvard Business School. Mr. White is actively involved in community service through his affiliation with the Citizens Crime Commission as well as industry and professional organizations. He serves on the Board of Directors of the American Gas Association, Aria Health System, and the National Petroleum

Council. He also serves on the Board of the Energy Association of Pennsylvania and is the past Chairman as well as former Executive Board Member of the American Public Gas Association.

Douglas A. Moser, Executive Vice President and Acting Chief Operating Officer

Mr. Moser started with the Philadelphia Gas Works in 1979. During his 36 years of service, he progressed through the ranks and in 2012 he was moved to his present position as Executive Vice President and Acting Chief Operating Officer. Mr. Moser received his Bachelor of Science degree in Chemical Engineering from Pennsylvania State University and a Master in Business Administration degree from Widener University. He serves on the Gas Board of the Energy Association of Pennsylvania as Chairman and the Leadership Council of the American Gas Association.

Joseph F. Golden, Jr., Executive Vice President and Acting Chief Financial Officer

Mr. Golden was appointed Executive Vice President and Acting Chief Financial Officer in March 2012. In this capacity he is responsible for the treasury, accounting, budgeting, and gas planning functions. Prior titles held by Mr. Golden at PGW include: Controller, Treasurer, Manager Treasury Department, Senior Staff Accountant, and Staff Accountant. Mr. Golden started his career with PGW in August of 1986. Mr. Golden has prior work experience in public accounting, treasury accounting and cash management, and manufacturing. Mr. Golden holds a Bachelor of Science degree in Accounting from Villanova University, a Master of Business Administration degree from Drexel University, and a Juris Doctor degree (Cum Laude) from Temple University School of Law.

Abby L. Pozefsky, Esq., Chief Administrative Officer and General Counsel

Ms. Pozefsky has served as General Counsel since 1998. In December 2012 she was also appointed Chief Administrative Officer, promoted from the position of Senior Vice President, Administration. She manages Human Resources, Risk Management, Technical Compliance, Ethics and Legal. Ms. Pozefsky previously held the position of Chief Deputy City Solicitor of Regulatory Affairs for the City's Law Department, where she was also General Counsel for the Philadelphia Water Department and the Philadelphia International Airport. Having been licensed in four states, she has practiced law with a private law firm, community legal services and the Colorado Attorney General, and she has taught at Virginia Commonwealth University. She serves as a trustee for the PGW OPEB Trust and Secretary to the Philadelphia Facilities Management Corporation, and is a member of various legal and human resources professional associations. Ms. Pozefsky received her Juris Doctor from New York University Law School, and her Bachelor of Arts (Cum Laude) from the University of Pennsylvania.

Charles J. Grant, Chief of Staff

Mr. Grant was appointed Chief of Staff in the Office of the President and Chief Executive Officer in March 2011. He previously held the same position in the Office of the Executive Vice President and Chief Operating Officer when he joined PGW in June 2010. His responsibilities include oversight and enforcement of PGW's labor contracts, including disciplinary issues involving Union personnel, working with senior management on regulatory and stakeholder issues, developing initiatives to enhance PGW's regulatory and legislative goals as well as improving PGW's relationship with various stakeholders, including customers. He is also responsible for media relations, crisis communications, community partnerships, government affairs, internal communication, digital communication/social media and advertising campaign development. Prior to joining PGW, Mr.

Grant was the owner and managing partner in the law firm of Grant & Lebowitz, LLC of Philadelphia, Pennsylvania. He represented clients in labor and employment matters, insurance defense and commercial litigation, civil rights defense, and eminent domain litigation. Mr. Grant also served as the Chief of the Homicide Unit for the Philadelphia District Attorney's Office. He collaborated with the Philadelphia Medical Examiner's Office and Philadelphia Police Department to solve homicides committed within the City; authorized search and seizure and homicide arrest warrants; supervised and assigned 22 homicide prosecutors to handle homicide prosecutions, including death penalty litigation. Prior to joining the Philadelphia District Attorney's Office, Mr. Grant served as a Deputy District Attorney in the Los Angeles County District Attorney's Office. He also served as an adjunct professor at the Beasley School of Law, Temple University. Mr. Grant has been admitted to practice in the State of California, the Commonwealth of Pennsylvania and the District of Columbia. Mr. Grant earned his Bachelor of Arts degree from the Honors College of Ohio University and his Juris Doctor degree from Georgetown University Law Center.

Daniel P. Murray, Senior Vice President – Customer Affairs and Operations

Mr. Murray was appointed Senior Vice President of Customer Affairs and Operations in December 2012. He is responsible for defining the strategy and the execution of all customer care, collections, field operations, and supply chain functions. He is charged with providing exceptional customer service for new and existing customers, improving revenue recovery, maintaining the safety and reliability of the gas distribution system, and providing goods and services to internal customers in the most cost effective manner while meeting the associated corporate-driven objectives and regulatory requirements. Prior titles held by Mr. Murray at PGW include: Vice President Customer Affairs, Director of Resource Management for Field Operations, and Director of Special Projects. Prior to joining PGW, Mr. Murray was a Senior Manager in the Utility practice of the global management consulting company, Accenture. He held various management positions on multiple Utility consulting engagements focused on strategic planning, business process design and improvement, and systems design and integration. Mr. Murray holds a Bachelor of Science degree in Business Management from Providence College.

Raymond M. Snyder, P.E., Senior Vice President - Gas Management

Mr. Snyder began his career at PGW almost 35 years ago in the Engineering Department. He continued in Engineering until he reached the level of Manager. Mr. Snyder moved into Operations as the Director of Systems Administration and then as Director of Gas Processing. His current position as Senior Vice President of Gas Management includes responsibility for Gas Processing, Engineering, Gas Acquisition, Transportation & Gas Control, as well as PGW-owned and -leased properties. Mr. Snyder received his Bachelor of Science in Civil Engineering from the Pennsylvania State University and his Master of Science in Engineering Management from Drexel University. He is a licensed professional engineer in Pennsylvania.

Eloise N. Young, Vice President and Chief Information Officer

Ms. Young has been the Chief Information Officer of the PGW since August 2007. She brings more than 20 years of experience to the position. As CIO, she is responsible for delivering information technology capabilities to PGW's approximately 1,600 employees. Prior to her appointment, she served in a number of positions in PGW's Information Services Department including Director of Technical Strategy and Support, Manager of Systems Services, System Administrator in both the

Unix and CICS environments, DBA, and applications developer. Ms. Young is a native Philadelphian, and volunteers work for area community groups. In 2011, Ms. Young was recognized as an Employee Chair of the Year with a Champions of Impact Award by the United Way of Southeastern Pennsylvania and named one of the "Most Powerful and Influential Women in Pennsylvania" by the National Diversity Council. In addition, Ms. Young belongs to the Network of Women in Computer Technology, American Association of Blacks in Energy, and the Non Profit Technology Network. She is also a Leadership Philadelphia Core Class 2010 alumnus and is an active participant in the Green Grid's Utility Task Force. A lifetime member of the Black Data Processing Professionals, Ms. Young sits on the Philadelphia chapter's Corporate Advisory Council. She received a Bachelor of Science degree in Information Technology from the University of Phoenix in 2003 and a Generalist Master of Business Administration from Rosemont College in 2014.

Philadelphia Gas Commission

The Philadelphia Home Rule Charter contains provisions for the establishment of the PGC with powers and duties as set forth in ordinances and contracts. The Management Agreement grants PGC certain specified powers and duties and all other powers not specifically granted to PFMC. The powers and duties granted to PGC include approval of personnel provided by PFMC, review of gas supply contracts for approval by City Council, approval of changes in tests and standards of gas quality and pressure, approval of PGW's operating budget, review of PGW's capital budgets and recommendations thereon to City Council, approval of certain loans (but not the issuance of bonds), access to and review of all books, records and accounts of PGW, prescription of insurance requirements, promulgation of standards for procurement and disposal of material, supplies and services and approval of all real property acquisitions for further approval of City Council.

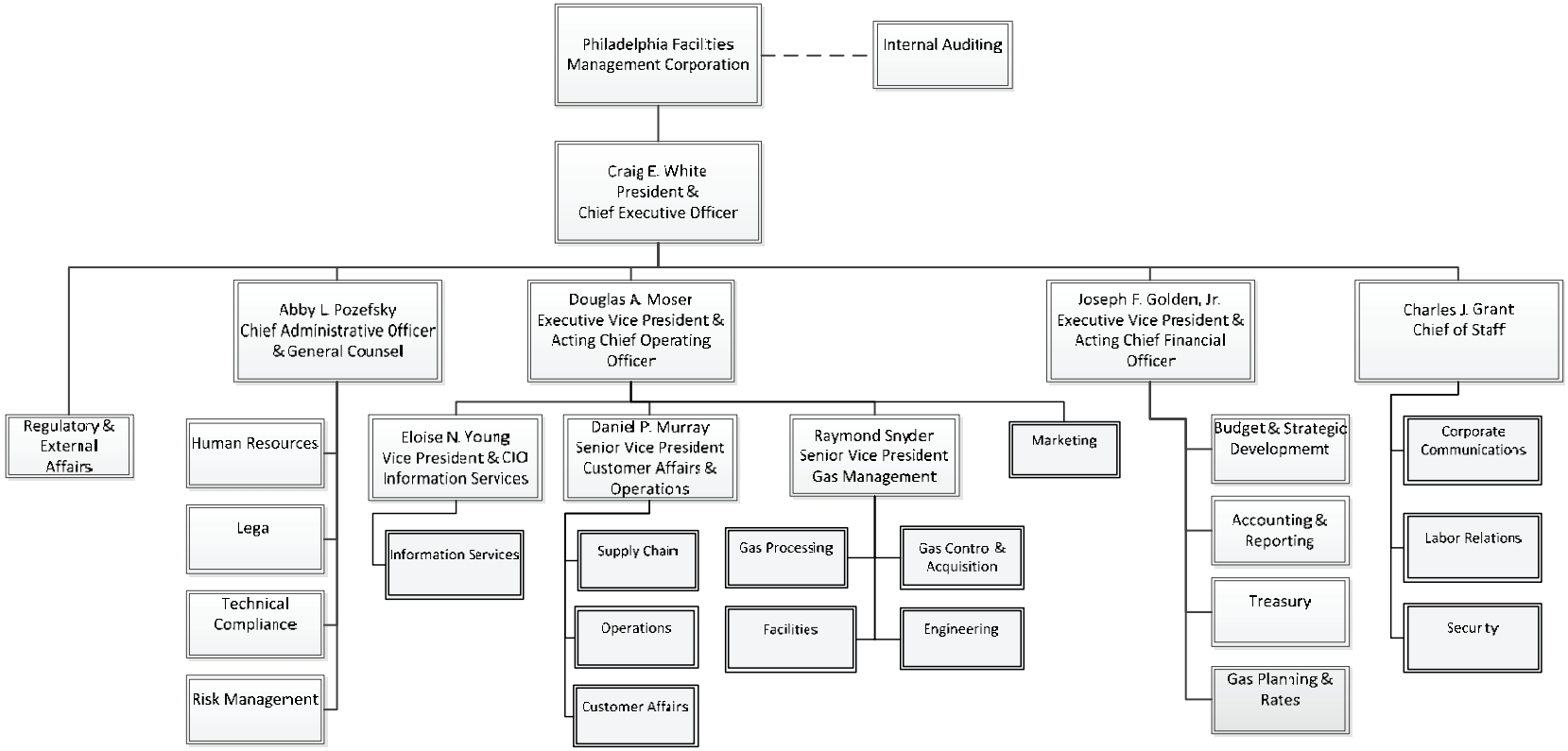

Figure 1 Philadelphia Gas Works Organization Chart

Pennsylvania Public Utility Commission

The PUC regulates the rates and service of Pennsylvania's public utilities, including electricity, water, natural gas, and telephone. Under current law, all rate regulation authority for PGW is held by the PUC, pursuant to the Gas Choice Act. The Gas Choice Act contains provisions which are designed to: (i) preserve the tax-exempt status of Approved Bonds, defined in the Gas Choice Act as bonds or other obligations issued by the City for PGW, including the Thirteenth Series Bonds, (ii) preserve the ability of the City to comply with its covenants, including the City's covenants with respect to the imposition and collection of rates and charges to the holders of Approved Bonds, including the Thirteenth Series Bonds, and (iii) require rates to be set for PGW utilizing the ratemaking methodology and requirements that were applicable to PGW's natural gas distribution operation prior to the assumption of jurisdiction by the PUC. Pursuant to the Gas Choice Act, among other things:

- Commencing July 1, 2000, PGW is subject to regulation by the PUC and, except as otherwise provided in the Gas Choice Act, the provisions of the Public Utility Code apply to PGW as if it were a public utility. The PUC, instead of the PGC, sets rates for PGW's customers.
- Notwithstanding customer choice in gas suppliers, PGW's gas distribution business will remain a regulated monopoly.
- In setting rates and notwithstanding any other provision of the Public Utility Code, the PUC must permit the City to impose, charge and collect rates or charges as necessary to permit the City to comply with its covenants to the holders of any Approved Bonds, as defined in the Gas Choice Act. All bonds issued by the City on behalf of PGW under the Act, including the Thirteenth Series Bonds, are Approved Bonds.
- The PUC is obligated to use PGW's ratemaking methodology and requirements until all Approved Bonds are refunded or defeased.
- The PUC is barred from requiring the City or PGW to take any action (or omit taking any actions) under the Public Utility Code if such action or omission would have the effect of causing the interest on any bonds issued by the City on behalf of PGW, including the Thirteenth Series Bonds, to be includable in the gross income of the holders of such bonds for Federal income tax purposes.
- On March 31, 2003, the PUC approved PGW's restructuring plan (Docket No. M-00021612), which implements customer choice and permits licensed natural gas suppliers to deliver gas to customers in Philadelphia using PGW's distribution system.
- On September 1, 2003, PGW began operating under its Restructuring Compliance Tariff.
- The PUC may, but is not required to, approve a senior citizen discount. On September 30, 2004, the PUC denied PGW's request to continue the senior discount program for post-September 1, 2003, applicants. Since September 1, 2003, the program is not available to new participants. *(See Senior Citizen Discount Program).*
- The PUC is required to provide for a management audit of all employees, records, equipment, contracts, assets, liabilities, appropriations, and obligations of PGW prior to the commencement of the restructuring proceeding. *(See Rates and Tariffs, Regulation).*

- Effective July 1, 2000, the provisions of the Home Rule Charter with respect to the powers and duties of the PGC are abrogated to the extent inconsistent with the Gas Choice Act.
- The City cannot be required to take any action under the Public Utility Code if the effect of the action is to cause a variation in the City's financial plan approved by the Pennsylvania Intergovernmental Cooperation Authority.
- The City's executive or legislative powers to "legislate or otherwise determine the powers, functions, budgets, activities and mission of PGW" are not abrogated or limited.

By Order entered April 19, 2010, the PUC issued a Policy Statement which reaffirmed its use of PGW's prior ratemaking methodology, the cash flow method, to determine PGW's allowable revenue requirement. The Policy Statement also reaffirmed the PUC's obligation to establish rate levels adequate to permit PGW to satisfy its bond ordinance covenants. The PUC further set forth a series of factors it would consider in determining just and reasonable rates for PGW, including: Test Year year-end cash and projected future levels of non-borrowed year-end cash; available short-term borrowing capacity; internal generation of funds for construction; debt-to-equity ratios and the financial performance and level of operating and other expenses of similarly situated utility enterprises; level of financial performance needed to maintain or improve PGW's bond rating; PGW's management quality, efficiency and effectiveness; service quality and reliability; and effect on universal service.

This Report assumes rate regulation will be administered by the PUC to comply with PGW's prior ratemaking methodology (as interpreted by the Policy Statement) and the City's bond covenants, as required by the Gas Choice Act.

The PGW Gas System

PGW began gas production in February 1836 and has since continuously provided the City with service. Today, PGW is the largest municipally owned gas utility in the nation, maintaining a distribution system of approximately 3,024 miles of gas mains and 475,800 service lines. In addition to this extensive distribution system, PGW operates facilities for the liquefaction, storage, and vaporization of natural gas to supplement gas supply taken directly from interstate pipeline and storage companies.

Population and Service Area

The PGW Gas System presently serves the limits of the City with a customer base of approximately 500,000. This service area is shown in Figure 2. The service area consists of an urban area of 129 square miles located in southeast Pennsylvania along the Delaware River. Philadelphia is the largest incorporated area within the Delaware Valley region. According to the 2013 United States Census Bureau survey, Philadelphia has a population of approximately 1,553,165, an increase of about 1.78 percent since 2010.[4]

Supply Facilities

The principal PGW natural gas supply facilities include nine city gate stations owned in large part by the interstate pipeline companies serving PGW and two liquefied natural gas ("LNG") plants, Richmond and Passyunk, owned by the City. The supply facilities also include a gas control center, a deactivated propane/air plant, and two gas holders, one of which has been removed from service.

City Gate Stations

Natural gas is received through nine city gate stations from two pipeline transmission companies – Spectra Energy ("Spectra") and Transcontinental Gas Pipe Line Corporation ("Transco-Williams"). The two pipeline companies own most of the facilities and land at eight of the nine city gate stations. The pressure delivered to PGW's distribution system is controlled at each of the city gate stations. Eight city gate stations are equipped with gas heaters.

Gas Control Center

The gas control center is located at 1800 N. 9th Street, with a backup at the Richmond Plant. The center monitors and controls gas flow and pressure from the nine city gate stations to the high-pressure distribution system. The gas control dispatchers also provide direction to the LNG production plant operators concerning startup, shutdown and gas flow output from the LNG facilities. Operations are facilitated through the use of a computer system that includes a backup unit and an auxiliary power supply.

[4] The City of Philadelphia and Philadelphia County are coextensive. *United States Census Bureau, American Community Survey 2013, Census 2010*

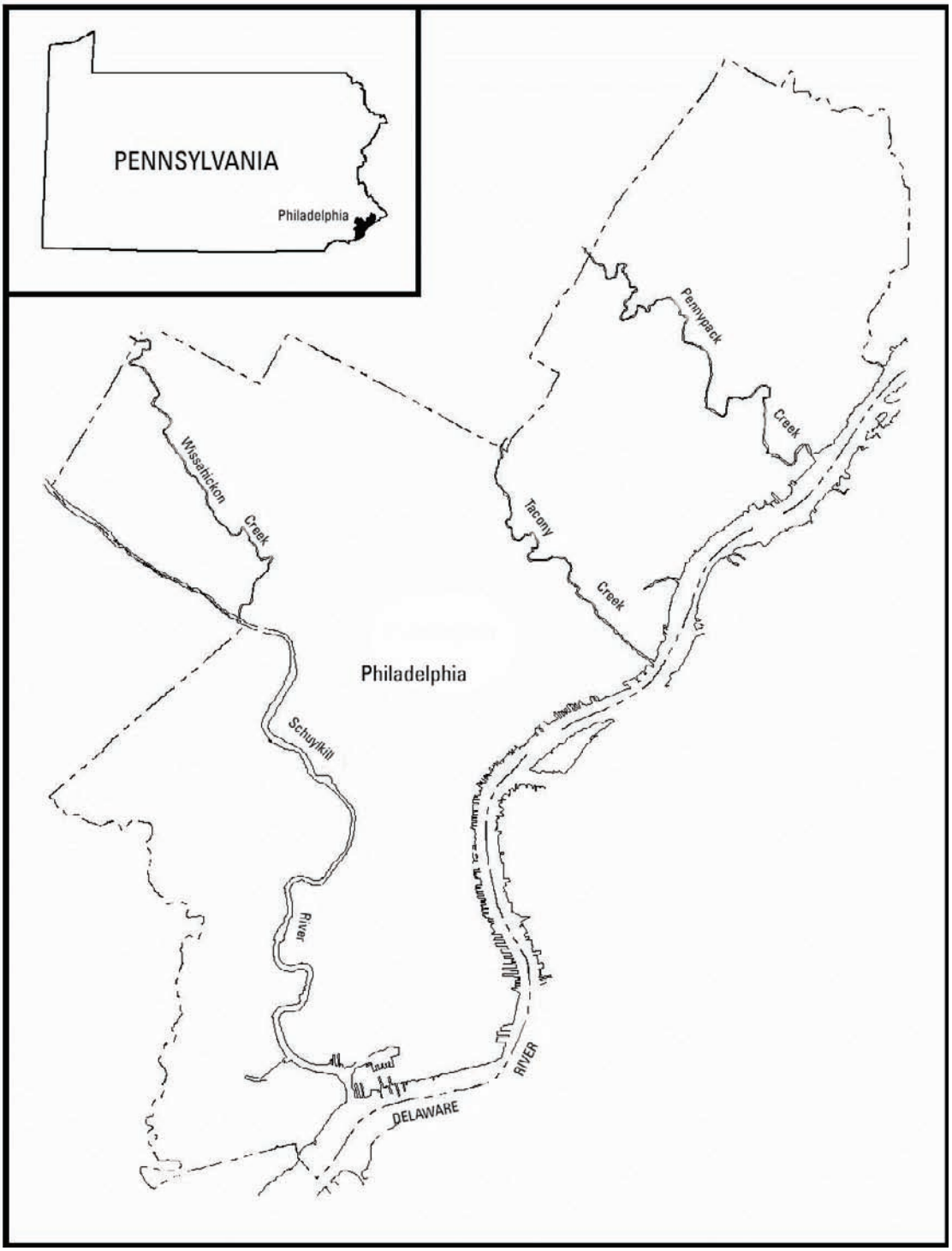

Figure 2 Philadelphia Gas Works Service Area

LNG Facilities

There are two LNG facilities – one at the Passyunk Plant and one at the Richmond Plant. The smaller satellite facility at the Passyunk Plant includes LNG storage and vaporization. It receives liquefied gas supply from the Richmond Plant via cryogenic trailer trucks. The Passyunk LNG facility consists

of one LNG storage tank of 3,066,000 gallons gross capacity (i.e., the equivalent of 253,300 thousand cubic feet ("Mcf") of natural gas) and two LNG vaporizers, each having a capacity of 45,000 Mcf per day resulting in 45,000 Mcf per day planned capacity and 45,000 Mcf per day reserve.

The Richmond LNG plant is one of the largest peak shaving facilities in the United States. It includes liquefaction, storage and vaporization facilities. A new liquefaction facility was completed and tested in March 2005, which replaced the original modified cascade liquefaction facility which has subsequently been removed from service. The new facility utilizes open expander technology. It has a daily liquefaction capacity of 16,000 Mcf per day. This technology utilizes energy from the high pressure interstate pipeline system to run the expander/compressors, significantly reducing fuel requirements. Further, this technology utilizes significantly fewer components than the older modified cascade facility and has resulted in lower operation and maintenance costs. The maximum capacity of the open expander liquefaction facility of 16,000 Mcf per day is not available during the summer months because the demand on the PGW system is not sufficient to create the throughput necessary to run at this capacity.

The two storage tanks at the Richmond Plant have a combined gross capacity of 48,970,000 gallons of LNG (4,045,800 Mcf). Regasification of the liquid natural gas is accomplished with six vaporizers having a total output of 463,000 Mcf per day plus 100,000 Mcf per day in reserve. The Richmond Plant also has facilities to receive LNG from and deliver LNG to cryogenic trailer trucks.

Gas Holder Storage Facilities

The Richmond Plant has a low pressure gas holder. The Richmond holder has an operating capacity of 1,000 Mcf. It was installed in the manufactured gas era and is in working order. It is used to enhance operational flexibility of the LNG Plant. The Passyunk gas holder has been removed from service.

Distribution Facilities

The principal gas distribution facilities consist of approximately 3,024 miles of main, 475,800 service lines, 202 regulator stations, 573,052 meters (of which 511,872 are active) and miscellaneous valves, instruments, and other appurtenances. PGW operates eight different operating pressure systems; each system is connected to the other by control regulators. The minimum and maximum operating pressures for these systems are:

	Pressure (PSIG)	
Pressure System	**Minimum**	**Maximum**
Richmond High Pressure Lateral	100	800
Transmission Main TP-1	125	500
Passyunk High Pressure Lateral	75	500
150 PSIG System	60	150
60 PSIG System	35	60
High Pressure Distribution System	10	35
Intermediate Pressure Distribution System	1.5	5
Low Pressure Distribution System (Inches W.C.)	4.5"	14"

The majority of PGW customers are served from the low-pressure distribution system (approximately 0.25 psig).

Approximately 50 percent (by length) of the gas mains are cast iron, 33 percent are steel, 4 percent are ductile iron, and 13 percent are plastic. Of the steel mains, approximately 50 percent are wrapped, coated, and cathodically protected. Approximately 31 percent of the service lines are steel (of which 17 percent are cathodically protected) and 69 percent are plastic.

PGW Technical Compliance Department

The Technical Compliance Department provides regulatory guidance and oversight for PGW operations to ensure compliance with applicable Federal (Department of Transportation, Environmental Protection Agency, Federal Emergency Management Agency), State (Pennsylvania Department of Labor and Industry, Pennsylvania Department of Environmental Protection, and the Pennsylvania Utilities Commission), and City (Philadelphia Water Department, Philadelphia Department of Public Health, Philadelphia Air Management Services, and Philadelphia Office of Emergency Management) laws and regulations. The Technical Compliance Department is currently staffed with approximately 15 personnel among four operating units: Chemical Services, Environmental Services, Gas Safety Regulatory Services, and Corporate Preparedness.

- Chemical Services provides chemical and physical analyses and advisory services relating to compliance with environmental, health and safety regulations, by carrying-out daily, weekly, and monthly analytical services in support of PGW operations including natural gas composition and BTU analysis, odorant analysis, LNG analysis, and glycol analysis.
- Environmental Services confirm environmental regulatory compliance with Federal, State, and City regulations for all activities conducted at PGW facilities or locations in support of PGW operations. Environmental Services is managing environmental remediation and monitoring efforts among five former manufactured gas plant sites, and managing compliance requirements (in conjunction with Chemical Services) for a total of 12 regulated storage tank systems.
- Gas Safety Regulatory Services supports PGW operations with provision and documentation of PUC safety inspections, data requests and official correspondences for PGW's Gas Processing, Field Services, and Distribution departments.
- Corporate Preparedness is engaged in the ongoing process of identifying and planning for risks of disruption to operations and services. The fundamental goals of Corporate Preparedness are to protect human life, minimize disruptions of service to the organization and customers, minimize financial loss, and to ensure a timely resumption of service.

Other Facilities

PGW's central building complex is located near Temple University in the north central section of Philadelphia. There are executive and administrative operating offices in a 150,000 square foot office building constructed in 1988, located at 800 West Montgomery Avenue. Adjacent to that, the former general office building, located at 1800 N. 9th Street, still houses additional administrative operations, in addition to distribution and field service dispatch centers, gas control dispatching, operating stations, a post office, duplicating center, radio repair shop, training facilities, parking facilities, telecommunications, and warehousing, as well as information systems center and a metal

fabrication shop. The central complex includes a meter shop and the main automotive maintenance and repair facility. The automotive maintenance and repair facility is responsible for the upkeep of PGW's fleet of 661 vehicles, 97 portable compressors, and 43 trailers. PGW also maintains three minor automobile repair facilities at several of its outlying stations. Additional facilities include six customer service district offices, the Tioga station for distribution crews, two LNG plants, five other warehousing facilities and three operating stations for field service crews.

Data Center

A new data center has been installed in the 800 West Montgomery Avenue building. The data center facility and operations were relocated from the 1800 N. 9th Street building. Upon completion of the move, PGW reduced its data center footprint from almost 7,000 square feet to 1,700 square feet and completed a major move toward updating the existing facility. The new data center design includes: a new dedicated backup generator, two fully independent or redundant power supply circuits fed from two new fully redundant battery powered uninterruptible power supplies. The modular datacenter design allows for information technology equipment load growth such as future supervisory control and data acquisition ("SCADA") equipment and telecom switching equipment and provides increased redundancy of cooling systems to essentially four systems.

The new datacenter features a highly efficient hot aisle containment system and will host state of the art information technology equipment. A Virtual Desktop Infrastructure project is planned in 2015 to extend virtualization into the desktop space and to effectively move all PGW desktop computing resources into the new datacenter. In 2015 a new state of the art SCADA and VOIP Phone system are planned to be installed in the new location.

Combined Heat and Power

A 200 kW natural gas-fired micro-turbine combined heat and power ("CHP") system produces electricity, heat and cooling for the 800 West Montgomery Avenue building. PGW estimates that approximately half of the building's electricity is produced by the CHP at approximately half the cost of that purchased from the local distribution grid. Waste heat from the micro-turbine's exhaust is converted via an absorber chiller into building cooling providing additional annual operating savings. The CHP system is also used by PGW marketing to demonstrate the advantages of CHP systems to customers in the growing CHP service segment.

Condition of Facilities

In January 2015, Black & Veatch conducted site inspections of certain PGW facilities as deemed appropriate. During the inspections, Black & Veatch used three evaluation criteria based on observation to evaluate the condition of each facility. These criteria are described below:

- *Good*: The facility is in condition to provide reliable operation in accordance with design parameters and requires only routine maintenance.
- *Adequate*: The facility is operating at or near design levels, however, non-routine renovation, upgrading and repairs are needed to ensure continued reliable operation. Significant expenditures for these improvements may be required.
- *Poor*: The facility cannot be operated within design parameters. Major renovations are required to restore the facility and assure reliable operation. Major expenditures for these improvements may be required.

Construction Sites

Inspections at construction sites included the observation of crews, vehicles, power-operated equipment, tools, safety procedures for the crew and public, construction standards, and general quality of work performed.

System maps were also examined and compared to existing facilities. This comparison showed the maps to have adequate detail to describe the system at the site. The maps contain the year the natural gas main was placed in service, size and material used, operating pressure, location of valves and bends, and where repairs have been performed.

Meter Settings

Meter setting observations include materials and equipment. Observed meter settings conformed to accepted industry standards, accessibility, and safety and security measures.

Field and District Offices

Field and district office sites, including related facilities, such as vehicle and equipment fueling stations, garage and vehicle maintenance supply, structures, driveways, parking, material and equipment storage areas and security features, were observed. Three of the six district offices are leased to PGW. Inspections of these leased sites were focused primarily on materials and equipment typically provided by PGW. The three PGW owned district offices were renovated in 2015 to facilitate improved customer service and security.

Personnel

During the inspection period, Black & Veatch conducted interviews and was assisted by PGW staff who are experienced, qualified, well trained, and knowledgeable in their assigned tasks. In addition to details of the operations, they were knowledgeable in details of routine and preventative maintenance procedures PGW has in place.

The following is a list of key areas discussed in conducting inspections and in the collection of system data:

- Construction
- Corrosion Engineering
- Field Offices
- District Offices
- Treasury
- District Regulators
- Field Services
- Gas Supply
- System Losses & Meter Maintenance Programs
- Leak Surveys
- Operations
- SCADA System
- Meter Settings
- City Gates and LNG Plants
- Accounts Receivable

Facility Inspections

The following facilities were inspected in January 2015:

Supply Facilities

Liquefied Natural Gas Facilities	***City Gate Stations***	
Richmond Plant	030	Penrose
Passyunk Plant	034	Richmond
	060	Somerton
	Ashmead	Whitman
	Ivy Hill	

Distribution Facilities

Meter Settings	***Construction Sites***
Navy Yard building 633	Allegheny St. and 30th St Tie-in of new 8" PE main to existing 16" CI main on low pressure system.
Navy Yard building 594	1800 N. Hope St. Transfer of 1 ¼" PE service line to new 4" PE main.
201 Rouse Boulevard	
Occupational Health Building	
17th and Kitty Hawk (Urban Outfitters)	

Other Facilities

PGW Main Office
PGW CHP facility
North Philadelphia district office
SCADA control room

Conclusions

All observed facilities, vehicles, equipment and warehouse stock appeared to be reasonably maintained and in good operating condition. During the inspections, Black & Veatch identified only minor items not in good operating condition as would be expected during the normal course of operation. These items were either in the process of being repaired or were essentially retired in place. Employees appeared to be knowledgeable of their job requirements and well trained.

PGW's highest operating priority is response to emergencies and the maintenance of a safe gas distribution system. PGW maintains maps and other records of the distribution system in good

order and has comprehensive written construction, operating and maintenance standards and procedures. Its personnel appeared well trained in the operation and maintenance of the gas distribution system. PGW is routinely actively involved in entering its facility records (Corrosion, Service and Leak Records) into computer databases, thus facilitating and improving the accuracy of accessing information. PGW has continued to monitor its security measures at its major facilities, including the two LNG facilities, the city gate stations, and the headquarters building complex. PGW has concrete barriers around critical facilities at Richmond and perimeter fencing around both Passyunk and Richmond Plants.

Based on the physical inspections and interviews conducted in January 2015, and the level of maintenance expense and capital improvements reflected in this Report, it is our opinion that PGW operates and maintains its system in accordance with current regulatory standards and generally accepted industry practices.

PGW Gas Supply

PGW manages its gas supply through a mix of flowing supplies, off-system underground storage, and City-owned and PGW-operated LNG facilities. PGW utilizes this mix to meet its obligation to serve customers' demand on the coldest day (peak day) as well as customers' annual requirements. PGW's gas distribution facilities are directly connected to Spectra through four city gate stations and to Transco-Williams through five city gate stations. All gas delivered to customers by PGW is transported to the city gates through either one of these pipelines. During predominantly off-peak periods, a portion of the purchased gas supply is stored in off-system underground storage facilities connected to these two pipelines or in PGW's LNG facilities. Through the effective use of off-system storage and LNG, PGW is able to more efficiently utilize its transportation contracts with Spectra and Transco-Williams.

Supply Services

PGW purchases gas through a combination of term contracts and spot market purchases. Natural gas supplies are purchased under a portfolio approach intended to secure the lowest price consistent with reliability of supply. Consideration is given to maintaining a diversity of sources and types of supply. During the 2015 fiscal year, purchased gas costs are estimated to account for approximately 91 percent of the total gas supply expenses of $261 million and approximately 35 percent of total gas revenues of $675 million. The cost of gas supply is a function of the prices paid and the quantity purchased, both of which are variable. While this price component can be managed by PGW to some extent through the timing of purchases, the prices paid are largely determined in a very competitive and a sometimes volatile marketplace. While the total annual volumes purchased are highly dependent on temperatures during the heating season and are beyond the utility's direct control, PGW can manage the timing of purchases and hence prices to a limited degree, by utilizing off-system and LNG storage.

Transportation and Storage Services

All of PGW's gas purchases are ultimately transported from the sources of supply to the city gates through either Spectra or Transco-Williams facilities. Injections and withdrawals of gas from off-system storage also rely on these two pipelines. Table 1 summarizes the existing transportation and storage agreements. As shown in this table, PGW's currently available pipeline capacity is almost equally divided between the two pipelines. Of PGW's total contract pipeline capacity of 436,298 Mcf per day, Spectra accounts for 222,054 Mcf per day, or 51 percent, and Transco-Williams accounts for 214,244 Mcf per day, or 49 percent. The initial terms of the major contracts for the Spectra transportation service (CDS and FT) expired prior to the 2011-12 winter period and the initial term of the major contract for the Transco-Williams transportation service (FT) expired after the 2011-12 winter period. These contracts renew on an automatic year-to-year basis. PGW's current long-term plan assumes that these contracts may also be renewed as longer term contracts.

Table 1 Gas Supply, Transportation, and Storage Contracts

Contract	Contract Expiration[b]	Transportation[c] dt/day	Transportation[c] Mcf/day[f]	Storage[d] dt/day	Storage[d] Mcf/day[f]
Transco-Williams					
FT - 3691	2019	165,212	156,451		
PSFT - 5001	2018	1,967	1,863		
S-2	2017	5,191	4,916	5,191	4,916
GSS(e)	2023	53,871	51,014	53,871	51,014
WSS(a)(e)	2016			35,115	33,253
ES1(a)	2016			38,327	36,295
ES2(a)	2016			52,077	49,315
Subtotal		226,241	214,244	184,581	174,793
Spectra					
CDS - 800232R	2016	75,000	71,023		
FT1 - 800233R	2016	23,822	22,559		
FT1 - 800514R	2016	18,000	17,045		
FT1 - 800515R	2016	18,000	17,045		
FTS2-5394	2015	5,394	5,108		
Dominion/GSS/FTS7(e)	2017	6,815	6,453	6,815	6,453
Dominion/GSS/FTS8(e)	2017	22,495	21,302	22,495	21,302
SS1A	2017	44,118	41,778	44,118	41,778
SS1B	2017	20,847	19,741	20,847	19,741
Subtotal		234,491	222,054	94,275	89,274
Total		460,732	436,298	278,856	264,067

(a) Transportation included in FT.

(b) Contracts are assumed renewed based on evergreen clauses beyond their expiration date.

(c) Reference: SDS 6, Page 4 of 4, In the Matter of Proposed Operating Budget, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

(d) Reference: SDS 6, Pages 1-2 of 4, In the Matter of Proposed Operating Budget, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

(e) Volumes reflects 87.5% contract limitation on maximum monthly storage withdrawal.

(f) Mcf conversion at 1.056 BTU.

Due to the highly seasonal nature of PGW's load (demand), the efficiency of pipeline transportation service can be increased significantly through the use of storage services. During periods when PGW's load is less than the contracted transportation service, PGW may utilize the available capacity to deliver gas to off-system storage facilities or liquefy gas for storage in its LNG facilities. The ability to store gas off-system and in LNG facilities provides three significant benefits. First, less capacity needs to be reserved on interstate pipelines to serve higher seasonal loads to the extent that gas can be stored in off-system storage and local LNG facilities. Second, less natural gas needs to be actually purchased during the generally higher cost winter period to the extent that gas be can

purchased during the lower cost non-winter period, stored and then redelivered from storage during the winter. Third, market area storage provides increased security of supply.

Of PGW's total contract daily storage withdrawal capacity of 264,067 Mcf per day, services provided on Spectra account for 89,274 Mcf per day, or 34 percent, and Transco-Williams accounts for 174,793 Mcf per day, or 66 percent. Transco WSS, ES1 and ES2 storages do not include bundled transportation so volumes from these storages must be transported using the FT transportation contract. All other storage volumes are bundled storage and transportation. This storage deliverability is used primarily to reduce contract demand for long haul transportation services and to reduce the quantity of gas that needs to be purchased during the typically higher cost winter period to meet winter peak demand.

During the 2015 fiscal year, transportation and storage capacity costs are estimated to account for approximately 9 percent of the total gas supply expenses of $261 million. The prices paid for these services are determined by long-term contracts and tariff rates regulated by the Federal Energy Regulatory Commission ("FERC"). Generally, these components of gas supply cost represent the purchase of capacity, are relatively fixed, and do not vary directly with the volumes of gas purchased.

LNG Facilities

The City owns and PGW operates two LNG facilities: the Richmond Plant and the Passyunk Plant. The LNG facilities are primarily used to ensure availability of supply needed to serve peak day demand. The LNG facilities provide capacity that would otherwise be needed from flowing gas and off-system storage (i.e., pipeline and storage capacity) to meet peak day demands. The LNG facilities also allow for a nominal reduction in purchases during the higher cost winter period. Based upon current pipeline and storage charges, which have remained relatively constant over the past five years, PGW estimates that utilizing the existing LNG facilities in lieu of additional pipeline and storage capacity saves approximately $75 million per year.

Gas is liquefied at the Richmond Plant. After liquefaction, LNG is stored and vaporized at both the Richmond Plant and the Passyunk Plant. Total liquefaction (converting natural gas to liquid state for storage) capacity at the Richmond Plant existing facilities is approximately 16,000 Mcf per day. The Richmond Plant can store approximately 49 million gallons of LNG (4.05 Bcf natural gas equivalent) and the Passyunk Plant can store approximately 3.0 million gallons of LNG (253,000 Mcf natural gas equivalent). The LNG stored at the Passyunk Plant is typically liquefied at the Richmond Plant and then transported by cryogenic trailer trucks to the Passyunk Plant, although LNG can also be purchased and transported from third parties. Total vaporization (converting the liquid LNG to gas) capacity at the Richmond Plant with six vaporizers, is 463,000 Mcf per day and 100,000 Mcf per day in reserve, and the capacity at the Passyunk Plant with two vaporizers, is 45,000 Mcf per day and 45,000 Mcf per day in reserve. The highest daily vaporization rate from the LNG facilities of approximately 360,000 Mcf occurred in January 1994 when PGW recorded its maximum system sendout.

Supply and Demand Balance

Table 2 summarizes the supply mix that was used to meet historical peak day demand from fiscal years 2010 through 2014, and the supply mix that would enable PGW to meet future demand

assuming design conditions over the 2015 through 2020 fiscal years. PGW's highest actual historical peak day occurred on January 19, 1994, with a demand (sendout) of 752,707 Mcf. The average temperature on that day was 2°F. For design purposes, PGW projects total demand based on a 65 heating degree-day ("HDD") which translates to a design day average temperature of 0°F. This is the lowest expected temperature that PGW believes could reasonably occur and PGW did experience a design day in the 1980's with an average temperature of 0°F. During the past four years, pipeline deliveries (flowing gas plus underground storage) have met between 85 and 93 percent of actual peak day demand. These figures are relatively high due to significantly warmer than normal winters. During the projection period, approximately 65 percent of peak day demand under design conditions would be met from pipeline supply with the remaining 35 percent met from LNG. PGW must maintain these capacity levels because it is considered the supplier of last resort if the customer's supplier is unable to deliver natural gas. PGW assigns proportionate shares of pipeline capacity and cost to firm transportation customers. Table 2 shows that PGW has sufficient capacity to meet demand requirements.

Table 3 summarizes the supply mix that is projected to meet annual requirements during normal and design years from 2015 through 2020. For supply planning purposes, PGW defines a normal year as one containing 4,237 HDDs. The supply planning normal year is based on the 30-year average HDDs as recorded at the Richmond Plant. PGW defines a design year as one containing 5,280 HDDs. A design year is based on the temperatures experienced during the 1977-1978 winter, which was the coldest recorded winter in the last 60 years.

Even though 100 percent of PGW's supply is originally transported through one of the two interstate pipelines, the supply components shown in Table 3 are based on the source of gas when ultimately delivered to the end user. As shown, approximately 65 percent of PGW's total gas pipeline supply during a normal year flows through the Transco-Williams pipeline system. On a projected normal annual basis, approximately 97 percent of volume is delivered to end users through the interstate pipeline systems (of which 81 percent is flowing gas[5] and 19 percent is off-system storage), and 3 percent is delivered from the LNG facilities.

[5] Flowing gas represents gas that is purchased at the same time as delivered to customers.

Table 2 Peak Day Supply and Demand

	Actual					Estimate	Projected - Design [a]				
Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual[b]											
Peak Heating Degree-Days	45	43	41	44	52	54					
Demand - Mcf	543,835	549,808	466,478	585,205	635,784	681,394					
Supply - Mcf											
Pipeline/Storage	463,509	468,210	431,293	497,267	457,541	531,051					
LNG	80,326	81,598	35,185	87,938	178,243	150,343					
Total	543,835	549,808	466,478	585,205	635,784	681,394					
Projected - Design											
Design Heating Degree-Days[c]							65	65	65	65	65
Demand - Mcf[c]							660,921	656,085	650,577	644,394	637,536
Supply - Mcf											
Pipeline/Storage [d]							436,299	436,299	436,299	436,299	436,299
LNG (net)							224,622	219,786	214,278	208,095	201,237
Total							660,921	656,085	650,577	644,394	637,536

(a) Assumes no unbundling of services.

(b) For 2011-2015, SDS 7, In the Matter of Proposed Operating Budget FY 2015-16, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

(c) SDS 6, Page 3 of 4, In the Matter of Proposed Operating Budget FY 2015-16, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

(d) SDS 6, Page 4 of 4, In the Matter of Proposed Operating Budget FY 2015-16, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

Table 3 Annual Supply and Demand

Line No.	Description	Budget 2016	Projected 2017	2018	2019	2020
		dt	dt	dt	dt	dt
	Normal Year - 4,237 Heating Degree-days					
	Requirements - Sales					
1	Firm Service	50,278,571	49,699,307	50,002,405	49,889,108	49,838,426
2	Boiler and Power Plant Service	0	0	0	0	0
3	Load Balancing Service	0	0	0	0	0
4	Cogeneration Service	6,853	6,776	6,622	6,468	6,316
5	Gas Transportation Service	5,110,131	5,394,043	5,613,160	5,782,854	5,914,813
6	LNG Sales	539,815	1,070,000	1,070,000	1,070,000	1,070,000
7	Natural Gas Vehicle Service	0	0	0	0	0
8	Trigen	0	0	0	0	0
9	Grays Ferry	0	0	0	0	0
10	Subtotal Sales	55,935,370	56,170,126	56,692,187	56,748,430	56,829,555
11	Plant Use	175,806	174,917	175,536	175,587	176,179
12	Transport Fuel	1,513,379	1,499,889	1,488,018	1,477,767	1,486,133
13	Storage Fuel	362,988	364,700	360,910	359,062	374,718
14	Storage Injections	14,165,755	14,150,417	13,938,594	13,826,578	14,248,350
15	Liquefaction	2,330,955	2,328,130	2,328,130	2,288,130	2,290,955
16	Total Demand	74,484,253	74,688,179	74,983,375	74,875,554	75,405,890
	Supply					
17	Spectra	21,670,472	20,517,911	20,050,716	19,921,742	20,189,847
18	Transco-Williams	37,217,305	37,705,288	38,704,585	38,750,463	38,762,051
19	Pipeline Subtotal	58,887,777	58,223,198	58,755,301	58,672,205	58,951,898
20	Spectra	7,181,445	7,557,616	7,331,448	7,349,059	7,698,203
21	Transco-Williams	6,588,287	6,562,414	6,515,078	6,509,718	6,416,827
22	Storage Subtotal	13,769,731	14,120,031	13,846,526	13,858,777	14,115,030
23	LNG	1,826,745	2,344,950	2,381,548	2,344,572	2,338,962
24	Total Supply	74,484,253	74,688,179	74,983,375	74,875,554	75,405,890
	Design Year - 5,280 Heating Degree-days					
	Requirements - Sales					
25	Firm Service	59,686,289	59,069,210	59,367,186	59,232,615	59,170,649
26	Boiler and Power Plant Service	0	0	0	0	0
27	Load Balancing Service	0	0	0	0	0
28	Cogeneration Service	6,853	6,776	6,622	6,468	6,316
29	Gas Transportation Service	5,892,161	6,225,662	6,482,668	6,681,791	6,835,962
30	LNG Sales	539,815	1,070,000	1,070,000	1,070,000	1,070,000
31	Natural Gas Vehicle Service	0	0	0	0	0
32	Trigen	0	0	0	0	0
33	Grays Ferry	0	0	0	0	0
34	Subtotal Sales	66,125,118	66,371,648	66,926,476	66,990,874	67,082,927
35	Plant Use	192,828	190,641	193,186	193,410	194,271
36	Transport Fuel	1,908,798	1,926,189	1,931,366	1,924,439	1,928,261
37	Storage Fuel	282,839	301,204	307,102	308,240	307,450
38	Storage Injections	9,909,684	11,729,032	11,881,965	11,970,328	11,990,465
39	Liquefaction	2,082,984	2,070,256	2,070,256	2,030,256	2,030,256
40	Total Demand	80,502,251	82,588,970	83,310,351	83,417,547	83,533,630
	Supply					
41	Spectra	28,598,524	27,493,479	27,624,681	27,584,463	27,729,765
42	Transco-Williams	37,185,373	39,890,019	40,175,685	40,199,222	40,197,585
43	Pipeline Subtotal	65,783,896	67,383,498	67,800,367	67,783,685	67,927,350
44	Spectra	5,732,172	6,091,860	5,778,385	5,939,655	5,911,203
45	Transco-Williams	5,925,779	5,602,728	6,070,164	6,059,490	6,047,473
46	Storage Subtotal	11,657,952	11,694,589	11,848,549	11,999,145	11,958,675
47	LNG	3,060,403	3,510,883	3,661,435	3,634,717	3,647,605
48	Total Supply	80,502,251	82,588,970	83,310,351	83,417,547	83,533,630

Reference: SDS 4, In the Matter of Proposed Operating Budget FY 2015-16, Supporting Documentation - Gas Costs and Purchasing Plans, Volume I, June 2015.

Capital Improvement Program

PGW uses a formal process of evaluating capital needs and funding programs to meet those needs. This annual capital planning process is used to identify potential capital improvements at the departmental level based upon certain operating and economic assumptions, evaluate these requirements, and establish priorities considering available financial resources. Based upon this process, a CIP was formulated for a six-year period based upon the approved budget for 2015 and the forecast period 2016 through 2020. For the large operating departments whose needs comprise the vast majority of PGW's capital requirements, the gas design load forecast is one of the key elements in determining their capital requirements. In addition to ensuring the continued safety of PGW's operations, reliability of service is a major concern when considering the need for capital resources. The Gas Processing Department addresses these concerns by providing and maintaining the necessary facilities to take delivery of pipeline supplies and provides supplemental gas to satisfy peak load requirements. The Distribution Department, in its capital budget process, is concerned with continuing to provide and properly maintain a distribution network and to safely deliver natural gas at adequate pressure to satisfy the requirements of the appliances and equipment of PGW's customers.

Also of major importance is to ensure funding is available to provide facilities to support new load opportunities as identified in the Marketing Department's forecast of customer additions. This forecast drives budget requirements for the Distribution Department for main and service additions, and in Field Services to identify new meter installations that must be provided for in their Capital Budget. Additional systems and technology initiatives are also considered to improve both efficiency and customer service. Under the terms of the Management Agreement, PGW submits the annual CIP to the Director of Finance and the PGC for their review and recommendation to City Council for budget approval.

In keeping with PGW's philosophy of maintaining a safe and reliable infrastructure, all capital projects are assigned a priority. The highest priority projects (Priority 1 and Priority 2) relate to expenditures required for maintaining the safety and reliability of PGW's infrastructure. Priority 3 expenditures relate to enforced main relocations that are based on City, State, and Federal mandated underground infrastructure projects. Priority 4 expenditures relate to projects that will result in additional revenues from load growth opportunities, while Priority 5 are for those expenditures associated with business improvements that increase operational efficiencies and/or productivity.

Table 4 presents a summary of PGW's historical and forecasted capital improvement program expenditures. Capital expenditures for the major departments are shown in the Table. Capital expenditures for all departments other than Gas Processing, Distribution, Field Services, and Fleet Operations are grouped together under the general category "Other Departments".

Proposed capital expenditures over the five-year projection period, 2016 through 2020, total $535 million. For fiscal year 2015, PGW's estimated capital expenditure of $90.3 million (net of salvage, contributions, and reimbursement) represents a $7.0 million increase from the 2014 capital expenditures. The major contributing factor for this significant spending increase is associated with implementation of PGW's Long-Term Infrastructure Improvement Plan ("LTIIP") and its increased main replacement goals, particularly high pressure/large diameter mains. The majority of the fiscal

year 2015 capital expenditures, $64.1 million or 71 percent, is committed to Distribution Department projects. Field Services and Other Departments have planned expenditures of about $6.0 million and $11.8 million, respectively, in fiscal year 2015. Gas Processing and Fleet Operations have planned expenditures of about $3.7 million and $4.8 million, respectively, in fiscal 2015. Over the five-year projected period, Distribution Department projects have planned expenditures of $429 million, which represents 80 percent of the total capital spending. The majority of the Distribution Department capital projects involve the replacement of gas services and ongoing and required main replacements for high pressure, intermediate and low-pressure mains identified in PGW's LTIIP. Based on our inspections of existing facilities in January 2015 and under normal operating conditions, the proposed capital expenditures should be sufficient to maintain the system in good condition.

A listing of projects approved in the budget for the fiscal year 2016, by major department, is shown in Table 5. This table also shows the priority assigned to each project. In addition to the estimated $95 million as shown in Table 5 for fiscal year 2016, PGW anticipates completing $16 million of capital improvements carried over from prior fiscal years.

Gas Processing

As shown in Table 4, the estimated capital spending for the Gas Processing Department is $3.7 million in fiscal year 2015. These capital expenditures are for normal additions and replacements necessary to maintain the safety and reliability of natural gas measurement and control facilities and PGW's LNG supplemental gas capabilities.

Distribution

The ongoing cast iron main replacement capital program involves the removal of 18 miles of cast iron mains annually, plus incremental mileage funded through the Distribution System Improvement Charge ("DSIC") (e.g., ten additional miles of cast iron main removed in fiscal year 2014). The scope of this program is consistent with the recommendations made by Advantica in a June 2008 "Benchmarking Analysis, Risk Analysis and Model, Replacement Analysis and Computerized Main Prioritization and Ranking Program" study. Cast iron pipe was generally used by natural gas utilities many decades ago and was quite common for low-pressure gas mains such as PGW's. While this pipe has performed well, as it ages the pipe becomes brittle and the joints deteriorate, thereby resulting in leaks. Over the last 20 years or so, natural gas utilities have been systematically replacing cast iron mains generally with plastic for low-pressure systems and sometimes wrapped and cathodically protected steel for higher pressure systems.

The estimated capital spending for fiscal year 2015 for the Distribution Department is $64.1 million. This level of capital spending in the Distribution Department is a continuation of increases which began in fiscal year 2013. This significant increase in Distribution Department spending is associated with the replacement of at-risk mains as currently sanctioned in PGW's LTIIP. This program provides the opportunity for PGW to implement a DSIC that will allow PGW to recover the annual cost for its accelerated replacement program on a pay-as-you-go basis, thus avoiding the need to issue additional debt financing to support the program. PGW's accelerated program has the benefit of the following two independent review studies in November 2012 of PGW's cast iron mains in formulating its LTIIP:

- GL Noble Denton Study – 12 Inch & Larger Cast Iron Comprehensive Mains Benchmark Study
- GL Noble Denton – 12 Inch 10-35 psig Cast Iron Mains Benchmark Study

Table 6 summarizes the miles of cast iron distribution mains replaced, number of service lines replaced and the capital expenditures for mains and service line replacement for the period 2000 through 2014. As shown in Table 6, the amount of cast iron mains replaced by PGW increased significantly in 2013 and 2014 due to implementation of the DSIC. The 2014 replacement rate of 28 miles per year equals approximately 1.9 percent of the total remaining cast iron mains. The decline in the number of service lines replaced is primarily a function of the number of service lines that are connected to the mains replaced and the fact that the total inventory of unprotected steel service lines declined approximately 50 percent from about 225,000 in 2000 to 115,000 in 2014. The capital improvement expenditures for cast iron mains and unprotected steel service lines have doubled from approximately $27 million in 2001 to $54 million in 2014.

The level of mains replacement represents a balance among several factors including prioritizing replacements to areas of highest reported leaks, working within the constraints of a highly populated urban area, providing sufficient supervision and oversight by PGW of internal and external construction crews, and the level of rate or surcharge revenues approved by the PUC to fund the replacements. Approximately 18 miles of the current mains replacement program is covered by the current level of approved base rates and 10 miles through the DSIC. The amount currently approved by the PUC for the DSIC is $22 million per year and at current cost levels, this allows PGW to replace approximately 10 additional miles per year above the levels reflected in current base rates. PGW intends to request the PUC increase the cap on the DSIC from 5 percent to 7.5 percent of the amount billed to customers starting in fiscal year 2016. This increase in the cap would allow PGW to recover up to $33 million per year in the DSIC. To the extent that PGW and its regulators propose to further accelerate the level of annual mains (and related service lines) replacement, the preferred method of financing these capital improvements would be through the existing DSIC surcharge mechanism or, as an alternative, through increased base rates.

The largest department expenditures relate to the replacement of small diameter (1.25 inches or less) services, which are necessary as a result of the distribution mains replacements as well as leaking services and collection activities, and implementation of PGW's main replacement program, both the 18-mile program as well as the accelerated replacement program.

Field Services

The estimated capital spending for fiscal year 2015 for the Field Services Department is $6.0 million. PGW embarked on an aggressive program to retrofit customer meters with electronic devices to maximize the effectiveness of its automated meter reading system ("AMR"). This program is 100 percent complete. PGW continues to realize benefits from the implementation of the automated meter reading system, including fewer estimated readings, increased reading accuracy, reduction in meter reading personnel and reduced customer complaints. While replacing meters and AMR devices, PGW is testing its meters to comply with PUC requirements.

Fleet Operations

The Fleet Operations Department estimated capital expenditures are $4.8 million for fiscal year 2015. The majority of the estimated capital expenditures for this department are associated with

vehicle and mobile equipment replacements. The majority of the vehicle replacements are targeted to support critical field operations activities.

Other Departments

The Other Departments category includes estimated capital expenditures for Facilities Services, Information Services, Customer Affairs, and other miscellaneous departments. For fiscal year 2015, the combined spending of these departments is estimated at $11.8 million. Projects contributing to this level of spending include funding to replace PGW's existing PBX phone system, as well as cost to relocate PGW's Gas Control Center. Funding is also requested to maintain PGW's information systems infrastructure in proper condition to support the business in providing service to the customer in an efficient manner.

Table 4 Historical and Proposed Capital Improvement Program Expenditures
(Thousands of Dollars)

	Fiscal Year Ending August 31,[a]											
	Actual					Estimate	Budget	Projected				Total
Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2016 - 2020
	$	$	$	$	$	$	$	$	$	$	$	$
Gas Processing	7,905	4,077	3,675	3,095	5,350	3,651	5,541	8,873	7,591	4,822	2,690	29,517
Distribution	41,554	44,736	44,751	57,394	61,768	64,116	77,782	84,713	89,467	88,885	88,219	429,066
Field Services	3,695	2,364	3,441	3,727	5,393	5,984	6,705	6,104	6,918	7,140	7,306	34,173
Fleet Operations	2,290	2,670	1,552	1,111	2,233	4,795	8,240	5,559	3,179	1,925	1,030	19,933
Other Departments [b]	3,515	4,979	3,713	7,048	8,587	11,781	12,484	2,410	2,607	2,357	2,370	22,228
Subtotal	58,959	58,826	57,132	72,375	83,331	90,327	110,752	107,659	109,762	105,129	101,615	534,917

(a) All figures are net of Salvage, Reimbursements, and Contributions.

(b) Includes Approved and Budgeted Program for Building Services, Customer Affairs, Information Technology, and Systems Technology.

Table 5 New Capital Projects for Fiscal Year 2016
(Thousands of Dollars)

Category	Priority 1 Safety	Priority 2 Reliability	Priority 3 Enforced	Priority 4 New Rev	Priority 5 Efficiency	Total
	$	$	$	$	$	$
Gas Processing						
Install Duplex Strainor for Glycolboiloff System	26					26
Install Air Compressors Outside Machine Shop	57					57
Replace H-1 Heater-Richmond	594					594
Replace Foam Water Piping on LNG Tanks	338					338
Replace Fire System on C-5RB Boiloff Compressor	363					363
Replace LNG Tank Elevator	741					741
Miscellaneous Replacements/Additions	473	-	-	-	-	473
Total Gas Processing	2,592	-	-	-	-	2,592
Distribution						
Prudent Main Replacements	12,904	-	-	-	-	12,904
LTIIP Accelerated CIMP	-	-	-	-	4,396	4,396
High Pressure Main Valves Replacements	620	-	-	-	-	620
Long Term Infrastructure Plan-Incremental Cast Iron	5,500	-	-	-	-	5,500
Renewal of Small Service-Incremental Cast Iron	1,835	-	-	-	-	1,835
Enterprise Asset Management Solution	200	-	-	-	-	200
Large Diameter/High Pressure Main Replacement	9,781	-	-	-	-	9,781
Small Service Replacements	19,110	-	-	-	-	19,110
Large Service Replacements	1,033	-	-	-	-	1,033
Small Service Installations	-	-	-	4,019	-	4,019
Large Service Installations	-	-	-	2,261	-	2,261
Customer Metering & Regulator Installation	-	-	-	602	-	602
Installations For Ahead-Of-Paving and Addt'l Loads	-	-	-	1,139	-	1,139
Replace Pressure Regulating/Corrosion Control Facilities	-	386	-	-	-	386
Purchase Tools, Equipment	-	-	-	-	11	11
Pressure Force Paper Chart Upgrade Project	-	-	-	-	412	412
Replace Tools, Equipment	-	1,479	-	-	-	1,479
Enforced Relocations For System Pressure	-	-	4,044	-	-	4,044
Enforced Relocations I-95 Reconstruction	-	-	6,200	-	-	6,200
Local Mains to Supply New Houses/Increased Capacity	-	-	2,385	2,068	-	4,453
Reimbursements/Contributions	-	-	-	-	-	(11,067)
Total Distribution	50,983	1,865	12,629	10,089	4,819	69,318
Field Services						
Regulator Purchases	23	-	-	-	-	23
Regulator Installations	-	-	-	56	-	56
Meter Installations	-	-	-	1,431	-	1,431
Shop Equipment	-	-	-	-	65	65
Training Equipment Replacements	-	-	-	-	-	-
Meters Purchases for Automatic Meter Reading	-	2,374	-	-	-	2,374
AMR Installations	-	-	-	-	140	140
AMR Replacements	-	-	-	-	2,332	2,332
BPS Metscan & LBS Metretek	166	-	-	-		166
Instrumentation Purchases and Installations	-	-	-	-	118	118
Total Field Services	189	2,374	-	1,487	2,655	6,705
Fleet Operations						
Vehicle Replacements	-	3,722	-	-	-	3,722
Mobile Equipment Replacements	-	1,651	-	-	-	1,651
Salvage	-	-	-	-	-	(105)
Total Transportation	-	5,373	-	-	-	5,268
Other Departments	4,171	3,126	-	-	3,571	10,868
Total FY 2016 Projects	57,935	12,738	12,629	11,576	11,045	94,751
Carryover from Years Prior to FY 2016	8,281	5,649	1,035	633	403	16,001
Total FY 2016 Expenditures (Net)	66,216	18,387	13,664	12,209	11,448	110,752

Table 6 Historical Cast Iron and Unprotected Steel Service Replacement

Line No.	Description	Fiscal Year Ending August 31, 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1	Cast Iron Main Abandoned (miles)	7.81	18.45	21.49	22.57	19.24	19.01	18.93	18.28	17.98	8.67	17.98	18.20	18.35	22.39	28.09
2	CI Main Replacement Capital ($000)	$ 8,282	$ 15,148	$ 16,108	$ 13,717	$ 20,393	$ 20,183	$ 17,582	$ 20,180	$ 21,371	$ 18,385	$ 21,718	$ 19,278	$ 24,387	$ 30,680	$ 37,414
3	Services Removed from Inventory															
4	Unprotected - Bare	(17,888) [(a)]	(8,211)	(6,688)	(7,011)	(7,846)	(40,477) [(a)]	(8,046)	(4,944)	(5,280)	(5,347)	(2,794)	(3,619)	(3,093)	(2,647)	(3,215)
5	Unprotected - Coated	9,960 [(a)]	(164)	(573)	(142)	(609)	(56)	(76)	(1,133)	7,027 [(a)]	(466)	(509)	(455)	(437)	(304)	(255)
6	Total	(7,928)	(8,375)	(7,261)	(7,153)	(8,455)	(40,533)	(8,122)	(6,077)	1,747	(5,813)	(3,303)	(4,074)	(3,530)	(2,951)	(3,470)
7	Service Replacement Capital ($000)	$ 10,940	$ 12,010	$ 9,986	$ 13,641	$ 17,652	$ 16,127	$ 17,232	$ 21,172	$ 20,743	$ 15,443	$ 15,793	$ 15,872	$ 16,247	$ 17,514	$ 16,576

(a) Change in number of services reflects adjustments to inventory

Rates and Tariffs

Regulation

Prior to July 2000, PGW's rates were regulated by the PGC. PGW's last base rate increase under PGC regulation was in December 1991. Commencing on July 1, 2000, PGW became regulated by the PUC pursuant to the Gas Choice Act which amended the Public Utility Code. Section 2212(b) of the Public Utility Code specifically transferred rate setting authority for PGW from the PGC to the PUC. Although the PGC continues to approve PGW's operating budget, and review and recommend the approval of PGW's capital budget, the PUC has the authority to approve the rates charged by PGW.[6] Since PGW became regulated under the PUC, the PUC has granted PGW base rate increases totaling approximately $171 million. PGW has also filed with the PUC on several occasions regarding revisions to its gas cost rate ("GCR"). The PUC has approved all of the GCRs filed by PGW. In our opinion, PGW has requested and received timely changes in its GCR.

On November 14, 2008, PGW filed for extraordinary base rate relief of $60 million, effective January 1, 2009. The request was granted December 18, 2008. PGW filed the request primarily to cover the additional financing costs that PGW incurred to improve PGW's financial position so as to enhance its ability to access the financial markets and maintain its bond rating and to provide liquidity and financial flexibility in the tight credit markets. The Office of Small Business Advocate ("OSBA") filed a petition for reconsideration of the PUC's extraordinary rate order, challenging the allocation of the rate increase. The PUC dismissed the petition on March 26, 2009. The PUC imposed several conditions on PGW's receipt of extraordinary rate relief, all of which PGW has accepted. PGW was required to: 1) file its Business Transformation Initiative-Full Plan with the PUC for review, followed up by annual reports on its implementation and savings, 2) provide monthly reports of financial and operational performance and the results of cost containment efforts, 3) submit a performance-based incentive compensation plan for all management employees for comment by the PUC, 4) submit, ninety (90) days in advance of negotiating its next employee collective bargaining agreement, a plan for improving performance and implementing efficiencies for hourly employees; 5) convene a collaborative process to explore options for transitioning default service supply customers to alternative suppliers; 6) take appropriate steps to seek repeal of the City's ordinance mandating the annual $18.0 million payment to the City. In granting the extraordinary relief, the PUC required PGW to file a base rate case no later than December 31, 2009.

On December 18, 2009, PGW submitted a base rate case filing with the PUC requesting: 1) to maintain the $60 million base rate increase that the PUC granted in 2008, and 2) to provide PGW with a rider above the base rates that will fund PGW's previously booked other post-employment benefits ("OPEB") liability in the amount of $105 million over the 2011 through 2015 period and to fully fund over 30 years, its unfunded actuarial accrued OPEB. PGW also moved to consolidate PGW's Demand Side Management Plan into the base rate filing. PGW filed the request to: 1) comply with the PUC's December 2008 order directing PGW to file a general rate case by the end of 2009, 2) maintain PGW's financial position, 3) maintain PGW's bond rating, 4) provide liquidity and financial

[6] Generally, the PUC is required to rule on an application for base rate relief within nine months of the utility's application.

flexibility in the current tight credit markets, 5) better enable PGW to sell bonds to finance its capital program, and 6) enable PGW to provide funding for its OPEB liability.

On May 19, 2010 PGW, along with all active parties to the proceeding, submitted a Petition for Proposed Settlement of the proceeding (the "Settlement"). The PUC approved this Settlement in its Order dated July 29, 2010 (the "Order").

Under the Order, PGW is permitted to maintain virtually all of the extraordinary base rate relief, received an incremental rate increase of $16 million annually and is required to fund $18.5 million of the OPEB liability in each of the years 2011 through 2015. The increase granted by the Order represented about 38 percent of the $42.5 million incremental rate increase as originally requested by PGW.

Under the 2010 Base Rate Case Order, PGW is authorized to make a uniform annual contribution of $15 million for Unfunded Actuarial Accrued Liability ("UAAL") in the first five years (through 2015), for a total of $75 million. After this five year period, OPEB funding would be made at the amount required for full funding as determined by an actuarial study. PGW submitted this study to the PUC in February 2015, requesting approval to make annual contributions of $18.5 million and PGW expects the PUC's review to be completed by September 1, 2015. The use of the Order's uniform funding approach results in more uniform rates and creates a reasonable transition period from "pay-as-you-go" funding to the full funding of OPEBs. Under the Order's uniform funding approach, ratepayers would save approximately $188 million, compared to savings of $200 million if PGW's original, full funding proposal had been approved.

The 2010 Order required the Net OPEB Obligation to be amortized over a thirty year period. With the thirty year amortization, $3.5 million will be required annually.

The 2010 Order authorized PGW to implement its proposed five year Demand Side Management ("DSM") Phase I program generally as proposed, although PGW agreed to modifications to the program to address concerns raised by the active parties. PGW was permitted to establish an automatic adjustment clause mechanism to recover its costs of implementing its DSM program. In December 2014, PGW submitted a petition to the PUC to continue the DSM program (Phase II) which includes a lost revenue and performance incentive proposal. PGW anticipates that the hearings on this proceeding will be concluded during the summer of 2015. On April 10, 2015, PGW filed a petition with the PUC to extend the current DSM program until the disposition of this filing, so that the current program would not lapse if a PUC order is not rendered prior to the expiration of Phase I. On May 7, 2015, PUC approved PGW's April 10th petition.

The Pennsylvania General Assembly approved Act 11 on February 14, 2012. This legislation provides Pennsylvania utility companies with a supplemental recovery mechanism for costs related to incremental/accelerated distribution system repair, improvement and replacement. Act 11 permits gas utilities to recover, through a DSIC surcharge, up to 5 percent of their non-gas revenues (which for PGW will be approximately $22.0 million) and permits an increase, if the PUC so permits. In order for a utility company to establish such a recovery mechanism, it must submit, along with other requirements, a LTIIP and a DSIC petition to the PUC for review and approval. Accordingly, PGW filed its LTIIP on December 3, 2012 and filed its DSIC petition on January 18, 2013. The PUC approved PGW's LTIIP on April 4, 2013 and its DSIC petition on May 9, 2013. On January 16, 2015,

the PUC initiated an inquiry and analysis of PGW's pipeline replacement program, including the need for and any impediments to the expansion of the pipeline replacement program. This inquiry and analysis culminated in a report to the PUC by Commission Staff. On April 21, 2015, the PUC Commission Staff issued its report "Inquiry into Philadelphia Gas Works' Pipeline Replacement Program." In this report, the Staff indicated that they did not believe the current pipeline replacement rate to be aggressive enough. The Staff identified the following seven "areas of opportunity that PGW should explore to increase its mains replacement rate":

1. Increase the DSIC above the current 5 percent cap
2. Levelize and Annualize DSIC eligible costs
3. Issue new debt
4. Improve cash management
5. Request that the City of Philadelphia waive all or a portion of the $18 million payment
6. Streamline corporate governance structure
7. Consolidate facilities

PGW is planning to meet with PUC Staff on June 25, 2015 and with the Commission on July 8, 2015 to discuss this report. In our discussions with PGW, it is PGW's intent to propose an increase in the DSIC to 7.5 percent (effective during fiscal year 2016) and to levelize and annualize the DSIC. This should provide up to $33 million per year to fund PGW's pipeline replacement program. PGW will consider requesting future increases to the DSIC once the 7.5 percent DSIC has been in place for a period of a few years to evaluate its impact on customers and PGW's and the City's ability to effectively implement the level of pipeline replacement associated with the 7.5 percent DSIC (or higher levels). PGW's level of debt and the cash balances it maintains (items 3 and 4) are consistent with PGW's current debt ratings and PGW does not plan to issue debt or reduce cash balances to fund additional pipeline replacement. Further, PGW believes that funding the replacements on a pay-as-you-go basis benefits both the ratepayer and PGW because base rates will not be impacted by any interest expense or debt service coverage requirements. The waiving of PGW's annual $18 million payment to the City and the corporate governance structure, (items 5 and 6) are both governance issues beyond the authority of PGW and would require action by the City of Philadelphia. PGW is in the process of evaluating the consolidation of facilities and expects a report by the end of summer 2015.

The PUC is currently conducting a management audit of PGW's operations, via a third party consultant. A final report regarding audit findings is anticipated in 2015 or 2016. The PUC previously conducted a management audit of PGW's operations from October 2007 through September 2008.

Existing Rates

The current tariff sets forth the rules and regulations for gas service and the rates PGW is allowed to charge for various types of service. Changes to this tariff must be approved by the PUC. Currently, PGW primarily provides service under three broad classifications: firm, interruptible, and

transportation service. Table 7 summarizes PGW's existing rates and applicable surcharges. PGW's rates are presented as unbundled and include a customer charge, distribution charge, and GCR. The distribution charge includes a delivery charge, as well as any applicable surcharges. The GCR is not applicable to certain firm service customers who transport gas through a qualified natural gas supplier ("NGS").

Firm Service

PGW provides firm service under three rate schedules: General Service, Municipal Service, and Philadelphia Housing Authority ("PHA") Service. The vast majority of PGW's customers are served under the General Service Rate. During the 2015 fiscal year, approximately 99 percent of PGW's customers are estimated to be served under this rate and these customers account for 96 percent of sales volumes (and 59 percent of total throughput). This rate is available to any residential, commercial, or industrial customer pursuant to the applicable rate provision. Monthly customer charges differ depending on whether the customer is classified as residential, commercial, or industrial customer. A different distribution charge applies to residential customers versus commercial and industrial customers. The General Service Rate contains special provisions for separately metered summer air conditioning and compressed natural gas ("CNG") vehicle service. Residential senior citizens may have previously qualified for a discount under this rate. (*See Senior Citizen Discount Program*).

Table 7 Existing Tariff Rates

Tariff	Effective	Existing Tariff Charges [a]
Firm Service		
General Service - Rate GS		
Customer Charge - $/meter per month		
Residential and Public Housing Customers	6/1/15	12.00
Commercial and Municipal Customers	6/1/15	18.00
Industrial Customers	6/1/15	50.00
Supply Charge - $/Mcf[b]		
Gas Cost Rate (GCR) + Merchant Function Charge + Gas Procurement Charge		
Residential	6/1/15	4.4074
Public Housing Customers	6/1/15	4.2121
Commercial and Municipal Customers	6/1/15	4.2238
Industrial Customers	6/1/15	4.2246
Distribution Charge - $/Mcf		
Residential	6/1/15	6.0067
Public Housing Customers	6/1/15	4.9441
Commercial and Municipal Customers	6/1/15	4.5984
Industrial Customers	6/1/15	4.5332
Surcharges		
Universal Service and Energy Conservation	6/1/15	1.4902
Restructuring and Consumer Education	9/1/12	0.0000
Efficiency Cost Recovery Surcharge		
Residential and Public Housing Customers	6/1/15	0.0019
Commercial Customers	6/1/15	0.0198
Industrial Customers	6/1/15	(0.0113)
Other Post Employment Benefits Surcharge	9/1/14	0.3078
Commodity Charge - $/Mcf		
Residential Customers		12.2140
Public Housing Customers		10.9561
Commercial and Municipal Customers		10.6400
Industrial Customers		10.5445
Distribution System Improvement Charge	7/1/15	1.64%
Customer Charge - $/meter per month		
Residential and Public Housing Customers		0.1968
Commercial and Municipal Customers		0.2952
Industrial Customers		0.8200
Commodity Charge - $/Mcf		
Residential Customers		0.1280
Public Housing Customers		0.1106
Commercial and Municipal Customers		0.1052
Industrial Customers		0.1036
Municipal Service - Rate MS		
Customer Charge - $/meter per month	6/1/15	18.00
Supply Charge - $/Mcf[b]	6/1/15	4.2121
Distribution Charge - $/Mcf		
Delivery Charge	6/1/15	3.3661
Surcharges		
Universal Service and Energy Conservation	6/1/15	1.4902
Restructuring and Consumer Education	9/1/12	0.0000
Efficiency Cost Recovery Surcharge		0.0000
Other Post Employment Benefits Surcharge	9/1/14	0.3078
Total Commodity Charge - $/Mcf		9.3762
Distribution System Improvement Charge	7/1/15	1.64%
Customer Charge - $/meter per month		0.2952
Commodity Charge - $/Mcf		0.0847
Philadelphia Housing Authority Service - Rate PHA		
Customer Charge - $/meter per month	6/1/15	18.00
Supply Charge - $/Mcf[b]	6/1/15	4.2121
Distribution Charge - $/Mcf		
Delivery Charge	6/1/15	4.1101
Surcharges		
Universal Service and Energy Conservation	7/1/15	1.4902
Restructuring and Consumer Education	9/1/12	0.0000
Efficiency Cost Recovery Surcharge	6/1/15	0.0198
Other Post Employment Benefits Surcharge	9/1/14	0.3078
Total Commodity Charge - $/Mcf		10.1400
Distribution System Improvement Charge	7/1/15	1.64%
Customer Charge - $/meter per month		0.2952
Commodity Charge - $/Mcf		0.0972

Table 7 (Continued). Existing Tariff Rates

Tariff	Effective	Existing Tariff Charges [a]
Interruptible Service		
Boiler and Power Plant Service-Small Volume - Rate BPS-S		
Customer Charge - $/meter per month		
Annual consumption less than 10,000 Mcf.	1/1/09	51.00
Annual consumption between 10,000 and 100,000 Mcf, inclusive.	1/1/09	108.00
Annual consumption greater than 100,000 Mcf.	1/1/09	150.00
Commodity Charge [c] - $/Mcf		17.55
Boiler and Power Plant Service - Large Volume - Rate BPS-L		
Customer Charge - $/meter per month		
Annual consumption less than 10,000 Mcf.	1/1/09	51.00
Annual consumption between 10,000 and 100,000 Mcf, inclusive.	1/1/09	108.00
Annual consumption greater than 100,000 Mcf.	1/1/09	150.00
Commodity Charge [c] - $/Mcf		17.50
Boiler and Power Plant Service - Heavy Oil - Rate BPS-H		
Customer Charge - $/meter per month		
Annual consumption less than 10,000 Mcf.	1/1/09	51.00
Annual consumption between 10,000 and 100,000 Mcf, inclusive.	1/1/09	108.00
Annual consumption greater than 100,000 Mcf.	1/1/09	150.00
Commodity Charge [c] - $/Mcf		17.45
Load Balancing Service - Extra-Large Volume - Rate LBS-XL		
Customer Charge - $/meter per month	1/1/09	362.00
Commodity Charge [c] - $/Mcf		17.30
Load Balancing Service - Large Volume - Rate LBS-L		
Customer Charge - $/meter per month	1/1/09	254.00
Commodity Charge [c] - $/Mcf		17.35
Load Balancing Service - Small Volume - Rate LBS-S		
Customer Charge - $/meter per month	1/1/09	145.00
Commodity Charge [c] - $/Mcf		17.40
Gas Transportation Service - Rate GTS		
Customer Charge - $/meter per month	9/1/03	250.00
Commodity Charge[d] - $/Mcf		n/a
Cogeneration Service - Rate CG		
Customer Charge - $/meter per month	9/1/03	362.00
Commodity Charge[e] - $/Mcf		3.06
Developmental Natural Gas Vehicle Service, Firm Service - Rate NGVS		
Customer Charge - $/meter per month	6/1/15	35.00
Supply Charge - $/Mcf[b]	6/1/15	4.2121
Distribution Charge - $/Mcf		
Delivery Charge	6/1/15	1.2833
Surcharges		
Universal Service and Energy Conservation	6/1/15	1.4902
Restructuring and Consumer Education	9/1/12	0.0000
Total Commodity Charge - $/Mcf		6.9856
Distribution System Improvement Charge	7/1/15	1.64%
Customer Charge - $/meter per month		0.5740
Commodity Charge - $/Mcf		0.0455
Developmental Natural Gas Vehicle Service, Interruptible Service - Rate NGVS		
Customer Charge - $/meter per month	9/1/03	35.00
Commodity Charge - $/Mcf		11.58
Transportation Service		
Daily Balancing Service - Rate DB		
Administrative Charge - $/supply pool per month	9/1/03	150.00
Plus charges and/or credits related to balancing and Operational Flow Orders (OFOs)		
Interruptible Transportation - Rate IT	1/1/09	
IT-A - Contracts for not less than 2,500 Dth, maintain standby non-natural gas energy.		
IT-B - Contracts for not less than 5,000 Dth, maintain standby non-natural gas energy.		
IT-C - Contracts for not less than 10,000 Dth, maintain standby non-natural gas energy.		
IT-D - Contracts for not less than 25,000 Dth, maintain standby non-natural gas energy.		
IT-E - Contracts for not less than 80,000 Dth, maintain standby non-natural gas energy.		

Customer Charge - $/meter location per month		Transportation Charge - $/Dth delivered		
IT-A	125.00	IT-A	1.81	maximum
IT-B	225.00	IT-B	0.87	maximum
IT-C	225.00	IT-C	0.68	maximum
IT-D	225.00	IT-D	0.61	maximum
IT-E	350.00	IT-E	0.58	maximum

(a) Reference: Philadelphia Gas Works, Gas Service Tariff, Pa P.U.C No 2.
(b) Sum of Gas Cost Rate (GCR), Merchant Function Charge (MFC), and Gas Procurement Charge (GPC).
(c) Competitively priced based on cost of alternative fuel. Based on May 2015 average.
(d) Commodity charge includes Delivery, Transportation, and Standby Service Charges, if applicable. There are no GTS customers at this time.
(e) Commodity charge based on cost of gas purchased and delivered to PGW gate stations.

Table 8 presents a comparison of a typical peak winter month's residential gas bill for PGW and the other principal gas distribution utilities in Pennsylvania. Based on rates, surcharges, and costs of gas currently in effect, PGW's typical winter month residential bill is $76.83 higher than the group average of $182.21. One of PGW's surcharges, the Universal Service and Energy Conservation surcharge, includes the recovery of costs related to the Customer Responsibility Program, the Enhanced Low Income Retrofit Program ("ELIRP"), and the Senior Citizen Discount Program[7]. PGW's Universal and Energy Conservation surcharge is currently $1.4902 per Mcf. For the typical peak winter month's residential bill for 20 Mcf of consumption, the Universal Service Charge amounts to $29.80 of the $259.04 total. Black & Veatch understands that, in comparison to PGW, comparable social program related surcharges of other Pennsylvania utilities are significantly lower because the cost of these programs are not as high as they are in Philadelphia.

Table 8 Comparison of Residential Gas Bills

Pennsylvania Utilities for Customers Using 20 Mcf per Month

Utility	Gas Cost Effective	Monthly Bill[(a) (b)]
PECO Energy	6/1/2015	155.94
UGI Corporation	6/1/2015	164.06
National Fuel Gas	5/1/2015	127.86
Peoples Natural Gas	4/1/2015	162.94
UGI Penn Natural Gas (formerly PG Energy)	6/1/2015	193.45
Columbia Gas of Pennsylvania	4/1/2015	220.16
Equitable Gas	4/1/2015	174.21
Philadelphia Gas Works	6/1/2015	259.04

(a) Table assumes 1 cubic foot equals 1,000 Btu.
(b) Gas Costs are a contributing factor to the difference in Monthly Bill.
Gas Costs range from $2.94/Mcf to $5.00/Mcf .

Interruptible Service

PGW provides interruptible sales service under several rate schedules. Virtually all interruptible sales service is under the Boiler and Power Plant Service ("BPS") or Load Balancing Service ("LBS"). The BPS rates are set within a range, based on the estimated cost of gas and on published No. 2 fuel oil prices in Philadelphia. The LBS service is priced similarly. Because this service is interruptible, customers taking BPS or LBS service must be able to use an alternate energy source. The rates are competitive. If alternate fuel (No. 2) is less expensive than the equivalent price that PGW offers in any given month, the customer may use the alternate fuel rather than burn natural gas.

[7] The Senior Citizen Discount provides customers with a discounted payment plan. The total number of customers receiving the discount as of August 31, 2013 and 2014 was approximately 24,000 and 20,000, respectively. The discount value was approximately $6.4 million for the year ended August 31, 2014. The discount program closed to new customers on September 1, 2003.

Transportation Service

PGW currently provides transportation service to approximately 3,786 customers. The increase in transportation customers from 2,188 in 2010, as shown in Table 9, is primarily due to customers transferring from sales to transportation service. During the calendar year 2014, Grays Ferry Cogeneration Facility accounted for approximately 44 percent of PGW's transportation throughput and 9 percent of PGW's transportation revenue. Service to this customer is provided through essentially dedicated facilities under a long-term negotiated contract. Under this contract, PGW receives approximately 8 cents per Mcf for each unit transported plus a service charge intended to cover PGW's cost of operating and maintaining the facilities required to serve this customer. The other customers are served under individually negotiated contracts. In some cases, transportation customers also take some service under the sales rate schedule for a portion of their load.

Although PGW has operated under its Restructuring Compliance Tariff with unbundled rates since September 1, 2003, many of PGW's customers continue to take fully bundled service from PGW. A fully bundled service is a service where the customer deals with one provider and pays for all services through a single charge. All of the separate services (gas supply, transportation, storage, and distribution) currently performed by PGW are packaged into one full-service rate.

Under PGW's restructured rates, customers have the option to continue taking the gas supply, transportation, and storage services from PGW or to choose a third party supplier to provide these services. Whether the customer decides to have PGW provide these services or a third party, the customer continues to take and pay for distribution service from PGW. Under its current tariff, PGW assigns (with recall rights) portions of its pipeline transportation to firm service third party suppliers such that PGW and customers who take a fully bundled service will not be adversely impacted by having to pay for capacity that would otherwise be stranded by customers who choose a third party supplier. PGW retains ownership to the transportation capacity because PGW continues to be the supplier of last resort. If a firm service third party supplier defaults or is no longer able to meet its commitments, PGW is able to recall the transportation capacity and serve the customers who had opted for service from this third party supplier. PGW does not release storage capacity to firm service third party suppliers. PGW provides balancing services from storage as needed. Firm service third party suppliers are assessed a storage and peaking charge for storage balancing services provided by PGW during the winter operating season; firm service third party suppliers return volumes provided from PGW storages during the summer refill season.

Under the unbundled rates, PGW's margin[8] from firm customers is not materially impacted by whether a customer chooses a third party supplier or elects to continue taking the fully bundled service. In effect, the unbundled rates and services make PGW indifferent as to which service a customer takes. Customers will continue to pay the distribution and customer charges no matter which service is taken. The GCR mechanism will keep PGW whole with regard to gas supply, transportation, and storage costs. PGW's ability to assign capacity to the third party suppliers will not adversely impact customers who choose to take the fully bundled service.

PGW estimates for fiscal year 2015, approximately 30.9 Bcf of commercial, industrial and municipal throughput, or 38.3 percent of total throughput, is taking gas supply and transportation from a

[8] Margin (non-gas revenues) is total revenues excluding gas costs

third party supplier. PGW projects transportation throughput will continue to grow annually, reaching 36.8 Bcf, or approximately 44.1 percent of total throughput by 2020.

Gas Cost Rate

As previously discussed, all changes in gas supply related costs are passed through to customers through the GCR. The specific components of PGW's current GCR are depicted in Figure 3. PGW's gas supply costs consist of purchased gas costs, transportation costs, and off-system storage costs. This cost is reduced by the cost directly paid by interruptible sales customers (specifically, BPS and LBS customers). Sales are made to these interruptible customers based on prices quoted monthly by PGW. The prices quoted are based on the average delivered price paid by PGW during the month with some consideration given to the customer's cost of alternative fuel. Natural gas service is competing against the price of alternative fuel; however, PGW only incurs gas supply cost attributable to these customers to the extent that sales are made (and gas is purchased to meet load). Total gas supply costs are also adjusted to reflect changes in the inventory cost of off-system and LNG storage and the cost of power purchased for the LNG facilities. The change in inventory cost is attributable to changes in volume as well as the price paid for the gas put into storage.

These costs are divided by the total sales volumes less the volumes attributable to direct billed interruptible sales customers to determine the unit cost of fuel, or sales service charge as depicted in Figure 3. Various adjustments are then made to the sales service charge. An additional adjustment is made for the net over or under collection of natural gas during the previous fiscal year resulting from differences between values used to project the prior year's GCR and those actually experienced. The interest expense or credit on the over or under recovery is also applied to calculate the total adjustment. In addition, an interruptible revenue credit ("IRC") for margin realized from interruptible sales is made. In the aggregate, these components comprise the GCR. The GCR is typically adjusted quarterly although PGW has the ability on thirty days' notice to the PUC to change it monthly.

Prior to the restructuring, PGW recovered certain non-fuel expenses in addition to gas supply costs through the GCR. These included discounts given to low income customers through the Customer Responsibility Program and funds provided to weatherize the homes for low-income customers through the Conservation Works Program. These costs are now recovered through surcharges which are not included as part of the GCR. By recovering these costs through surcharges, customers cannot avoid these costs by not purchasing gas from PGW.

Weather Normalization Adjustment

Since 2002, PGW's Tariff has included a weather normalization adjustment ("WNA") clause. The benefit of a WNA is that it mitigates the single biggest risk to PGW of recovering its approved margin; which is warmer than normal weather during the winter season. PGW's approved commodity charges (exclusive of cost of gas) are derived using throughput (volumes) that are based on the assumption that weather will be normal. If conditions are warmer than normal, sales decline and in conjunction with that, margin declines. Several warmer than normal winters, including one of the warmest winters in PGW's history, created the circumstances that led to PGW's need to file for extraordinary rate relief in 2002.

The WNA is designed to adjust the customers' bills upwards or downwards to reflect differences between actual HDDs and normal HDDs. The benefits of a WNA include the following:

- Stabilizes earnings,
- Stabilizes cash flow during the winter heating season,
- Reduces the need to file rate cases, thereby lowering costs,
- Reduces the need for short-term financing, and
- Stabilizes customers' bills.

Heating customers were credited approximately $12.3 million as a result of the colder than normal winter period in fiscal year 2014. PGW's WNA applies to customers served under its General Service, Municipal Service, and PHA rate schedules and is calculated for each customer bill rendered between October 1 and May 31.

The type of WNA that PGW implemented is referred to as a Type 1 WNA. This type of WNA adjusts the customer's bill to reflect conditions during the billing cycle covering that bill. This contrasts with a Type 2 WNA which is calculated on a seasonal basis. The advantage of the Type 1 WNA is that the calculation of the customers' bills and PGW's revenue recovery are concurrent with the current billing cycle. The adjustment is calculated as the ratio of the normal HDDs during the billing cycle divided by the actual HDDs during the cycle. For example, assume a residential customer uses 10 Mcf during the period November 16 through December 15, when the actual HDDs during this period are 750, and the normal HDDs during this period are 850. The customer's volumetric charge (exclusive of gas cost) would be calculated as 8 Mcf (10 Mcf minus 2 Mcf base load) times 841.5 HDDs (850 HDDs less 1 percent) divided by 750 HDDs times $6.0067 per Mcf which equals $65.93. Without a WNA, the customer's volumetric charge would have been $60.07 (10 Mcf times $6.0067 per Mcf). The WNA only applies if the actual HDDs deviate by more than 1 percent from the normal HDDs during the billing cycle. Therefore, if the actual HDDs during the cycle in the above example had been within the range of 842 to 859 HDDs, no adjustment would be made to the bill.

Surcharges

PGW's surcharges include a Restructuring and Consumer Education Surcharge, Universal Service and Energy Conservation Surcharge, Efficiency Cost Recovery Surcharge, OPEB Surcharge, and DSIC Surcharge. These surcharges are depicted in Figure 4. Gas utilities in Pennsylvania can recover the costs of social programs through what are generally referred to as universal service charges. The Universal Service and Energy Conservation Surcharge provides for the recovery of discounts to customers on the Customer Responsibility Program ("CRP"), of discounts to customers receiving the Senior Citizen Discount, of the costs of the Enhanced Low Income Retrofit Program, and of past due arrearages forgiven to CRP customers entering CRP after September 1, 2003. The Universal Service and Energy Conservation Surcharge is applicable to all PGW customers, excluding interruptible customers, who are delivered natural gas through PGW's distribution system. PGW automatically adjusts the surcharge quarterly in connection with its GCR filing.

The Restructuring and Consumer Education Surcharge separately tracks and recovers costs associated with the transition to customer choice and what are generally referred to as PUC Chapter 56 (Customer Service) and Chapter 59 (Safety) costs. The restructuring costs include the recovery of PUC approved costs which PGW has or will incur to meet requirements of the Gas Choice Act and applicable PUC regulations, orders, and other regulatory requirements. The

additional costs associated with Chapter 56 primarily relate to more frequent reading of indoor meters. The additional costs associated with Chapter 59 primarily relate to more frequent meter testing and indoor leak surveys.

The Efficiency Cost Recovery Surcharge recovers the program costs and the administrative costs of the energy efficiency programs (i.e. the demand side management programs) for the firm customer rate classes. The OPEB Surcharge recovers the amounts necessary for PGW's OPEB obligations. Revenues from the DSIC Surcharge are used to supplement PGW's 18-mile pipeline replacement program as part of PGW's LTIIP.

Five-Year Gas Demand-Side Management Plan

PGW's DSM program, marketed as EnergySense, is a portfolio of conservation programs that PGW launched in fiscal year 2011 and was approved by the PUC for a 5-year term. PGW's costs associated with the market rate programs (non-ELIRP) are recovered through the Efficiency Cost Recovery Surcharge. From program launch through the end of fiscal year 2014, PGW spent $31.5 million (nominal) on EnergySense activities, resulting in Total Resource Cost (which includes costs incurred by program participants) of $36.4 million and benefits of $43.0 million based on the projected 5.9 Bcf of lifetime natural gas savings (i.e. reduced customer usage).

The budget for the fifth and final year of the current approval period is $12.8 million. On December 23, 2014, PGW filed a Petition for Approval of Demand Side Management Plan 2016-2020 with the PUC. The 5-year EnergySense budget proposed for 2016-2020 is 57% less than the current 5-year Phase I budget. The PUC has not yet acted on the Petition.

The current DSM program includes an automatic adjustment change mechanism to recover the costs of program delivery. The most recent extension filing also includes two additional cost recovery elements: the first would allow PGW to recover the loss of margin from reduced sales to customers directly attributable to program implementation; the second would provide for performance incentives to PGW based on meeting and exceeding certain performance targets. In addition to the existing programs the extension filing also proposes to create a new fuel switching program to encourage customers to convert to natural gas end uses through projects that are deemed to be overall cost-effective and result in net energy usage reductions.

The full portfolio of energy-efficiency programs, EnergySense conservation, consists of six separate programs offering incentives available to all PGW customers to assist in conserving energy. The portfolio has five broad goals:

- Reduce customer bills.
- Maximize customer value.
- Contribute to the fulfillment of the City's sustainability plan.
- Reduce PGW cash flow requirements.
- Help the Commonwealth and the City reduce greenhouse gas.

These goals will be accomplished by:

- Fielding a portfolio of programs that targets cost-effective gas efficiency savings among all PGW's firm heating customers,

- Maximizing delivery efficiency to minimize costs and maximize coverage from the available budget,
- Staging program implementation to permit orderly and sustainable expansion,
- Treating customers in greatest economic need with the most cost-effective opportunities first,
- Supporting economic development in the City, both directly and indirectly, and
- Exploring opportunities to take advantage of efficiencies by partnering with other parties.

PGW filed its DSM Implementation Plan for the 2015 fiscal year in May 2014. The DSM Implementation Plan projects expenditures of $44.1 million for the period 2011 through 2015. From inception through August 31, 2014, PGW has spent $31.5 million (nominal). Over the expected useful life of the measures installed, the activity through the end of fiscal year 2014 is projected by PGW to achieve 5.7 Bcf of natural gas savings (reduced customer usage). Over the full five-years of the Phase I program, the portfolio is projected by PGW to achieve 7.8 Bcf of natural gas savings. Based on the Total Resource Cost test, the actual activity results from inception through August 31, 2014 achieved a positive net savings to customers of approximately $5.2 million (2009$) from total present value spending of $28.6 million (2009$) and $33.8 million (2009$) in present value savings over the expected useful life of the measures. Over the full five-years of the Phase I program, the portfolio is projected to achieve a positive net savings to customers of approximately $5.7 million (2009$) from total present value spending of $41.4 million (2009$) and $47.2 million (2009$) in present value savings over the expected useful life of the measures.

PGW filed its most recent DSM Implementation Plan for fiscal year 2016 in June 2015. The fiscal year 2016 DSM Implementation Plan projects estimated expenditures of $10.7 million for fiscal year 2016.

The portfolio has been revised annually since approval, based on actual activities and latest market developments, such as falling gas commodity costs and updated avoided costs calculations. Additional elements in the updated avoided costs calculations now include the economic value of wholesale price reduction caused by demand reductions resulting from energy-efficiency improvements, as well as estimates of the long-run value of reduced greenhouse gas emissions resulting from DSM activities.

Listed below are the major DSM programs. As used below, the term "retrofit" follows the common use of the term in this kind of program, meaning modification of an existing structure to improve energy efficiency.

1. *CRP Home Comfort (formerly Enhanced Low-Income Retrofit Program "ELIRP")*

   Target Audience**:** Low-income Residential (CRP Participants), participation is required per CRP program enrollment

   Description: Comprehensive residential retrofit measures will be installed at no cost to the customer.

2. *Home Rebates Program*

Target Audience: High-use Residential

Description: Customized incentives offered to non-CRP customers to encourage them to complete comprehensive single-family residential retrofit projects with PGW contractors. This program provides discounted energy assessments and rebates of $40 per-MMBtu for savings projected from the project.

3. *Residential Heating Equipment Rebates Program*

Target Audience: Customers purchasing residential-sized heating equipment

Description: Prescriptive incentives offered to PGW customers who purchase residential-sized, energy efficient gas appliances and heating equipment. This program targets the entire supply chain, providing incentives designed to cover 80 percent of incremental costs for high efficiency models.

4. *Commercial and Industrial Equipment Rebates Program*

Target Audience: Commercial and industrial customers purchasing commercial-scale gas equipment.

Description: Prescriptive incentives offered to PGW customers who purchase commercial-scale, energy efficient gas appliances and heating equipment. This program targets the entire supply chain, providing incentives designed to cover 80 percent of incremental costs for high efficiency models.

5. *Efficient Construction Grants*

Target Audience: Residential and Commercial Construction

Description: Customized incentives offered to encourage the design and construction of new residential and commercial buildings that exceed energy code minimum requirements. This program provides incentives of up to $750 for single-family residential customers and up to $60,000 to multifamily and commercial customers based on the projected savings.

6. *Efficient Building Grants*

Target Audience: Commercial, Multifamily and Industrial Facilities

Description: Technical assistance and customized incentives offered to PGW commercial and industrial customers to encourage them to complete comprehensive retrofit projects to their existing properties. This program provides incentives of up to $75,000 to cover up to 33% of the retrofit project costs.

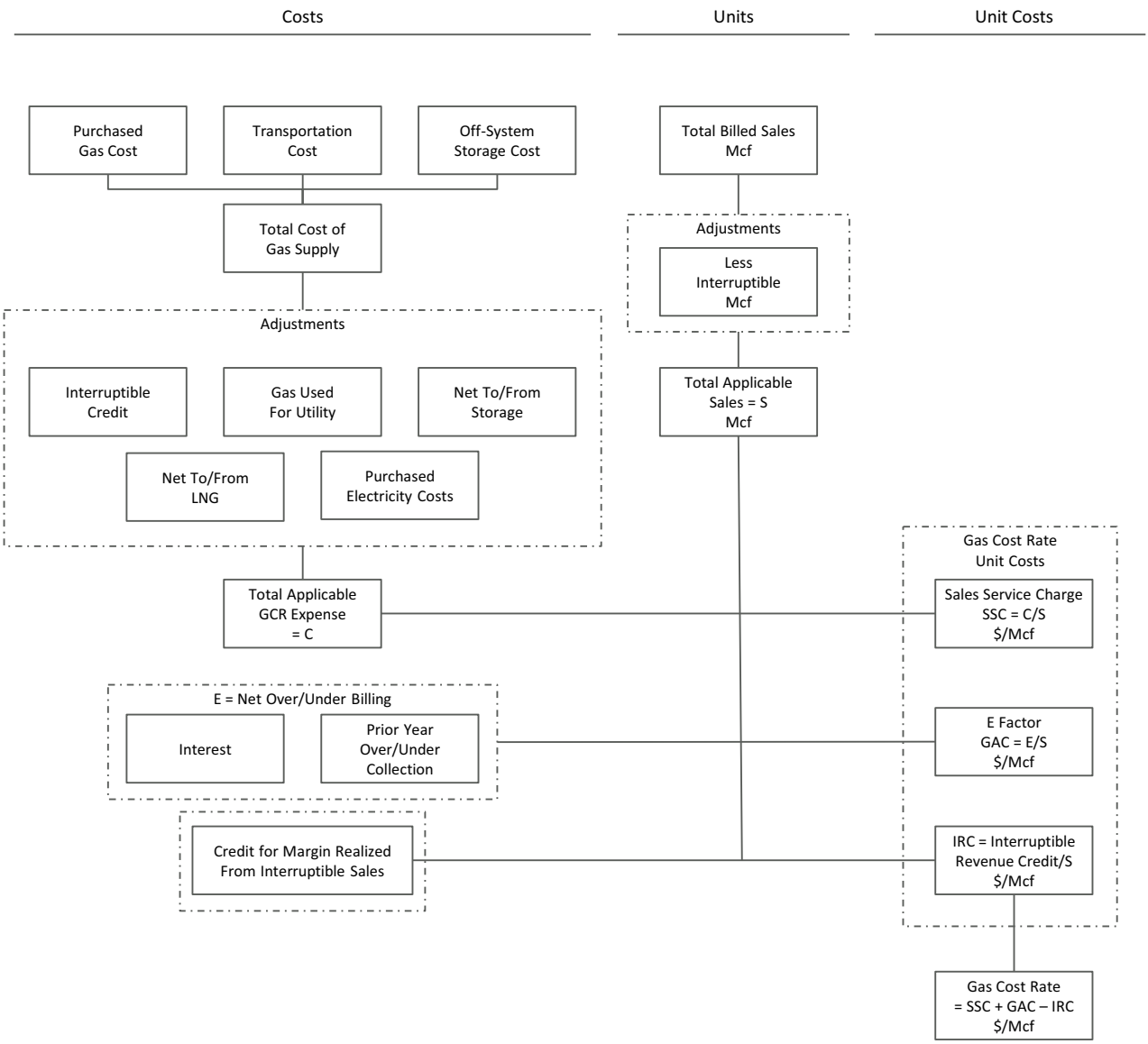

Figure 3 Components of PGW Gas Cost Rate

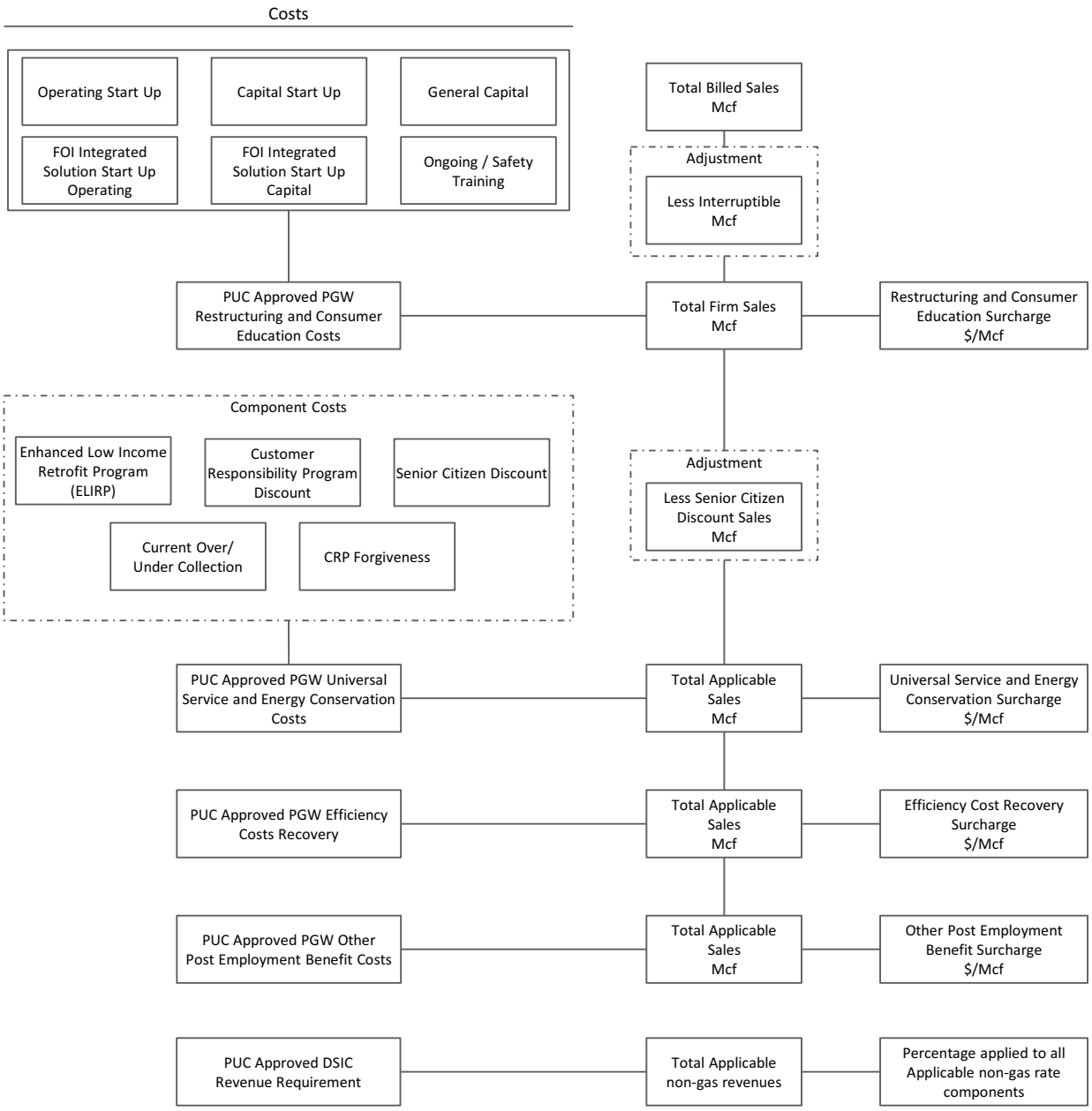

Figure 4 Components of PGW Surcharges

Infrastructure Replacement

As discussed earlier in this Report in the Capital Improvement Program – Distribution section, PGW is currently replacing 18 miles of cast iron mains annually. This program was initiated by PGW based on risk assessment and benchmarking studies conducted for PGW. The cost of this program is being paid for by customers under the existing base rates. Supplementing this 18-mile cast iron main replacement program is PGW's PUC approved LTIIP.

PGW's LTIIP is a five-year plan (fiscal years 2013 - 2017) for accelerated recovery for distribution facilities over and above PGW's base line replacement program (recovery for the base line program is already included in base rates). The LTIIP proposes to accelerate the replacement cycle for PGW's large diameter cast iron mains (i.e. 12-inch and larger diameter high pressure main) and accelerate the more extensive smaller diameter cast iron mains (i.e. 8-inch and smaller, low/intermediate pressure main) replacement program. For forecasting purposes, PGW assumes this program would continue throughout the fiscal year 2020 forecasting period.

The LTIIP includes several key elements:

- The program of replacing 18 miles per year of small diameter, low/intermediate pressure cast iron main increased by approximately 3 miles per year;
- Increased replacement of gas main valves.
- Additionally, replacement of large diameter, high pressure cast iron mains that have been identified as potential risks began fiscal year 2013 related to:
    - 30-inch cast iron mains that have been identified as being in poor condition, and
    - 12-inch cast iron mains, similar to those that have been involved in two separate incidents in PGW's system; 12-inch cast iron mains were also involved in an incident within UGI Corporation's service territory.

PGW is recovering the annual cost of this incremental work, approximately $22.0 million, on a pay-as-you-go basis through the DSIC surcharge. PGW has not issued any long-term debt to fund the accelerated replacement program. Funding on a pay-as-you-go basis benefits both the ratepayer and PGW because rates will not be impacted by any interest expense or debt service coverage requirements. PGW's debt to equity ratio will not increase as a result of the accelerated spending funded by a DSIC. Separate funding via a pay-as-you-go DSIC model for the accelerated program is also beneficial (versus a base rate case) because it can be approved more timely and efficiently than would be true in a base rate case.

The DSIC surcharge applies to Residential and Public Housing, Commercial and Municipal, and Industrial customers. The surcharge is calculated as a percentage applied to the delivery charge, surcharges, and customer charge. The percentage is equal to the DSIC revenue requirement divided by the annual non-gas cost revenues of the above customers. This percentage is then applied equally to each of the non-gas rate components of those customers. The percentage effective on July 1, 2015 is 1.64 percent. It is PGW's intent to propose to increase the current DSIC to 7.5 percent (effective during fiscal year 2016) and annualize and levelize the calculation of the DSIC surcharge. The 7.5 percent DSIC funding level will provide approximately $33 million per year above the capital replacement included in base rates.

Customer Responsibility Program

In November 1993, the PGC adopted a low-income program known as the CRP. This program became effective in February 1994. The purpose of CRP is to increase the collection of revenues, provide an affordable payment plan for low-income customers, impress payment responsibility on the customer, reinforce the importance of conservation and increase grant assignment. The goals of the program are to increase cash flow to PGW and decrease accounts receivable.

Currently, CRP is open to any customer who is at or below 150 percent of the Federal Poverty Level ("FPL"). Monthly bills for CRP customers are based on income, so that they are affordable for low-income households. If a customer entering CRP has arrears, those arrears are forgiven at a rate of 1/36th per month. As part of their CRP agreement of fixed monthly bills and arrearage forgiveness, CRP customers are required to:

- accept conservation measures offered to them in the CRP Home Comfort (formerly known as Enhanced Low Income Retrofit Program);
- allow the installation of an Automatic Meter Reading device;
- make a $5 monthly co-payment toward their pre-program arrears, if they have any;
- apply for Low-Income Home Energy Assistance Program ("LIHEAP"), if eligible, and designate PGW as the grant recipient;
- re-certify at least once per year, or when household size or income changes; and
- make payments on time and in full (CRP customers are considered in default when they are one full payment past due).

CRP is a customer assistance program that can help low-income residential customers who are at or below 150 percent of the poverty level to better afford their PGW bills and maintain their gas service. Participants receive a discount based on their gross household income. Applicants must apply by showing proof of income and identification cards for everyone in the household. There are three agreement types:

PGW Annual Bill	Household Income
8% of income	0-50% FPL
9% of income	51-100% FPL
10% of income	101-150% FPL

The minimum payment under a CRP agreement is $25 per month. Customers with pre-program arrears must make a $5 monthly co-payment toward the arrears, in addition to the CRP budget amount. They must also pay their bill on time to receive forgiveness of pre-program arrears.

Approximately 62,700 customers were enrolled in CRP as of May 2015. The main costs associated with the CRP program are the discounts that customers receive (revenue shortfall) and their arrearage forgiveness.

The CRP revenue shortfall is currently recovered in the Universal Service Surcharge. In the past five fiscal years, these amounts were approximately$78.9 million for 2010, $88.7 million for 2011, $63.2

million for 2012, $70.6 million for 2013, and $65.1 million for 2014. Shortfall fluctuation can be primarily attributed to the cost of natural gas supply and participation levels.

PGW forgives 1/36th of CRP pre-program arrears each month, provided that all bills are paid on time and in full. In the past five fiscal years, PGW forgave approximately $9.6 million in 2010, $10 million in 2011 and $8.3 million in 2012, $6.9 in 2013 and $6.2 in 2014.

On November 13, 2014, the Pennsylvania Public Utility Commission (PUC) entered a Final Order on PGW's Universal Service and Energy Conservation Plan for 2014-2016 at PUC Docket No. M-2013-2366301. Pursuant to this proceeding, a number of modifications will be made to CRP, including but not limited to: a CRP stay-out provision for certain customer activity such as committing two or more incidents of unauthorized usage or submitting fraudulent enrollment or re-certification information; a modification to apply all unauthorized usage charges to the CRP customer's account; enhancements to employee training, fraud detection, quality control and intake processes; targeted outreach activities; application of arrearage forgiveness regardless of existing arrears; and application of overpayments to future CRP bills.

Five-Year Demand Side Management Programs with a Focus on the Low-Income Conservation Program

PGW's original low-income customer conservation program was called the Conservation Works Program ("CWP"). CWP was designed to provide cost-effective energy savings to PGW's low-income customers who participate in CRP. CWP was intended to reduce the overall long-term costs of CRP.

CWP began in 1990 and was operated by the Energy Coordinating Agency of Philadelphia ("ECA") for the first years of the program. In September 1996, the program was redesigned, a second weatherization contractor was added, and PGW became the program operator. Both contractors pursued a lower cost program approach designed to install only the most cost-effective measures. After redesign, the program continued with an annual budget of approximately $2 million. About 2,000 homes were treated annually under the program.

On January 1, 2011, CWP was expanded into the CRP Home Comfort program, as part of PGW's new portfolio of energy-efficiency programs for all of PGW's customers (as described more fully in the section entitled "Five-Year Gas Demand-Side Management Program"). CWP had been designed to spend smaller amounts within each home so as to treat as many homes as possible within the allotted budget amounts. CRP Home Comfort emphasizes greater expenditures within each home entered, so as to realize more savings per home. One of the main goals of CRP Home Comfort is to reduce the Universal Service surcharge imposed on non-CRP customers. CRP Home Comfort accounts for $7.6 million in fiscal year 2015 expenditures and as such represents the most significant portion of total EnergySense activity.

On December 23, 2014, PGW filed a Petition for Approval of Demand Side Management Plan 2016-2020 with the PUC. The 5-year CRP Home Comfort budget proposed for 2016-2020 is 74% less than the current 5-year Phase I budget for CRP Home Comfort. On April 10, 2015, PGW filed a Petition to Extend Demand Side Management Plan with the PUC to extend its Phase I plan because the expected date of completion of litigation regarding the Phase II DSM Plan will occur after the expiration of the Phase I DSM plan. On May 7, 2015 the PUC Ordered that PGW permission to

implement the DSM Bridge Plan for an interim period effective September 1, 2015, through the earlier of the effective date of the Phase II Plan or August 31, 2016.

Senior Citizen Discount Program

The senior citizen discount program is a closed program. Since September 1, 2003, the program has not been available to new participants. However, PGW has approximately 20,000 participants as of December 2014 in its senior citizen discount program. All participants currently in the program were "grandfathered" in when the PUC discontinued it in September 2003. In 2004 there were approximately 70,000 "grandfathered" participants in the program. The senior citizen discount amounts to a 20 percent reduction on the participant's total gas bill each month.

Other Programs and Grants

In addition to the programs described above, PGW also participates in or partially funds several other assistance programs that are intended to increase cash flow and reduce accounts receivable.

Low-Income Home Energy Assistance Program

The Federally funded LIHEAP provides funds to households to ensure continued utility service. The City's low-income residential gas consumers may apply for assistance through the Pennsylvania Department of Human Services (formerly the Department of Public Welfare). PGW district offices and many community organizations throughout Philadelphia offer assistance with the application process. The LIHEAP program consists of two grant components: cash grants and crisis grants. The main difference between the two grant types is that crisis grants are offered only to eligible customers whose utility service is off or in danger of having services terminated. Funds obtained are paid directly to PGW for crediting to the customer's account.

LIHEAP is an important source of low income assistance funding for PGW and has ranged over the last nine years (2005-2014) from a low of $19.5 million in 2008 to a high of $41.5 million in 2010. PGW's share of LIHEAP funds allocated by the Commonwealth of Pennsylvania has ranged from approximately 12 to 17 percent since 2005. These levels have been achieved through a vigorous educational and outreach program by PGW to encourage its low-income residential population to apply for the grants. Funding levels vary based on Federal allocation and program design by state.

Since 1996, the Commonwealth of Pennsylvania has had the flexibility to change the customer eligibility criteria for LIHEAP participation from 210 percent of the FPL to 110 percent of the FPL. During the 2013-2014 grant season, the program capped eligibility at 150 percent of the FPL.

In 2010-2011, Pennsylvania received approximately $294 million in LIHEAP funding by the Federal Government; $264 million of which was used for grants. In 2011-2012, Pennsylvania received approximately $210 million; $172 million of which was used for grants. In 2012-2013, Pennsylvania received approximately $185 million in LIHEAP funding by the Federal Government; approximately $153 million of which was to be used for grants. In 2013-2014, Pennsylvania received approximately $204 million; approximately $150 million of which was to be used for grants.

Vendor Payment Program

PGW continues to support a Vendor Payment Program for a group of customers known as Scattered Site Tenants of the PHA. The customers occupy dwellings, usually single family homes, owned by the PHA, for which the Federal Government provides rent subsidies. Under agreement with the PHA and the Scattered Site Tenants, the Federal Government's Department of Housing and Urban Development provides funding for a utility allowance to PHA, on behalf of the tenant. There are two groups of PHA tenants: one for which utility payments are received by PGW directly from PHA, and a second group, which is responsible for paying their own utility bills.

Utility Emergency Services Fund

PGW also participates in the Utility Emergency Services Fund ("UESF"), which is a private fuel fund set up with the assistance of the City, the Water Department, PECO Energy, individual contributions, and private foundations. Under this program, customers at or below 175 percent of the FPL may combine a LIHEAP grant with a UESF grant and matching grant from PGW, and their own payment, if necessary, to zero-out all arrearages to avoid termination or restore service. Except for possible special grant programs, the maximum UESF grant and PGW matching grant is $750 each (for a total of $1,500). To be eligible for a UESF grant, the customer must have a termination notice or already have service terminated. The customer must also apply for LIHEAP and must zero out their account. If the total arrearage is not satisfied by the combination of LIHEAP, UESF, and the matching PGW grant, then the customer must pay the balance that would remain prior to being approved for the UESF grant and matching utility grant. Also, customers are limited to one UESF grant every two years.

Dollar Plus Program

PGW also continues to support the Dollar Plus Program, wherein PGW's customers are asked to add $1.00 or more to their gas bill payments as a donation to the Utility Emergency Services Fund.

Payment Plans

PGW maintains a number of residential customer payment plans that are tailored to the customer's ability to pay in order to allow the customer the opportunity to pay down past arrearages and budget future usage and payments.

Billing and Collections

To strengthen its financial condition, PGW utilizes a number of programs designed to improve collections and increase operational efficiencies. These programs are as follows:

Soft-off monitoring. PGW automated many of the services associated with soft-off monitoring. Previously, when a customer moved, PGW deployed a field service representative to shut off service. Many times the field service representative would be unable to gain access to the meter and the service would remain on and continue to bill the out-going customer resulting in additional uncollectible receivables. PGW now final bills a customer's account, transfers the future usage expense responsibility to PGW and monitors the premise closely to avoid any excess usage or theft of service. In addition to decreasing the uncollectible receivables as a result of a failed shut off attempt, the soft-off program allows Operations to redirect field employees to other jobs resulting in a more efficient use of resources.

The soft-off monitoring benefits reflect the cost of having the program in place versus not having the program. The goal is for the cost of the program to be 25 percent less than the cost of not having a program.

Landlord Cooperation Program ("LCP"). The LCP allows landlords of residential properties to work collaboratively with PGW in a manner that improves PGW's ability to collect from residential tenants (landlords provide access to the meter) and minimize tenant delinquencies in exchange for not filing a lien on the landlord's property for a tenant's unpaid balance. When a landlord fails to cooperate or enroll in the program, the property is subject to liens. As of early January 2015, LCP had approximately 71,150 registered premises.

Commercial Lien Notification Program ("CLNP"). The CLNP allows landlords of commercial properties to work collaboratively with PGW in a manner that improves PGW's ability to collect from commercial tenants (landlords provide access to the meter) and minimize tenant delinquencies in exchange for an additional advance notice of the intended filing of a lien. Regardless of enrollment in the program, a property remains subject to liens. As of early January 2015, CLNP had approximately 380 registered premises.

Write-off reactivation. PGW ensures that prior written-off balances are immediately identified and appropriately transferred when the same customer re-applies for service, and when an applicant lived at the property during the time the debt was incurred.

Liens. PGW has an automated lien process which ensures that all properties are appropriately liened as part of the collection process.

Risk-based collections. PGW utilizes a risk based collection strategy. Customers' past payment patterns are analyzed, and each customer is assigned a "score" based on the age of their receivable, amount of their receivable, and risk of their receivable going to write off. Actual write-off occurs 90 days after the shut-off for accounts when there are no payments against the final bill. Based on a customer's score, PGW determines an appropriate collection path. If a customer has a high score, they are selected for the physical shut off path, however if a customer has a lower score, more frequent customer communications may be the only thing needed to ensure payment.

Public Utility Law and Collections. PGW continues to abide by all regulations with respect to collections. On November 30, 2004, the Pennsylvania General Assembly passed and the Governor signed Act 201, entitled the "Responsible Utility Customer Protection Act" (now codified in the Pennsylvania Public Utility Code and referred to hereafter as "Chapter 14").

Chapter 14 provides a number of tools to help PGW collect payment, including but not limited to confirmation that termination of service following shut off notification may occur up to 60 days after notice; shut off with notice is permitted for things such as failure to meet the terms of a payment agreement; shut off without notice is permitted for things such as theft of service, obtaining service through fraud, tampering with a gas meter; winter termination (December 1 – March 31) without PUC prior approval for customers whose household income exceeds 250% of the federal poverty level; and winter termination (January 1 – March 31) without PUC prior approval (under specified conditions) for customers whose household income exceeds 150% but does not exceed 250% of the federal poverty level.

Chapter 14 was scheduled to expire on December 31, 2014, but the law was extended and amended effective December 21, 2014. Amendments include (among other things) a change in the deposit interest rate and elimination of a 24 month hold maximum for security deposits. In addition, Chapter 14 is now scheduled to expire December 31, 2024.

In addition to its collection efforts, PGW continues to offer customers many options to pay their bills in order to avoid collection activity:

Customer Service Centers ("CSC"). A CSC or District Office is a remote office owned or leased by PGW that accepts payments for all PGW services. PGW has six CSCs located throughout Philadelphia, due to staffing requirements, only four CSCs are operational per day,

Authorized Agents for walk–in payments. Customers can make payments at authorized agent locations, usually check cashing agencies. These locations are "In Person Payment" centers, or have BuyPay or Americash and Checkfree service. An authorized agent is an establishment that accepts payments from PGW customers and remits the total to PGW.

Pay by Phone. Credit card or check payments are accepted through the Interactive Voice Response ("IVR") system using a 3rd party vendor and by PGW customer service representatives through a desktop application maintained by the same vendor.

Web Payments. Customers may pay their bill by credit card or check on PGW's website which is processed through a third-party vendor's web portal.

Auto Payments. Customers may sign up to have monthly payments automatically deducted from their bank account on their bill due date.

Competition

PGW's customer, volume, and revenue mix is heavily weighted towards the residential and smaller commercial markets. PGW currently holds in excess of 90 percent of the home heating market in the City with fuel oil constituting most of the remaining market. This high market share combined with a service territory that is not growing limits PGW's ability to increase its customer base. For residential and small commercial customers, the short run cost of changing energy sources is generally prohibitive without some kind of incentive to switch appliances (rebates or financing of appliances, for example). While not totally immune from competition, the residential and small to medium-sized commercial markets are quite stable. Further, opportunities for PGW to increase market share are limited without investment in marketing or incentive programs.

Generally, competition in the larger commercial and industrial markets is common. PGW's Interruptible customers (LBS, BPS and IT sale customers) have the ability to utilize alternate energies (oil, propane, electric or steam). If the equivalent price of natural gas is higher than alternative energy's, many customers will opt to switch energy sources. Further, these interruptible customers may be curtailed during peak periods in the winter (curtailed by PGW or third-party suppliers). While large commercial and industrial loads are an important part of PGW's base, PGW's risk to competition is lower than most natural gas utilities that have a relatively higher industrial load. Further, regulations of the Clean Air Act will sometimes cause dual fuel commercial and industrial consumers to use natural gas (instead of fuel oil) in order to meet stringent air emission

operating permits. Finally, the commodity price of natural gas has fallen significantly with predictions of low stable prices for several years. The spread between natural gas and alternative energy sources has resulted in large commercial and industrial customers switching to natural gas.

Financial Feasibility for the Thirteenth Series Bonds

The financial data used in the analyses presented herein were obtained from the historical financial records of PGW, PUC GCR filings, and proposed operating and capital budgets for fiscal years 2015 through 2020. PGW's financial statements are audited annually. The most recently available audited financial statement is for fiscal year 2014 and may be viewed at www.pgworks.com. PGW's financial statements are maintained in conformity with U.S. Generally Accepted Accounting Principles (U.S. GAAP), and are in accordance with City reporting requirements.

Projected Revenues

Operating revenues for PGW consist principally of revenues from the sale and transportation of natural gas to residents of the City. Non-operating revenues include interest income and miscellaneous other revenues from non-operating sources.

Projected Average Number of Customers

Consistent with the trend in a declining customer base, the number of customers served by PGW is projected to decline slightly during fiscal years 2016 through 2020. Table 9 summarizes projected average number of customers. Historical average number of customers (for fiscal years 2011 through 2014) has been approximately 499,000. The total average number of customers served is projected to decline from approximately 499,000 in fiscal year 2015 to about 490,000 in fiscal year 2020, a total decline of about 1.9 percent over five years. Most of this decline is in the number of non-heating residential customers served.

It is estimated that for fiscal year 2015, 3,786 commercial, industrial and municipal customers, or 0.8 percent of total customers, will take gas supply, transportation and storage services from a third party supplier. For purposes of this Report, it is assumed that the number of transport customers will continue to grow annually, reaching 5,655, or 1.2 percent of total customers, by 2020.

The principal difference between customers taking sales versus transportation service is that PGW does not buy the natural gas commodity for the transportation customers. However, PGW continues to charge for the transportation of gas through its distribution system, through which customers will continue to take service from PGW. This charge for distribution service should not differ appreciably from the charge (less gas cost) that would apply to sales service customers. Therefore, PGW is unlikely to experience a material reduction in margin (gross revenues less cost of gas) due to customers migrating to transportation service. While it is difficult to predict with certainty the actual number of customers who will migrate and the timing of such a migration, PGW's projection of interruptible customers transferring to transportation service appears to be reasonable. If the rates for transportation service are properly designed, the margin realized by PGW will not be materially sensitive to whether customers take sales or transportation service, or both.

Table 9 Historical and Projected Average Number of Customers

Line No.	Description	Actual 2010	2011	2012	2013	2014	Estimate 2015	Budget 2016	Projected[a] 2017	2018	2019	2020
1	**Total Average Number of Customers**	**495,868**	**498,976**	**498,167**	**498,960**	**498,771**	**499,324**	**498,267**	**496,129**	**493,996**	**491,875**	**489,766**
	Non-Heating Customers											
	Firm											
2	Residential	32,226	30,084	28,165	26,277	24,239	22,730	20,935	18,859	16,793	14,731	12,674
3	CRP Residential	848	760	725	564	375	258	277	286	290	294	298
4	Commercial	4,875	4,742	4,605	4,405	4,257	4,138	4,019	3,932	3,883	3,862	3,846
5	Industrial	192	178	174	162	154	142	137	133	129	127	126
6	Municipal	109	113	112	102	104	104	105	105	105	105	105
7	Housing Authority	0	0	0	0	0	0	0	0	0	0	0
8	NGV Firm	1	1	1	1	2	4	4	4	4	4	4
9	Total Average Firm Non-Heating	38,251	35,878	33,782	31,512	29,130	27,377	25,477	23,318	21,204	19,124	17,054
	Interruptible											
10	LNG - Direct	0	0	0	0	0	2	4	4	4	4	4
11	Other Interruptible	145	121	38	12	7	3	4	4	4	4	4
12	Total Average Interruptible	145	121	38	12	7	5	8	8	8	8	8
13	**Total Average Non-Heating Customers**	**38,396**	**35,999**	**33,820**	**31,524**	**29,138**	**27,382**	**25,485**	**23,326**	**21,212**	**19,132**	**17,062**
	Heating Customers											
14	Residential	354,257	358,291	361,473	369,630	380,794	386,471	382,058	378,974	377,305	375,642	373,984
15	CRP Residential	81,221	82,688	80,909	75,594	66,298	62,987	67,640	70,047	71,043	72,039	73,035
16	Commercial	18,069	17,952	17,640	17,390	17,242	17,088	17,137	17,403	17,723	18,091	18,496
17	Industrial	465	451	444	418	410	391	380	366	354	344	337
18	Municipal	402	411	416	384	379	381	383	383	383	383	383
19	Housing Authority	871	890	845	833	825	839	831	827	823	819	815
20	**Total Average Heating Customers**	**455,284**	**460,681**	**461,727**	**464,249**	**465,948**	**468,157**	**468,428**	**468,000**	**467,631**	**467,317**	**467,049**
21	**Total Average Sales Customers**	**493,680**	**496,680**	**495,547**	**495,773**	**495,085**	**495,539**	**493,913**	**491,327**	**488,843**	**486,449**	**484,111**
22	**Total Average Transportation Customers[b]**	**2,188**	**2,297**	**2,621**	**3,186**	**3,685**	**3,786**	**4,354**	**4,803**	**5,152**	**5,426**	**5,655**

(a) Projected figures are based on budgeted department figures.

(b) Increase in transportation customers is due to the transfer of interruptible customers to GTS service and firm sales customers to firm transportation service. No firm customers are assumed to transfer to GTS service.

Historical and Projected Gas Sales and Throughput

Historical throughput (sales plus transportation volumes) for the 2010 through 2014 fiscal years and estimated or projected throughput for the 2015 through 2020 fiscal years are summarized in Table 10. The throughput volumes for the projected period are based on 4,237 HDDs for 2016 through 2020.

The decline in total residential throughput (heating and non-heating) is consistent with the projected decline in the average number of residential customers and the long-term decline in residential use per customer. The projection for residential and commercial throughput generally reflects a constant use per customer.

As interruptible customers migrate to transportation service, sales volumes attributable to interruptible customers also decline as transportation volumes increase. As stated previously, if transportation rates are designed properly, the migration of customers and volumes from firm or interruptible sales service to transportation service should not translate into a material change in margin. Although transportation throughput increases from 30.9 million Mcf in 2015 to 36.8 million Mcf in 2020, throughput volumes remain relative constant. Therefore, most of this increase in transportation throughput is attributable to incremental new business. This increase in transportation throughput is resulting in an increase in the overall PGW throughput. This trend is primarily due to the price advantage that natural gas has over alternate fuels (such as oil) and this trend is expected to continue during the projection period.

Table 10 Historical and Projected Sales and Throughput

Line No.	Description	Actual[a] 2010	2011	2012	2013	2014	Estimate 2015	Budget 2016	Projected 2017	2018	2019	2020
		MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf	MMcf
	Gas Sales Volumes											
	Non-heating											
	Firm											
1	Residential	663	627	585	559	529	482	423	381	339	297	255
2	CRP Residential	-	-	-	-	-	14	15	15	15	16	16
3	Commercial	1,196	1,268	1,199	1,191	1,150	1,171	1,051	961	883	814	749
4	Industrial	192	181	239	135	116	107	104	100	97	96	95
5	Municipal	134	142	124	117	158	136	136	137	138	140	141
6	Housing Authority	-	-	-	-	-	-	-	-	-	-	-
7	NGV Firm	1	1	1	1	2	3	3	3	3	3	3
8	Total Average Firm Non-Heating	2,186	2,219	2,148	2,003	1,955	1,913	1,731	1,597	1,476	1,366	1,259
	Interruptible											
9	LNG - Direct	-	-	-	239	1,044	497	505	1,000	1,000	1,000	1,000
10	Other Interruptible	1,049	1,004	192	652	53	15	6	6	6	6	6
11	Total Interruptible	1,049	1,004	192	891	1,097	512	511	1,006	1,006	1,006	1,006
12	**Total Non-Heating**	**3,235**	**3,223**	**2,340**	**2,894**	**3,052**	**2,425**	**2,242**	**2,603**	**2,482**	**2,372**	**2,265**
	Heating											
13	Residential	34,632	37,384	29,476	35,193	38,634	31,309	28,592	28,326	28,149	27,973	27,813
14	CRP Residential	-	-	-	-	-	7,818	7,816	8,125	8,232	8,340	8,451
15	Commercial	6,489	6,830	5,546	6,169	6,468	6,515	6,194	6,191	6,233	6,310	6,420
16	Industrial	378	401	272	344	386	377	359	345	335	326	319
17	Municipal	538	606	454	462	492	512	503	511	518	526	534
18	Housing Authority	567	574	448	573	597	753	725	722	719	717	714
19	**Total Heating**	**42,605**	**45,796**	**36,196**	**42,741**	**46,577**	**47,284**	**44,189**	**44,219**	**44,187**	**44,192**	**44,252**
20	**Total Sales Volumes**	**45,840**	**49,019**	**38,537**	**45,635**	**49,629**	**49,709**	**46,430**	**46,822**	**46,669**	**46,564**	**46,517**
21	**Total Transportation[b]**	23,136	25,275	24,373	26,483	29,358	30,893	31,797	33,069	34,330	35,541	36,766
22	**Total Throughput**	**68,976**	**74,294**	**62,910**	**72,118**	**78,987**	**80,601**	**78,228**	**79,891**	**81,000**	**82,105**	**83,283**

(a) PGW historical data. CRP volumes are included in appropriate residential figure.
(b) Increase in transportation sales is due to the transfer of interruptible customers to GTS service and firm sales customers to firm transportation service. No firm customers are assumed to transfer to GTS service.

Sales and Transportation Revenues

Historical revenues (sales plus transportation service) for the 2010 through 2014 fiscal years and projected revenues for the 2015 through 2020 fiscal years are summarized in Table 11. The revenue figures shown in Table 11 are based on application of PGW's existing rates to the projected number of customers, projected normal sales and transported volumes, and the gas cost assumptions discussed in the "*Projected Revenue Requirements – Gas Costs*" section of this Report. The revenue projections reflect the same adjustments made to sales and throughput (migration of interruptible customers to transportation). We assume, consistent with PGW's existing GCR, that changes in the gas cost recovery portion of revenues will equal changes in gas costs.

In this Report, the revenue projections reflect currently effective rates and a 96 percent collection factor on billed revenues (*See Table 13*). This Report reflects the base rates which are the same rates as those reflected in the case PGW filed in December 2009 and those same base rates were reflected in the May 19, 2010 Settlement and July 29, 2010 PUC Order. This Report assumes that PGW files for a base rate increase such that an increase in base rate revenues of $40.0 million is realized in fiscal year 2018. If revenues are less than the projections reflected in this Report or costs increase to levels above those reflected in this Report, PGW may have to file for additional rate relief (or PGW will have to achieve an equivalent combination of permanent revenue enhancements or cost savings). If this base rate increase is approved for fiscal year 2018, it will represent the first base rate increase in 8 years.

The level of revenues projected for fiscal years 2015 through 2020 is based on normal weather conditions. As discussed in *"Rates and Tariffs - Weather Normalization Adjustment"*, the WNA essentially removes the single biggest risk to PGW of recovering its approved margin during periods of warmer than normal weather during the winter season as long as it remains in effect. Because PGW's WNA tariff has no sunset provision, the WNA will continue in place unless the PUC issues an order directing that it be discontinued. We are assuming for the purposes of this Report that the WNA will remain in effect through the projected period.

As with the projected volume and number of customers, as interruptible sales volumes and customers migrate to interruptible transportation service, so do revenues. Total transportation revenues also increase due to the previously discussed forecasted increase in customers migrating from firm sales to firm transportation service. As stated previously, if transportation rates are designed properly, this migration should not translate into a material reduction in net contribution margin and hence, net cash flow and income should not be materially affected.

Table 11 Historical and Projected Revenues
(Thousands of Dollars)

Line No.	Description	Actual[a] 2010	2011	2012	2013	2014	Estimate 2015	Budget 2016	Projected 2017	2018	2019	2020
		$	$	$	$	$	$	$	$	$	$	$
	Gas Sales Revenues											
	Non-heating											
	Firm											
1	Residential	14,930	14,043	12,362	11,987	11,030	9,644	8,210	7,513	6,808	6,022	5,224
2	CRP Residential[b]	-	-	-	-	-	230	221	234	243	249	255
3	CRP Shortfall	24	(68)	(31)	(98)	(62)	(53)	(55)	(61)	(68)	(72)	(75)
4	Commercial	18,333	18,439	16,265	16,215	15,386	14,551	12,216	11,518	10,934	10,283	9,623
5	Industrial	2,903	2,601	3,234	1,875	1,497	1,320	1,190	1,181	1,182	1,182	1,186
6	Municipal	1,733	1,754	1,444	1,360	1,746	1,401	1,280	1,330	1,388	1,422	1,457
7	Housing Authority	-	-	-	-	-	-	-	-	-	-	-
8	NGV	8	10	9	12	15	25	19	20	24	26	27
9	Total Firm Non-heating	37,932	36,779	33,283	31,351	29,612	27,118	23,081	21,735	20,511	19,112	17,697
	Interruptible											
10	LNG - Direct	-	-	-	1,415	6,201	3,021	2,595	5,051	5,097	5,184	5,280
11	Other Interruptible	12,503	14,430	3,338	3,288	2,867	203	43	45	45	45	45
12	Total Interruptible	12,503	14,430	3,338	4,703	9,068	3,224	2,638	5,096	5,142	5,229	5,325
13	**Subtotal Non-Heating**	**50,435**	**51,209**	**36,621**	**36,054**	**38,680**	**30,342**	**25,719**	**26,831**	**25,653**	**24,341**	**23,022**
14	Cost of Gas Increase	NA	NA	NA	NA	NA	0	0	0	0	0	0
15	Prior Year's Gas Cost Recovery	908	227	433	(842)	218	(379)	(230)	12	2	(2)	(2)
16	**Total Non-Heating**	**51,343**	**51,436**	**37,054**	**35,212**	**38,898**	**29,963**	**25,489**	**26,843**	**25,655**	**24,339**	**23,020**
	Heating											
17	Residential	590,014	629,270	492,044	574,369	605,617	469,122	405,606	411,273	419,210	421,869	424,509
18	CRP Residential[c]	-	-	-	-	-	113,684	106,747	113,472	117,875	120,800	123,760
19	CRP Shortfall	(78,945)	(88,621)	(63,200)	(70,500)	(65,024)	(52,263)	(39,559)	(43,376)	(46,709)	(48,589)	(50,503)
20	Commercial	98,569	97,957	76,027	83,706	84,920	80,316	70,790	72,749	75,355	77,408	79,700
21	Industrial	5,792	5,700	3,821	4,806	4,914	4,602	4,066	4,016	4,016	3,959	3,920
22	Municipal	7,137	7,609	5,470	5,485	5,579	5,480	4,873	5,099	5,352	5,514	5,678
23	Housing Authority	8,403	7,766	5,788	7,314	7,374	9,099	8,063	8,255	8,464	8,555	8,632
24	**Subtotal Heating**	**630,970**	**659,681**	**519,950**	**605,180**	**643,380**	**630,040**	**560,586**	**571,488**	**583,563**	**589,516**	**595,696**
25	Cost of Gas Increase	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
26	Prior Year's Gas Cost Recovery	16,742	5,360	4,244	(12,408)	6,174	(8,283)	(6,215)	319	58	(48)	(49)
27	**Total Heating**	**647,712**	**665,041**	**524,194**	**592,772**	**649,554**	**621,757**	**554,371**	**571,807**	**583,621**	**589,468**	**595,647**
28	WNA Adjustment - Heating	12,970	1,697	44,016	8,061	(11,811)	(14,297)	5,625	5,580	-	-	-
29	**Total Adjusted Heating**	**660,682**	**666,738**	**568,210**	**600,833**	**637,743**	**607,460**	**559,996**	**577,387**	**583,621**	**589,468**	**595,647**
30	**Total Sales Revenues**	**712,025**	**718,174**	**605,264**	**636,045**	**676,641**	**637,423**	**585,485**	**604,230**	**609,276**	**613,807**	**618,667**
31	**Total Transportation[d]**	**26,860**	**28,700**	**27,912**	**36,698**	**40,807**	**38,796**	**42,009**	**44,513**	**46,840**	**48,847**	**50,518**
32	WNA Adjustment - Transportation	-	-	1,412	331	(488)	(663)	327	346	-	-	-
33	**Total Adjusted Transportation**	**26,860**	**28,700**	**29,324**	**37,029**	**40,319**	**38,133**	**42,336**	**44,859**	**46,840**	**48,847**	**50,518**
34	**Total Weather Normalization Adjustment**	**12,970**	**1,697**	**45,428**	**8,392**	**(12,299)**	**(14,960)**	**5,952**	**5,926**	**-**	**-**	**-**
35	**Total Revenues[e]**	**738,885**	**746,874**	**634,588**	**673,074**	**716,960**	**675,556**	**627,821**	**649,089**	**656,116**	**662,654**	**669,185**
36	DSIC Surcharge	-	-	-	681	19,173	14,743	27,116	32,660	32,816	32,930	33,024
37	Rate Increase	-	-	0	0	0	0	0	0	40,000	40,000	40,000
38	**Adjusted Total Gas Revenues[e]**	**738,885**	**746,874**	**634,588**	**673,755**	**736,133**	**690,299**	**654,937**	**681,749**	**728,932**	**735,584**	**742,209**

(a) PGW historical data.
(b) Actual revenues for 2010 through 2014 included in Residential, Line 1
(c) Actual revenues for 2010 through 2014 included in Residential, Line 17
(d) Increase in transportation revenues is due to the transfer of interruptible customers to GTS service. No firm customers are assumed to transfer to GTS service.
(e) Total Revenues does not include Unbilled Gas Adjustment

Other Operating Revenues

Other operating revenues are projected to be approximately $20.0 to $22.8 million for fiscal years 2015 through 2020 (Table 17, Line 9). These revenues consist of sales of energy- related appliance services, finance charges realized on overdue accounts, field collection charges, margin on LNG sales and other miscellaneous sources.

Assistance Programs

As part of PGW's proactive approach to managing accounts receivable balances, PGW has continued to develop programs targeted at assisting customers with meeting their energy costs. Table 12 details PGW's LIHEAP participation in recent years and provides an estimate for fiscal year 2015. Assistance programs are estimated to contribute $19.7 million in revenues in fiscal year 2015.

Accounts Receivable

Table 13 summarizes historical and projected accounts receivable and account write-offs. As shown in Table 13, net accounts receivable increased approximately 10 percent from $92.2 million in 2010 to $101.5 million in 2014. Between 2015 and 2020, net accounts receivable are projected to decrease 35 percent primarily due to a projected decline in receivables as a percentage of billed revenues. If actual gas costs substantially exceed these levels, accounts receivable and bad debts may increase. Conversely, if gas costs are less than these levels, accounts receivable and bad debts may decrease.

Realized bad debt expense as a percent of billed gas revenues is projected to range between 5.0 and 5.4 percent over the projected period. Table 13 also shows PGW's historical and projected average collection rate. PGW's collection rate has stabilized around 95 to 96 percent and a collection rate of 96 percent is projected during the 2015 through 2020 period.

If the sluggish economy continues or there is an economic downturn, and/or the commodity price of natural gas increases significantly, then billing and collections could be adversely affected, and a corresponding decrease in the collection rate and increase in receivables beyond those levels assumed in our projections could result.

Table 12 Historical and Budgeted Assistance Programs

	Historical										Estimate	
Description	2010		2011		2012		2013		2014		2015	
Grant Money Available	**$254,494,060**		**$264,214,912**		**$172,168,332**		**$153,405,881**		**$149,467,482**		**$149,000,000**	
Cash	$207,325,659	81.5%	$219,380,286	83.0%	$143,057,420	83.1%	$111,256,630	72.5%	$92,464,195	61.9%	$95,000,000	63.8%
Crisis	$47,168,401	18.5%	$44,834,626	17.0%	$29,110,912	16.9%	$42,149,251	27.5%	$57,003,287	38.1%	$54,000,000	36.2%
Number of Grants												
State of PA												
Cash	434,128	76.7%	457,881	78.7%	392,338	78.9%	390,872	76.6%	397,954	76.8%	391,000	75.0%
Crisis	132,176	23.3%	123,948	21.3%	105,183	21.1%	119,264	23.4%	120,000	23.2%	130,000	25.0%
Total State of PA	566,304	100.0%	581,829	100.0%	497,521	100.0%	510,136	100.0%	517,954	100.0%	521,000	100.0%
PGW Share of Total PA												
Cash	76,054	17.5%	77,609	16.9%	64,223	16.4%	64,882	16.6%	66,565	16.7%	61,000	15.6%
Crisis	10,777	8.2%	7,619	6.1%	8,381	8.0%	12,118	10.2%	13,379	11.1%	14,000	10.8%
Total PGW Share of Total PA	86,831	15.3%	85,228	14.6%	72,604	14.6%	77,000	15.1%	79,944	15.4%	75,000	14.4%
Total Funding - Final												
State of PA												
Cash	$207,325,659		$219,380,286		$143,057,420		$111,256,630		$92,464,195		$95,000,000	
Crisis	$47,168,401		$44,834,626		$29,110,912		$42,149,251		$57,003,287		$54,000,000	
Total State of PA	$254,494,060		$264,214,912		$172,168,332		$153,405,881		$149,467,482		$149,000,000	
PGW Share of Total PA												
PGW - Cash	$38,404,025	18.5%	$38,049,147	17.3%	$24,238,191	16.9%	$16,336,081	14.7%	$15,675,586	17.0%	$15,500,000	16.3%
PGW - Crisis	$3,099,645	6.6%	$2,353,930	5.3%	$1,981,965	6.8%	$3,371,291	8.0%	$4,688,877	8.2%	$4,200,000	7.8%
Total PGW Share of Total PA[(a)]	$41,503,670	16.3%	$40,403,077	15.3%	$26,220,155	15.2%	$19,707,371	12.8%	$20,364,463	13.6%	$19,700,000	13.2%
Value of Grants, per customer												
State of PA												
Cash	$478		$479		$365		$285		$232		$243	
Crisis	$357		$362		$277		$353		$475		$415	
PGW												
Cash	$505		$490		$377		$252		$235		$254	
Crisis	$288		$309		$236		$278		$350		$300	

Table 13 Historical and Projected Accounts Receivable and Write-offs

Description	Fiscal Year Ending August 31,										
	Historical					Estimate	Budget	Projected			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Billed Gas Revenues ($000) [(a)]	721,235	741,287	629,911	687,005	729,741	698,961	661,382	681,418	728,872	735,634	742,260
Accounts Receivable ($000)	195,773	198,857	179,754	203,326	208,806	206,205	199,642	194,309	191,876	189,665	187,717
Less: Reserve for Bad Debt	(103,600)	(99,932)	(97,757)	(105,577)	(107,349)	(110,207)	(111,373)	(112,948)	(116,706)	(120,746)	(124,927)
Net Accounts Receivable	92,173	98,925	81,997	97,749	101,457	95,998	88,269	81,361	75,170	68,919	62,790
Bad Debt Reserve/Accounts Receivable	52.9%	50.3%	54.4%	51.9%	51.4%	53.4%	55.8%	58.1%	60.8%	63.7%	66.6%
Net Write-Offs ($000)	54,990	39,765	38,401	29,028	37,056	35,000	34,000	34,000	33,000	33,000	33,000
Receivable/Billed Gas Revenues	27.1%	26.8%	28.5%	29.6%	28.6%	29.5%	30.2%	28.5%	26.3%	25.8%	25.3%
Bad Debt ($000)	35,000	36,027	36,702	39,971	38,848	37,873	35,216	35,625	36,808	37,090	37,231
Bad Debt/Billed Gas Revenues	4.9%	4.9%	5.8%	5.8%	5.3%	5.4%	5.3%	5.2%	5.0%	5.0%	5.0%
Bad Debt/Accounts Receivable	17.9%	18.1%	20.4%	19.7%	18.6%	18.4%	17.6%	18.3%	19.2%	19.6%	19.8%
Total Customer Receipts ($000)	740,756	731,622	633,497	657,125	724,662	696,714	663,168	684,756	731,145	737,906	744,534
Total Customer Billings ($000)	750,263	769,504	655,711	715,196	763,077	729,544	690,800	713,288	761,609	768,652	775,556
Collection Factor	98.73%	95.08%	96.61%	91.88%	94.97%	95.50%	96.00%	96.00%	96.00%	96.0%	96.0%
Five-Year Average Collection Factor (2010-2014)					95.45%						

(a) Adjusted Total Revenues (Table 11, Line 38) less Prior Year's Gas Cost Recovery (Table 11, Lines 26 and 15)

Capital Improvement Program Financing

The CIP described earlier (*See Capital Improvement Program*) will be financed by PGW through the issuance of a combination of Bonds, Notes, investment income, and system revenues. Also, in financial support of PGW's LTIIP for the Distribution Department, approximately $27 million of DSIC proceeds are budgeted for fiscal year 2016, and approximately $33 million in annual DSIC proceeds are projected to fund the DSIC portion of the CIP beginning in fiscal year 2017.

The Notes are intended to be used as interim financing for capital improvements. The City expects that it would issue bonds in fiscal year 2017 in the amount of $250 million to repay the Notes and to fund additional capital improvements. The Notes will be repaid contemporaneously with the issuance of the bonds. The forecast anticipates an additional $100 million bond issue in fiscal year 2020.

The projected CIP expenditures for the six-year period ending August 31, 2020, are shown on Line 13 of Table 14 and total approximately $625 million. Lines 1 through 10 outline the sources available to meet the CIP financing requirements. Line 1 in fiscal year 2015 shows no funds available in the Capital Improvement Fund as of August 31, 2014. Lines 2 through 5 show the net proceeds from bond sales, Line 7 through 10 shows the amount projected to be available from the DSIC surcharge, the Notes and internally generated funds, and Line 11 presents the total funds available. Planned fund uses are summarized on Lines 13 through 16 of Table 14.

Table 14 Capital Improvement Fund
(Thousands of Dollars)

		Fiscal Year Ending August 31,						
		Actual	Estimate	Budget	Projected			
Line No.	Description	2014	2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$	$
1	Balance from Previous Year	33,294	0	0	0	101,916	48,593	0
2	Bond Proceeds @ Par	0	0	0	250,000	0	0	100,000
3	Less Discount & Issuance Costs	0	0	0	(2,500)	0	0	(1,000)
4	Less Deposit to Sinking Fund Reserve	0	0	0	(16,091)	0	0	(6,438)
5	Net Bond Proceeds	-	-	-	231,409	-	-	92,562
6	Other Sources of Funds							
7	Distribution System Improvement Charge	13,914	14,743	27,116	32,660	32,816	32,930	33,024
8	Capital Restricted Fund	0	10,000	0	0	0	0	0
9	Twelfth Series (Notes)	0	30,000	48,600	0	0	0	0
10	Internally Generated Funds	36,123	35,584	35,036	23,000	23,000	25,335	24,000
11	Total Other Sources of Funds	50,037	90,327	110,752	55,660	55,816	58,265	57,024
12	Total Sources of Funds	83,331	90,327	110,752	287,069	157,732	106,858	149,586
13	Capital Expenditures	83,331	90,327	110,752	107,659	109,762	105,129	101,615
14	Interest Earned	0	0	0	(1,106)	(623)	(229)	(502)
15	Withdrawal of Interest Received	0	0	0	0	0	1,958	0
16	Repayment of Twelfth Series (Notes)	0	0	0	78,600	0	0	0
17	Total Uses of Funds	83,331	90,327	110,752	185,153	109,139	106,858	101,113
18	Net Balance - End of Year	0	0	0	101,916	48,593	0	48,473

As presented in Table 14, bond issues are projected in 2017 with a principal amount of $250 million (a portion of which will be used to fully refund the Notes), and in 2020 with a principal amount of $100 million. Coupled with $289 million of other funding sources (DSIC surcharge and internally generated funds), sufficient funds are expected to be available for PGW to complete its planned capital improvement program.

Projected Revenue Requirements

PGW's rates are developed to provide sufficient levels of revenue to meet cost of gas, all operation and maintenance expenses of the System, debt service requirements on obligations issued for the System, capital improvement expenditures to be funded from current revenues, and other specific bond ordinance and revenue requirements. This section provides a discussion of the components that make up PGW's revenue requirements.

Gas Costs

Table 15, Line 1 presents PGW's historical and projected natural gas costs. The unit gas costs assumed by PGW and relied upon in this Report are projected to increase from approximately $5.24 per Mcf in fiscal year 2015 to $5.54 per Mcf in fiscal year 2020. PGW gas cost assumptions are based on pricing input from the futures prices from the New York Mercantile Exchange. PGW purchases its gas supplies under a portfolio approach as discussed in the "*PGW Gas Supply – Supply Services*" section of this Report. As a result of the GCR, changes in the cost of gas result in equal changes in revenues. The mechanism by which PGW recovers its gas supply costs is discussed in the "*Gas Cost Rate*" section of this Report.

Operation and Maintenance Expenses

Table 15 presents PGW's historical and projected operation and maintenance expense. The audited expenses for 2014 serve as a base for the projected years.

As discussed in the *Sales and Transportation Revenues* section of this Report, PGW's collection factor is projected to be approximately 96 percent of billed revenues for the 2016-2020 fiscal years with bad debt expense forecasted to range from $37.9 million in 2015 to $37.2 million in 2020. The higher level of bad debt expense for PGW relative to other gas utilities is consistent with the higher level of costs associated with social programs for PGW. Pension fund and health insurance costs are based on PGW's fiscal year 2015 operating budget filing and have been updated with the most current information from PGW for the forecast period through fiscal year 2020. The number of employees is assumed to be 1,660 throughout the forecast period.

Debt Service Requirements

Table 16 presents a summary of the existing and proposed long-term debt service requirements for the five-year projection period. In addition to the refunding issue in 2015, there are two proposed new bond issues projected to be issued on or after September 1, 2017, and 2020 respectively. The Notes issued as Subordinate Bonds constituting Interim Debt under the 1998 General Ordinance are included as debt service in the calculation of coverage.

The assumed all-in interest rates for the Thirteenth Series, Twelfth Series (Notes) projected to be issued in 2016 and 2017, anticipated 2017 bonds, and anticipated 2020 bonds are as follows:

Issuance	All-in Interest Rate
Thirteenth Series	3.5387%
Twelfth Series (Notes)	5.1498%
2017 Bond Issuance	5.0875%
2020 Bond Issuance	5.0875%

Table 15 Historical and Projected Operation and Maintenance Expenses
(Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, Historical 2010	2011	2012	2013	2014	Estimate 2015	Budget 2016	Projected 2017	2018	2019	2020
		$	$	$	$	$	$	$	$	$	$	$
	Operating Expenses											
1	Natural Gas	353,998	330,926	233,709	255,496	304,040	260,594	220,857	233,283	245,779	251,513	257,501
2	Other Raw Materials	6	6	4	5	11	10	10	10	10	10	10
3	Subtotal Fuel	354,004	330,932	233,713	255,501	304,051	260,604	220,867	233,293	245,789	251,523	257,511
4	Gas Processing	14,952	16,097	15,640	17,592	19,637	17,530	15,853	16,809	17,127	17,516	17,826
5	Field Services	34,026	33,950	33,883	34,926	37,577	37,664	39,057	39,745	40,720	41,684	42,506
6	Distribution	23,426	27,990	27,750	30,259	36,929	36,880	38,073	38,899	39,634	40,495	41,207
7	Collection	7,534	4,457	3,939	3,766	3,629	3,152	3,406	3,403	3,471	3,550	3,611
8	Customer Services	13,030	12,532	11,946	11,102	11,187	12,556	13,011	13,047	13,349	13,685	13,932
9	Customer Accounting	7,732	7,308	7,552	7,531	7,644	8,145	8,298	8,398	8,580	8,767	8,933
10	Bad Debt Expense	35,000	36,027	36,702	39,971	38,848	37,873	35,216	35,625	36,808	37,090	37,231
11	Marketing & Point-of-Sale Expenses	3,900	4,378	6,664	6,789	7,783	4,415	4,392	4,408	4,501	4,600	4,684
12	Administrative & General	44,859	47,177	53,962	54,737	58,962	65,904	69,422	64,121	64,586	65,832	66,763
13	Health Insurance	42,083	46,250	44,343	42,787	46,483	51,176	56,409	61,303	66,412	71,691	76,996
14	Capitalized Fringe Benefits	(8,660)	(9,535)	(10,526)	(10,958)	(9,951)	(9,922)	(10,838)	(11,693)	(12,370)	(13,075)	(13,736)
15	Capitalized Admin. Charges	(7,384)	(7,680)	(6,819)	(8,360)	(9,622)	(9,044)	(12,285)	(11,418)	(11,581)	(11,857)	(11,367)
16	BT[(a)] Supply Chain Initiative	722	638	201	23,614	0	0	0	0	0	0	0
17	Pensions	24,633	22,597	23,972	23,614	24,521	21,986	23,871	23,726	23,566	23,281	23,123
18	Other Post Employee Benefits	27,269	22,472	20,119	16,492	11,228	11,167	5,445	3,386	1,218	0	0
19	Taxes	6,990	7,135	7,122	7,220	7,687	7,801	7,875	8,071	8,273	8,479	8,648
20	Environmental Expenses	0	0	0	0	0	0	0	0	195	3,308	935
21	Cost Savings/Productivity Improvements	0	0	0	0	0	(1,754)	(1,191)	0	0	0	0
22	**Total Other Operating Expenses**	270,112	271,793	276,450	301,082	292,542	295,529	296,014	297,830	304,489	315,046	321,292
23	**Total Operating Expenses**	**624,116**	**602,725**	**510,163**	**556,583**	**596,593**	**556,133**	**516,881**	**531,123**	**550,278**	**566,569**	**578,803**
24	Depreciation	41,521	41,756	42,561	43,037	44,766	45,400	46,654	47,942	49,336	50,840	50,813
25	Cost of Removal	1,647	1,873	2,484	2,875	2,662	2,500	2,600	2,600	2,600	2,600	2,600
26	Less: Clearing Account Depreciation	(4,690)	(4,714)	(4,870)	(4,870)	(5,771)	(6,010)	(6,231)	(6,475)	(6,706)	(6,868)	(7,154)
27	Net Depreciation	38,478	38,915	40,175	41,042	41,657	41,890	43,023	44,067	45,230	46,572	46,259
28	**Total Operating Expense & Depreciation**	**662,594**	**641,640**	**550,338**	**597,625**	**638,250**	**598,023**	**559,904**	**575,190**	**595,508**	**613,141**	**625,062**

(a) Business Transformation ("BT") was a program designed to enable PGW to improve its operational practices, improve service quality and reduce the cost of operations.

Table 16 Projected Long Term Debt Service Requirements
(Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	Revenue Bonds under 1975 Ordinance						
1	Series 17	2,683	0	0	0	0	0
2	Series 18	700	0	0	0	0	0
3	Series 19	723	0	0	0	0	0
4	Series 20	55	0	0	0	0	0
5	Total 1975 Ordinance Debt	4,161	0	0	0	0	0
	Revenue Bonds under 1998 Ordinance						
	Senior Debt						
6	Fourth Series	1,962	0	0	0	0	0
7	Fifth Series	8,416	0	0	0	0	0
8	A-2 Fifth Series Variable	531	531	531	531	531	531
9	Seventh Series	14,297	17,905	17,900	17,474	17,452	17,427
10	Eighth Series	23,982	21,818	20,748	21,774	21,213	21,941
11	Ninth Series	9,936	9,933	8,437	9,804	9,803	9,758
12	Tenth Series	6,316	8,243	7,503	7,267	6,488	5,780
13	Thirteenth Series - Refunding - 2015[(a)]	27,719	32,745	31,218	29,690	28,163	26,623
14	New Bond Issue - 2017	0	0	6,250	16,088	16,089	16,091
15	New Bond Issue - 2020	0	0	0	0	0	2,500
16	Senior Debt	93,159	91,175	92,587	102,628	99,739	100,651
	Subordinate Debt						
17	Twelfth Series (Notes) [(b)]	0	1,917	0	0	0	0
18	Total Subordinate Debt	0	1,917	0	0	0	0
19	Total 1998 Ordinance Debt	93,159	93,092	92,587	102,628	99,739	100,651
20	Total Long-Term Debt Service	97,320	93,092	92,587	102,628	99,739	100,651

(a) Refunded Series 17, 18, 19 and 20 of 1975 Ordinance debt, and Fourth and Fifth Series of 1998 Ordinance debt.

(b) For Ordinance compliance, assumes a 5.15% amortization rate of the Twelfth Series (Notes). Not a true cash component of 1998 Ordinance Bonds.

Payments to City

In accordance with the Management Agreement and the Gas Choice Act, PGW makes an annual base payment of $18.0 million to the City. In fiscal year 2014, PGW paid $18.0 million to the City. For fiscal year 2015 through the remainder of the forecasted period, PGW is projected to pay $18.0 million annually to the City.

Adequacy of Projected Revenues to Meet Projected Revenue Requirements under Ordinance Requirements

Table 17 presents a pro forma statement developed from the revenue and expense projections for fiscal years 2015 through 2020. This table is presented in conjunction with Table 18, which presents a statement of cash flows, provides an indication of the adequacy of PGW's revenues and shows the financial feasibility of the proposed Thirteenth Series Bonds.

The operating revenue projections presented earlier in Table 11, Line 35 are summarized in Lines 1 through 3 of Table 17. These projected revenues are based on PGW's currently effective rate schedules. The DSIC, which is budgeted to be $27 million in fiscal year 2016 and projected to increase to $33 million for 2017 through 2020, is shown on Line 6 of Table 17. The projected base rate increase in 2018 of $40 million is shown on Line 7. Revenues from Other Sales, primarily unbilled gas adjustments, are shown on Line 4 of Table 17.

Other operating revenues presented on Table 17, Line 9 include revenues from sales of energy-related appliance services, field collection charges, and margin from LNG sales. Projected Other Income for the System presented on Table 17, Line 30 includes interest earnings from the different reserve funds.

The projected operation and maintenance expenses shown on Table 17, Lines 11 through 23 are from Table 15. PGW's projected net operating income before interest is summarized on Line 29 of Table 17. Interest expense on existing bonds and proposed bonds is presented on Line 32, and the interest expense and minimum maintenance fee on Notes proposed to be issued in 2015 and 2016 is shown on Line 33. Other interest costs including loss from refunded debt and the allowance for funds used during construction ("AFUDC") are shown on Lines 35 and 36. PGW's projected net income is shown on Line 38 of the table and ranges from $64.4 million in fiscal year 2015 to $92.8 million in fiscal year 2020.

Table 17 Projected Statement of Income
(Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	Projected Revenues						
1	Non-Heating	29,963	25,489	26,843	25,655	24,339	23,020
2	Gas Transport Service	38,133	42,336	44,859	46,840	48,847	50,518
3	Heating	607,460	559,996	577,387	583,621	589,468	595,647
4	Other Sales	(431)	(196)	134	102	42	28
5	Total Gas Revenues - Existing Rates	675,125	627,625	649,223	656,218	662,696	669,213
6	DSIC Revenue	14,743	27,116	32,660	32,816	32,930	33,024
7	Base Rate Increase	0	0	0	40,000	40,000	40,000
8	Total Gas Revenues	689,868	654,741	681,883	729,034	735,626	742,237
9	Other Operating Revenues	20,679	20,047	22,214	22,409	22,594	22,777
10	**Total Operating Revenues**	710,547	674,788	704,097	751,443	758,220	765,014
	Operating Expenses						
11	Natural Gas	260,594	220,857	233,283	245,779	251,513	257,501
12	Other Raw Materials	10	10	10	10	10	10
13	Total Fuel	260,604	220,867	233,293	245,789	251,523	257,511
14	Gas Processing	17,530	15,853	16,809	17,127	17,516	17,826
15	Field Services	37,664	39,057	39,745	40,720	41,684	42,506
16	Distribution	36,880	38,073	38,899	39,634	40,495	41,207
17	Collection	3,152	3,406	3,403	3,471	3,550	3,611
18	Customer Services	12,556	13,011	13,047	13,349	13,685	13,932
19	Customer Accounting	8,145	8,298	8,398	8,580	8,767	8,933
20	Bad Debt Expense	37,873	35,216	35,625	36,808	37,090	37,231
21	Other Post Employee Benefits	11,167	5,445	3,386	1,218	0	0
22	A&G and Other Expenses	130,562	137,655	138,518	143,582	152,259	156,046
23	Total Non-Fuel O&M	295,529	296,014	297,830	304,489	315,046	321,292
24	Depreciation	45,400	46,654	47,942	49,336	50,840	50,813
25	Cost of Removal	2,500	2,600	2,600	2,600	2,600	2,600
26	Less: Clearing Accounts	(6,010)	(6,231)	(6,475)	(6,706)	(6,868)	(7,154)
27	**Net Depreciation**	41,890	43,023	44,067	45,230	46,572	46,259
28	**Total Operating Expenses**	**598,023**	**559,904**	**575,190**	**595,508**	**613,141**	**625,062**
29	**Net Operating Income**	**112,524**	**114,884**	**128,907**	**155,935**	**145,079**	**139,952**
30	Other Income	3,619	3,687	5,007	4,635	4,313	4,723
31	**Net Income Before Interest Charges**	**116,143**	**118,571**	**133,914**	**160,570**	**149,392**	**144,675**
	Interest						
32	Long Term Debt	44,316	42,249	52,404	49,875	47,443	49,932
33	Twelfth Series (Notes) [(a)]	1,278	1,757	1,240	1,240	1,240	1,240
34	Other	3,091	(446)	219	(2,657)	(2,321)	(1,941)
35	Loss From Refunded Debt	3,703	4,814	4,401	3,985	3,670	3,354
36	AFUDC	(656)	(891)	(766)	(781)	(748)	(723)
37	Total Interest	51,732	47,483	57,498	51,662	49,284	51,862
38	**Net Income[(b)]**	**64,411**	**71,088**	**76,416**	**108,908**	**100,108**	**92,813**

(a) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96% with a minimum annual maintenance fee of $1.24 million.
(b) Net Income is net of all payments to the City excluding the $18 million Payment to City/Distribution of Earnings.

Table 18 Projected Statement of Cash Flows
(Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
1	**Beginning Cash Balance**	**105,734**	**106,136**	**96,587**	**95,809**	**108,064**	**116,070**
	Sources of Funds						
	Internal Sources						
2	Net Income	64,411	71,088	76,416	108,908	100,108	92,813
3	Depreciation	45,400	46,654	47,942	49,336	50,840	50,813
4	Amortized Costs[(a)]	2,005	80	153	88	107	162
5	Earnings on Restricted Funds	(487)	(1,098)	(2,363)	(1,906)	433	(1,870)
6	Bond Proceeds to Pay Issuance Cost	507	0	0	0	0	0
7	Increased/(Decreased) Other Liabilities	2,586	(12,153)	(14,867)	(21,565)	(18,241)	(22,900)
8	Total Internal Sources	114,422	104,571	107,281	134,861	133,247	119,018
	External Sources						
9	Net Revenue Bond Proceeds [(b)]	339,671	0	231,409	0	0	92,562
10	Capital Improvement Fund Drawdown	0	0	51,999	53,946	46,864	44,591
11	Release of Excess Sinking Fund Money	0	0	0	0	0	0
12	Notes	30,000	48,600	0	0	0	0
13	Total External Sources	369,671	48,600	283,408	53,946	46,864	137,153
14	**Total Sources of Funds**	**484,093**	**153,171**	**390,689**	**188,807**	**180,111**	**256,171**
	Uses of Funds						
15	Debt Reduction paid on all Bonds	54,190	48,655	46,100	52,375	51,905	52,795
16	Debt Reduction Funding	0	0	0	0	0	0
17	CIP Requirements	90,327	110,752	107,659	109,762	105,129	101,615
18	Payment to City/Distribution of Earnings	18,000	18,000	18,000	18,000	18,000	18,000
19	Deposit to CIP Fund	0	0	152,809	0	0	92,562
20	Repayment of Prior Bonds	339,671	0	0	0	0	0
21	Repayment of Twelfth Series (Notes)[(c)]	0	0	78,600	0	0	0
22	Change in Non-Cash Working Capital[(d)]	(18,497)	(14,687)	(11,701)	(3,585)	(2,929)	(7,682)
23	**Total Uses of Funds**	**483,691**	**162,720**	**391,467**	**176,552**	**172,105**	**257,290**
24	Increase/(Decrease) in Cash	402	(9,549)	(778)	12,255	8,006	(1,119)
25	**Ending Cash Balance**	**106,136**	**96,587**	**95,809**	**108,064**	**116,070**	**114,951**

(a) Includes amortization on bond issuance costs and extraordinary losses.
(b) 2015 Refunding Bond includes Par Amount of $304,035,000.00 plus Premium of $35,636,264.10
(c) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96%.
(d) Includes changes in Accounts Payable, Accounts Receivable, and Materials and Supplies.

Table 18, Line 1 presents PGW's cash balance as of September 1 for each fiscal year. From this starting point, the net income line from Table 17 is combined with non-cash adjustments (such as depreciation and amortization) expensed on the Income Statement. External sources of funds are summarized on Lines 9 through 11 and include revenue bond proceeds, drawdowns on the capital improvement fund, and the Notes. The total for all sources of funds is shown on Line 14 of Table 18.

Uses of funds are summarized on Lines 15 through 22 of Table 18. Line 15 represents the principal payments made on long-term debt. CIP requirements are shown on Line 17, and payments to the City are shown on Line 18. Deposits to CIP Fund are shown on Line 19. Repayment of Prior Bonds by the proposed refunding issuance of the Thirteenth Series Bonds is shown on Line 20 and the

repayment of the Notes is shown on Line 21. Changes in non-cash working capital items, including changes in accounts payable and accounts receivable, are shown on Line 22.

The net increase or decrease in available cash for each fiscal year is shown on Line 24 of Table 18. The ending cash balance for the year, which is the sum of Lines 1 and 24, is shown on Line 25. The ending cash balance for 2015 represents approximately 19 weeks of operation and maintenance expense (excluding the cost of gas) and the ending cash balances for fiscal years 2016 and 2020 each represent from approximately 17 to 19 weeks of operation and maintenance expense (excluding the cost of gas). These projected year-end cash balances for fiscal years 2016 through 2020 should be sufficient for PGW to accommodate normal fluctuations in expenditures for utility operations.

A detailed calculation of debt service coverage requirements under the 1975 General Ordinance and the 1998 General Ordinance is presented in Table 19. The results presented in the table indicate that provided the assumptions made herein are realized, PGW will meet the requirements of the 1975 General Ordinance and the 1998 General Ordinance for all years in the projection period.

Table 19 Projected Debt Service Coverage
(Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	SOURCES OF FUNDS						
1	Total Gas Revenues	689,868	654,741	681,883	729,034	735,626	742,237
2	Other Operating Revenues	20,679	20,047	22,214	22,409	22,594	22,777
3	Total Operating Revenues	710,547	674,788	704,097	751,443	758,220	765,014
4	Other Income	3,788	3,480	3,410	3,510	5,494	3,576
5	**Total Sources of Funds**	714,335	678,268	707,507	754,953	763,714	768,590
	USES OF FUNDS						
6	Fuel Costs	260,604	220,867	233,293	245,789	251,523	257,511
7	Other Operating Costs	337,419	339,037	341,897	349,719	361,618	367,551
8	Total Operating Expenses	598,023	559,904	575,190	595,508	613,141	625,062
9	Less: Non-Cash Expenses	(48,973)	(50,082)	(51,620)	(53,025)	(54,549)	(54,525)
10	**Total Uses of Funds**	549,050	509,822	523,570	542,483	558,592	570,537
11	**Funds Available for Debt Service**	165,285	168,446	183,937	212,470	205,122	198,053
12	1975 Ordinance Bonds Debt Service	4,161	0	0	0	0	0
13	**Debt Service Coverage - 1975 Ordinance**	**39.72**					
14	Net Available after Prior Bond Debt Service	161,124	168,446	183,937	212,470	205,122	198,053
15	1998 Ordinance Bonds Debt Service	93,159	91,175	92,587	102,628	99,739	100,651
16	1998 Ordinance Subordinate Debt Service - Twelfth Series [(a)]	0	1,917	0	0	0	0
17	**Debt Service Coverage - 1998 Ordinance**	**1.73**	**1.81**	**1.99**	**2.07**	**2.06**	**1.97**
18	Net Available after Prior Debt Service	67,965	75,354	91,350	109,841	105,383	97,403
	Total Debt Service Coverage						
19	Funds Available for Debt Service	165,285	168,446	183,937	212,470	205,122	198,053
20	Total Debt Service [(b)]	97,320	93,092	92,587	102,628	99,739	100,651
21	**Debt Service Coverage on Total Debt**	**1.70**	**1.81**	**1.99**	**2.07**	**2.06**	**1.97**

(a) For Ordinance compliance, assumes a 5.15% amortization rate of the 1998 Ordinance Subordinate Debt Service - Twelfth Series (Notes). Not a true cash component of 1998 Ordinance Bonds.

(b) Line 12 + Line 15 + Line 16

Sensitivity Case – LNG Plant Expansion

PGW is currently studying the feasibility of expanding the liquefaction capacity of its Richmond plant. The costs and the revenue potential associated with such expansion are not included in the Base Case in this Report. In this section, two sensitivity cases are presented based on the potential LNG expansion.

Background

PGW solicited non-binding expressions of interest from potential LNG buyers as to their interest in purchasing LNG, if available. Based on such solicitation, PGW has identified an annual market for up to 5 Bcf of direct LNG sales. In order to respond to this interest, as well as provide redundancy for PGW's existing facilities and additional capacity, PGW would need to increase the liquefaction capacity of its Richmond Plant. Various scenarios of additional capacity were studied with 21,000 Mcf/day being determined to best meet PGW's needs and the perceived demand. This additional liquefaction capacity would allow PGW to cycle its 4.05 Bcf of storage capacity to meet both the demand of these year round LNG sales as well as the peak day and design winter LNG demand (2.2 Bcf) of its natural gas sales business.

The LNG liquefaction process on PGW's existing facility utilizes interstate pipeline pressure as its primary energy source. However, utilizing the energy from the reduction in pressure from interstate pipeline pressure to PGW's operating pressures requires that there be sufficient demand on PGW's system to utilize the pipeline gas flowing through the process. During the summer months (June through September), there is insufficient end-use demand on PGW's system to efficiently utilize the amount of natural gas required to operate the liquefaction facility. The additional liquefaction facilities will allow PGW to utilize the energy available from the lower summer system demand to liquefy natural gas, essentially year round.

The current LNG liquefaction facilities were put into service in 2005. These facilities were built to replace an older liquefaction process that was at the end of its useful life and that was also much more energy intensive. The current facilities were originally planned as a two phase project. The second phase (which was never constructed) was intended to increase PGW's capabilities to liquefy natural gas during the summer months.

In addition to the planned liquefaction facilities providing the capacity to make additional direct LNG sales, there are other benefits that will derive from the expansion (comparable to the second phase of the current facilities that were not built) including the following:

1. Increasing the season over which natural gas can be liquefied.
    a. Expanded season will provide more flexibility in the timing of natural gas purchases, thus reducing cost of purchased gas.
    b. Increases gas available from existing storage which will allow PGW to reduce winter purchases (primarily during a design winter) thus reducing cost of purchased gas.
    c. This increased flexibility could result in savings between $5 million and $25 million during a winter season.

2. The annual capacity of the current liquefaction facilities (1.8 Bcf) is less than the design day storage requirement (2.2 Bcf). Increased capacity will provide additional capability to meet design conditions, especially if there are back-to-back colder than normal heating seasons.

3. Provides liquefaction redundancy and back-up for the existing liquefaction facilities. The current liquefaction facilities will be 15 years old at the time of the expansion and redundancy will be important as this facility nears the end of its useful life. This will also provide greater flexibility in the timing of routine maintenance activities. Having redundancy also minimizes periods when liquefaction is not available due to maintenance activities.

Sensitivity Cases

In order to identify the range of potential outcomes resulting from the LNG expansion, two sensitivity cases are presented. We refer to these as Case 1 and Case 2. Case 1 includes the LNG expansion and the projected level of LNG direct sales. Case 2 includes the LNG expansion with no incremental LNG direct sales above current levels. The following are the principal differences between these sensitivity cases and the Base Case presented in this Report:

Case 1 – LNG expansion with incremental LNG direct sales

a. $120 million LNG expansion project

b. $100 million in additional long-term debt issued in 2017.

    i. Increases Debt Service approximately $6.5 million per year

c. $20 million of LNG expansion project funded with internally generated funds

d. 5 Bcf of additional annual LNG direct sales

    i. Increases in revenues (approximately $47.5 million per year) and associated gas cost (approximately $22.7 million per year)

e. Increase in operating costs associated with new facilities (approximately $1.6 million per year).

f. Smaller rate increase ($10 million less than Base Case) required in 2018

Case 2 – LNG expansion with no incremental LNG direct sales

a. $120 million LNG expansion project

b. $100 million in additional long-term debt issued in 2017.

    i. Increases Debt Service approximately $6.5 million per year

c. $20 million of LNG expansion project funded with internally generated funds

d. Minor increase in operating costs associated with new facilities (approximately $100,000 per year)

e. Higher rate increase ($5 million more than Base Case) required in 2018

It should be noted that neither of the sensitivity cases analyzed in this Report reflect the lower cost of natural gas that would be realized by PGW's existing core customers due to the greater operational flexibility and capacity of the LNG liquefaction facilities.

Tables 20, 21, and 22 are similar in format to Table 17, 18, and 19 discussed in the prior sections of this Report and present the Statement of Income, Statement of Cash Flows, and Projected Debt Service Coverage, respectively for Case 1. Tables 23, 24, and 25 present similar information for Case 2.

The LNG expansion with incremental LNG direct sales (Case 1) results in about $15 million in higher net income in 2019 and 2020 than the Base Case (comparing Table 20 to Table 17) without a base rate increase. However, in order to maintain cash balances at about $100 million (see Table 21), a rate increase in 2018 would still be necessary, although the projected rate increase would be approximately $10 million per year less ($30 million) than in the Base Case ($40 million). The debt service coverage in Case 1 (Table 22) differs little from the coverage in the Base Case (Table 19). This $10 million in lower base rates plus the lower gas costs due to the greater flexibility PGW will have to purchase gas for liquefaction with the new facilities would provide a net benefit to PGW's core customers.

The LNG expansion without incremental LNG direct sales (Case 2) results in about $9 million in lower net income in 2019 and 2020 than the Base Case (comparing Table 23 to Table 17) without a base rate increase. However, in order to maintain cash balances at about $100 million (see Table 24), a rate increase in 2018 would still be necessary and the projected rate increase would be approximately $5 million per year more ($45 million) than in the Base Case ($40 million). The debt service coverage in Case 1 (Table 25) differs little from the coverage in the Base Case (Table 19). As previously discussed, this $5 million in additional base rate revenue increase would likely be offset by lower gas costs due to the greater flexibility PGW will have to purchase gas for liquefaction with the new facilities, such that the net impact on PGW's core customers would be negligible.

Table 20 Projected Statement of Income – LNG Expansion with Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	Projected Revenues						
1	Non-Heating	29,963	25,489	26,843	34,817	51,813	51,006
2	Gas Transport Service	38,133	42,336	44,859	46,840	48,847	50,518
3	Heating	607,460	559,996	577,387	583,621	589,468	595,647
4	Other Sales	(431)	(196)	134	102	42	28
5	Total Gas Revenues - Existing Rates	675,125	627,625	649,223	665,380	690,170	697,199
6	DSIC Revenue	14,743	27,116	32,660	32,816	32,930	33,024
7	Base Rate Increase	0	0	0	30,000	30,000	30,000
8	Total Gas Revenues	689,868	654,741	681,883	728,196	753,100	760,223
9	Other Operating Revenues	20,679	20,047	22,214	28,982	42,098	42,278
10	**Total Operating Revenues**	710,547	674,788	704,097	757,178	795,198	802,501
	Operating Expenses						
11	Natural Gas	260,594	220,857	233,283	256,331	273,545	280,243
12	Other Raw Materials	10	10	10	10	10	10
13	Total Fuel	260,604	220,867	233,293	256,341	273,555	280,253
14	Gas Processing	17,530	15,853	16,809	17,973	19,169	19,379
15	Field Services	37,664	39,057	39,745	40,720	41,684	42,506
16	Distribution	36,880	38,073	38,899	39,634	40,495	41,207
17	Collection	3,152	3,406	3,403	3,471	3,550	3,611
18	Customer Services	12,556	13,011	13,047	13,349	13,685	13,932
19	Customer Accounting	8,145	8,298	8,398	8,580	8,767	8,933
20	Bad Debt Expense	37,873	35,216	35,625	36,808	37,090	37,231
21	Other Post Employee Benefits	11,167	5,445	3,386	1,218	0	0
22	A&G and Other Expenses	130,562	133,972	129,624	139,864	152,259	156,046
23	Total Non-Fuel O&M	295,529	292,331	288,936	301,617	316,699	322,845
24	Depreciation	45,400	46,654	47,942	51,336	54,840	54,813
25	Cost of Removal	2,500	2,600	2,600	2,600	2,600	2,600
26	Less: Clearing Accounts	(6,010)	(6,231)	(6,475)	(6,706)	(6,868)	(7,154)
27	**Net Depreciation**	41,890	43,023	44,067	47,230	50,572	50,259
28	**Total Operating Expenses**	**598,023**	**556,221**	**566,296**	**605,188**	**640,826**	**653,357**
29	**Net Operating Income**	**112,524**	**118,567**	**137,801**	**151,990**	**154,372**	**149,144**
30	Other Income	3,619	3,687	5,524	4,721	4,317	4,723
31	**Net Income Before Interest Charges**	**116,143**	**122,254**	**143,325**	**156,711**	**158,689**	**153,867**
	Interest						
32	Long Term Debt	44,316	42,249	57,386	54,800	52,291	54,699
33	Twelfth Series (Notes) [(a)]	1,278	1,854	1,240	1,240	1,240	1,240
34	Other	3,091	(446)	271	(2,606)	(2,271)	(1,892)
35	Loss From Refunded Debt	3,703	4,814	4,401	3,985	3,670	3,354
36	AFUDC	(656)	(959)	(1,279)	(952)	(748)	(723)
37	Total Interest	51,732	47,512	62,019	56,467	54,182	56,678
38	**Net Income[(b)]**	**64,411**	**74,742**	**81,306**	**100,244**	**104,507**	**97,189**

(a) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96% with a minimum annual maintenance fee of $1.24 million.
(b) Net Income is net of all payments to the City excluding the $18 million Payment to City/Distribution of Earnings.

Table 21 Projected Statement of Cash Flows – LNG Expansion with Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
1	**Beginning Cash Balance**	**105,734**	**106,136**	**100,241**	**96,370**	**89,418**	**104,887**
	Sources of Funds						
	Internal Sources						
2	Net Income	64,411	74,742	81,306	100,244	104,507	97,189
3	Depreciation	45,400	46,654	47,942	51,336	54,840	54,813
4	Amortized Costs[(a)]	2,005	80	206	139	158	212
5	Earnings on Restricted Funds	(487)	(1,098)	(2,880)	(1,992)	1,036	(1,870)
6	Bond Proceeds to Pay Issuance Cost	507	0	0	0	0	0
7	Increased/(Decreased) Other Liabilities	2,586	(12,153)	(14,867)	(21,565)	(18,241)	(22,900)
8	Total Internal Sources	114,422	108,225	111,707	128,162	142,300	127,444
	External Sources						
9	Net Revenue Bond Proceeds [(b)]	339,671	0	330,409	0	0	92,562
10	Capital Improvement Fund Drawdown	0	0	113,999	66,946	46,864	44,591
11	Release of Excess Sinking Fund Money	0	0	0	0	0	0
12	Notes	30,000	72,600	0	0	0	0
13	Total External Sources	369,671	72,600	444,408	66,946	46,864	137,153
14	**Total Sources of Funds**	**484,093**	**180,825**	**556,115**	**195,108**	**189,164**	**264,597**
	Uses of Funds						
15	Debt Reduction paid on all Bonds	54,190	48,655	46,100	53,845	53,455	54,420
16	Debt Reduction Funding	0	0	0	0	0	0
17	CIP Requirements	90,327	134,752	179,659	133,762	105,129	101,615
18	Payment to City/Distribution of Earnings	18,000	18,000	18,000	18,000	18,000	18,000
19	Deposit to CIP Fund	0	0	227,809	0	0	92,562
20	Repayment of Prior Bonds	339,671	0	0	0	0	0
21	Repayment of Twelfth Series (Notes)[(c)]	0	0	102,600	0	0	0
22	Change in Non-Cash Working Capital[(d)]	(18,497)	(14,687)	(14,182)	(3,547)	(2,889)	(7,640)
23	**Total Uses of Funds**	**483,691**	**186,720**	**559,986**	**202,060**	**173,695**	**258,957**
24	Increase/(Decrease) in Cash	402	(5,895)	(3,871)	(6,952)	15,469	5,640
25	**Ending Cash Balance**	**106,136**	**100,241**	**96,370**	**89,418**	**104,887**	**110,527**

(a) Includes amortization on bond issuance costs and extraordinary losses.
(b) 2015 Refunding Bond includes Par Amount of $304,035,000.00 plus Premium of $35,636,264.10
(c) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96%.
(d) Includes changes in Accounts Payable, Accounts Receivable, and Materials and Supplies.

Table 22 Projected Debt Service Coverage – LNG Expansion with Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	SOURCES OF FUNDS						
1	Total Gas Revenues	689,868	654,741	681,883	728,196	753,100	760,223
2	Other Operating Revenues	20,679	20,047	22,214	28,982	42,098	42,278
3	Total Operating Revenues	710,547	674,788	704,097	757,178	795,198	802,501
4	Other Income	3,788	3,548	3,923	3,681	6,101	3,576
5	**Total Sources of Funds**	714,335	678,336	708,020	760,859	801,299	806,077
	USES OF FUNDS						
6	Fuel Costs	260,604	220,867	233,293	256,341	273,555	280,253
7	Other Operating Costs	337,419	335,354	333,003	348,847	367,271	373,104
8	Total Operating Expenses	598,023	556,221	566,296	605,188	640,826	653,357
9	Less: Non-Cash Expenses	(48,973)	(50,082)	(51,620)	(55,025)	(58,549)	(58,525)
10	**Total Uses of Funds**	549,050	506,139	514,676	550,163	582,277	594,832
11	**Funds Available for Debt Service**	165,285	172,197	193,344	210,696	219,022	211,245
12	1975 Ordinance Bonds Debt Service	4,161	0	0	0	0	0
13	**Debt Service Coverage - 1975 Ordinance**	**39.72**					
14	Net Available after Prior Bond Debt Service	161,124	172,197	193,344	210,696	219,022	211,245
15	1998 Ordinance Bonds Debt Service	93,159	91,175	95,087	109,061	106,177	107,085
16	1998 Ordinance Subordinate Debt Service - Twelfth Series [(a)]	0	1,917	0	0	0	0
17	**Debt Service Coverage - 1998 Ordinance**	**1.73**	**1.85**	**2.03**	**1.93**	**2.06**	**1.97**
18	Net Available after Prior Debt Service	67,965	79,105	98,257	101,635	112,845	104,160
	Total Debt Service Coverage						
19	Funds Available for Debt Service	165,285	172,197	193,344	210,696	219,022	211,245
20	Total Debt Service [(b)]	97,320	93,092	95,087	109,061	106,177	107,085
21	**Debt Service Coverage on Total Debt**	**1.70**	**1.85**	**2.03**	**1.93**	**2.06**	**1.97**

(a) For Ordinance compliance, assumes a 5.15% amortization rate of the 1998 Ordinance Subordinate Debt Service - Twelfth Series (Notes). Not a true cash component of 1998 Ordinance Bonds.

(b) Line 12 + Line 15 + Line 16

Table 23 Projected Statement of Income – LNG Expansion with no Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	Projected Revenues						
1	Non-Heating	29,963	25,489	26,843	25,655	24,339	23,020
2	Gas Transport Service	38,133	42,336	44,859	46,840	48,847	50,518
3	Heating	607,460	559,996	577,387	583,621	589,468	595,647
4	Other Sales	(431)	(196)	134	102	42	28
5	Total Gas Revenues - Existing Rates	675,125	627,625	649,223	656,218	662,696	669,213
6	DSIC Revenue	14,743	27,116	32,660	32,816	32,930	33,024
7	Base Rate Increase	0	0	0	45,000	45,000	45,000
8	Total Gas Revenues	689,868	654,741	681,883	734,034	740,626	747,237
9	Other Operating Revenues	20,679	20,047	22,214	22,409	22,594	22,777
10	**Total Operating Revenues**	710,547	674,788	704,097	756,443	763,220	770,014
	Operating Expenses						
11	Natural Gas	260,594	220,857	233,283	245,779	251,513	257,501
12	Other Raw Materials	10	10	10	10	10	10
13	Total Fuel	260,604	220,867	233,293	245,789	251,523	257,511
14	Gas Processing	17,530	15,853	16,809	17,169	17,616	17,926
15	Field Services	37,664	39,057	39,745	40,720	41,684	42,506
16	Distribution	36,880	38,073	38,899	39,634	40,495	41,207
17	Collection	3,152	3,406	3,403	3,471	3,550	3,611
18	Customer Services	12,556	13,011	13,047	13,349	13,685	13,932
19	Customer Accounting	8,145	8,298	8,398	8,580	8,767	8,933
20	Bad Debt Expense	37,873	35,216	35,625	36,808	37,090	37,231
21	Other Post Employee Benefits	11,167	5,445	3,386	1,218	0	0
22	A&G and Other Expenses	130,562	133,972	129,624	139,864	152,259	156,046
23	Total Non-Fuel O&M	295,529	292,331	288,936	300,813	315,146	321,392
24	Depreciation	45,400	46,654	47,942	51,336	54,840	54,813
25	Cost of Removal	2,500	2,600	2,600	2,600	2,600	2,600
26	Less: Clearing Accounts	(6,010)	(6,231)	(6,475)	(6,706)	(6,868)	(7,154)
27	**Net Depreciation**	41,890	43,023	44,067	47,230	50,572	50,259
28	**Total Operating Expenses**	**598,023**	**556,221**	**566,296**	**593,832**	**617,241**	**629,162**
29	**Net Operating Income**	**112,524**	**118,567**	**137,801**	**162,611**	**145,979**	**140,852**
30	Other Income	3,619	3,687	5,524	4,721	4,317	4,723
31	**Net Income Before Interest Charges**	**116,143**	**122,254**	**143,325**	**167,332**	**150,296**	**145,575**
	Interest						
32	Long Term Debt	44,316	42,249	57,386	54,800	52,291	54,699
33	Twelfth Series (Notes) [(a)]	1,278	1,854	1,240	1,240	1,240	1,240
34	Other	3,091	(446)	271	(2,606)	(2,271)	(1,892)
35	Loss From Refunded Debt	3,703	4,814	4,401	3,985	3,670	3,354
36	AFUDC	(656)	(959)	(1,279)	(952)	(748)	(723)
37	Total Interest	51,732	47,512	62,019	56,467	54,182	56,678
38	**Net Income[(b)]**	**64,411**	**74,742**	**81,306**	**110,865**	**96,114**	**88,897**

(a) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96% with a minimum annual maintenance fee of $1.24 million.
(b) Net Income is net of all payments to the City excluding the $18 million Payment to City/Distribution of Earnings.

Table 24 Projected Statement of Cash Flows – LNG Expansion with no Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
1	**Beginning Cash Balance**	**105,734**	**106,136**	**100,241**	**96,370**	**100,039**	**107,115**
	Sources of Funds						
	Internal Sources						
2	Net Income	64,411	74,742	81,306	110,865	96,114	88,897
3	Depreciation	45,400	46,654	47,942	51,336	54,840	54,813
4	Amortized Costs[(a)]	2,005	80	206	139	158	212
5	Earnings on Restricted Funds	(487)	(1,098)	(2,880)	(1,992)	1,036	(1,870)
6	Bond Proceeds to Pay Issuance Cost	507	0	0	0	0	0
7	Increased/(Decreased) Other Liabilities	2,586	(12,153)	(14,867)	(21,565)	(18,241)	(22,900)
8	Total Internal Sources	114,422	108,225	111,707	138,783	133,907	119,152
	External Sources						
9	Net Revenue Bond Proceeds [(b)]	339,671	0	330,409	0	0	92,562
10	Capital Improvement Fund Drawdown	0	0	113,999	66,946	46,864	44,591
11	Release of Excess Sinking Fund Money	0	0	0	0	0	0
12	Notes	30,000	72,600	0	0	0	0
13	Total External Sources	369,671	72,600	444,408	66,946	46,864	137,153
14	**Total Sources of Funds**	**484,093**	**180,825**	**556,115**	**205,729**	**180,771**	**256,305**
	Uses of Funds						
15	Debt Reduction paid on all Bonds	54,190	48,655	46,100	53,845	53,455	54,420
16	Debt Reduction Funding	0	0	0	0	0	0
17	CIP Requirements	90,327	134,752	179,659	133,762	105,129	101,615
18	Payment to City/Distribution of Earnings	18,000	18,000	18,000	18,000	18,000	18,000
19	Deposit to CIP Fund	0	0	227,809	0	0	92,562
20	Repayment of Prior Bonds	339,671	0	0	0	0	0
21	Repayment of Twelfth Series (Notes)[(c)]	0	0	102,600	0	0	0
22	Change in Non-Cash Working Capital[(d)]	(18,497)	(14,687)	(14,182)	(3,547)	(2,889)	(7,640)
23	**Total Uses of Funds**	**483,691**	**186,720**	**559,986**	**202,060**	**173,695**	**258,957**
24	Increase/(Decrease) in Cash	402	(5,895)	(3,871)	3,669	7,076	(2,652)
25	**Ending Cash Balance**	**106,136**	**100,241**	**96,370**	**100,039**	**107,115**	**104,463**

(a) Includes amortization on bond issuance costs and extraordinary losses.
(b) 2015 Refunding Bond includes Par Amount of $304,035,000.00 plus Premium of $35,636,264.10
(c) Includes assumed cash flow of Twelfth Series (Notes) assuming an interest rate of 1.96%.
(d) Includes changes in Accounts Payable, Accounts Receivable, and Materials and Supplies.

Table 25 Projected Debt Service Coverage – LNG Expansion with no Incremental Sales (Thousands of Dollars)

Line No.	Description	Fiscal Year Ending August 31, 2015	2016	2017	2018	2019	2020
		$	$	$	$	$	$
	SOURCES OF FUNDS						
1	Total Gas Revenues	689,868	654,741	681,883	734,034	740,626	747,237
2	Other Operating Revenues	20,679	20,047	22,214	22,409	22,594	22,777
3	Total Operating Revenues	710,547	674,788	704,097	756,443	763,220	770,014
4	Other Income	3,788	3,548	3,923	3,681	6,101	3,576
5	**Total Sources of Funds**	714,335	678,336	708,020	760,124	769,321	773,590
	USES OF FUNDS						
6	Fuel Costs	260,604	220,867	233,293	245,789	251,523	257,511
7	Other Operating Costs	337,419	335,354	333,003	348,043	365,718	371,651
8	Total Operating Expenses	598,023	556,221	566,296	593,832	617,241	629,162
9	Less: Non-Cash Expenses	(48,973)	(50,082)	(51,620)	(55,025)	(58,549)	(58,525)
10	**Total Uses of Funds**	549,050	506,139	514,676	538,807	558,692	570,637
11	**Funds Available for Debt Service**	165,285	172,197	193,344	221,317	210,629	202,953
12	1975 Ordinance Bonds Debt Service	4,161	0	0	0	0	0
13	**Debt Service Coverage - 1975 Ordinance**	**39.72**					
14	Net Available after Prior Bond Debt Service	161,124	172,197	193,344	221,317	210,629	202,953
15	1998 Ordinance Bonds Debt Service	93,159	91,175	95,087	109,061	106,177	107,085
16	1998 Ordinance Subordinate Debt Service - Twelfth Series [(a)]	0	1,917	0	0	0	0
17	**Debt Service Coverage - 1998 Ordinance**	**1.73**	**1.85**	**2.03**	**2.03**	**1.98**	**1.90**
18	Net Available after Prior Debt Service	67,965	79,105	98,257	112,256	104,452	95,868
	Total Debt Service Coverage						
19	Funds Available for Debt Service	165,285	172,197	193,344	221,317	210,629	202,953
20	Total Debt Service [(b)]	97,320	93,092	95,087	109,061	106,177	107,085
21	**Debt Service Coverage on Total Debt**	**1.70**	**1.85**	**2.03**	**2.03**	**1.98**	**1.90**

(a) For Ordinance compliance, assumes a 5.15% amortization rate of the 1998 Ordinance Subordinate Debt Service - Twelfth Series (Notes). Not a true cash component of 1998 Ordinance Bonds.

(b) Line 12 + Line 15 + Line 16

Assumptions and Opinions

In developing the information which Black & Veatch utilized for preparing the projections presented herein, Black & Veatch relied on PGW's financial planning model and PGW's assumptions contained within that model with several exceptions as noted in this Report. The analyses summarized in this Report are based on assumptions that have been provided by or reviewed by PGW and others and relied on currently available information and present circumstances. Black & Veatch has not conducted verification tests of this information. While we believe that these data and the underlying assumptions are reasonable, actual results may materially differ from those projected, as influenced by the conditions, events and circumstances that actually occur that are unknown at this time and/or which are beyond the control of Black & Veatch. Such factors may include PGW's ability to execute the capital improvement plan as scheduled and within budget, regional climate and weather conditions affecting the demand for gas, PGW's ability to obtain the full amount of the rate increase in fiscal year 2018 as assumed herein, and adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting PGW's ability to operate the System.

Considerations and Assumptions

The following, while not all inclusive, is a list of critical assumptions used in the development of the projections presented herein:

Revenues

1. As set forth by the PUC in its order dated February 22, 2001, the PUC will comply with its statutory obligations pursuant to the Gas Choice Act as it amends the provisions of the Public Utility Code (66 Pa C.S.A. §2212(b)) requiring that the PUC, in determining PGW's revenue requirement and approving overall rates and charges, "follow the same rate-making methodology and requirements that were applicable to [PGW] prior to the assumption of jurisdiction by the [PUC]" and permit PGW to "impose, charge and collect rates or charges as necessary to permit…PGW to comply with its covenants to the holders of any approved bonds." The PUC affirmed this intention in a Policy Statement issued on April 19, 2010.

2. The throughput and revenue figures are based on the assumption of normal weather. To the extent that weather is warmer than normal, the resulting contribution margin will be maintained to the extent that the WNA remains in effect.

3. Projected revenue figures are based on the assumption that PGW will recover, in a timely manner, 100 percent of all gas supply costs (including upstream transportation, upstream storage, and LNG related costs) and 100 percent of the costs (or discounted revenues) attributed to the Customer Responsibility Program, Customer Works Program, Senior Citizen Discount Program, restructuring transition costs, and costs attributable to PUC mandated programs such as those indicated in Chapters 56 and 59 of the Public Utility Code (less certain avoided costs).

4. If PGW were unable to meet the rate covenant required under the 1998 General Ordinance, PGW would then have to reduce expenditures, develop other sources of Gas Works Revenues, and/or file for and receive timely rate relief.

5. If lost margins resulting from customers' reducing usage due to DSM programs are significant, PGW will file for additional base rate increases.

6. PGW's current DSIC surcharge will allow the recovery of $22.0 million in annual revenues to fund annual capital improvements in such amount associated with the LTIIP and will increase to $33 million by fiscal year 2017 (assuming approval by the PUC). The Pennsylvania PUC will continue to provide either rate increases or surcharges to fund these expenditures. If the PUC determines that PGW's cast iron main replacement should be accelerated above current levels, the PUC will also provide rate increases or surcharges to fund the additional expenditures.

7. PGW will realize $40.0 million in revenue enhancements, cost savings, or base rate increases on a levelized basis beginning in fiscal year 2018.

Operating Expenses

1. PGW's annual bad debt expense will range from $35.2 to $37.2 million and PGW's collection factor on billed revenues will be 96 percent during the projected 2016-2020 period.

Debt Service

1. The debt service and interest costs reflect refunding of the 1975 General Ordinance Series 17, 18, 19 and 20 Bonds and 1998 General Ordinance Fourth and Fifth Series Bonds and the new bond issues in 2017 and 2020. If PGW refunds additional bonds, it is assumed that such additional refunding will result in a reduction in interest costs and annual debt service from the levels reflected in this Report.

Capital Improvement Program (2015 – 2020)

1. The planned capital improvements will be completed at the levels budgeted, for the projects currently planned and within the timeframe projected. Any additional capital improvements required to meet future regulatory requirements will be made to comply with those regulatory requirements.

2. Projected levels of capital improvements that are paid for by internally generated funds are assumed to comply with PGW's internal policies for financing capital improvements with other funding sources.

3. PGW is currently studying a $120 million LNG liquefaction expansion project. It is assumed that PGW will have adequate incremental LNG sales to recover the operating and financing costs of such a facility. Any excess revenues associated with this project would be used to lower the $40 million base rate increase assumed for 2018, and any shortfall associated with this project would be recovered through additional base rate increases. Based on the costs and potential sales provided by PGW associated with this project, the incremental benefit (up to $10 million annually) or incremental cost (up to $5 million annually) associated with this project would have a relatively minor impact on base rates.

City of Philadelphia

1. PGW will make an annual payment to the City in fiscal years 2015 through 2020 of $18.0 million.

Opinions

Based on these analyses and the assumptions set forth or referred to in this Report, we offer the following opinions to indicate PGW's conformance with specific requirements which must be met for the issuance of the Thirteenth Series Bonds, as provided in the 1998 General Ordinance:

1. PGW is a competently managed and operated gas distribution utility. PGW and the System are organized, operated, and maintained at a level equal to, or in excess of, regulatory requirements and generally accepted industry practices. The System is in good operating condition.
2. Based upon Black & Veatch's evaluation of financial projections and certain assumptions with respect to the System which Black & Veatch believes to be reasonable, and on the basis of actual and estimated future annual financial operations of the System, the System should yield Gas Works Revenues (which are pledged under the 1998 General Ordinance) over the amortization periods of the Bonds issued under the 1998 General Ordinance (including the Notes) which will be sufficient to: (a) meet all expenses of operation, maintenance, repair and replacement of the System, (b) meet all reserve or special funds required to be established under the 1998 General Ordinance, (c) meet the principal of and interest on all Bonds issued under the 1998 General Ordinance (including the Notes), as the same shall become due and payable, and (d) provide such surplus requirements as are contained in the rate covenant of the 1998 General Ordinance. The Gas Works Revenues forming the basis of this opinion comply with the requirements of the definition of Project Revenues contained in Section 2 of the First Class City Revenue Bond Act.
3. The Gas Works Revenues which are pledged as security for the Bonds (including the Notes) issued under the 1998 General Ordinance are currently, and are projected to be, sufficient to comply with the rate covenant set forth in Section 4.03(b) of the 1998 General Ordinance.
4. The capital improvements proposed during the projection period, September 1, 2015, through August 31, 2020, should, along with continued good operation and maintenance practices, enable PGW to maintain the System in good operating condition. Review of present management practices indicates that good operation and maintenance is likely to continue.
5. Contracted PGW gas supplies plus: (a) spot market purchases, (b) anticipated additional contracted supplies plus supplemental gas capacities, as well as, (c) the pipeline transport capacity to move these supplies to PGW, appear adequate to meet PGW's projected demand on a day of maximum demand (a "design peak day"), in an hour of maximum demand (a "design peak hour"), and during a year of maximum demand (a "design peak year").

APPENDIX C

GOVERNMENT AND FINANCIAL INFORMATION

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THE GOVERNMENT OF THE CITY OF PHILADELPHIA

Introduction

The City of Philadelphia (the "City" or "Philadelphia") is located along the southeastern border of the Commonwealth of Pennsylvania (the "Commonwealth" or "Pennsylvania"). The City is the largest city in the Commonwealth and the fifth largest city in the nation with approximately 1,553,165 residents (based on 2013 estimates). The City is also the center of the United States' sixth largest metropolitan statistical area, which is an 11-county area encompassing the City, Camden, NJ, and Wilmington, DE and represents approximately 6,035,000 residents (based on 2013 estimates).

The City benefits from its strategic geographical location, relative affordability, cultural and recreational amenities, and its growing strength in key industries. The City is a business and personal services center with strengths in professional services, such as insurance, law, finance, healthcare and higher education, and leisure and hospitality. The cost of living in the City is relatively moderate compared to other major metropolitan areas in the northeast United States. In addition, the City, as one of the country's education centers, offers the business community a large and diverse labor pool.

The University of Pennsylvania, Temple University, Drexel University, St. Joseph's University, and LaSalle University are well-known institutions of higher education located in the City. There are also a number of colleges and universities located near the City, notably including Villanova University, Bryn Mawr College, Haverford College, Swarthmore College, Lincoln University, and the Camden Campus of Rutgers University, among others.

The City is a center for health, education, research and science facilities. In the City, there are presently more than 30 hospitals, including the Children's Hospital of Philadelphia, Hospital of the University of Pennsylvania, Hahnemann University Hospital, Einstein Medical Center-Philadelphia, and Temple University Hospital, among others, five medical schools, two dental schools, two pharmacy schools, as well as schools of optometry, podiatry and veterinary medicine.

Tourism is important to the City and is driven by the City's extraordinary historic and cultural assets. The City's Historic District includes Independence Hall, the Liberty Bell, Carpenters' Hall, Betsy Ross' house and Elfreth's Alley, the nation's oldest residential street. The Parkway District includes the Philadelphia Museum of Art, the Barnes Foundation, and the Rodin Museum. The Avenue of the Arts, located along a mile-long section of South Broad Street between City Hall and Washington Avenue, includes the Kimmel Center, the Academy of Music, and other performing arts venues. All of the foregoing are key tourist attractions in the City.

For more information on the City's demographic and economic resources and economic development initiatives, see APPENDIX D hereto.

History and Organization

The City was incorporated in 1789 by an Act of the General Assembly of the Commonwealth (the "General Assembly") (predecessors of the City under charters granted by William Penn in his capacity as proprietor of the colony of Pennsylvania may date to as early as 1682). In 1854, the General Assembly, by an act commonly referred to as the Consolidation Act, (i) made the City's boundaries coterminous with the boundaries of Philadelphia County (the same boundaries that exist today) (the "County"), (ii) abolished all governments within these boundaries other than the City and the County, and (iii) consolidated the legislative functions of the City and the County. Article 9, Section 13 of the

Pennsylvania Constitution abolished all county offices in the City, provides that the City performs all functions of county government, and states that laws applicable to counties apply to the City.

Since 1952, the City has been governed under a Home Rule Charter authorized by the General Assembly (First Class City Home Rule Act, Act of April 21, 1949, P.L. 665, Section 17) and adopted by the voters of the City (as amended and supplemented, the "City Charter"). The City Charter provides, among other things, for the election, organization, powers and duties of the legislative branch (the "City Council") and the executive and administrative branch, as well as the basic rules governing the City's fiscal and budgetary matters, contracts, procurement, property, and records. Under Article XII of the City Charter, the School District of Philadelphia (the "School District") operates as a separate and independent home rule school district. Certain other constitutional provisions and Commonwealth statutes continue to govern various aspects of the City's affairs, notwithstanding the broad grant of powers of local self-government in relation to municipal functions set forth in the First Class City Home Rule Act.

Under the City Charter, there are two principal governmental entities in the City: (i) the City, which performs municipal and county functions; and (ii) the School District, which has boundaries coterminous with the City and responsibility for all public primary and secondary education.

The court system in the City, consisting of Common Pleas and Municipal Courts, is part of the Commonwealth judicial system. Although judges are paid by the Commonwealth, most other court costs are paid by the City, with partial reimbursement from the Commonwealth.

Elected and Appointed Officials

The Mayor is elected for a term of four years and is eligible to be elected for no more than two successive terms. Each of the seventeen members of City Council is also elected for a four-year term, which runs concurrently with that of the Mayor. There is no limitation on the number of terms that may be served by members of City Council. Of the members of City Council, ten are elected from districts and seven are elected at-large. No more than five of the seven at-large candidates for City Council may be nominated by any party or political body. The District Attorney and the City Controller are elected at the mid-point of the terms of the Mayor and City Council.

The City Controller's responsibilities derive from the City Charter, various City ordinances and state and federal statutes, and contractual arrangements with auditees. The City Controller must follow Generally Accepted Government Auditing Standards, established by the federal Government Accountability Office (formerly known as the General Accounting Office), and Generally Accepted Auditing Standards, promulgated by the American Institute of Certified Public Accountants.

The City Controller post-audits and reports on the City's and the School District's Comprehensive Annual Financial Reports ("CAFRs"), federal assistance received by the City, and the performance of City departments. The City Controller also conducts a pre-audit program of City expenditure documents required to be submitted for approval, such as invoices, payment vouchers, purchase orders and contracts. Documents are selected for audit by category and statistical basis. The Pre-Audit Division verifies that expenditures are authorized and accurate in accordance with the City Charter and other pertinent legal and contractual requirements before any moneys are paid by the City Treasurer. The Pre-Audit Technical Unit, consisting of auditing and engineering staff, inspects and audits capital project design, construction and related expenditures. Other responsibilities of the City Controller include investigation of allegations of fraud, preparation of economic reports, certification of the City's debt capacity and the capital nature and useful life of the capital projects, and opining to the Pennsylvania Intergovernmental Cooperation Authority ("PICA") on the reasonableness of the assumptions and estimates in the City's five-year financial plans.

Under the City Charter, the principal officers of the City's government appointed by the Mayor are the Managing Director of the City (the "Managing Director"), the Director of Finance of the City (the "Director of Finance"), the City Solicitor (the "City Solicitor"), the Director of Commerce (the "Director of Commerce"), and the City Representative (the "City Representative"). In addition to the foregoing principal officers, the Mayor also utilizes a deputy mayor structure, which includes additional individuals that comprise the Mayor's cabinet.

The Managing Director, in coordination with the Deputy Mayor for Public Safety, the Deputy Mayor for Health and Opportunity, the Deputy Mayor for Transportation and Utilities, the Deputy Mayor for Planning and Economic Development/Director of Commerce, and the Deputy Mayor for Environmental and Community Resources, is responsible for supervising the operating departments and agencies of the City that render the City's various municipal services. The Director of Commerce is charged with the responsibility of promoting and developing commerce and industry. The City Representative is the Ceremonial Representative of the City and especially of the Mayor. The City Representative is charged with the responsibility of giving wide publicity to any items of interest reflecting the activities of the City and its inhabitants, and for the marketing and promotion of the image of the City.

The City Solicitor is head of the Law Department and acts as legal advisor to the Mayor, City Council, and all of the agencies of the City government. The City Solicitor is also responsible for (i) advising on legal matters pertaining to all of the City's contracts and bonds, (ii) assisting City Council, the Mayor, and City agencies in the preparation of ordinances for introduction in City Council, and (iii) conducting litigation involving the City.

The Director of Finance is the chief financial and budget officer of the City and is selected from three names submitted to the Mayor by a Finance Panel, which is established pursuant to the City Charter and is comprised of the President of the Philadelphia Clearing House Association, the Chairman of the Philadelphia Chapter of the Pennsylvania Institute of Certified Public Accountants, and the Dean of the Wharton School of Finance and Commerce of the University of Pennsylvania. Under Mayor Nutter's administration, the Director of Finance is responsible for the financial functions of the City, including (i) development of the annual operating budget, the capital budget, and capital program; (ii) the City's program for temporary and long-term borrowing; (iii) supervision of the operating budget's execution; (iv) the collection of revenues through the Department of Revenue; (v) the oversight of pension administration as Chairperson of the Board of Pensions and Retirement; and (vi) the supervision of the Office of Property Assessment. The Director of Finance is also responsible for the appointment and supervision of the City Treasurer, whose office manages the City's debt program and serves as the disbursing agent for the distribution of checks and electronic payments from the City Treasury and the management of cash resources.

The following are brief biographies of Mayor Nutter, his Chief of Staff, the Director of Finance and the City Treasurer:

Michael A. Nutter, Mayor, was sworn in for a second consecutive term on January 2, 2012 as Mayor of his hometown. Born in Philadelphia and educated at the Wharton School at the University of Pennsylvania, Michael Nutter has been committed to public service since his youth in West Philadelphia. Before his election as Mayor, he served almost 15 years on City Council, earning the reputation of a reformer.

In 2008, the Mayor laid out a vision for Philadelphia to focus his administration around five key goals designed to make the City safer, healthier, greener, and more competitive, and to create an ethical government that serves all of its citizens. Philadelphia has made progress on these fronts after weathering

the impacts of the recession and the slower than expected economic recovery. The Revised Twenty-Fourth Five-Year Plan (as defined herein) makes investments to further each of the Mayor's five goals:

- Goal 1: Philadelphia becomes one of the safest cities in America;
- Goal 2: The education and health of Philadelphians improves;
- Goal 3: Philadelphia is a place of choice;
- Goal 4: Philadelphia becomes the greenest and most sustainable city in America; and
- Goal 5: Philadelphia government works efficiently and effectively, with integrity and responsiveness.

Everett A. Gillison, Chief of Staff to the Mayor and Deputy Mayor for Public Safety, was appointed Chief of Staff by Mayor Nutter on October 19, 2011. Mr. Gillison has served as Deputy Mayor for Public Safety since January 7, 2008, and continues in his role as Deputy Mayor for Public Safety in addition to his role as the Mayor's Chief of Staff. Mr. Gillison previously served as a Senior Trial Lawyer for the Defender Association of Philadelphia, where he worked for more than 30 years.

Rob Dubow, Director of Finance, was appointed on January 7, 2008. Prior to his appointment, Mr. Dubow was the Executive Director of PICA. He has also served as Executive Deputy Budget Secretary of the Commonwealth, from 2004 to 2005, and as Budget Director for the City, from 2000 to 2004.

Nancy E. Winkler, City Treasurer, was appointed City Treasurer effective January 31, 2011. Prior to her tenure with the City, Ms. Winkler worked for over 28 years with Public Financial Management (the PFM Group), from 1990 to 2011 as Managing Director, with responsibility to manage the firm's municipal, state and authority practices in New York and Maryland.

Government Services

Municipal services provided by the City include: (i) police and fire protection; (ii) health care; (iii) certain welfare programs; (iv) construction and maintenance of local streets, highways, and bridges; (v) trash collection, disposal and recycling; (vi) provision for recreational programs and facilities; (vii) maintenance and operation of the water and wastewater systems (the "Water and Wastewater Systems"); (viii) acquisition and maintenance of City real and personal property, including vehicles; (ix) maintenance of building codes and regulation of licenses and permits; (x) maintenance of records; (xi) collection of taxes and revenues; (xii) purchase of supplies and equipment; (xiii) construction and maintenance of airport facilities (the "Airport System"); and (xiv) maintenance of a prison system. The City maintains enterprise funds – the Water Fund and the Aviation Fund – for each of the Water and Wastewater Systems and the Airport System. For information on the Water and Wastewater Systems, see APPENDIX D – "KEY CITY-RELATED SERVICES AND BUSINESSES – Water and Wastewater." For information on the Airport System, see APPENDIX D – "ECONOMIC BASE AND EMPLOYMENT – Airport System."

The City owns the assets that comprise the Philadelphia Gas Works ("PGW" or the "Gas Works"). PGW serves residential, commercial, and industrial customers in the City. PGW is operated by Philadelphia Facilities Management Corporation ("PFMC"), a non-profit corporation specifically organized to manage and operate PGW for the benefit of the City.

In 2012, the City engaged a team of legal and financial advisors to assist it with a process to consider the sale of PGW to a private entity. On March 2, 2014, the City, as seller, entered into an agreement, providing for the sale of a portion of the assets that comprise PGW and the transfer of PGW operations to a private entity. Closing on the agreement was subject to authorization by City Council and approval by the Pennsylvania Public Utility Commission ("PUC"), among other things. City Council did not introduce legislation authorizing the sale of PGW or hold hearings on such sale under the terms of the agreement. As a result, the prospective buyer terminated the agreement. Presently, the City does not have plans to sell PGW. City Council has proposed hearings on the future of energy initiatives in the City, including PGW, the first of which was held on March 13, 2015.

For more information on PGW, see "DISCUSSION OF FINANCIAL OPERATIONS – Current Financial Information – Fiscal Year 2015 Adopted Budget," "PGW PENSION PLAN," "PGW OTHER POST-EMPLOYMENT BENEFITS," "EXPENDITURES OF THE CITY – PGW Annual Payments," and "LITIGATION – PGW," among others.

Local Government Agencies

There are a number of governmental authorities and quasi-governmental non-profit corporations that also provide services within the City. Certain of these entities are comprised of governing boards, the members of which are either appointed or nominated, in whole or part, by the Mayor, while others are independent of the Mayor's appointment or recommendation.

Mayoral-Appointed or Nominated Agencies

Philadelphia Industrial Development Corporation and Philadelphia Authority for Industrial Development. The Philadelphia Industrial Development Corporation ("PIDC") and its affiliate, the Philadelphia Authority for Industrial Development ("PAID"), coordinate the City's efforts to maintain an attractive business environment, attract new businesses to the City, and retain existing businesses. Of the 30 members of the board of PIDC, seven are City officers or officials (the Mayor, the Director of Commerce, the President of City Council or a designee, the Chairman of the City Planning Commission, the City Solicitor, the Managing Director, and the Director of Finance), 15 are nominated jointly by the President of the Greater Philadelphia Chamber of Commerce and the Director of Commerce, and eight are nominated by the President of the Greater Philadelphia Chamber of Commerce. The five-member board of PAID is appointed by the Mayor.

Philadelphia Municipal Authority. The Philadelphia Municipal Authority (formerly the Equipment Leasing Authority of Philadelphia) ("PMA") was originally established for the purpose of buying equipment and vehicles to be leased to the City. PMA's powers have been expanded to include any project authorized under applicable law that is specifically authorized by ordinance of City Council. PMA is governed by a five-member board appointed by City Council from nominations made by the Mayor.

Philadelphia Energy Authority. The Philadelphia Energy Authority ("PEA") was established by the City and incorporated in 2011 for the purpose of facilitating and developing energy generation projects, facilitating and developing energy efficiency projects, the purchase or facilitation of energy supply and consumer energy education. PEA is authorized to participate in projects on behalf of the City, other government agencies, institutions and businesses. PEA is governed by a five-member board appointed by City Council from four nominations made by the Mayor and one nomination from City Council.

Philadelphia Redevelopment Authority. The Philadelphia Redevelopment Authority (formerly known as the Redevelopment Authority of the City of Philadelphia) (the "PRA"), supported by federal funds through the City's Community Development Block Grant Fund and by Commonwealth and local funds, is responsible for the redevelopment of the City's blighted areas. PRA is governed by a five-member board appointed by the Mayor.

Philadelphia Land Bank. The Philadelphia Land Bank (the "Land Bank") was created in 2014 with a mission to return vacant and tax delinquent property to productive reuse. The Land Bank is an independent agency formed under the authority of City ordinance and Pennsylvania law. The Land Bank has an 11-member board of directors, of which five are appointed by the Mayor and five are appointed by City Council. The final board member is appointed by a majority vote of the other board members. The City provides funds for its operations.

The Land Bank can: (i) consolidate properties owned by multiple public agencies into single ownership to speed property transfers to new, private owners; (ii) acquire tax-delinquent properties through purchase or by bidding the City's lien interests at a tax foreclosure; and (iii) assist in the assemblage and disposition of land for community, nonprofit and for-profit uses.

On October 30, 2014, the Land Bank approved its first proposed strategic plan (the "Strategic Plan"), which identifies market conditions across the City, identifies inventory of vacant and tax delinquent properties that the Land Bank could take in, and sets goals to guide Land Bank activity. Such goals include priority acquisition areas and annual targets against which to measure progress. On December 11, 2014, City Council approved the Strategic Plan. In December, the Mayor and City Council appointed their respective members to the Land Bank's permanent board of directors, replacing the interim board that was named in the authorizing ordinance. This board of directors convened for the first time in late January 2015, appointed the final member of the board, and elected officers.

Philadelphia Housing Authority. The Philadelphia Housing Authority (the "Housing Authority") is a public body organized pursuant to the Housing Authorities Law of the Commonwealth and is neither a department nor an agency of the City. The Housing Authority is the fourth largest public housing authority in the United States and is responsible for developing and managing low and moderate income rental units and limited amounts of for-sale housing in the City. The Housing Authority is also responsible for administering rental subsidies to landlords who rent their units to housing tenants qualified by the Housing Authority for such housing assistance payments. The Housing Authority is governed by a nine member Board of Commissioners, all of whom are appointed by the Mayor with the approval of a majority of the members of City Council. The terms of the Commissioners are concurrent with the term of the appointing Mayor. Two of the members of the Board are required to be Housing Authority residents.

Over 93% of the Housing Authority's annual budget is funded directly or indirectly by the U.S. Department of Housing and Urban Development, and most of the balance of the Housing Authority's budget is derived from resident rent payments. Neither the Housing Authority's funds nor its assets are available to pay City expenses, debts or other obligations, and the City has no power to tax the Housing Authority or its property. Neither the City's funds nor its assets are subject to claims for the expenses, debts or other obligations of the Housing Authority.

Hospitals and Higher Education Facilities Authority of Philadelphia. The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Hospitals Authority") assists non-profit hospitals by financing hospital construction projects. The City does not own or operate any hospitals. The powers of the Hospitals Authority also permit the financing of construction of buildings and facilities for certain colleges and universities and other health care facilities and nursing homes. The Hospitals

Authority is governed by a five-member board appointed by City Council from nominations made by the Mayor.

Southeastern Pennsylvania Transportation Authority. The Southeastern Pennsylvania Transportation Authority ("SEPTA"), which is supported by transit revenues and federal, Commonwealth, and local funds, is responsible for developing and operating a comprehensive and coordinated public transportation system in the southeastern Pennsylvania region. Two of the 15 members of SEPTA's board are appointed by the Mayor and confirmed by City Council.

Pennsylvania Convention Center Authority. The Pennsylvania Convention Center Authority (the "Convention Center Authority") constructed and maintains, manages, and operates the Pennsylvania Convention Center, which opened on June 25, 1993. The Pennsylvania Convention Center is owned by the Commonwealth and leased to the Convention Center Authority. An expansion of the Pennsylvania Convention Center was completed in March 2011. This expansion enlarged the Pennsylvania Convention Center to approximately 2,300,000 square feet with the largest contiguous exhibit space in the Northeast, the largest convention center ballroom in the East and the ability to host large tradeshows or two major conventions simultaneously.

Of the 15 members of the board of the Convention Center Authority, two are appointed by the Mayor and one by each of the President and Minority Leader of City Council. The Director of Finance is an ex-officio member of the Board with no voting rights. The Commonwealth, the City and the Convention Center Authority have entered into an operating agreement with respect to the operation and financing of the Pennsylvania Convention Center. In January 2014, SMG began managing and operating the Pennsylvania Convention Center, instituting a number of measures intended to reduce and control show costs and improve customer service.

The School District. The School District was established by the Educational Supplement to the City Charter to provide free public education to the City's residents. Under the City Charter, the School District is governed by the Board of Education of the School District of Philadelphia (the "Board of Education"). During a period of distress following a declaration of financial distress by the Secretary of Education of the Commonwealth, all of the powers and duties of the Board of Education granted under the Public School Code of 1949, as amended (the "School Code") or any other law are suspended and all of such powers and duties are vested in the School Reform Commission (the "School Reform Commission") created pursuant to the School Code. The School Reform Commission is granted all of the powers and duties of the Board of Education by the School Code, as well as all the powers and duties of a board of control under the School Code. The School Reform Commission is responsible for the operation, management and educational program of the School District during such period. It is also responsible for financial matters related to the School District. The School District was declared distressed by the Secretary of Education of the Commonwealth pursuant to the School Code, effective December 22, 2001, and such declaration continues to be in effect.

The School Code provides that the members of the Board of Education continue to serve during the time the School District is governed by the School Reform Commission, and that the establishment of the School Reform Commission may not interfere with the regular selection of the members of the Board of Education. The School Reform Commission may delegate duties to the Board of Education. Two of the five members of the School Reform Commission are appointed by the Mayor and three by the Governor of the Commonwealth, subject to confirmation by the Pennsylvania Senate.

Under the City Charter, the School District's governing body is required to levy taxes annually, within the limits and upon the subject authorized by the General Assembly or City Council, in amounts sufficient to provide for operating expenses, debt service charges, and for the costs of any other services

incidental to the operation of public schools. The School District has no independent power to authorize school taxes. Certain financial information regarding the School District is included in the City's CAFR.

Except during a period of distress following a declaration of financial distress by the Secretary of Education of the Commonwealth, as described above, the Board of Education consists of nine members appointed by the Mayor from a list supplied by an Educational Nominating Panel established in accordance with provisions set forth in the City Charter. In some matters, including the incurrence of short-term and long-term debt, the School District is governed primarily by the laws of the Commonwealth. The School District is a separate political subdivision of the Commonwealth, and the City has no property interest in or claim on any revenues or property of the School District.

Non-Mayoral-Appointed or Nominated Agencies

PICA. PICA was created by the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (the "PICA Act") in 1991 to provide financial assistance to cities of the first class, and it continues in existence for a period not exceeding one year after all of its liabilities, including the PICA Bonds, have been fully paid and discharged. The City is the only city of the first class in the Commonwealth. The Governor of Pennsylvania, the President pro tempore of the Pennsylvania Senate, the Minority Leader of the Pennsylvania Senate, the Speaker of the Pennsylvania House of Representatives and the Minority Leader of the Pennsylvania House of Representatives each appoints one voting member of PICA's board. The Secretary of the Budget of the Commonwealth and the Director of Finance of the City serve as ex officio members of PICA's board with no voting rights.

In January 1992, the City and PICA entered into an Intergovernmental Cooperation Agreement (the "PICA Agreement"), pursuant to which PICA agreed to issue bonds from time to time, at the request of the City, for the purpose of funding, among other things, deficits in the General Fund and a debt service reserve. See "DEBT OF THE CITY – PICA Bonds."

Under the PICA Act and for so long as any PICA Bonds (as defined herein) are outstanding, the City is required to submit to PICA (i) a five-year financial plan on an annual basis and (ii) quarterly financial reports, each as further described below under "DISCUSSION OF FINANCIAL OPERATIONS – Five-Year Plans of the City" and "– Quarterly Reporting to PICA." Under the PICA Act, at such time when no PICA Bonds are outstanding, the City will no longer be required to prepare such annual or quarterly reports. See "DEBT OF THE CITY – PICA Bonds" for the current final stated maturities of outstanding PICA Bonds.

The PICA Act and the PICA Agreement provide PICA with certain financial and oversight functions. PICA has the power to exercise certain advisory and review procedures with respect to the City's financial affairs, including the power to review and approve the five-year financial plans prepared by the City, and to certify non-compliance by the City with the then-existing five-year plan. PICA is also required to certify non-compliance if, among other things, no approved five-year plan is in place or if the City has failed to file mandatory revisions to an approved five-year plan. Under the PICA Act, any such certification of non-compliance would, upon certification by PICA, require the Secretary of the Budget of the Commonwealth to withhold funds due to the City from the Commonwealth or any of its agencies (including, with certain exceptions, all grants, loans, entitlements and payments payable to the City by the Commonwealth, including payment of the portion of the PICA Tax, as further described under "DEBT OF THE CITY – PICA Bonds" below, otherwise payable to the City).

Philadelphia Parking Authority. The Philadelphia Parking Authority (the "PPA") is responsible for the construction and operation of parking facilities in the City and at Philadelphia International Airport ("PHL") and, by contract with the City, for enforcement of on-street parking

regulations. The members of the PPA's board are appointed by the Governor of the Commonwealth, with certain nominations from the General Assembly. For more information on the PPA, see "REVENUES OF THE CITY – Philadelphia Parking Authority Revenues."

DISCUSSION OF FINANCIAL OPERATIONS

Principal Operations

The major financial operations of the City are conducted through the General Fund. In addition to the General Fund, operations of the City are conducted through two other major governmental funds and 19 non-major governmental funds. The City operates on a July 1 to June 30 fiscal year ("Fiscal Year") and reports on all the funds of the City, as well as its component units, in the City's CAFR. PMA's and PICA's financial statements are blended with the City's statements. The financial statements for PGW, PRA, the PPA, the School District, the Community College of Philadelphia, the Community Behavioral Health, Inc., the Delaware River Waterfront Corporation, and PAID are presented discretely.

Fund Accounting

Funds are groupings of activities that enable the City to maintain control over resources that have been segregated for particular purposes or objectives. All of the funds of the City can be divided into three categories: governmental funds, proprietary funds and fiduciary funds.

Governmental Funds. The governmental funds are used to account for the financial activity of the City's basic services, such as: general government; economic and neighborhood development; public health, welfare and safety; cultural and recreational; and streets, highways and sanitation. The funds' financial activities focus on a short-term view of the inflows and outflows of spendable resources, as well as on the balances of spendable resources available at the end of the Fiscal Year. The financial information presented for the governmental funds is useful in evaluating the City's short-term financing requirements.

The City maintains 22 individual governmental funds. The City's CAFRs, including the City's CAFR for Fiscal Year 2014 (the "Fiscal Year 2014 CAFR"), present data separately for the General Fund, Grants Revenue Fund, and Health Choices Behavioral Health Fund, which are considered to be major funds. Data for the remaining 19 funds are combined into a single aggregated presentation.

Proprietary Funds. The proprietary funds are used to account for the financial activity of the City's operations for which customers are charged a user fee; they provide both a long and short-term view of financial information. The City maintains three enterprise funds that are a type of proprietary fund – airport, water and wastewater operations, and industrial land bank.

Fiduciary Funds. The City is the trustee, or fiduciary, for its employees' pension plans. It is also responsible for PGW's employees' retirement reserve assets. Both of these fiduciary activities are reported in the City's CAFRs, including the Fiscal Year 2014 CAFR, as separate financial statements of fiduciary net assets and changes in fiduciary net assets.

See "CITY FINANCES AND FINANCIAL PROCEDURES" for a further description of these governmental, proprietary, and fiduciary funds.

Budget Procedure

At least 90 days before the end of the Fiscal Year, the operating budget for the next Fiscal Year is prepared by the Mayor and submitted to City Council for adoption. The budget, as adopted, must be balanced and provide for discharging any estimated deficit from the current Fiscal Year and make appropriations for all items to be funded with City revenues. The Mayor's budgetary estimates of revenues for the ensuing Fiscal Year and projection of surplus or deficit for the current Fiscal Year may not be altered by City Council. Not later than the passage of the operating budget ordinance, City Council must enact such revenue measures as will, in the opinion of the Mayor, yield sufficient revenues to balance the budget.

At least 30 days before the end of the Fiscal Year, City Council must adopt by ordinance an operating budget and a capital budget for the ensuing Fiscal Year and a capital program for the six ensuing Fiscal Years. If the Mayor disapproves the bills, he must return them to City Council with the reasons for his disapproval at the first meeting thereof held not less than ten days after he receives such bills. If the Mayor does not return the bills within the time required, they become law without his approval. If City Council passes the bills by a vote of two-thirds of all of its members within seven days after the bills have been returned with the Mayor's disapproval, they become law without his approval. While the City Charter requires that City Council adopt the ordinances for the operating and capital budgets at least 30 days before the end of the Fiscal Year, in practice, such ordinances are often adopted after such deadline, but before the end of such Fiscal Year. For example, the City's Fiscal Year 2016 operating budget was presented to City Council on March 5, 2015, approved by City Council on June 18, 2015, and signed by the Mayor on June 18, 2015.

The capital program is prepared annually by the City Planning Commission to present the capital expenditures planned for each of the six ensuing Fiscal Years, including the estimated total cost of each project and the sources of funding (local, state, federal, and private) estimated to be required to finance each project. The capital program is reviewed by the Mayor and transmitted to City Council for adoption with his recommendation thereon. The Capital Improvement Program for Fiscal Years 2016-2021 (the "Capital Improvement Program") was approved by City Council on June 18, 2015, and signed by the Mayor on June 18, 2015.

The capital budget ordinance, authorizing in detail the capital expenditures to be made or incurred in the ensuing Fiscal Year from City Council appropriated funds, is adopted by City Council concurrently with the capital program. The capital budget must be in full conformity with that part of the capital program applicable to the Fiscal Year that it covers.

For information on the Fiscal Year 2015 Adopted Budget and the Fiscal Year 2016 Adopted Budget (as defined below), see "– Current Financial Information – Fiscal Year 2015 Adopted Budget" and "Fiscal Year 2016 Adopted Budget" below. For a summary of the Capital Improvement Program, see Table 45.

Budget Stabilization Reserve

In April 2011, the City adopted an amendment to the City Charter that established the "Budget Stabilization Reserve." The City Charter provides that the annual operating budget ordinance is required to provide for appropriations to a Budget Stabilization Reserve, to be created and maintained by the Director of Finance as a separate fund, which may not be commingled with any other funds of the City. Appropriations to the Budget Stabilization Reserve are required to be made each Fiscal Year if the projected General Fund balance for the upcoming Fiscal Year equals or exceeds three percent of General Fund appropriations for such Fiscal Year. City Council can appropriate additional amounts to the Budget Stabilization Reserve by ordinance, no later than at the time of passage of the annual operating budget ordinance and only upon recommendation of the Mayor. Total appropriations to the Budget Stabilization Reserve are subject to a limit of five percent of General Fund appropriations. Amounts in the Budget Stabilization Reserve from the prior Fiscal Years, including any investment earnings certified by the Director of Finance, are to remain on deposit therein.

Since the establishment of the Budget Stabilization Reserve, no annual operating budget ordinance has included a provision to fund the Budget Stabilization Reserve because the conditions that would require the funding of such reserve have not been met.

Annual Financial Reports

The City is required by the City Charter to issue, within 120 days after the close of each Fiscal Year, a statement as of the end of the Fiscal Year showing the balances in all funds of the City, the amounts of the City's known liabilities, and such other information as is necessary to furnish a true picture of the City's financial condition (the "Annual Financial Reports"). The Annual Financial Reports, which are released on or about October 28 of each year, are intended to meet these requirements and are unaudited. As described above, the audited financial statements of the City are contained in the CAFR, which is published at a later date. The Annual Financial Reports contain financial statements for all City governmental funds and blended component units presented on the modified accrual basis. The proprietary and fiduciary funds are presented on the full accrual basis. They also contain budgetary comparison schedules for those funds that are subject to an annual budget. The financial statements of the City's discretely presented component units that are available as of the date of the Annual Financial Reports are also presented. Historically, the results for General Fund fund balance have not materially changed between the Annual Financial Reports and the CAFRs.

Five-Year Plans of the City

The PICA Act requires the City to annually prepare a financial plan that includes projected revenues and expenditures of the principal operating funds of the City for five Fiscal Years consisting of the current Fiscal Year and the subsequent four Fiscal Years. Each five-year plan, which must be approved by PICA, is required to, among other things, eliminate any projected deficits, balance the Fiscal Year budgets and provide procedures to avoid fiscal emergencies. The City has updated the previous Fiscal Year's five-year plan with the preparation of each new five-year plan. For information on the five-year plan for Fiscal Years 2016-2020, see "– Current Financial Information – Fiscal Year 2016 Adopted Budget and Revised Twenty-Fourth Five-Year Plan" below.

Quarterly Reporting to PICA

The PICA Act requires the City to prepare and submit quarterly reports to PICA so that PICA may determine whether the City is in compliance with the then-current five-year plan. Each quarterly report is required to describe actual or current estimates of revenues, expenditures, and cash flows compared to budgeted revenues, expenditures, and cash flows by covered funds for each month in the previous quarter and for the year-to-date period from the beginning of the then-current Fiscal Year of the City to the last day of the fiscal quarter or month, as the case may be, just ended. Each such report is required to explain any variance existing as of such last day.

Under the PICA Agreement, a "variance" is deemed to have occurred as of the end of a reporting period if (i) a net adverse change in the fund balance of a covered fund (i.e., a principal operating fund) of more than 1% of the revenues budgeted for such fund for that Fiscal Year is reasonably projected to occur, such projection to be calculated from the beginning of the Fiscal Year for the entire Fiscal Year, or (ii) the actual net cash flows of the City for a covered fund are reasonably projected to be less than 95% of the net cash flows of the City for such covered fund for that Fiscal Year originally forecast at the time of adoption of the budget, such projection to be calculated from the beginning of the Fiscal Year for the entire Fiscal Year.

PICA may not take any action with respect to the City for variances if the City: (i) provides a written explanation of the variance that PICA deems reasonable; (ii) proposes remedial action that PICA believes will restore overall compliance with the then-current five-year plan; (iii) provides information in the immediately succeeding quarterly financial report demonstrating to the reasonable satisfaction of PICA that the City is taking remedial action and otherwise complying with the then-current five-year plan; and (iv) submits monthly supplemental reports until it regains compliance with the then-current five-year plan.

PICA last declared a variance in February 2009 and that variance was cured. As of March 31, 2015, PICA has declared no further variances. A failure by the City to explain or remedy a variance would, upon certification by PICA, require the Secretary of the Budget of the Commonwealth to withhold funds due to the City from the Commonwealth or any of its agencies (including, with certain exceptions, all grants, loans, entitlements and payments payable to the City by the Commonwealth, including payment of the portion of the PICA Tax, as further described under "DEBT OF THE CITY – PICA Bonds" below, otherwise payable to the City). The City uses its Quarterly City Manager's Reports to satisfy the quarterly reporting requirement to PICA. Such reports are released within 45 days following the end of the applicable quarter and the most recent versions of such reports are available on the City's Investor Website (as defined herein). The most recent Quarterly City Manager's Report is the report for the period ending March 31, 2015, which was released on May 15, 2015 (the "Third Quarter QCMR"). The next Quarterly City Manager's Report will be for the period ending June 30, 2015, and is expected to be released by August 17, 2015.

Overview of City Response to Economic Downturn

Between October 2008 and December 2011, the City implemented significant actions to balance its operating budget and its five-year plans, including reducing overtime costs, reducing General Fund full- and part-time employee headcount, implementing a temporary five-year sales tax increase (which expired on June 30, 2014) and a 9.9% Real Estate Tax increase in Fiscal Year 2011, pension funding changes, freezing City funded wage and business tax reductions until Fiscal Year 2014, increasing fees, and instituting spending cuts throughout the City government. During this period of time, the City improved its public safety results due to important changes in policing and largely maintained delivery of its services. The City undertook these measures as a result of the impact of the national and global recession.

Beginning in August 2008, the City began to experience adverse budgetary performance for Fiscal Year 2009 as a result of the recession. In November 2008, the City projected a revenue to expenditure gap of at least $1 billion over the five-year period covering Fiscal Years 2009-2013, and the City took a series of measures to close the projected gap for Fiscal Years 2009-2013. However, the economy deteriorated further and revenues declined at a greater pace than had been projected, leaving the City with a Fiscal Year 2009 operating deficit of $286.8 million, resulting in a deficit of $236.8 million after prior year net adjustments of $41.8 million and a cumulative adjusted year-end General Fund balance deficit of $137.2 million. Tax receipts continued to display weakness in Fiscal Year 2010, increasing the projected revenue to expenditure gap for Fiscal Years 2010-2014. In total during the six-year period of Fiscal Years 2009-2014, the projected revenue shortfall was estimated to reach $2.4 billion. As a result of the budgeting measures outlined above, the City had (i) an actual cumulative adjusted year-end General Fund balance deficit of $114.0 million in Fiscal Year 2010, (ii) an actual cumulative adjusted year-end General Fund balance surplus of approximately $92,000 in Fiscal Year 2011, (iii) an actual cumulative adjusted year-end General Fund balance surplus of approximately $146.8 million in Fiscal Year 2012, (iv) an actual cumulative adjusted year-end General Fund balance surplus of $256.9 million in Fiscal Year 2013, and (v) an actual cumulative adjusted year-end General Fund balance surplus of $202.1 million in Fiscal Year 2014. See also Table 1 below.

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Summary of Operations

The following table presents the summary of operations for the General Fund for Fiscal Years 2011-2014 (actual) and Fiscal Year 2015 (budgeted and estimated). For a description of the legally enacted basis on which the City's budgetary process accounts for certain transactions, see "CITY FINANCES AND FINANCIAL PROCEDURES – Budgetary Accounting Practices." "Current estimate," as used in the tables and text below, refers (except as otherwise indicated) to the most recent revised Fiscal Year 2015 estimate, which was published by the City on June 19, 2015.

Table 1
General Fund
Summary of Operations (Legal Basis)
Fiscal Years 2011-2014 (Actual) and 2015 (Budgeted and Estimated)
(Amounts in Millions of USD)[1], [2]

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Adopted Budget 2015	Current Estimate 2015
Revenues						
Real Property Taxes[3]	482.7	500.7	540.5	526.4	547.4	527.9
Wage and Earnings Tax	1,134.3	1,196.3	1,221.5	1,261.6	1,294.7	1,323.1
Net Profits Tax	8.8	15.1	19.2	16.3	20.5	19.8
Business Income and Receipts Tax[4]	376.9	389.4	450.9	461.7	453.2	466.3
Sales Tax[5]	244.6	253.5	257.6	263.1	154.6	143.8
Other Taxes[6]	211.7	215.4	243.7	266.9	277.9	300.9
Total Taxes	2,459.1	2,570.4	2,733.5	2,795.9	2,748.2	2,781.9
Locally Generated Non-Tax Revenue	280.0	256.7	266.2	301.8	970.7[7]	301.3
Revenue from Other Governments						
Net PICA Taxes Remitted to the City[8]	293.8	295.2	314.0	318.7	338.0	337.0
Other Revenue from Other Governments[9], [10]	772.7	420.7	337.5	347.3	300.9	302.3
Total Revenue from Other Governments	1,066.5	715.9	651.5	666.0	638.9	639.3
Receipts from Other City Funds	54.6	48.3	46.8	42.0	67.9	64.2
Total Revenue	3,860.3	3,591.4	3,698.0	3,805.6	4,425.7	3786.7
Obligations/Appropriations						
Personnel Services	1,360.4	1,319.0	1,362.4	1,450.6	1,433.9	1,503.4
Purchase of Services	1,127.8	760.8	757.8	787.6	814.9	833.0
Materials, Supplies and Equipment	78.3	79.9	85.4	88.8	92.6	95.0
Employee Benefits	967.1	1,066.2	1,119.1	1,194.1	1,817.3[7]	1111.7
Indemnities, Contributions and Refunds[11]	111.1	118.0	138.3	208.6	145.2	151.2
City Debt Service[12]	110.4	111.3	118.9	122.5	136.6	133.9
Other	0.0	0.0	0.0	0.0	52.8[13]	0.0
Payments to Other City Funds	30.3	29.5	31.5	34.4	31.2	37.5
Total Obligations/Appropriations	3,785.3	3,484.9	3,613.3	3,886.6	4,524.6	3,865.6
Operating Surplus (Deficit) for the Year	75.0	106.5	84.7	(80.9)	(98.8)	(78.8)
Net Adjustments – Prior Year	39.1	40.2	25.4	26.1	20.4	16.1
Funding for Contingencies	0.0	0.0	0.0	0.0	0.0	0.0
Cumulative Fund Balance Prior Year	(114.0)	0.1	146.8	256.9	146.8	202.1
Cumulative Adjusted Year End Fund Balance (Deficit)	0.1	146.8	256.9	202.1	68.4	139.4

(1) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For Fiscal Year 2015, the Fiscal Year 2015 Adopted Budget and the Revised Twenty-Fourth Five-Year Plan (as defined herein).
(2) Figures may not add up due to rounding.
(3) The amounts for Fiscal Years 2012 and 2013 reflect a respective 3.9% and 3.6% increase in the Real Estate Tax rate. The amounts for Fiscal Year 2014 and thereafter reflect a reduction in the Real Estate Tax rate, but also an increase in the assessed value of all taxable real property resulting from a citywide property reassessment. See "REVENUES OF THE CITY – Real Property Taxes Assessment and Collection."
(4) As of May 1, 2012, the Business Privilege Tax was renamed the Business Income and Receipts Tax.
(5) The amounts for Fiscal Years 2011-2014 reflect a 1% increase in the City Sales Tax effective October 8, 2009, which expired June 30, 2014. Fiscal Year 2015 figures include remaining 1% City Sales Tax, an additional $15,000,000 for debt service, plus any amounts designated for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax".
(6) Includes Amusement Tax, Real Property Transfer Tax, Parking Lot Tax, Smokeless Tobacco Tax and miscellaneous taxes.
(7) The Fiscal Year 2015 Adopted Budget included $700 million from the proposed sale of PGW. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Government Services" and "– Current Financial Information – Fiscal Year 2015 Adopted Budget."
(8) Reflects revenues received by the City from the PICA Tax of 1.50%, the proceeds of which are remitted to PICA for payment of debt service on PICA bonds and PICA expenses. After paying debt service and expenses, net proceeds from the tax are remitted to the City as Revenue from Other Governments. See "DEBT OF THE CITY – PICA Bonds."
(9) Fiscal Year 2011 was the last year that the full amount of revenue for DHS (as defined herein) was deposited into the General Fund. The decrease in revenues from Fiscal Year 2011 to Fiscal Year 2012 is largely due to the transfer of the majority of DHS revenue and obligations to the Grants Revenue Fund.
(10) Includes state gaming revenues.
(11) Includes contributions to the School District. See also Table 21 and the accompanying text herein.
(12) Excludes PICA bonds. See "DEBT OF THE CITY – PICA Bonds."
(13) The Fiscal Year 2015 Adopted Budget included funding for future contracts with District Council 33, IAFF and FOP, which were settled subsequent to the adoption of such budget.

Current Financial Information

Table 2 below shows General Fund balances for Fiscal Year 2014 (actual), Fiscal Year 2015 (adopted budget), Fiscal Year 2015 (current estimate), and Fiscal Year 2016 (adopted budget).

Table 2
General Fund – Fund Balance Summary
(Amounts in Thousands of USD)[1]

	Fiscal Year 2014 Actual[2] (June 30, 2014)	Fiscal Year 2015 Adopted Budget[3] (June 27, 2014)	Fiscal Year 2015 Current Estimate[4] (June 19, 2015)	Fiscal Year 2016 Adopted Budget[5] (June 19, 2015)
REVENUES				
Taxes	$2,795,884	$2,748,205	$2,781,895	$2,912,279
Locally Generated Non - Tax Revenues	301,755	970,712[6]	301,302	275,807
Revenue from Other Governments	666,009	638,912	639,291	651,815
Revenues from Other Funds of City	42,001	67,903	64,249	65,240
Total Revenue	**$3,805,649**	**$4,425,732**[6]	**$3,786,737**	**$3,905,141**
OBLIGATIONS / APPROPRIATIONS				
Personal Services	1,450,615	1,433,919	1,503,412	1,534,426
Personal Services - Employee Benefits	1,194,091	1,817,314[6]	1,111,659	1,172,182
Purchase of Services	787,615	814,898	832,966	832,668
Materials, Supplies and Equipment	88,814	92,612	95,046	97,082
Contributions, Indemnities and Taxes	208,587	145,192	151,167	187,631
Debt Service	122,481	136,578	133,851	141,398
Payments to Other Funds	34,361	31,215	37,455	32,715
Advances & Miscellaneous Payments	0	52,837	0	0
Total Obligations / Appropriations	**$3,886,564**	**$4,524,565**[6]	**$3,865,556**	**$3,998,103**
Operating Surplus (Deficit)	**(80,915)**	**(98,833)**	**(78,819)**	**(92,962)**
OPERATIONS IN RESPECT TO PRIOR FISCAL YEARS				
Net Adjustments - Prior Years	26,148	20,388	16,085	22,885
Operating Surplus/(Deficit) & Prior Year Adj.	(54,767)	(78,445)	(62,734)	(70,077)
Prior Year Fund Balance	256,902	146,813[7]	202,135	139,401
Year End Fund Balance	**$202,135**	**$68,368**	**$139,401**	**$69,324**

(1) Amounts may not total due to rounding.
(2) From the Fiscal Year 2014 CAFR.
(3) From the Fiscal Year 2015 Adopted Budget.
(4) From the Revised Twenty-Fourth Five-Year Plan.
(5) From the Fiscal Year 2016 Adopted Budget.
(6) Includes the payment of $700 million to the Municipal Pension Plan from the proceeds of the sale of PGW, which did not occur. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Government Services" and "– Current Financial Information – Fiscal Year 2015 Adopted Budget."
(7) As of June 27, 2014, the City estimated that Fiscal Year 2014 would end with a General Fund balance of $146.813 million. Upon the release of the Fiscal Year 2014 CAFR, the actual number reported was $202.135 million and such number has been included in the current estimate for Fiscal Year 2015.

Fiscal Year 2015 Adopted Budget. In the Fiscal Year 2015 Adopted Budget, total revenues were estimated to increase due to the inclusion of an estimated $700 million in one-time locally generated non-tax revenues from the proposed sale of PGW. Similarly, total obligations were estimated to increase as a result of an equal one-time expenditure of $700 million to be paid into the Municipal Pension Fund. The sale of PGW did not occur and such revenues and obligations are not included in the current estimate for Fiscal Year 2015. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Government Services" for more information on PGW.

Fiscal Year 2015 Current Estimate. The current estimate for Fiscal Year 2015 is derived from information included in the Revised Twenty-Fourth Five-Year Plan.

Fiscal Year 2016 Adopted Budget and Revised Twenty-Fourth Five-Year Plan. On March 5, 2015, the Mayor submitted his proposed Fiscal Year 2016 budget to City Council (the "Proposed Fiscal Year 2016 Budget"), along with the proposed five-year plan for Fiscal Years 2016-2020 (the "Proposed Twenty-Fourth Five-Year Plan"). On June 18, 2015, City Council approved the Fiscal Year 2016 budget (the "Fiscal Year 2016 Adopted Budget"), which included certain key changes to the Proposed Fiscal Year 2016 Budget, such as the following:

- Labor arbitration awards for Local #159 (Correctional Officers) and the FOP – Sheriff and Register of Wills costing an additional $3.4 million;

- Increased contribution of $35 million to the School District proposed to be offset entirely by proposed Parking and Real Estate Tax revenue; and

- Other increases of General Fund appropriations totaling $4.7 million for various City programs.

On June 19, 2015, the City submitted to PICA its revised five-year plan for Fiscal Years 2016-2020, which reflects changes to the Proposed Twenty-Fourth Five-Year Plan required as a result of the Fiscal Year 2016 Adopted Budget (the "Revised Twenty-Fourth Five-Year Plan").

For Fiscal Years 2016-2020, the Revised Twenty-Fourth Five-Year Plan projects that the City will end such Fiscal Years with General Fund balances (on the legally enacted basis) of $69.32 million (Fiscal Year 2016), $33.99 million (Fiscal Year 2017), $47.19 million (Fiscal Year 2018), $94.42 million (Fiscal Year 2019), and $153.53 million (Fiscal Year 2020). The City continues to face uncertainty regarding the pace of economic growth. The estimated General Fund balances in Fiscal Years 2016-2020, which are low, could lead to financial risk.

On July 9, 2015, the City Controller provided to PICA its analysis of the Revised Twenty-Fourth Five-Year Plan, as required by the PICA Act. The City Controller recommended that PICA reject the Plan for three principal reasons, as excerpted from its analysis below:

- "the Plan . . . assumes overly optimistic revenues from the City's Business Income and Receipts Tax, Sales, Realty Transfer and Parking Tax, especially in the first two years of the Plan. These overly optimistic estimates significantly inflate fund balances and in reality could lead the city to experience deficits from Fiscal Year 2017 in the Plan and forward." For more information on these City taxes, see "REVENUES OF THE CITY."

- "Additionally, as of June 2015, approximately $5.4 billion in market value of property still must be adjudicated by the Board of Revision of Taxes because of appeals by property owners. The success rate of these appeals falls between 50-60 percent, with the average

reduction near 30 percent of the property's value. If this trend continues, the remaining appeals could cost the city nearly $12 million in Real Estate Tax revenue and unfavorably impact fund balances over the life of the Plan." For more information on real property tax assessment and the related appeals process, see "REVENUES OF THE CITY – Real Property Taxes Assessment and Collection."

- "Further, the Plan assumes the collection of $20 million over its life, the result of a Data Warehouse Project. This Project has yet to be fully implemented and there is no historical data on its ability to achieve such collections. As such, related revenues are very speculative in nature and the forecasted fund balances over the five-year life of the Plan may again be artificially elevated." For more information on the data warehouse project, see "REVENUES OF THE CITY – Improved Collection Initiative."

After review of the Plan and the City Controller's analysis, PICA approved the Revised Twenty-Fourth Five-Year Plan on July 16, 2015. The PICA staff report on the Revised Twenty-Fourth Five-Year Plan recommended approval of the Plan to the PICA Board, and noted that "the revenue and expenditure projections, as presented in the Plan, are 'based on reasonable and appropriate assumptions and methods of estimation,' which are 'consistently applied,' as required by the PICA Act."

Labor Agreements. The City now has contracts in place with all of its largest unions and the costs associated with these agreements are included in the Revised Twenty-Fourth Five-Year Plan. Because of this, the set-aside for labor has been removed from the Fiscal Year 2016 Adopted Budget and the Revised Twenty-Fourth Five-Year Plan.

For more information on the City's annual budget process under the City Charter and the five-year financial plans and quarterly reporting required under the PICA Act, see "– Budget Procedure," "– Five-Year Plans of the City," and "– Quarterly Reporting to PICA."

CITY FINANCES AND FINANCIAL PROCEDURES

Except as otherwise noted, the financial statements, tables, statistics, and other information shown below have been prepared by the Office of the Director of Finance and can be reconciled to the financial statements in the Fiscal Year 2014 CAFR and notes therein. The Fiscal Year 2014 CAFR was prepared by the Office of the Director of Finance in conformance with guidelines adopted by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants' audit guide, Audits of State and Local Government Units.

General

Governmental funds account for their activities using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures are generally recorded when a liability is incurred, as in the case of full accrual accounting. Debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due; however, those expenditures may be accrued if they are to be liquidated with available resources.

Imposed non-exchange revenues, such as real estate taxes, are recognized when the enforceable legal claim arises and the resources are available. Derived tax revenues, such as wage, Business Income

and Receipts Tax ("BIRT"), net profits and earnings taxes, are recognized when the underlying exchange transaction has occurred and the resources are available. Grant revenues are recognized when all the applicable eligibility requirements have been met and the resources are available. All other revenue items are considered to be measurable and available only when cash is received by the City.

Revenue that is considered to be program revenue includes: (i) charges to customers or applicants for goods received, services rendered or privileges provided, (ii) operating grants and contributions, and (iii) capital grants and contributions. Internally dedicated resources are reported as general revenues rather than as program specific revenues; therefore, all taxes are considered general revenues.

The City's financial statements reflect the following three funds as major Governmental Funds:

- The General Fund is the City's primary operating fund. It accounts for all financial resources of the general government, except those required to be accounted for in other funds.

- The Health Choices Behavioral Health Fund accounts for resources received from the Commonwealth. These resources are restricted to providing managed behavioral health care to residents of the City.

- The Grants Revenue Fund accounts for the resources received from various federal, Commonwealth, and private grantor agencies. The resources are restricted to accomplishing the various objectives of the grantor agencies.

In Fiscal Year 2012, the City transferred the majority of the Department of Human Services ("DHS") revenues and obligations to the Grants Revenue Fund.

The City also reports on permanent funds, which are used to account for resources legally held in trust for use by the park and library systems of the City. There are legal restrictions on the resources of the permanent funds that require the principal to remain intact, while only the earnings may be used for the programs.

The City reports on the following fiduciary funds:

- The Municipal Pension Fund accumulates resources to provide pension benefit payments to qualified employees of the City and certain other quasi-governmental organizations.

- The Philadelphia Gas Works Retirement Reserve Fund accounts for contributions made by PGW to provide pension benefit payments to its qualified employees under its pension plan. For more information on the PGW Pension Plan (as defined herein), see "PGW PENSION PLAN."

The City reports on the following major proprietary funds:

- The Water Fund accounts for the activities related to the operation of the Water and Wastewater Systems.

- The Aviation Fund accounts for the activities of the City's airports.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's ongoing operations. The principal operating revenues of

the Water Fund are charges for water and sewer service. The principal operating revenues of the Aviation Fund are charges for the use of the City's airports. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Current City Disclosure Practices

It is the City's practice to file its CAFR, which contains the audited combined financial statements of the City, in addition to certain other information, such as the City's bond ratings and information about upcoming debt issuances, with the Municipal Securities Rulemaking Board ("MSRB") as soon as practicable after delivery of such report (but no later than February 25 of each year). The Fiscal Year 2014 CAFR was filed with the MSRB on February 25, 2015, through the MSRB's Electronic Municipal Market Access ("EMMA") system. The Fiscal Year 2014 CAFR is attached hereto as APPENDIX C and is also available on the City's investor information website at http://www.phila.gov/investor (the "City's Investor Website").

A wide variety of information concerning the City is available from publications and websites of the City and others, including the City's Investor Website. Any such information that is inconsistent with the information set forth in this Official Statement should be disregarded. No such information is a part of or incorporated into this Official Statement, except as expressly noted.

Independent Audit and Opinion of the City Controller

The City Controller has examined and expressed opinions on the basic financial statements of the City contained in the Fiscal Year 2014 CAFR. The City Controller has not participated in the preparation of this Official Statement nor in the preparation of the budget estimates and projections and cash flow statements and forecasts set forth in various tables contained in this Official Statement. Consequently, the City Controller expresses no opinion with respect to any of the data contained in this Official Statement other than what is contained in the Fiscal Year 2014 CAFR.

Budgetary Accounting Practices

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

The operating funds of the City, consisting of the General Fund, nine Special Revenue Funds (County Liquid Fuels Tax, Special Gasoline Tax, Health Choices Behavioral Health, Hotel Room Rental Tax, Grants Revenue, Community Development, Car Rental Tax, Acute Care Hospital Assessment and Housing Trust Funds) and two Enterprise Funds (Water and Aviation Funds), are subject to annual operating budgets adopted by City Council. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as: (i) personnel services; (ii) purchase of services; (iii) materials and supplies; (iv) equipment; (v) contributions, indemnities and taxes; (vi) debt service; (vii) payments to other funds; and (viii) advances and other miscellaneous payments. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have City Council approval. Appropriations that are not expended or encumbered at year-end are lapsed.

The City's capital budget is adopted annually by City Council. The capital budget is appropriated by project for each department. Requests to transfer appropriations between projects must be approved by City Council. Any appropriations that are not obligated at year-end are either lapsed or carried forward to the next Fiscal Year.

Schedules prepared on the legally enacted basis differ from the GAAP basis in that both expenditures and encumbrances are applied against the current budget, adjustments affecting activity budgeted in prior years are accounted for through fund balance or as reduction of expenditures and certain interfund transfers and reimbursements are budgeted as revenues and expenditures. The primary difference between the GAAP and legal (budgetary) fund balance is due to the timing of recognizing the BIRT. The legal basis recognizes BIRT revenues in the Fiscal Year they are collected. The GAAP basis requires the City to recognize the BIRT revenues (which are primarily paid in April) for the calendar year in which the BIRT taxes are due, requiring the City to defer a portion of the April payment into the next Fiscal Year. For more information on BIRT, see "REVENUES OF THE CITY – Business Income and Receipts Tax."

REVENUES OF THE CITY

General

Prior to 1939, the City relied heavily on the real estate tax as the mainstay of its revenue system. In 1932, the General Assembly adopted an act (commonly referred to as the Sterling Act) under which the City was permitted to levy any tax that was not specifically pre-empted by the Commonwealth. Acting under the Sterling Act and other legislation, the City has taken various steps over the years to reduce its reliance on real property taxes as a source of income, including: (i) enacting the wage, earnings, and net profits tax in 1939; (ii) introducing a sewer service charge to make the sewage treatment system self-sustaining after 1945; (iii) requiring under the City Charter that the water, sewer, and other utility systems be fully self-sustaining; and (iv) enacting the Mercantile License Tax (a gross receipts tax on business done within the City) in 1952, which was replaced as of the commencement of Fiscal Year 1985 by the Business Privilege Tax (renamed the Business Income and Receipts Tax in May 2012).

Major Revenue Sources

The City derives its revenues primarily from various taxes, non-tax revenues, and receipts from other governments. See Table 3 for General Fund tax revenues for Fiscal Years 2011-2014, as well as the Fiscal Year 2015 Adopted Budget and current estimates for Fiscal Year 2015. The following discussion of the City's revenues does not take into account revenues in the non-debt related funds. The tax rates for Fiscal Years 2011 through 2014 are contained in the Fiscal Year 2014 CAFR.

Table 3 provides a detailed breakdown of the "Total Taxes" line from Table 1 above. Table 3 does not include "Revenues from Other Governments," which consists of "Net PICA Taxes Remitted to the City" and "Other Revenue from Other Governments." "Net PICA Taxes Remitted to the City" is set forth in Table 1 and a detailed breakdown of such revenues is shown in Table 42. "Other Revenue from Other Governments" is set forth in Table 1 and a detailed breakdown of such revenues is shown in Table 12.

Table 3
General Fund Tax Revenues
Fiscal Years 2011-2015
(Amounts in Millions of USD) [(1), (2), (3)]

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Adopted Budget 2015	Current Estimate 2015
Real Property Taxes[(4)]	$454.7	$464.4	$504.2	$483.9	$503.2	$483.7
Current	28.0	36.3	36.3	42.5	44.2	44.2
Prior	$482.7	$500.7	$540.5[(4)]	$526.4	$547.4	$527.9
Total						
Wage and Earnings Tax[(5)]						
Current	$1,127.4	$1,192.2	$1,219.5	$1,255.9	$1,290.4	$1,314.6
Prior	6.9	4.1	2.0	5.7	4.3	8.5
Total	$1,134.3	$1,196.3	$1,221.5	$1,261.6	$1,294.7	$1,323.1
Business Taxes						
Business Income and Receipts Tax[(6)] Current & Prior	$376.9	$389.4	$450.9	$461.7	$453.2	$466.3
Net Profits Tax						
Current	$5.7	$12.2	$17.2	$13.2	$18.0	$14.8
Prior	3.1	2.9	1.9	3.1	2.5	5.0
Subtotal Net Profits Tax	8.8	15.1	19.2	16.3	20.5	19.8
Total Business Taxes	$385.7	$404.5	$470.1	$478.0	$473.7	$486.1
Other Taxes						
Sales and Use Tax[(7)]	$244.6	$253.5	$257.6	$263.1	$154.6	$143.8
Amusement Tax	20.8	21.9	19.1	20.0	20.9	18.9
Real Property Transfer Tax	116.6	119.4	148.0	168.1	176.6	201.7
Parking Taxes	71.6	70.9	73.3	75.1	76.9	76.9
Other Taxes	2.7	3.2	3.4	3.7	3.5	3.5
Subtotal Other Taxes	$456.3	$468.9	$501.3	$530.0	$432.5	$444.7
TOTAL TAXES	$2,459.1	$2,570.4	$2,733.5	$2,795.9	$2,748.2	$2,781.9

(1) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For Fiscal Year 2015, the Fiscal Year 2015 Adopted Budget and the Revised Twenty-Fourth Five-Year Plan.
(2) See Table 7 in the Fiscal Year 2014 CAFR for tax rates.
(3) Figures may not add up due to rounding.
(4) The amounts for Fiscal Years 2012 and 2013 reflect a respective 3.9% and 3.6% increase in the Real Estate Tax rate. The amounts for Fiscal Year 2014 and thereafter reflect a reduction in the Real Estate Tax rate, but also an increase in the assessed value of all taxable real property resulting from a citywide property reassessment. See "– Real Property Taxes Assessment and Collection."
(5) Does not include the PICA Tax of 1.50%, the proceeds of which are remitted to PICA for payment of debt service on PICA Bonds and PICA expenses. After paying debt service and expenses, net proceeds from the tax are remitted to the City as Revenue from Other Governments. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.
(6) As of May 1, 2012, the Business Privilege Tax was renamed the Business Income and Receipts Tax.
(7) The amounts for Fiscal Years 2011-2014 reflect a 1% increase in the City Sales Tax effective October 8, 2009, which expired June 30, 2014. Fiscal Year 2015 figures include remaining 1% City Sales Tax, an additional $15,000,000 for debt service, plus any amounts designated for the Municipal Pension Fund. See "– Sales and Use Tax."

Wage, Earnings, and Net Profits Taxes

The largest tax revenue source (comprising 45.7% of all tax revenues in Fiscal Year 2014) is the wage, earnings and net profits tax. The wage and earnings tax is collected from all employees working within City limits, and all City residents regardless of work location. The net profits tax is collected on the net profits from the operation of a trade, business, profession, enterprise or other activity conducted by individuals, partnerships, associations or estates and trusts within the City limits. The following table sets forth the resident and non-resident wage, earnings and net profits tax rates for Fiscal Years 2011-2015, the annual wage, earnings and net profits tax receipts in Fiscal Years 2011-2014, and the current estimate of such receipts for Fiscal Year 2015.

Table 4
Summary of Wage, Earnings and Net Profits Tax Rates and Receipts
Fiscal Years 2011-2015[1]

Fiscal Year	Resident Wage, Earnings and Net Profits Tax Rates[2]	Non-Resident Wage, Earnings and Net Profits Tax Rates	Annual Wage, Earnings and Net Profits Tax Receipts (including PICA Tax) (Amounts in Millions of USD)[3]
2011	3.9280%	3.4985%	$1,501.8 (Actual)
2012	3.9280%	3.4985%	$1,568.9 (Actual)
2013	3.9280%	3.4985%	$1,617.2 (Actual)
2014	3.9240%	3.4950%	$1,662.3 (Actual)
2015	3.9200%	3.4915%	$1,745.6 (Current Estimate)

(1) See Table 7 in the Fiscal Year 2014 CAFR for tax rates.
(2) Includes PICA Tax. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.
(3) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For Fiscal Year 2015, the Revised Twenty-Fourth Five-Year Plan.

Commonwealth funding from gaming revenues is mandated by statute to be used to reduce the resident and nonresident wage tax rate. Gaming revenues have averaged approximately $86.27 million in Fiscal Years 2011-2014. The Fiscal Year 2015 Adopted Budget and the current estimate for Fiscal Year 2015 is $86.28 million. The wage tax rates in such Fiscal Years reflect a rate reduction due to these revenues.

See "– Proposed Tax Rate Changes" for information regarding proposed wage and earnings tax rate reductions commencing in Fiscal Year 2016 under the Revised Twenty-Fourth Five-Year Plan and commencing in Fiscal Year 2017 under the Governor's proposed 2015-2016 budget.

In a recent decision by the Supreme Court of the United States, a state's failure to provide certain credits against its personal income tax was held to have violated the dormant Commerce Clause of the United States Constitution. Such personal income tax was applied to income earned outside of the state of residency, and residents were not given a credit for income taxes paid to the state where such income was earned, resulting, in the circumstances presented, in taxing income earned interstate at a rate higher than income earned intrastate. The City is considering what impact this decision may have on its wage, earnings, and net profits tax revenues, but at this point in time no determinations have been made. The City does not provide a credit to resident taxpayers against their respective wage, earnings, and net profits tax liabilities for similar taxes paid to another jurisdiction.

Business Income and Receipts Tax

In 1984, the Commonwealth passed legislation known as The First Class City Business Tax Reform Act of 1984, authorizing City Council to impose a business tax measured by gross receipts, net income or the combination of the two. The same year, the City Council by ordinance repealed the Mercantile License Tax and the General Business Tax and imposed the Business Privilege Tax. As of May 1, 2012, the Business Privilege Tax was renamed the Business Income and Receipts Tax (the "BIRT"). Rental activities are usually considered to be business activities. Every estate or trust (whether the fiduciary is an individual or a corporation) must file a BIRT return if the estate or trust is engaged in any business or activity for profit within the City.

The BIRT allows for particular allocations and tax computations for regulated industries, public utilities, manufacturers, wholesalers and retailers. There are also credit programs where meeting the requirement of the program allows for a credit against the BIRT. All persons subject to both the BIRT and the net profits tax are entitled to apply a credit of 60% of the net income portion of their BIRT liability against what is due on the net profits tax to the maximum of the net profits tax liability for that tax year.

In November 2011, legislation was enacted to halt a previously enacted program of reducing the gross receipts portion of the BIRT and to commence reductions in the net income portion of the BIRT to take effect in tax year 2014 with changes phasing in through tax year 2023. The following table reflects such changes and provides a summary of BIRT rates for tax years 2011-2023. Future scheduled reductions in the net income portion of the BIRT remain subject to amendment by action of City Council and the Mayor.

Table 5
Summary of Business Income and Receipts Tax Rates

Tax Year	Gross Receipts	Net Income
2011	1.415 mills	6.45%
2012	1.415 mills	6.45%
2013	1.415 mills	6.45%
2014	1.415 mills	6.43%
2015	1.415 mills	6.41%
2016	1.415 mills	6.39%
2017	1.415 mills	6.35%
2018	1.415 mills	6.30%
2019	1.415 mills	6.25%
2020	1.415 mills	6.20%
2021	1.415 mills	6.15%
2022	1.415 mills	6.10%
2023	1.415 mills	6.00%

In addition, the 2011 legislation incorporated several changes intended to help small and medium sized businesses and lower costs associated with starting a new business in order to stimulate new business formation and increase employment in the City, including the following: (i) the Commercial Activity License fee for all businesses was eliminated in 2014; (ii) business taxes for the first two years of operations for all new businesses with at least three employees in their first year and six employees in their second year were eliminated beginning in 2012; and (iii) across the board exclusions on the gross receipts portion of the BIRT were provided for all businesses phased in over a three-year period beginning in 2014 and eventually excluding the first $100,000 of gross receipts, along with proportional reductions in the net income portion of the BIRT. The legislation also provides for implementation of

single sales factor apportionment in 2015, which enables businesses to pay BIRT based solely on sales in the City, rather than on property or payroll.

The net impact of the 2011 legislative changes has been an estimated decrease in revenues that could have been collected from the BIRT in the amount of $3.2 million in Fiscal Year 2014. In Fiscal Year 2015, such estimated decrease is projected to be $25.2 million, with the amounts of such estimated decreases projected to grow annually through Fiscal Year 2020, for which a $63.4 million estimated decrease is projected. For Fiscal Years 2015-2020, the estimated cumulative decrease in revenues that could have been collected from the BIRT without the above legislative changes is projected to be $308.1 million.

Real Property Taxes Assessment and Collection

A tax is levied on the assessed value of all taxable residential and commercial real property located within the City's boundaries (the "Real Estate Tax") as assessed by the Office of Property Assessment ("OPA") and collected by the Department of Revenue ("Revenue"). Real Estate Taxes are allocated to the City and the School District with the millage split between the two taxes changing over the years.

Beginning in 2010, the City significantly changed the system used for assessing Real Estate Tax in Philadelphia. On May 18, 2010, Philadelphia voters approved an amendment to the City Charter that split the assessment and appeals functions, moving assessment functions into City government into a new agency, OPA, and creating an independent board of appeals, replacing the Board of Revision of Taxes ("BRT") which previously combined both functions. OPA formally took over responsibility for assessments in October 2010. However, the Pennsylvania Supreme Court ruled on September 20, 2010, that without an amendment to state law, the City did not have the authority to replace the BRT in its capacity as an existing appeals board. Therefore, the BRT remains in place as the property assessment appeals board; but the separation of the appeals function from the assessment function, which removed an inherent conflict and was a key goal of the legislation, remains in place. The BRT is an independent, seven-member board appointed by the Board of Judges of the Philadelphia Common Pleas Court.

For tax year 2014, under the Actual Value Initiative ("AVI"), all 579,000 properties in Philadelphia were reassessed at their actual market value by OPA, replacing outdated values and inequities within the system. As the new total assessed value of all properties more accurately reflected the market in Philadelphia, the total assessment grew substantially. As a result, the Mayor and City Council significantly reduced the tax rate to ensure that the reassessment resulted in the collection of approximately the same amount of current year revenue as the prior year (the rates are shown in Table 6 below). Moreover, in order to make the tax bills more understandable, AVI removed the complicated fractional system. Prior to AVI, tax bills were calculated by multiplying the certified market value by an established predetermined ratio ("EPR") multiplied by the tax rate. The last applicable EPR was 32%.

The changes in the system had implications for most property owners in the City. Under the old assessment system, some properties were valued closer to their actual value than other properties. Properties that had been valued closer to their actual value saw relatively smaller increases in assessments and when those assessment changes were coupled with the much lower Real Estate Tax rate, they produced tax decreases. On the other hand, properties that were relatively undervalued saw tax increases, a small number of which were substantial.

In order to mitigate the hardship that could be created by those large increases, the ordinance imposing the new Real Estate Tax rates included a homestead exemption of $30,000 for all primary residential owner-occupants. To date, approximately 76% of all eligible households have received the

homestead exemption. In addition to the homestead exemption, the City has also instituted several other property tax relief programs for taxpayers.

The Real Estate Tax rates for tax years 2011-2015 are set forth in Table 6 below:

Table 6
Real Estate Tax Rates and Allocations

Tax Year	City	School District	Total
2011	4.123%	4.959%	9.082%
2012	4.123%	5.309%	9.432%
2013	4.462%	5.309%	9.771%
2014[(1)]	0.6018%	0.7382%	1.340%
2015[(1)]	0.6018%	0.7382%	1.340%

[(1)] The reduction of the Real Estate Tax rates for tax years 2014 and 2015 reflect the City's Actual Value Initiative.

Fiscal Year 2015 Real Estate Tax revenue for the City is projected in the Revised Twenty-Fourth Five Year Plan to be $483.7 million (excluding delinquent collections), slightly lower than the Fiscal Year 2014 actual amount of $483.9 million. See Table 3 above. Real Estate Taxes are due on March 31 of each year.

Table 7 below shows the differences in the assessed values of properties used for tax year 2013 Real Estate Taxes (prior to AVI) and the assessed values used for tax year 2014, 2015, and 2016 Real Estate Taxes following the reassessment and implementation of AVI. Prior to AVI, the OPA certified the market values in November in the preceding tax year (that is, for tax year 2013, the OPA certified the market values in November 2012), but following AVI, the OPA certifies the market values by March 31 of the prior year (that is, for tax year 2016, the OPA certified the market values on March 31, 2015). Taxpayers base their appeals on the certified market values, and therefore, the assessed values are adjusted as the appeals are finalized. For budgetary purposes, the OPA provides an updated table to the Office of the Director of Finance in December, from which tax rates are determined.

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Table 7
Certified Property Values for Tax Years 2013, 2014, 2015, and 2016
(with Revised Market Values for Tax Years 2014 and 2015)

Tax Year 2013*

Category	Tax Status	Assessed Value	Taxable Assessed Value	Exempt Assessed Value	Number of Parcels
Residential	Fully Taxable	$21,257,133,434	$6,802,282,698	$0	448,609
Residential	Abatement	3,038,267,900	172,618,172	799,627,556	15,815
Residential	Exemption	176,246,000	978,711	55,420,009	6,257
Total		**$24,471,647,334**	**$6,975,879,581**	**$855,047,565**	**470,681**
Hotels and Apartments	Fully Taxable	$4,694,682,190	$1,502,298,301	$0	25,974
Hotels and Apartments	Abatement	826,716,800	87,482,601	177,066,775	539
Hotels and Apartments	Exemption	795,158,700	9,424,011	245,026,773	1,121
Total		**$6,316,557,690**	**$1,599,204,913**	**$422,093,548**	**27,634**
Store with Dwelling	Fully Taxable	$933,069,234	$298,582,155	$0	14,736
Store with Dwelling	Abatement	55,627,300	7,937,076	9,863,660	191
Store with Dwelling	Exemption	24,407,800	1,465,872	6,344,624	217
Total		**$1,013,104,334**	**$307,985,103**	**$16,208,284**	**15,144**
Commercial	Fully Taxable	$7,871,193,801	$2,518,782,016	$0	10,649
Commercial	Abatement	1,150,309,400	133,140,564	234,958,444	437
Commercial	Exemption	12,398,611,000	61,299,919	3,906,255,601	4,298
Total		**$21,420,114,201**	**$2,713,222,499**	**$4,141,214,045**	**15,384**
Industrial	Fully Taxable	$1,714,727,400	$548,712,768	$0	4,376
Industrial	Abatement	212,537,100	23,627,281	44,384,591	108
Industrial	Exemption	439,991,100	6,349,937	134,447,215	221
Total		**$2,367,255,600**	**$578,689,986**	**$178,831,806**	**4,705**
Vacant Land	Fully Taxable	$745,426,660	$238,536,531	$0	33,992
Vacant Land	Abatement	510,000	0	163,200	1
Vacant Land	Exemption	480,948,600	2,729,783	151,173,769	12,115
Total		**$1,226,885,260**	**$241,266,314**	**$151,336,969**	**46,108**
Grand Total		**$56,815,564,419**	**$12,416,248,396**	**$5,764,732,217**	**579,656**

*Certified Market Value as of 11/30/2012.

Tax Year 2014*

Category	Tax Status	Assessed Value	Taxable Assessed Value	Exempt Assessed Value	Number of Parcels
Residential	Fully Taxable	$61,109,079,400	$61,109,079,400	$0	449,977
Residential	Abatement	5,321,882,000	1,006,287,885	4,315,594,115	15,135
Residential	Exemption	600,339,500	9,097,095	591,242,405	6,085
Total		**$67,031,300,900**	**$62,124,464,380**	**$4,906,836,520**	**471,197**
Hotels and Apartments	Fully Taxable	$11,874,704,000	$11,874,704,000	$0	26,015
Hotels and Apartments	Abatement	2,016,286,000	630,265,222	1,386,020,778	531
Hotels and Apartments	Exemption	2,131,041,200	150,488,411	1,980,552,789	1,111
Total		**$16,022,031,200**	**$12,655,457,633**	**$3,366,573,567**	**27,657**
Store with Dwelling	Fully Taxable	$3,292,805,900	$3,292,805,900	$0	14,751
Store with Dwelling	Abatement	111,412,300	49,261,276	62,151,024	190
Store with Dwelling	Exemption	43,773,500	4,063,521	39,709,979	209
Total		**$3,447,991,700**	**$3,346,130,697**	**$101,861,003**	**15,150**
Commercial	Fully Taxable	$15,924,459,700	$15,924,459,700	$0	10,347
Commercial	Abatement	1,645,409,300	749,680,116	895,729,184	413
Commercial	Exemption	26,024,024,400	586,654,681	25,437,369,719	4,281
Total		**$43,593,893,400**	**$17,260,794,497**	**$26,333,098,903**	**15,041**
Industrial	Fully Taxable	$2,751,232,900	$2,751,232,900	$0	4,268
Industrial	Abatement	212,399,700	72,547,530	139,852,170	88
Industrial	Exemption	572,167,700	23,389,866	548,777,834	188
Total		**$3,535,800,300**	**$2,847,170,296**	**$688,630,004**	**4,544**
Vacant Land	Fully Taxable	$1,681,239,900	$1,681,239,900	$0	34,050
Vacant Land	Abatement	3,447,200	62,763	3,384,437	5
Vacant Land	Exemption	2,088,476,400	26,694,608	2,061,781,792	12,054
Total		**$3,773,163,500**	**$1,707,997,271**	**$2,065,166,229**	**46,109**
Grand Total		***$137,404,181,000**	**$99,942,014,774**	**$37,462,166,226**	**579,698**
		$134,445,737,572	**$94,919,215,922**	**$39,526,366,390**	**579,698**

* Certified Market Value as of 3/31/2013.
** Revised Market Value as of 7/17/2015.

Tax Year 2015*

Category	Tax Status	Assessed Value	Taxable Assessed Value	Exempt Assessed Value	Number of Parcels
Residential	Fully Taxable	$60,857,901,488	$60,857,901,488	$0	450,613
Residential	Abatement	$5,491,428,100	$1,082,840,451	$4,408,587,649	15,575
Residential	Exemption	$606,677,900	$9,683,298	$596,994,602	6,122
Total		**$66,956,007,488**	**$61,950,425,237**	**$5,005,582,251**	**472,310**
Hotels and Apartments	Fully Taxable	$12,137,156,500	$12,137,156,500	$0	25,574
Hotels and Apartments	Abatement	$1,962,493,600	$595,063,304	$1,367,430,296	576
Hotels and Apartments	Exemption	$2,112,930,200	$149,657,172	$1,963,273,028	1,102
Total		**$16,212,580,300**	**$12,881,876,976**	**$3,330,703,324**	**27,252**
Store with Dwelling	Fully Taxable	$3,167,238,700	$3,167,238,700	$0	14,544
Store with Dwelling	Abatement	$97,020,800	$44,216,602	$52,804,198	181
Store with Dwelling	Exemption	$40,883,100	$4,198,242	$36,684,858	199
Total		**$3,305,142,600**	**$3,215,653,544**	**$89,489,056**	**14,924**
Commercial	Fully Taxable	$15,364,630,300	$15,364,630,300	$0	10,150
Commercial	Abatement	$1,619,298,800	$729,888,364	$889,410,436	403
Commercial	Exemption	$25,810,707,200	$566,613,770	$25,244,093,430	4,299
Total		**$42,794,636,300**	**$16,661,132,434**	**$26,133,503,866**	**14,852**
Industrial	Fully Taxable	$2,737,960,700	$2,737,960,700	$0	4,189
Industrial	Abatement	$192,190,700	$70,341,441	$121,849,259	81
Industrial	Exemption	$554,278,000	$23,907,337	$530,370,663	185
Total		**$3,484,429,400**	**$2,832,209,478**	**$652,219,922**	**4,455**
Vacant Land	Fully Taxable	$1,531,824,135	$1,531,824,135	$0	33,983
Vacant Land	Abatement	$22,124,500	$2,134,462	$19,990,038	23
Vacant Land	Exemption	$2,034,115,700	$42,407,110	$1,991,708,590	12,029
Total		**$3,588,064,335**	**$1,576,365,707**	**$2,011,698,628**	**46,035**
Grand Total		***$136,340,860,423**	**$99,117,663,376**	**$37,223,197,047**	**579,828**
		****$135,204,347,059**	**$95,887,423,992**	**$39,316,923,067**	**579,828**

* Certified Market Value as of 3/31/2014.
** Revised Market Value as of 7/17/2015.

Tax Year 2016*

Category	Tax Status	Assessed Value	Taxable Assessed Value	Exempt Assessed Value	Number of Parcels
Residential	Fully Taxable	$26,264,061,193	$26,264,061,193	$0	227,060
Residential	Abatement	$8,297,419,600	$2,773,190,544	$5,524,229,056	31,295
Residential	Exemption	$32,665,233,808	$25,863,433,627	$6,801,800,181	214,564
Total		**$66,877,995,701**	**$54,900,685,364**	**$12,326,029,237**	**472,919**
Hotels and Apartments	Fully Taxable	$11,097,523,000	$11,097,523,000	$0	21,864
Hotels and Apartments	Abatement	$2,519,189,900	$803,639,111	$1,715,550,789	1,326
Hotels and Apartments	Exemption	$3,118,605,200	$913,756,282	$2,204,848,918	4,017
Total		**$16,735,318,100**	**$12,814,918,393**	**$3,920,399,707**	**27,207**
Store with Dwelling	Fully Taxable	$2,710,425,800	$2,710,425,800	$0	12,722
Store with Dwelling	Abatement	$248,270,600	$135,312,637	$112,957,963	760
Store with Dwelling	Exemption	$273,755,100	$215,685,182	$58,069,918	1,281
Total		**$3,232,451,500**	**$3,061,423,619**	**$171,027,881**	**14,763**
Commercial	Fully Taxable	$15,061,397,900	$15,061,397,900	$0	10,020
Commercial	Abatement	$1,710,678,900	$841,467,004	$869,211,896	400
Commercial	Exemption	$25,401,030,100	$529,930,868	$24,871,099,232	4,394
Total		**$42,173,106,900**	**$16,432,795,772**	**$25,740,311,128**	**14,814**
Industrial	Fully Taxable	$2,781,476,200	$2,781,476,200	$0	4,129
Industrial	Abatement	$127,442,100	$50,481,990	$76,960,110	60
Industrial	Exemption	$553,087,800	$27,130,885	$525,956,915	238
Total		**$3,462,006,100**	**$2,859,089,075**	**$602,917,025**	**4,427**
Vacant Land	Fully Taxable	$1,447,838,635	$1,447,838,635	$0	33,302
Vacant Land	Abatement	$32,505,900	$2,054,545	$30,451,355	47
Vacant Land	Exemption	$1,985,521,500	$17,718,350	$1,967,803,150	12,057
Total		**$3,465,866,035**	**$1,467,611,530**	**$1,998,254,505**	**45,406**
Grand Total		**$136,295,463,236**	**$91,536,523,753**	****$44,758,939,483**	**579,536**

* Certified Market Value as of 3/31/2015.

** Note that the unusually large increase in exempt assessment for tax year 2016 is due to a shift of $6,425,966,073 in assessed value from taxable to exempt assessment to reflect the homestead exemption totals. This exemption had not been reflected in prior (tax years 2014 and 2015) assessment totals, but was reflected directly in the tax billing.

As part of the transition to the new assessment system, OPA set up a new process called a first level review ("FLR"), where a taxpayer could request an administrative review of its assessment notice prior to launching a formal appeal with the BRT. The BRT has the authority, following a formal appeal, to either increase or decrease the property valuations contained in the return of the assessors in order that such valuations conform with law. After all changes in property assessments, and after all assessment appeals, assessments are certified and the results provided to the Department of Revenue.

For tax year 2014, OPA received 51,301 requests for FLRs. As noted above, the FLR process allows a taxpayer to request an administrative review of its assessment notice prior to launching a formal appeal with the BRT. Of the FLR requests in tax year 2014, many were resolved and did not result in formal appeals. The BRT received 25,014 formal appeals for tax year 2014. As of July 17, 2015, all but 150 FLRs and 1,964 formal BRT appeals have been decided. As a result of decisions rendered for those FLR and BRT appeals, the total taxable assessment has been revised from $99,942,014,774 (at certification on March 31, 2013) to $94,919,215,922 as of July 17, 2015. This is a net taxable assessment change of -$5,022,798,852. See Table 7.

For tax year 2015, OPA mailed only 3,700 Change of Assessment notices. OPA received 239 FLRs and BRT received 4,903 formal appeals. As of July 17, 2015, all but 54 FLRs and 2,125 formal BRT appeals have been decided. As a result of decisions rendered for those FLR and BRT appeals, the total taxable assessment has been revised from $99,117,663,376 (at certification on March 31, 2014) to $95,887,423,991. This is a net taxable assessment change of -$3,230,239,385. See Table 7.

The vast majority of the appeals for tax year 2014 have been disposed of by the BRT, and relatively few were filed for tax year 2015. The remaining appeals for tax year 2014 include mostly commercial appeals, and are expected to result in approximately the same rate of losses to the taxable assessment base as those that have been decided. All tax year 2014 and 2015 appeals are expected to have been decided by December of 2015, after which time the BRT will begin hearings on tax year 2016 appeals.

On October 24, 2012, the Governor approved Act 160 ("Act 160"), which permits downward adjustments to School District property tax and use and occupancy tax rates, solely to offset the higher assessed values anticipated under AVI, and only to the extent the yield from such lower rates is no lower than the highest tax yield in the previous three years. Act 160 also precludes the School District from using its direct authority to levy real estate taxes, separately granted by the General Assembly of the Commonwealth, but only to the extent the City authorizes School District real estate taxes yielding an amount not lower than total real estate taxes yielded in the year prior to the year of the revision of assessments, adjusted to account for increases in assessed value since the first year of revision.

In 2014, City Council passed legislation intended to ease the transition to AVI, which provided, for tax year 2014 only, that residential and commercial property owners who appeal their new property assessments need only pay the prior year's amount of Real Estate Tax and (if applicable) use and occupancy tax, pending the assessment appeal. Interest and penalties would not accrue on the additional 2014 tax liability during the appeal, whether or not the appeal is ultimately successful. The City estimates that it will collect approximately $12.0 million of additional one-time tax revenues in Fiscal Year 2016 from taxpayers who are paying the tax year 2014 amounts and the tax year 2015 amounts in Fiscal Year 2016.

With AVI, the OPA planned to conduct full reassessments annually; however, staff resources have been redeployed to focus on the large number of appeals. For tax year 2016, OPA has proposed reassessments on properties in areas for which its uniformity measurements show that there are larger variations in assessed values than is standard under best assessment practice. In total, OPA has re-

assessed approximately 126,000 properties for tax year 2016. OPA anticipates doing additional reassessments annually beginning in tax year 2017.

Historically, the City did not commence collection of Real Estate Taxes while they were "overdue," between the March 31 due date and January 1 when they became "delinquent." In late 2010, the Department of Revenue sent a letter to taxpayers who had overdue taxes, but had paid all prior years, to explain that if they did not pay by the end of the year, the addition on their Real Estate Tax would be capitalized (i.e. become part of the principal) and their tax liability would become a lien on the property. This effort has been repeated each year since and has resulted in significant collections and reduction of expenses that would otherwise be incurred for further collection efforts. Also in 2012 and 2013, the Department of Revenue and the Law Department hired two outside collection firms to collect overdue Real Estate Taxes with an Outbound Calling Campaign. This project has been extremely successful, contributing to a decrease in first time Real Estate Tax delinquencies and generating a total of approximately $17,000,000 in collections of overdue Real Estate Taxes in 2013 alone. The City is continuing this practice and pursuing a number of other initiatives to improve collections, including sequestration of delinquent properties occupied by commercial tenants.

See Table 8 below for data with respect to Real Estate Taxes levied and collected by the City from 2010 to 2014. See Table 9 for the assessed property values of the City's principal taxable assessed parcels in 2016. See Table 10 for the 2016 market and assessed values of the ten highest valued taxable real properties in the City as well as the amounts and duration of Real Estate Tax abatements with respect to such properties.

Table 8
City of Philadelphia
Real Property Taxes Levied and Collected
For the Calendar Years 2010-2014
(Amounts in Millions of USD)[(1), (2)]

Calendar Year	Taxes Levied Based on Original Assessment[(3)]	Taxes Levied Based on Adjusted Assessment[(4)]	Collections in the Calendar Year of Levy	Percentage Collected in the Calendar Year of Levy	Collections in Subsequent Years[(5)]	Total Collections to Date: All Years	Percentage Collected to Date: All Years[(6)]
2010	$405.8	N/A	$353.7	87.2%	$41.8	$395.5	97.5%
2011	$509.1	N/A	$440.9	86.6%	$44.8	$485.7	95.4%
2012	$508.6	$492.2	$459.2	93.3%	$13.9	$473.1	96.1%
2013	$554.0	$538.0	$505.6	94.0%	$8.3	$513.9	95.5%
2014	$553.2	$535.8	$470.1[(6)]	87.7%[(6), (7)]	N/A	$470.1	87.7%

(1) Source: Fiscal Year 2014 CAFR.
(2) Real Estate Taxes are levied by the City and the School District. While this table reflects City General Fund Real Estate Tax revenues exclusively, the School District Real Estate Tax collection rates are the same.
(3) Taxes are levied on a calendar year basis. They are due on March 31.
(4) Adjustments include assessment appeals, a 1% discount for payment in full by February 28, the senior citizen tax discount, and the tax increment financing return of tax paid.
(5) Includes payments from capitalization charges. This capitalization occurs one time, after the end of the first year of the levy, on any unpaid balances.
(6) Reflects collections through June 30, 2014.
(7) Preliminary analysis shows the 2014 calendar year percentage collected as of December 31, 2014 is 91.6% with $482.8 million in payments on an adjusted levy of $527.1 million. Outstanding appeals generated by the AVI initiative have had a significant impact on this collection rate. Adjusting for the appeals the collection rate approaches 93%.

Table 9
Principal Taxable Assessed Parcels – 2016
(Amounts in Millions of USD)

Taxpayer	2016 Assessment[1]	2016 Percentage of Total Assessments
HUB Properties Trust	$265.7	0.27%
Nine Penn Center Associates	232.6	0.24
Phila Liberty Place ELP	207.7	0.21
Philadelphia Market Street	203.7	0.21
Tenet Health Systems Hahnemann	192.1	0.20
Commerce Square Partners	178.2	0.18
Maguire / Thomas	170.1	0.17
NNN 1818 Market Street 37	170.0	0.17
Franklin Mills Associates	163.2	0.17
Brandywine Cira	160.7	0.16
Total	$1,966.0	1.98%
Total Taxable Assessments[2]	$91,536.5	

Source: City of Philadelphia, Office of Property Assessment.

(1) Assessment Values rounded to the nearest $100,000 and only include the largest assessed property for each taxpayer, additional properties owned by the same taxpayer are not included.

(2) Total 2016 Taxable Assessment as of March 31, 2015.

Table 10
Ten Largest Certified Market and Assessment Values
of Tax-Abated Properties
Certified Values for 2016
(Amounts in Millions of USD)

Location	2016 Certified Market Value	Total Assessment	Total Taxable Assessment	Total Exempt Assessment	Exempt Thru Tax Year
1701 John F Kennedy Blvd.	$212.5	$212.5	$9.1	$203.4	2017
1001 N Delaware Ave.	$150.9	$150.9	$39.3	$111.6	2020
1500-30 Spring Garden St.	$138.7	$138.7	$78.4	$60.3	2020
2116 Chestnut St.	$72.5	$72.5	$1.4	$71.1	2023
2323 Race St.	$72.4	$72.4	$2.8	$69.5	2016
2026 – 58 Market St.	$65.0	$65.0	$8.4	$56.6	2023
1601 N 05th St	$64.2	$64.2	$0.5	$63.7	2017
233-43 S Broad St	$62.4	$62.4	$56.1	$6.3	2023
3401L Chestnut St.	$61.2	$64.6	$0	$61.2	2017
907-37 Market St.	$61.0	$61.0	$41.4	$19.6	2016

Source: City of Philadelphia, Office of Property Assessment.

See "– Proposed Tax Rate Changes" for information regarding a proposed increase in the School District portion of the Real Estate Tax commencing in Fiscal Year 2016 under the Revised Twenty-Fourth Five-Year Plan and proposed reductions in both the City and School District portion of the Real Estate Tax commencing in Fiscal Year 2017 under the Governor's proposed 2015-2016 budget.

Sales and Use Tax

Pursuant to the authorization granted by the Commonwealth under the PICA Act, the City adopted a 1% sales and use tax (the "City Sales Tax") for City general revenue purposes effective beginning in Fiscal Year 1992. It is imposed in addition to, and on the same basis as, the Commonwealth's sales and use tax. Vendors are required to pay City Sales Taxes to the Commonwealth Department of Revenue together with the Commonwealth sales and use tax. The State Treasurer deposits the collections of City Sales Taxes in a special fund and disburses the collections, including any investment income earned thereon, less administrative fees of the Commonwealth Department of Revenue, to the City on a monthly basis.

The City's budgets for Fiscal Years 2010-2014 provided for an increase in the City Sales Tax rate to 2%, as authorized by the Commonwealth effective October 8, 2009, through June 30, 2014. In July 2013, the Commonwealth authorized the implementation of a new, permanent 1% increase in the City Sales Tax rate effective July 1, 2014, which was adopted by the City on June 12, 2014 and became effective on July 1, 2014. Under the reauthorized City Sales Tax, the first $120 million collected from such additional 1% will be distributed to the School District. For Fiscal Years 2015-2018, the General Assembly has also authorized the City to use the next $15 million of City Sales Tax revenues from such additional 1% collected in such Fiscal Years for the payment of debt service on obligations issued by the City for the benefit of the School District. Following any such debt service payments, that remaining portion of the City Sales Tax revenues from such additional 1% distributed to the City is required to be used exclusively in accordance with Act 205 (as defined herein) and deposited to the Municipal Pension Fund.

In October 2014, the City, through PAID, issued its $57,515,000 City Service Agreement Revenue Bonds, Series 2014B ("City Service Agreement Bonds") to fund a portion of the School District's operating deficit for its Fiscal Year 2015 and refund certain outstanding City Service Agreement Bonds. The debt service on the City Service Agreement Bonds is approximately $15 million annually through Fiscal Year 2018 and the City expects to pay its obligations with respect to such bonds with a combination of proceeds from the City Sales Tax revenues and other General Fund revenues. Such City Sales Tax revenues are not pledged to the holders of such bonds. Such funding by the City of a portion of the School District's operating deficit for Fiscal Year 2015, and the related payment of debt service, does not require a comparable increase in grants by the City to the School District in subsequent Fiscal Years. See "EXPENDITURES OF THE CITY – City Payments to School District" and the paragraphs that follow Table 21.

The following table sets forth the City Sales Taxes collected in Fiscal Years 2011 through 2014 and the current estimate for Fiscal Year 2015.

Table 11
Summary of City Sales Tax Collections
(Amounts in Millions of USD)[1]

Fiscal Year	City Sales Tax Collections
2011 (Actual)	$244.6
2012 (Actual)	$253.5
2013 (Actual)	$257.6
2014 (Actual)	$263.1
2015 (Current Estimate)	$143.8[2]

(1) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For the current estimate for Fiscal Year 2015, the Revised Twenty-Fourth Five-Year Plan.

(2) Net collections estimated to be distributed to the City from the first 1% City Sales Tax and following the distribution of $120 million of revenues from the second 1% City Sales Tax to the School District, as described above.

See "– Proposed Tax Rate Changes" for information regarding a proposed reduction of the City Sales Tax commencing in Fiscal Year 2017 under the Governor's proposed 2015-2016 budget.

Other Taxes

The City also collects real property transfer taxes, parking taxes, amusement tax, valet parking tax, outdoor advertising tax, smokeless tobacco tax and other miscellaneous taxes.

Improved Collection Initiative

The City is pursuing a multifaceted strategy designed to improve collections of various taxes while decreasing delinquencies. Key compliance strategies continue to include revocation of commercial licenses and sequestration, among others.

In addition to compliance efforts, the City is engaged in two active projects to implement technology solutions for its cashiering and payments processing systems and to develop an integrated data warehouse and case management system. These initiatives are designed to improve operational efficiencies and drive compliance efforts by providing tools currently unavailable to the City.

Other Locally Generated Non-Tax Revenues

These revenues include license fees and permit sales, traffic fines and parking meter receipts, court related fees, stadium revenues, interest earnings and other miscellaneous charges and revenues of the City.

Revenue from Other Governments

The following table presents revenues received from other governmental jurisdictions for Fiscal Years 2011-2015 and the percentage such revenues represent in the General Fund. The table does not reflect substantial amounts of revenues from other governments received by the Grants Revenue Fund, Community Development Fund, and other operating and capital funds of the City.

Table 12
Revenue from other Governmental Jurisdictions
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)
(Dollar Amounts in Millions of USD)[1]

Fiscal Year	Commonwealth[2]	Federal Government	Other Governments[3], [4]	Total	Percentage of General Fund Revenues
2011 (Actual)	$833.7	$170.1	$62.7	$1,066.5	27.6%
2012 (Actual)	536.8	97.0	82.1	715.9[5]	19.9
2013 (Actual)	233.6	39.7	64.2	337.5[5]	9.1
2014 (Actual)	255.3	31.0	61.0	347.3	9.1
2015 (Current Estimate)	215.6	29.5	57.2	302.3	8.0

(1) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For Fiscal Year 2015, the Fiscal Year 2016 Adopted Budget.
(2) Such revenues are for health, welfare, court, and various other specified purposes.
(3) Such revenues primarily consist of payments from PGW, parking fines and fees from PPA.
(4) Does not include the PICA Tax.
(5) Fiscal Year 2011 was the last year that the full amount of revenue for DHS (as defined herein) was deposited into the General Fund. The decrease in revenues from Fiscal Year 2011 to Fiscal Year 2012 and Fiscal Year 2012 to Fiscal Year 2013 is largely due to the transfer of the majority of DHS revenue and obligations to the Grants Revenue Fund.

Revenues from City-Owned Systems

In addition to taxes, the City realizes revenues through the operation of various City-owned systems such as the Water and Wastewater Systems and PGW. The City has issued revenue bonds with respect to the Water and Wastewater Systems and PGW to be paid solely from and secured by a pledge of the respective revenues of these systems. The revenues of the Water and Wastewater Systems and PGW are not legally available for payment of other obligations of the City until, on an annual basis, all revenue bond debt service requirements and covenants relating to those bonds have been satisfied, and then only in a limited amount and upon satisfaction of certain other conditions.

Water Fund. The revenues of the Philadelphia Water Department (the "Water Department") are required to be segregated from other funds of the City. Under the City's Restated General Water and Wastewater Revenue Bond Ordinance of 1989 (the "Water Ordinance"), an annual transfer may be made from the Water Fund to the City's General Fund in an amount not to exceed the lesser of (i) all Net Reserve Earnings and (ii) $4,994,000. "Net Reserve Earnings" means the amount of interest earnings during the Fiscal Year on amounts in the Debt Reserve Account and Subordinated Bond Fund, each as defined in the Water Ordinance. The following table shows the amounts transferred from the Water Fund to the General Fund for Fiscal Years 2011-2014 and the current estimate for Fiscal Year 2015.

Table 13
Transfers from Water Fund to General Fund
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)[1]

Fiscal Year	Amount Transferred
2011 (Actual)	$1,229,851
2012 (Actual)	$1,086,165
2013 (Actual)	$560,156
2014 (Actual)	$400,364
2015 (Current Estimate)	$800,000

(1) Sources: For Fiscal Years 2011-2014, the Supplemental Report of Revenues & Obligations for such Fiscal Years. For Fiscal Year 2015, the Revised Twenty-Fourth Five-Year Plan.

PGW. The revenues of PGW are required to be segregated from other funds of the City. Payments for debt service on PGW bonds are made directly by PGW. In certain prior Fiscal Years, PGW made an annual payment of $18 million to the General Fund. PGW made such annual payment in Fiscal Years 2012-2015. Revenue estimates contained in the Revised Twenty-Fourth Five-Year Plan include such $18 million annual payment to the General Fund from PGW for Fiscal Years 2016-2020. For more information on PGW, see "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Government Services" and "DISCUSSION OF FINANCIAL OPERATIONS – Current Financial Information – Fiscal Year 2015 Adopted Budget."

Philadelphia Parking Authority Revenues

The PPA was established by City ordinance pursuant to the Pennsylvania Parking Authority Law (P.L. 458, No. 208 (June 5, 1947)). Various statutes, ordinances, and contracts authorize PPA to plan, design, acquire, hold, construct, improve, maintain and operate, own or lease land and facilities for parking in the City, including such facilities at PHL, and to administer the City's on-street parking program through an Agreement of Cooperation ("Agreement of Cooperation") with the City.

PPA owns and operates five parking garages and a number of surface parking lots at PHL. The land on which these garages and surface lots are located is leased from the City, acting through the Division of Aviation, pursuant to a lease expiring in 2030 (the "Lease Agreement"). The Lease Agreement provides for payment of rent to the City, which is equal to gross receipts less operating expense, debt service on PPA's bonds issued to finance improvements at PHL and reimbursement to PPA for capital expenditures and prior year operating deficits relating to its operations at PHL, if any.

One component of the operating expenses is PPA's administrative costs. In 1999, at the request of the FAA, PPA and the City entered into a letter agreement (the "FAA Letter Agreement"), which contained a formula for calculating PPA's administrative costs and capped such administrative costs at 28% of PPA's total administrative costs for all of its cost centers. PPA owns and/or operates parking facilities at a number of locations in the City in addition to those at PHL. These parking facilities are revenue centers for purposes of the FAA Letter Agreement. According to PPA's audited financial statements, as filed with the City, PPA has been in compliance with the FAA Letter Agreement since its execution.

Pursuant to the Agreement of Cooperation, on-street parking revenues are administered and collected on behalf of the City by the PPA. Pursuant to Pennsylvania law, PPA is to transmit these revenues to the City, net of any actual expenses incurred in the administration of the on-street parking

system in accordance with the PPA's approved budget, provided that, should such net revenues exceed a designated threshold, any excess above that threshold is to be transmitted to the School District. Pursuant to Act 84 of 2012, commencing in Fiscal Year 2015, the threshold, which was previously set at $25 million, is set at $35 million, including a mandatory escalator to take into account increases in revenues. The following table presents payments received by the City from PPA under the Agreement of Cooperation for Fiscal Years 2010-2014.

Table 14
PPA On-Street Parking Payments to the City
Fiscal Years 2010-2014
(Amounts in Millions of USD)[1]

Fiscal Year	Payments to the City
2010	$33.7
2011	$41.6
2012	$37.3
2013	$36.5
2014	$37.7

(1) Sources: City's CAFRs for Fiscal Years 2010-2014.

Proposed Tax Rate Changes

The Revised Twenty-Fourth Five-Year Plan includes future changes to some of the taxes described above. Also, the Governor's proposed 2015-2016 budget includes additional future changes which are incorporated into the Revised Twenty-Fourth Five-Year Plan. Such proposed future changes affect the following taxes.

Wage and Earnings Tax. Commencing in Fiscal Year 2016, reductions in both the resident and non-resident wage and earnings tax, which resumed in Fiscal Year 2014 after being suspended during the national economic downturn, are proposed to continue under the Revised Twenty-Fourth Five-Year Plan. The Governor's proposed 2015-2016 budget would provide for additional reductions beginning in Fiscal Year 2017. The following table details rates under the Revised Twenty-Fourth Five-Year Plan and under the Governor's proposed 2015-2016 budget.

Table 15
Proposed Future Changes in Wage and Earnings Tax Rates[1]

	Revised Twenty-Fourth Five-Year Plan		Governor's Proposed 2015-2016 Budget	
Fiscal Year	Resident Wage and Earnings Tax Rates[2]	Non-Resident Wage and Earnings Tax Rates	Resident Wage and Earnings Tax Rates[2]	Non-Resident Wage and Earnings Tax Rates
2015	3.9200%	3.4915%	3.9200%	3.4915%
2016	3.9102%	3.4828%	3.9102%	3.4828%
2017	3.9004%	3.4741%	3.4831%	3.1147%
2018	3.8907%	3.4654%	3.4874%	3.1181%
2019	3.8129%	3.3961%	3.4233%	3.0606%
2020	3.7366%	3.3282%	3.3603%	3.0041%

(1) Source: The Revised Twenty-Fourth Five-Year Plan.
(2) Includes PICA Tax. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.

Receipts from the Wage and Earnings Tax, estimated under the Revised Twenty-Fourth Five-Year Plan to grow at a rate of 4.00% in Fiscal Year 2017 and then 3.00% annually through Fiscal Year 2020, would be reduced under the Governor's proposed 2015-2016 budget; however; the City would be compensated by the Commonwealth for the revenue losses resulting from such reductions, as a result of the other proposed tax changes described below.

Real Estate Tax. Commencing in Fiscal Year 2016 under the Revised Twenty-Fourth Five-Year Plan, the City proposes to increase the Real Estate Tax in order to provide $50 million in additional revenue for the School District, resulting in an increase in the combined rate from 1.3400% to 1.3998% through Fiscal Year 2020.

In addition to wage and earnings tax relief and sales tax relief, the Governor's proposed 2015-2016 budget provides $87.6 million in property tax relief in Fiscal Year 2017, to be used to increase the amount of the homestead exemption from $30,000 to $56,650, the maximum allowed under Pennsylvania law. Also beginning in Fiscal Year 2017, the Governor's proposed 2015-2016 budget would reduce both the City and School District portion of the Real Estate Tax, resulting in a decrease in the combined rate from 1.4651% to 1.4633% through Fiscal Year 2020. The reduction would be funded annually with $1.7 million from the Commonwealth.

City Sales Tax. Beginning in Fiscal Year 2017, the Governor's proposed 2015-2016 budget would reduce the City Sales Tax from 2.0% to 1.4%, while broadening the categories of transactions that would be subject to the City Sales Tax. Revenue from the first 1.0% would continue to go to the City's General Fund, with the additional revenue generated by the base broadening mandated to be contributed to the Municipal Pension Fund.

Under the Governor's proposed 2015-2016 budget, the Commonwealth would compensate the City for the revenue loss resulting from the 0.6% reduction in the City Sales Tax, as well as for the loss of revenue relating to the 0.6% reduction that would otherwise have been realized by the City from broadening the categories of transactions that would be subject to the City Sales Tax. The reduction in the City Sales Tax, the base broadening and the compensation of the City by the Commonwealth would provide the expected funding for the School District, for the debt service during Fiscal Years 2017 and 2018 on obligations issued by the City for the benefit of the School District, and for contributions by the City to the Municipal Pension Fund.

EXPENDITURES OF THE CITY

Three of the principal City expenditures are for personal services (including pensions and other employee benefits), purchase of services (including payments to SEPTA), and debt service. The expenditures for personal services and purchase of services are addressed below under this caption; debt service is addressed below under "DEBT OF THE CITY."

Personal Services (Personnel)

As of January 2015, the City employed 27,831 full-time employees, representing approximately 4.2% of non-farm public and private employment in the City. Of these full-time public employees, the salaries of 21,015 were paid from the General Fund. Additional sources of funding for full-time public employees include the Grants Fund, the Water Fund and the Aviation Fund, as well as grants and contributions from other governments. Activities funded through such grants and contributions are not undertaken if funding is not received. The following table sets forth the number of filled, full-time positions of the City as of the dates indicated.

Table 16
Filled, Full-Time Positions
Fiscal Year 2011-2014 (Actual) and as of March 31, 2015 (Current Estimate)

	June 30, 2011	June 30, 2012	June 30, 2013	June 30, 2014	March 31, 2015[1]
General Fund					
Police	7,219	7,225	7,193	7,095	7,023
Fire	2,146	2,072	2,125	2,053	2,054
Courts	1,869	1,957	1,909	1,866	1,821
Prisons	2,166	2,144	2,248	2,268	2,310
Streets	1,689	1,682	1,690	1,684	1,618
Public Health	661	669	673	659	637
Human Services[2]	1,668	804	377	382	450
All Other	4,602	4,622	4,710	4,984	5,092
Total - General Fund	22,020	21,175	20,925	20,991	21,005
Other Funds	4,540	4,540	5,547	5,657	5,545
Total - All Funds	26,560	25,715	26,472	26,648	26,550

(1) Source: Third Quarter QCMR.
(2) Fiscal Years 2012-2015 reflect the transfer of the majority of DHS revenue and obligations from the General Fund to the Grants Revenue Fund.

Overview of City Employees

The wages and benefits of City employees vary not only by position, but also by whether the employees are represented by a union and, if so, which union. Employee wages and benefits may also be impacted by whether the employee is subject to the civil service system or exempt from those rules. Thus, City employees may be broken down into three major categories for purposes of understanding how their wages and benefits are determined: (i) employees who are not subject to the civil service system ("exempt employees"); (ii) employees who fall under the civil service system but are not represented by a union ("non-represented employees"); and (iii) employees who are subject to the civil service system and are represented by a union ("union employees").

As of January 2015, the City's 23,071 unionized employees, representing approximately 83% of the City's employees, were represented by the City's four municipal unions: (i) Fraternal Order of Police ("FOP") Lodge No. 5; (ii) International Association of Fire Fighters ("IAFF") Local 22; (iii) American Federation of State, County and Municipal Employees District Council 33 ("AFSCME DC 33"); and (iv) American Federation of State, County and Municipal Employees District Council 47 ("AFSCME DC 47").

Collective bargaining with respect to the wages, hours and other terms and conditions of employment of union employees, other than uniformed employees of the Police Department and the Fire Department, is governed by the Public Employee Relations Act (Pa. P.L. 563, No. 195 (1970)) ("PERA"). PERA requires the City and the unions to negotiate in good faith to attempt to reach agreement on new contract terms and, if an impasse exists after such negotiations, to mediate through the Commonwealth Bureau of Mediation. Once the mediation procedures have been satisfied, and if no collective bargaining agreement has been reached, most employees covered by PERA are permitted to strike.

Certain employees, however, including employees of the Sheriff's Office and the Register of Wills represented by the FOP, corrections officers represented by AFSCME DC 33, and employees of the First Judicial District represented by AFSCME DC 47, are not permitted to strike under PERA. These employees must submit any impasse to binding interest arbitration once the mediation procedures have been satisfied. PERA permits parties at an impasse, which are not required to submit to binding interest arbitration, to do so voluntarily. Provisions of an interest arbitration award issued under PERA that require legislative action are considered advisory only and the legislative body is permitted to meet, consider, and reject those provisions.

Uniformed employees of the Police Department and the Fire Department bargain under the Policemen and Firemen Collective Bargaining Act (Pa. P.L. 237, No. 111 (1968)) ("Act 111"), which provides for final and binding interest arbitration to resolve collective bargaining impasses and prohibits these employees from striking. Interest arbitration under Act 111 operates similarly to interest arbitration under PERA, but City Council is not permitted to reject the portions of an interest arbitration award that require legislative action. To the contrary, City Council is required to pass any legislation necessary to implement the award unless doing so would violate state or federal law. Thus, the arbitration panel has significant, although not limitless, power to issue an award on mandatory subjects of bargaining. As with interest arbitration under PERA, the arbitration panel cannot issue an award on a matter that is one of inherent managerial policy. In addition to the grounds available to challenge a PERA interest arbitration award on appeal, the PICA Act requires an Act 111 interest arbitration panel to, among other things, give substantial weight to the City's five-year plan and ability to pay for the cost of the award without negatively impacting services, and gives the City the right to appeal the award to the Court of Common Pleas if it believes the panel has failed to meet these responsibilities. If the arbitration panel fails to do so or, among other things, if it awards wages or benefits that exceed what is assumed in the most-recent five-year plan without substantial evidence in the record demonstrating that the City can afford these increases

without adversely impacting service levels, the Court of Common Pleas is required to vacate the arbitration award and remand it to the arbitration panel.

Overview of Employee Benefits

The City provides various pension, life insurance, and health benefits for its employees. The benefits offered depend on the employee's union status and bargaining unit, if applicable. General Fund employee benefit expenditures for Fiscal Years 2011 through 2015 are shown in the following table.

Table 17
General Fund Employee Benefit Expenditures
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)
(Amounts in Millions of USD)

	2011	2012	2013	2014	2015[1]
Pension Contribution[2]	$485.3	$547.8	$618.9[3]	$646.4[3]	$576.1
Health	343.6	379.4	363.2	409.4	386.4
Social Security	64.6	67.2	64.7	67.5	71.1
Other	73.6	72.0	72.3	70.8	78.1
Total	$967.1	$1,066.4	$1,119.1	$1,194.1	$1,111.7

(1) Source: Revised Twenty-Fourth Five-Year Plan.
(2) Includes debt service on Pension Bonds (as defined herein) and the Commonwealth contributions to the Municipal Pension Fund. See Tables 28 and 29.
(3) Includes repayment of deferred contributions. See Table 28.

Each of the City's four municipal unions sponsors its own health plan that provides medical, prescription, dental and optical benefits to participating employees and eligible retirees through trusts on which the City has varying degrees of minority representation. Exempt and non-represented employees, along with represented employees of the Register of Wills and employees represented by AFSCME DC 33 who have chosen not to become members of the union, receive health benefits through a plan sponsored and administered by the City. Each of the plans provides different benefits determined by the plan sponsor or through collective bargaining. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by the union contract for AFSCME DC 33 and is self-insured for all other eligible employees. The City is responsible for the actual health care cost that is invoiced to the City's unions. The actual cost can be a combination of self-insured claim expenses, premiums, ancillary services and administrative expenses. In addition, employees who satisfy the eligibility criteria receive five years of health benefits after their retirement. See "OTHER POST-EMPLOYMENT BENEFITS" below. These benefits are determined and administered by the plan in which the employee participated at the time of his or her retirement.

Other employee benefits, including life insurance and paid leave, are similarly determined by the respective collective bargaining agreements and City policies and Civil Service Regulations. Employees also participate in the Municipal Pension Plan. See "PENSION SYSTEM" below.

Overview of Current Labor Situation

Table 18 summarizes the current status of the interest arbitration awards that have been issued for, and contract settlements reached with, the City's major labor organizations, as well as changes that have been made for exempt and non-represented employees. It also provides a brief summary of pension reforms that have occurred since 2009.

Table 18
Status of Arbitration Awards and Labor Contract Settlements

Organization	Authorized Number of Full-Time Citywide Employees Represented[1]	Status of Arbitration Award or Contract Settlement	Wage Increases; City Healthcare Costs	Pension Reforms[2]
FOP Lodge No. 5 (Police Department)	6,469	Three-year contract effective July 1, 2014 through June 30, 2017 awarded by arbitration panel on July 30, 2014	• 3% pay increase for Fiscal Year 2015. • 3.25% pay increase for Fiscal Years 2016 and 2017.	• Employees in Plan 87 hired before 1/1/10 pay 5% of salary • Employees hired on or after 1/1/10 elect to either enter Plan 87 and pay 6% of salary or enter Plan 10

FOP Lodge No. 5 (Sheriff's Office and Register of Wills)	324	Three-year contract effective July 1, 2014 through June 30, 2017 awarded by arbitration panel on April 16, 2015	• 2.5% increase for Fiscal Year 2015.
			• 3.0% increase for Fiscal Year 2016.
			• 3.25% increase for Fiscal Year 2017.
			• Register of Wills employees receive same wage package as AFSCME DC 33.
				• Sheriff's Office:
				  • Employees in Plan 87 hired before 1/1/12 pay 30% of normal cost
				  • Employees hired on or after 1/1/12 elect to enter Plan 87 and pay 50% of normal cost or enter Plan 10
				• Register of Wills:
				  • Employees in Plan 87 hired before 1/1/12 pay 30% of normal cost
				  • Employees hired on or after 1/1/12 participate in Plan 10

IAFF Local 22	2,109	Four-year contract effective July 1, 2013 through June 30, 2017 awarded by arbitration panel on January 9, 2015	• 3% pay increase for Fiscal Year 2014 and 2015. • 3.25% pay increase for Fiscal Year 2016. • Wage reopener for Fiscal Year 2017.	• Employees in Plan 87 hired before 7/2/12 pay 5% of salary • Employees hired on or after 7/2/12 elect to enter Plan 87 and pay 6% of salary or enter Plan 10
AFSCME DC 33	7,973	Contract term from July 1, 2009 through June 30, 2016 ratified September 9, 2014	• 3.5% pay increase effective September 1, 2014. • 2.5% pay increase for Fiscal Year 2016.	• Employees in Plan 87 hired before 9/9/14 pay 30% of normal cost plus an additional 0.5% of pay in 2015 and an additional 0.5% of pay in 2016 (for a total of 1% of pay by 1/1/16) • Employees hired on or after 9/9/14 may elect to enter Plan 87 and pay an additional 1% of pay over what others in Plan 87 pay or enter Plan 10

(1) From the Revised Twenty-Fourth Five-Year Plan as of January 2015.
(2) "Plan 87" and "Plan 10" referenced in this column are described in Table 19. The July 1, 2014 Valuation (as defined herein) indicates that as of July 1, 2014 there were nine active members in Plan 10. As Table 18 indicates, Plan 10 is mandatory for newly-hired employees of the Register of Wills and employees covered by the Correctional Officers arbitration award.

Organization	Authorized Number of Full-Time Citywide Employees Represented[1]	Status of Arbitration Award or Contract Settlement	Wage Increases; City Healthcare Costs	Pension Reforms[2]
AFSCME DC 33, Local 159 Correctional Officers	2,221	Three-year contract effective July 1, 2014 through June 30, 2017 awarded by arbitration panel on March 23, 2015	• 3% pay increase for Fiscal Year 2015. • 3.25% pay increase for Fiscal Years 2016 and 2017. • $600 equity adjustment to base wages on January 1, 2016.	• Employees in Plan 87 hired before 11/14/14 pay 30% of normal cost • Effective 11/14/14, the employee contribution for all current employees increased to no less than 50% of normal cost and the offset under Plan 67 for employees participating in social security was eliminated • Employees hired on or after 11/14/14 participate in Plan 10
AFSCME DC 47	3,480	Contract term from July 1, 2009 through June 30, 2017 ratified on March 5, 2014	• 3.5% pay increase effective April 4, 2014. • 2.5% pay increase for Fiscal Year 2016. • 3% pay increase for Fiscal Year 2017.	• Employees in Plan 87 hired before 3/5/14 pay 30% of normal cost plus an additional 0.5% of pay in 2015 and an additional 0.5% of pay in 2016 (for a total of 1% of pay by 1/1/16) • Employees hired on or after 3/5/14 may elect to enter Plan 87 and pay an additional 1% of pay over what others in Plan 87 pay or enter Plan 10
AFSCME DC 47 Local 810 Court Employees	495	Agreement ratified August 13, 2014 on economic terms for July 1, 2014 through June 30, 2016	• 2.5% pay increase for Fiscal Year 2015. • 2.5% pay increase for Fiscal Year 2016.	• Employees in Plan 87 hired before 3/5/14 pay 30% of normal cost plus an additional 0.5% of pay in 2015 and an additional 0.5% of pay in 2016 (for a total of 1% of pay by 1/1/16) • Employees hired on or after 11/14/14 may elect to enter Plan 87 and pay an additional 1% of pay over what others in Plan 87 pay or enter Plan 10
Exempt and Non-Represented Employees	4,760	Changes for exempt and non-represented employees	• 2.5% pay increase effective October 1, 2012. • 3.5% exempt pay increase effective September 1, 2014. • 3.5% non-represented pay increase effective April 1, 2014. • 2.5% non-represented pay increase for Fiscal Year 2016. • 3% non-represented pay increase for Fiscal Year 2017.	• Employees in Plan 87 hired before 5/14/14 for non-represented civil service and before 11/14/14 for non-represented non-civil service pay 30% of normal cost plus an additional 0.5% of pay in 2015 and an additional 0.5% of pay in 2016 (for a total of 1% of pay by 1/1/16) • Employees hired on or after dates above may elect to enter Plan 87 and pay an additional 1% of pay over what others in Plan 87 pay or enter Plan 10

(1) From the Revised Twenty-Fourth Five-Year Plan as of January 2015.

(2) "Plan 87" and "Plan 10" referenced in this column are described in Table 19. The July 1, 2014 Valuation (as defined herein) indicates that as of July 1, 2014 there were nine active members in Plan 10. As Table 18 indicates, Plan 10 is mandatory for newly-hired employees of the Register of Wills and employees covered by the Correctional Officers arbitration award.

Certain features of the 1987 Plan ("Plan 87") and the 2010 Plan ("Plan 10") are summarized below. Plan 87 is solely a defined benefit plan. Plan 10 is a "hybrid" plan that includes both a defined benefit and a defined contribution component. A more comprehensive summary of each plan is included as Appendix D of the July 1, 2014 Valuation.

Table 19
Summary of Key Aspects of Plan 87 and Plan 10

Plan 87	Normal Retirement Eligibility	Average Final Compensation ("AFC")	Defined Benefit – Retirement Benefits Multiplier
Municipal (Plan Y)	Age 60 and 10 years of credited service	Average of three highest calendar or anniversary years	• (2.2% x AFC x years of service up to 10 years) plus (2.0% x AFC x numbers of years in excess of 10 years), subject to a maximum of 100% of AFC
Police and Fire	Age 50 and 10 years of credited service	Average of two highest calendar or anniversary years	• (2.2% x AFC x years of service up to 20 years) plus (2.0% x AFC x numbers of years in excess of 20 years), subject to a maximum of 100% of AFC
Elected Official (Plan L)	Age 55 and 10 years of credited service	Average of three highest calendar or anniversary years	• 3.5% x AFC x years of service, subject to a maximum of 100% of AFC

Plan 10	Normal Retirement Eligibility	Average Final Compensation ("AFC")	Defined Benefit – Retirement Benefits Multiplier
Municipal[1]	Age 60 and 10 years of credited service	Average of five highest calendar or anniversary years	• 1.25% x AFC x years of service up to 20 years
Police and Fire	Age 50 and 10 years of credited service	Average of five highest calendar or anniversary years	• 1.75% x AFC x years of service up to 20 years - **Defined Contribution** • City matches employee contributions at a 50% rate, with the total City match not to exceed 1.5% of compensation for each year • After five years of credited service, the full amount in the account is distributed to the employee when he or she separates from City service • The right to the portion of the account attributable to City contributions does not vest until the completion of five years of credited service

[1] Under Plan 10 (Municipal), pension contributions freeze after 20 years. At such time and for each subsequent year, the employee's pension payments remain fixed and the employee may no longer make pension contributions.

Purchase of Services

The following table shows the City's major purchase of services, which represents one of the major classes of expenditures from the General Fund. Table 20 shows contracted costs of the City for Fiscal Years 2011-2014 and the current estimate for Fiscal Year 2015 and, with the exception of the Convention Center subsidy and vehicle leasing, excludes debt service.

Table 20
Purchase of Services in the General Fund
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Current Estimate 2015
Human Services[2]	448.2	78.2	67.5	76.3	81.6
Public Health	66.1	63.0	63.0	60.5	60.1
Public Property[3]	138.7	139.5	139.5	140.7	147.9
Streets[4]	51.0	45.7	40.5	48.3	47.5
Legal Services[5]	36.6	37.1	38.7	40.6	42.6
First Judicial District	27.9	24.1	16.5	15.8	10.7
Licenses & Inspections[6]	4.1	7.0	7.1	10.1	10.0
Supportive Housing[7]	30.2	30.4	34.2	36.9	36.6
Prisons	106.6	104.0	105.4	105.8	104.1
All Other[8]	131.0	142.1	154.4	159.1	180.6
Total	1,040.4	671.1	666.8	694.1	721.7

(1) Sources: For Fiscal Years 2011-2014, the City's Supplemental Report of Revenues & Obligations for such Fiscal Years and the Fiscal Year 2016 Adopted Budget. For the current estimate for Fiscal Year 2015, the Fiscal Year 2016 Adopted Budget.
(2) Includes payments for care of dependent and delinquent children. Fiscal Year 2011 was the last year that the full amount of revenue for DHS was deposited into the General Fund. The decrease in revenues and obligations from Fiscal Year 2011 to Fiscal Year 2012 is largely due to the transfer of the majority of DHS revenue and obligations to the Grants Revenue Fund.
(3) Includes payments for SEPTA, space rentals, and utilities.
(4) Includes solid waste disposal costs.
(5) Includes payments to the Defender Association to provide legal representation for indigents.
(6) Includes payments for demolition in Fiscal Year 2011 and Fiscal Year 2012.
(7) Includes homeless shelter and boarding home payments.
(8) Includes the Convention Center subsidy and payments for vehicle leasing.

Figures may not add up due to rounding.

City Payments to School District

In each Fiscal Year since Fiscal Year 1996, the City has made an annual grant of at least $15 million to the School District. Pursuant to negotiations with the Commonwealth to address the School District's then current and future educational and fiscal situation, the Mayor and City Council agreed to provide the School District with an additional $20 million annual grant beginning in Fiscal Year 2002. The following table presents the City's payments to the School District from the General Fund for Fiscal Years 2011-2014 and the current estimate for Fiscal Year 2015.

Table 21
City Payments to School District
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2011	Actual 2012	Actual 2013[2]	Actual 2014[3]	Current Estimate 2015
City Payments to School District	$38.6	$48.9	$68.9	$114.1	$69.1

(1) Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For the current estimate for Fiscal Year 2015, the Revised Twenty-Fourth Five-Year Plan.
(2) The City's contribution included a budgeted contribution of $48.9 million and an additional contribution of $20 million, which was derived from an increase in the Real Estate Tax rate.
(3) In Fiscal Year 2014, the City's contribution included a budgeted contribution of $69.1 million and an additional $45.1 million one-time contribution that was passed through from the Commonwealth.

In Fiscal Year 2014, the City also issued, through PAID, $27.3 million of bonds for the benefit of the School District in Fiscal Year 2014. In Fiscal Year 2015, the City issued, through PAID, $57.5 million of bonds for the benefit of the School District and to refund the bonds issued in Fiscal Year 2014.

The Fiscal Year 2016 Adopted Budget includes a property tax increase and parking tax increase to benefit the School District in amounts of $25 million and $10 million, respectively. Both the $25 million and the $10 million will be collected by the City and then granted to the School District. Each year in the Revised Twenty-Fourth Five-Year Plan reflects these increases in tax revenues, as well as the related expense to the School District; therefore, this does not impact General Fund balance.

Section 696 of the School Code imposes on the City a maintenance of effort obligation with respect to the School District. For so long as the School District remains subject to a declaration of "distress" by the Secretary of Education, the City is obligated to continue (i) paying over to the School District each year an amount at least equal to the amount paid over to the School District in the previous year and (ii) authorizing for the School District tax rates at least equal to the rates of taxation authorized by the City for the School District in the previous year. The School District was declared distressed effective December 22, 2001, and such declaration continues to be in effect. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – *Mayoral-Appointed or Nominated Agencies* – The School District."

For a discussion of changes and proposed changes in the funding provided by the City to the School District, see "REVENUES OF THE CITY – Sales and Use Tax." For a discussion of the transition to AVI, see "REVENUES OF THE CITY – Real Property Taxes Assessment and Collection."

City Payments to SEPTA

SEPTA operates a public transportation system within the City and Bucks, Chester, Delaware, and Montgomery counties. SEPTA's operating budget is supported by federal, Commonwealth, and local subsidies, including payments from the City. The following table presents the City's payments to SEPTA from the General Fund for Fiscal Years 2011-2014 and the current estimate for Fiscal Year 2015.

Table 22
City Payments to SEPTA
Fiscal Years 2011-2014 (Actual) and 2015 (Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Current Estimate 2015
City Payment to SEPTA	$65.9	$66.4	$65.2	$66.0	$70.4

[1] Sources: For Fiscal Years 2011-2014, the City's CAFRs for such Fiscal Years. For the current estimate for Fiscal Year 2015, the Revised Twenty-Fourth Five-Year Plan.

The City budgets operating subsidies each Fiscal Year to match the estimated operating subsidies of the Commonwealth under Act 89. The state operating subsidy is funded through the Pennsylvania Public Transportation Trust Fund as created by Act 44 of 2007, amended by Act 89 of 2013. The local match requirement for Fiscal Years 2016-2020 has been calculated to match state operating subsidies. In addition, local matching funds must be appropriated each Fiscal Year in which state funds are received in order for SEPTA to receive the full allocation of state funds. The Revised Twenty-Fourth Five-Year Plan projects operating subsidy payments to SEPTA from the City will increase to $92.5 million by Fiscal Year 2020. For more information on SEPTA, see APPENDIX D – "KEY CITY-RELATED SERVICES AND BUSINESSES – Transportation – SEPTA."

City Payments to Convention Center Authority

In connection with the financing of the expansion to the Pennsylvania Convention Center and the refinancing of debt for the original Pennsylvania Convention Center construction, the Commonwealth, the City, and the Convention Center Authority entered into an operating agreement in 2010 (the "Convention Center Operating Agreement"). The Convention Center Operating Agreement provides for the operation of the Convention Center by the Convention Center Authority and includes an annual service fee of $15,000,000 from the City to the Convention Center Authority in each Fiscal Year through Fiscal Year 2040.

As authorized by ordinance, the City has agreed to pay to the Convention Center Authority on a monthly basis a certain percentage of hotel room taxes and hospitality promotion taxes collected during the term of the Convention Center Operating Agreement. The remaining percentages of such taxes are paid to the City's tourism and marketing agencies. The General Fund does not retain any portion of the proceeds of the hotel room rental tax or the hospitality promotion tax.

PENSION SYSTEM

The amounts and percentages set forth under this heading relating to the City's pension system, including, for example, actuarial liabilities and funded ratios, are based upon numerous demographic and economic assumptions, including the investment return rates, inflation rates, salary increase rates, post-retirement mortality, active member mortality, rates of retirement, etc. The reader is cautioned to review and carefully consider the assumptions set forth in the documents that are cited as the sources for the information in this section. In addition, the reader is cautioned that such sources and the underlying assumptions speak as of their respective dates, and are subject to changes, any of which could cause a significant change in the unfunded actuarial liability.

Overview

The City faces significant ongoing financial challenges in meeting its pension obligations, including an unfunded actuarial liability ("UAL") of approximately $5.7 billion as of July 1, 2014. In Fiscal Year 2014, the City's contribution to the Municipal Pension Fund was approximately $553.2 million, of which the General Fund's share (including the Commonwealth contribution) was $435.4 million. See Table 28 below. The City's aggregate pension costs (consisting of payments to the Municipal Pension Fund and debt service on the Pension Bonds (as defined herein)) have increased from approximately 8% of the City's General Fund budget to approximately 15% of the General Fund budget from Fiscal Years 2005 to 2014. See Table 30 below. As reflected in the Funded Ratio chart following Table 27, the funded ratio of the Municipal Pension Plan was 47.7% on July 1, 1995 (at which time the UAL was approximately $2.5 billion), and was 45.8% on July 1, 2014.

The decline in the Municipal Pension System's funded status and the net growth of the unfunded liability is the product of a number of factors, including the following:

- The declines in the equity markets in 2000-2001 and in 2008-2009. See Table 23 and the Funded Ratio chart below.

- A reduction in the assumed rate of return, from 9.00% in 2004 to 7.80% effective July 1, 2014. Although the gradual reductions in the assumed rates of return reflected in Table 23 are considered a prudent response to experience studies, by reducing the assumed return in the measurement of the actuarial liabilities, it serves to increase the UAL from what it otherwise would have been.

- Adopting more conservative mortality rates in response to experience studies performed by the Municipal Pension Plan actuary.

- The Municipal Pension Plan is a mature system, which means the number of members making contributions to the Municipal Pension Plan is less than the number of retirees and other beneficiaries receiving payments from the Municipal Pension Plan, by approximately 10,700. As a result, the aggregate of member contributions and the City's contributions are less than the amount of benefits and refunds payable in any particular year, with the result that investment income must be relied upon to meet such difference before such income can contribute to an increase in the Municipal Pension System's assets growth. See Table 25 below.

- The determination by the City, commencing in Fiscal Year 2005, to fund in accordance with the "minimum municipal obligation" ("MMO"), as permitted and as defined by Pennsylvania law, in lieu of the City Funding Policy (as defined herein), resulted in the City contributing

less than otherwise would have been contributed. See below, "– Funding Requirements; Funding Standards."

- Revising, in Fiscal Year 2009, the period over which the UAL was being amortized, such that the UAL as of July 1, 2009 was "fresh started" to be amortized over a 30 year period ending June 30, 2039. In addition, changes were made to the periods over which actuarial gains and losses and assumption changes were amortized under Pennsylvania law. See "UAL and its Calculation – Actuarial Valuations."

The City has taken a number of steps to address the funding of the Municipal Pension Plan, including the following:

- Reducing the assumed rate of return on a gradual and consistent basis. See Table 23 below.

- Adopting more conservative mortality rates in response to experience studies performed by the Municipal Pension Plan actuary.

- In conjunction with the revisions to the amortization periods that occurred in Fiscal Year 2009, changing from a level percent of pay amortization schedule to a level dollar amount schedule. This results in producing payments that ensure that a portion of principal on the UAL is paid each year.

- Funding consistently an amount greater than the MMO (subject to the deferrals for Fiscal Years 2010 and 2011 described below).

- Negotiating recent collective bargaining agreements by which additional contributions are being made (and will be made) by certain current (and future) members of the Municipal Pension Plan. See Table 18.

- Securing additional funding, including funds required to be deposited by the City to the Municipal Pension Fund from its share of future sales tax revenue.

This "Overview" is intended to highlight certain of the principal factors that led to the pension system's current funded status, and significant steps the City and the Pension Board have taken to address the underfunding. The reader is cautioned to review with care the more detailed information presented below under this caption, "PENSION SYSTEM."

Pension System; Pension Board

The City maintains two defined-benefit pension programs: (i) the Municipal Pension Plan, a multi-employer plan, which provides benefits to police officers, firefighters, non-uniformed employees, and non-represented appointed and elected officials, and (ii) the PGW Pension Plan, a single employer plan, which provides benefits to PGW employees. The Municipal Pension Plan is administered through 18 separate benefit structures, the funding for which is accounted for on a consolidated basis by the Municipal Pension Fund. The 18 benefit structures establish for their respective members different contribution levels, retirement ages, etc., but all assets are available to pay benefits to all members of the Municipal Pension Plan. The Municipal Pension Plan is a mature plan, initially established in 1915, with investment assets that totaled approximately $4.9 billion as of June 30, 2014. The Municipal Pension Plan has approximately 27,000 members who make contributions to the plan, and provides benefits to approximately 38,000 retirees and other beneficiaries.

PGW is principally a gas distribution facility owned by the City. For accounting presentation purposes, PGW is a component unit of the City and follows accounting rules as they apply to proprietary fund-type activities. The PGW Pension Plan is funded with contributions by PGW to such plan, which are treated as an operating expense of PGW, and such plan is not otherwise addressed under the caption "PENSION SYSTEM." See "PGW PENSION PLAN" below.

Contributions are made by the City to the Municipal Pension Fund from (i) the City's General Fund, (ii) funds that are received by the City from the Commonwealth for deposit into the Municipal Pension Fund, and (iii) various City inter-fund transfers, representing amounts contributed, or reimbursed, to the City's General Fund for pensions from the City's Water Fund, Aviation Fund, and certain other City funds or agencies. See Table 28 below. In addition to such City (employer) contribution, the other principal additions to the Municipal Pension Fund are (i) member (employee) contributions, (ii) interest and dividend income, (iii) net appreciation in asset values, and (iv) net realized gains on the sale of investments. See Table 25 below. An additional source of funding in the future is expected to be that portion of the 1% Sales Tax rate increase that is required under Pennsylvania law to be deposited to the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."

The City of Philadelphia Board of Pensions and Retirement (the "Pension Board") was established by the City Charter to administer "a comprehensive, fair and actuarially sound pension and retirement system covering all officers and employees of the City." The City Charter provides that the Pension Board "shall consist of the Director of Finance, who shall be its chairman, the Managing Director, the City Controller, the City Solicitor, the Personnel Director and four other persons who shall be elected to serve on the Board by the employees in the civil service in such manner as shall be determined by the Board." In addition, there is one non-voting member on the Pension Board, who is appointed by the President of City Council. An Executive Director, together with a staff of 75 personnel, administers the day-to-day activities of the retirement system, providing services to approximately 65,000 members.

The Municipal Pension Plan, the Municipal Pension Fund, and the Pension Board are for convenience sometimes collectively referred to under this caption as the "Municipal Retirement System."

Membership. Total membership in the Municipal Pension Plan decreased by 0.2%, or 64,958 to 64,822 members, from July 1, 2013 to July 1, 2014, including an increase of 1.0% in active members from 26,788 to 27,065 (who were contributing to the Municipal Pension Fund). Of the 64,822 members, 37,757 were retirees, beneficiaries, disabled, and other members (who were withdrawing from, or not contributing to, the Municipal Pension Fund).

Subject to the exceptions otherwise described in this paragraph, employees and officials become vested in the Municipal Pension Plan upon the completion of ten years of service. Employees and appointed officials who hold positions that are exempt from civil service and who are not entitled to be represented by a union, and who were hired before January 13, 1999, may elect accelerated vesting after five years of service in return for payment of a higher employee contribution than if the vesting period were ten years. Such employees and officials hired after January 13, 1999, become vested after five years of service and pay a higher employee contribution than if the vesting period were ten years. Elected officials become vested in the Municipal Pension Plan once they complete service equal to the lesser of two full terms in their elected office or eight years and pay a higher contribution than if the vesting period were ten years. Elected officials pay an additional employee contribution for the full cost of the additional benefits they may receive over those of general municipal employees. Upon retirement, employees and officials may receive up to 100% of their average final compensation depending upon their years of credited service and the plan in which they participate.

All City employees participate in the U.S. Social Security retirement system except for uniformed Police and uniformed Fire employees.

Certain membership information relating to the City's municipal retirement system provided by the Pension Board is set forth in Appendix A to the July 1, 2014 Actuarial Valuation Report (the "July 1, 2014 Valuation") and includes as of July 1, 2014, among other information, active and non-active member data by plan, age/service distribution for active participants and average salary for all plans, and age and benefit distributions for non-active member data.

Funding Requirements; Funding Standards

City Charter. The City Charter establishes the "actuarially sound" standard quoted above. Case law has interpreted "actuarially sound" as used in the City Charter to require the funding of two components: (i) "normal cost" (as defined below) and (ii) interest on the UAL. (*Dumbrowski v. City of Philadelphia*, 431 Pa. 199, 245 A.2d 238 (1968)).

Pennsylvania Law. The Municipal Pension Plan Funding Standard and Recovery Act (Pa. P.L. 1005, No. 205 (1984)) ("Act 205"), applies to all municipal pension plans in Pennsylvania, "[n]otwithstanding any provision of law, municipal ordinance, municipal resolution, municipal charter, pension plan agreement or pension plan contract to the contrary . . . ." Act 205 provides that the annual financial requirements of the Municipal Pension Plan are: (i) the normal cost, (ii) administrative expense requirements, and (iii) an amortization contribution requirement. In addition, Act 205 requires that the MMO be payable to the Municipal Pension Fund from City revenues, and that the City shall provide for the full amount of the MMO in its annual budget. The MMO is defined as "the financial requirements of the pension plan reduced by . . . the amount of any member contributions anticipated as receivable for the following year." Act 205 further provides that the City has a "duty to fund its municipal pension plan," and the failure to provide for the MMO in its budget, or to pay the full amount of the MMO, may be remedied by the institution of legal proceedings for mandamus.

In accordance with Pennsylvania law and Act 205, the City uses the entry age normal actuarial funding method, whereby "normal cost" (associated with active employees only) is the present value of the benefits that the City expects to become payable in the future distributed evenly as a percent of expected payroll from the age of first entry into the plan to the expected age at retirement. The City's share of such normal cost (to which the City adds the Plan's administrative expenses) is reduced by member contributions. The term "level" means that the contribution rate for the normal cost, expressed as a percentage of active member payroll, is expected to remain relatively level over time.

The City has budgeted and paid at least the full MMO amount since such requirement was established, and more specifically, prior to Fiscal Year 2005 the City had been contributing to the Municipal Pension Plan the greater amount as calculated pursuant to the City Funding Policy which was implemented before Act 205 was effective, as described below. Payment of the MMO is a condition for receipt of the Commonwealth contribution to the Municipal Pension Fund. See Table 28 below.

Act 205 was amended in 2009 by Pa. P.L. 396, No. 44 ("Act 44") to authorize the City to (i) "fresh start" the amortization of the UAL as of July 1, 2009 by a level annual dollar amount over 30 years ending June 30, 2039, and (ii) revise the amortization periods for actuarial gains and losses and assumption changes in accordance with Act 44, as described below under "UAL and its Calculation – Actuarial Valuations." In addition, Act 44 authorized the City to defer, and the City did defer, $150 million of the MMO otherwise payable in Fiscal Year 2010, and $80 million of the MMO otherwise payable in Fiscal Year 2011, subject to repayment of the deferred amounts by June 30, 2014. The City

repaid the aggregate deferred amount of $230 million, together with interest at the then-assumed interest rate of 8.25%, in Fiscal Year 2013. See Table 28 below.

GASB 27; Annual Required Contribution; City Funding Policy. Governmental Accounting Standards Board ("GASB") Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers" ("GASB 27"), applies to the City for Fiscal Years beginning prior to July 1, 2014. For the Fiscal Year beginning July 1, 2014, GASB Statement No. 68 ("GASB 68"), which amends GASB 27 in several significant respects, applies. GASB 27 defines an "annual required contribution" ("ARC") as that amount sufficient to pay (i) the normal cost and (ii) the amortization of UAL, and provides that the maximum acceptable amortization period is 30 years (for the initial 10 years of implementation, 1996-2006, a 40-year amortization period was permitted). GASB 27 does not establish funding requirements for the City but rather is an accounting and financial reporting standard. GASB 68 will not require the calculation of an ARC but will require the City to include as a liability on its balance sheet the City's "net pension liability," as defined by GASB 68. The City has been funding the Municipal Pension Fund since Fiscal Year 2003 based on the MMO, including the deferral permitted by Act 44. See Table 28 below.

The City, prior to Fiscal Year 2005, had been funding the Municipal Pension Fund in accordance with what the City referred to as the "City Funding Policy." That reference was used and continues to be used in the Actuarial Reports. The City's financial statements have reflected as the ARC for GASB 27 purposes the amounts required under the City Funding Policy. Because the City has been using the City Funding Policy amounts as the ARC for financial reporting purposes under GASB 27, while funding at the lower MMO amounts, the aggregate differences have resulted in a Net Pension Obligation ("NPO") being reported. See Note IV.1 to the City's audited Financial Statements for the Fiscal Year ended June 30, 2014, which sets forth the City's ARC for such year. The City could have used the MMO as the ARC for financial reporting purposes under GASB 27. Had the City done so, the MMO amounts paid would have equaled or exceeded the ARC, and thus no NPO would have resulted. Under the City Funding Policy, the UAL as of July 1, 1985 was to be amortized over 34 years ending June 30, 2019, with payments increasing at 3.3% per year, the assumed payroll growth. Other changes in the actuarial liability were amortized in level-dollar payments over various periods as prescribed in Act 205. In 1999, the City issued pension funding bonds, the proceeds of which were deposited directly into the Municipal Pension Fund to pay down its UAL. For GASB 27 purposes, these funds were treated as additional contributions. See "– Annual Contributions – Pension Bonds" below.

UAL and its Calculation

According to the July 1, 2014 Valuation, the funded ratio (the valuation of assets available for benefits to total actuarial liability) of the Municipal Pension Fund as of July 1, 2014 was 45.8% and the Municipal Pension Fund had an unfunded actuarial liability ("UAL") of $5.707 billion. The UAL is the difference between total actuarial liability ($10.522 billion as of July 1, 2014) and the actuarial value of assets ($4.815 billion as of July 1, 2014).

Key Actuarial Assumptions. In accordance with Act 205, the actuarial assumptions must be, in the judgment of both Cheiron (the independent consulting actuary for the Municipal Pension Fund) and the City, "the best available estimate of future occurrences in the case of each assumption." The assumed investment return rate used in the July 1, 2014 Valuation was 7.80% a year (which includes an inflation assumption of 2.75%), net of administrative expenses, compounded annually. For the prior actuarial valuation, the assumed investment return rate was 7.85%. See Table 23 for the assumed rates of return for Fiscal Years 2005 to 2014. The 7.85% was used to establish the MMO payment for Fiscal Year 2015; 7.80% will be used to establish the MMO payment for Fiscal Year 2016.

Other key actuarial assumptions in the July 1, 2014 Valuation include the following: (i) total annual payroll growth of 3.30%, (ii) annual administrative expenses assumed to increase 3.30% per year, (iii) to recognize the expense of the benefits payable under the Pension Adjustment Fund, actuarial liabilities were increased by 0.54%, based on the statistical average expected value of the benefits, (iv) a vested employee who terminates will elect a pension deferred to service retirement age so long as their age plus years of service at termination are greater than or equal to 55 (45 for police and fire employees), (v) for municipal and elected members, 70% of all disabilities are ordinary and 30% are service-connected, and (vi) for police and fire members, 50% of all disabilities are ordinary and 50% are service-connected.

"Smoothing Methodology". The Municipal Retirement System uses an actuarial value of assets to calculate its annual pension contribution, using an asset smoothing method to dampen the volatility in asset values that could occur because of fluctuations in market conditions. The Municipal Retirement System used a five-year smoothing prior to Fiscal Year 2009, and beginning with Fiscal Year 2009 began employing a ten-year smoothing. Using the ten-year smoothing methodology, investment returns in excess or below the assumed rate are prospectively distributed in equal amounts over a ten-year period, subject to the requirement that the actuarial value of assets will be adjusted, if necessary, to ensure that the actuarial value of assets will never be less than 80% of the market value of the assets, nor greater than 120% of the market value of the assets. The actuarial value of assets as of July 1, 2014, was approximately 99% of the market value of the assets.

Actuarial Valuations. The Pension Board engages an independent consulting actuary (currently Cheiron) to prepare annually an actuarial valuation report. Act 205, as amended by Act 44, establishes certain parameters for the actuarial valuation report, including: (i) use of the entry age normal actuarial cost method, (ii) that the report shall contain (a) actuarial exhibits, financial exhibits, and demographic exhibits, (b) an exhibit of normal costs expressed as a percentage of the future covered payroll of the active membership in the Municipal Pension Plan, and (c) an exhibit of the actuarial liability of the Municipal Pension Plan, and (iii) that changes in the actuarial liability be amortized in level-dollar payments as follows: (1) actuarial gains and losses be amortized over 20 years beginning July 1, 2009 (prior to July 1, 2009, gains and losses were amortized over 15 years); (2) assumption changes be amortized over 15 years beginning July 1, 2010 (prior to July 1, 2010, assumption changes were amortized over 20 years); (3) plan changes for active members be amortized over 10 years; (4) plan changes for inactive members be amortized over one year; and (5) plan changes mandated by the Commonwealth be amortized over 20 years.

Act 205 further requires that an experience study be conducted at least every four years, and cover the five-year period ending as of the end of the plan year preceding the plan year for which the actuarial valuation report is filed. The most recent Experience Study was prepared by Cheiron in March 2014 for the period July 1, 2008 – June 30, 2013. The changes to the actuarial and demographic assumptions that were adopted by the Pension Board in response to such Experience Study have been employed in the July 1, 2014 Valuation. The principal revisions included marginal changes in salary growth rates; changes in retirement assumptions (increase for those under the pension plan the City established in 1967; decrease for those under the pension plan the City established in 1987); increase in the expected disability rates for police and fire employees; and changes in mortality assumptions to fully reflect the most recent experience. Details of these assumption changes and the experience of the Municipal Pension Plan can be found in the *City of Philadelphia Municipal Retirement System Experience Study Results and Recommendations For the period covering July 1, 2008 – June 30, 2013,* available at the Investor Information section of the City's Investor Website.

Pension Adjustment Fund

Pursuant to § 22-311 of the Philadelphia Code, the City directed the Pension Board to establish a Pension Adjustment Fund ("PAF") on July 1, 1999, and further directed the Pension Board to determine, effective June 30, 2000 and each Fiscal Year thereafter, whether there are "excess earnings" as defined available to be credited to the PAF. The Pension Board's determination is to be based upon the actuary's certification using the "adjusted market value of assets valuation method" as defined in § 22-311. Although the portion of the assets attributed to the PAF is not segregated from the assets of the Municipal Pension Fund, the Philadelphia Code provides that the "purpose of the Pension Adjustment Fund is for the distribution of benefits as determined by the Board for retirees, beneficiaries or survivors [and] [t]he Board shall make timely, regular and sufficient distributions from the Pension Adjustment Fund in order to maximize the benefits of retirees, beneficiaries or survivors." Distributions are to be made "without delay" no later than six months after the end of each Fiscal Year. The PAF was established, in part, because the Municipal Retirement System does not provide annual cost-of-living increases to retirees or beneficiaries. At the time the PAF was established, distributions from the PAF were subject to the restriction that the actuarial funded ratio using the "adjusted market value of assets" be not less than such ratio as of July 1, 1999 (76.7%). That restriction was deleted in 2007 by an ordinance adopted by City Council; the Mayor vetoed such ordinance, and City Council overrode such veto.

The amount to be credited to the PAF is 50% of the "excess earnings" that are between one percent (1%) and six percent (6%) above the actuarial assumed investment rate. Earnings in excess of six percent (6%) of the actuarial assumed investment rate remain in the Municipal Pension Fund. Although the Pension Board utilizes a ten-year smoothing methodology, as explained above, for the actuarial valuation of assets for funding and determination of the MMO, § 22-311 provides for a five-year smoothing to determine the amount to be credited to the PAF. The actuary determined that for the Fiscal Year ended June 30, 2014, there were "excess earnings" as defined to be credited to the PAF of approximately $61.2 million available for transfer and distribution. The Pension Board transfers to the PAF the full amount calculated by the actuary as being available in any year for transfer within six months of the Pension Board designating the amount to be transferred.

Transfers to the PAF and the resultant additional distributions to retirees result in removing assets from the Municipal Pension Plan. To account for the possibility of such transfers, and as an alternative to adjusting the assumed investment return rate to reflect such possibility, the actuary applies a load of 0.54% to the calculated actuarial liability as part of the funding requirement and MMO. Such calculation was utilized for the first time in the July 1, 2013 actuarial valuation.

The market value of assets as used under this caption, "PENSION SYSTEM," represents the value of the assets if they were liquidated on the valuation date and this value includes the PAF (except as otherwise indicated in certain tables), although the PAF is not available for funding purposes. The actuarial value of assets does not include the PAF.

Rates of Return; Asset Values; Changes in Plan Net Position

Rates of Return. The following table sets forth for the Fiscal Years 2005-2014 the market value of assets internal rate of return and actuarial value of assets internal rate of return experienced by the Municipal Pension Fund, and the assumed rate of return. The 5-year and 10-year annual average returns as of June 30, 2014, were 12.01% and 7.38%, respectively, on a market value basis.

Table 23
Municipal Pension Fund
Annual Rates of Return

Year Ending June 30,	Market Value	Actuarial Value[1]	Assumed Rate of Return
2005	9.9%	1.8%	8.75%
2006	11.3	6.1	8.75
2007	17.0	10.7	8.75
2008	-4.5	10.1	8.75
2009	-19.9	-9.3	8.75
2010	13.8	12.9	8.25
2011	19.4	9.9	8.15
2012	0.2	2.4	8.10
2013	10.9	5.1	7.95
2014	15.7	4.8	7.85

Source: July 1, 2014 Valuation for Market and Actuarial Value annual rates of return; annual Actuarial Valuation Reports prepared by Mercer Human Resources Consulting for Fiscal Years 2005-2006 and Cheiron for Fiscal Years 2007-2014 for Assumed Rates of Return.

(1) Net of PAF. See "Pension Adjustment Fund" above. The actuarial values for 2005-2008 reflect a five-year smoothing; for 2009-2014, a ten-year smoothing.

Asset Values. The following table sets forth as of the July 1 actuarial valuation date for the years 2005-2014 the actuarial and market values of assets in the Municipal Pension Fund and the actuarial value as a percentage of market value.

Table 24
Actuarial Value of Assets vs. Market Value of Net Assets
(Dollar Amounts in Millions of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets[1]	Market Value of Net Assets[1]	Actuarial Value as a Percentage of Market Value
2005	$4,159.5	$4,100.6	101.4%
2006	4,168.5	4,315.6	96.6
2007	4,421.7	4,850.9	91.2
2008	4,623.6	4,383.5	105.5
2009	4,042.1	3,368.4	120.0
2010[2]	4,380.9	3,650.7	120.0
2011[2]	4,719.1	4,259.2	110.8
2012[2]	4,716.8	4,151.8	113.6
2013	4,799.3	4,444.1	108.0
2014	4,814.9	4,854.3	99.2

Source: July 1, 2014 Valuation for Actuarial Value of Assets; 2005-2014 Actuarial Reports for Market Value of Net Assets.

(1) For purposes of this table, the Market Value of Net Assets excludes the PAF, which as of June 30, 2014 equaled $62,439,223. The Actuarial Value of Assets excludes that portion of the Municipal Pension Fund that is allocated to the PAF. The actuarial values for 2005-2008 reflect a five-year smoothing; for 2009-2014, a ten-year smoothing.

(2) The July 1, 2010 actuarial and market values of assets include the $150 million deferred contribution from Fiscal Year 2010, and the July 1, 2011 and July 1, 2012 actuarial and market values of assets include the total deferred contribution of $230 million. See Table 28 below.

Changes in Plan Net Position. The following table sets forth for the Fiscal Years 2010-2014, the additions, including employee (member) contributions, City contributions (including contributions from the Commonwealth), investment income and miscellaneous income, and deductions, including benefit payments and administration expenses, for the Municipal Pension Fund. Debt service payments on pension funding bonds (as described below at "Annual Contributions – Pension Bonds") are made from the City's General Fund and not made from the Municipal Pension Fund, and therefore are not included in Table 25. In those years in which the investment income is less than anticipated, the Municipal Pension Fund may experience negative changes (total deductions greater than total additions), which, as the table reflects, did occur in Fiscal Year 2012. Furthermore, if unrealized gains are excluded from Table 25, resulting in a comparison of cash actually received against actual cash outlays, it results in a negative cash flow in each year, which is typical of a mature retirement system.

Contributions from the Commonwealth are provided pursuant to the provisions of Act 205. Any such contributions are required to be used to defray the cost of the City's pension system. The amounts contributed by the Commonwealth for each of the last ten Fiscal Years are set forth in Table 28 below. The contributions from the Commonwealth are capped pursuant to Act 205, which provides that "[n]o municipality shall be entitled to receive an allocation of general municipal pension system State aid in an amount greater that 25% of the total amount of the general municipal pension system State aid available."

Employee (member) contribution amounts reflect contribution rates as a percent of pay, which vary from 5.00% to 6.00% for police and fire employees, and from 1.95% to 3.75% for municipal employees. However, future member contribution rates for nearly all municipal employees increased by 0.5% of pay on January 1, 2015 and are scheduled to increase by an additional 0.5% of pay commencing January 1, 2016.

Table 25
Changes in Net Position of the Municipal Pension Fund
Fiscal Years 2010-2014
(Amounts in Thousands of USD)

	2010	2011	2012	2013	2014
Beginning Net Assets (Market Value)[1]	$3,375,767	$3,501,602	$4,030,216	$3,922,817	$4,445,224
Additions					
- Member Contributions	51,570	52,706	49,979	49,614	53,722
- City Contributions[2,3]	312,556	470,155	556,031	781,823	553,179
- Investment Income[4]	455,793	701,225	13,297	442,667	677,380
- Miscellaneous Income[5]	(1,368)	(385)	1,224	3,134	4,089
Total	$818,551	$1,223,701	620,531	$1,277,238	$1,288,370
Deductions					
- Benefits and Refunds	(684,642)	(687,034)	(712,684)	(746,490)	(808,597)
- Administration	(8,074)	(8,053)	(15,246)[6]	(8,341)	(8,292)
Total	$ (692,716)	$ (695,087)	$ (727,930)	$ (754,831)	($816,889)
Ending Net Assets (Market Value)[7]	$3,501,602	$4,030,216	$ 3,922,817	$4,445,224	$4,916,705

Source: Municipal Pension Fund's audited financial statements.

(1) Includes the PAF, which is not available for funding purposes.

(2) City Contributions include pension contributions from the Commonwealth. See Table 28 below.

(3) City Contributions are the actual cash outlays for Fiscal Year 2010 and Fiscal Year 2011, which do not include deferred amounts of $150 million and $80 million, respectively.

(4) Investment income is shown net of fees and expenses, and includes interest and dividend income, net appreciation in fair value of investments, and net gains realized upon the sale of investments.

(5) Miscellaneous income includes securities lending and other miscellaneous revenues.

(6) The $15,246 is the number in the Fund's 2012 audited financial statements. However, it was subsequently determined that certain investment expenses had been misclassified as administration expenses. If those investment expenses were not included, the administration deduction for Fiscal Year 2012 would have been $8,482,639.

(7) For Fiscal Year 2010, does not include the $150 million contribution receivable and for Fiscal Years 2011 and 2012 does not include the $230 million total contribution receivable, which was paid back and is included in Fiscal Year 2013.

Funded Status of the Municipal Pension Fund

The following two tables set forth as of the July 1 actuarial valuation date for the years 2005-2014, the asset value, the actuarial liability, the UAL, the funded ratio, covered payroll and UAL, as a percentage of covered payroll for the Municipal Pension Fund on actuarial and market value bases, respectively.

Table 26
Schedule of Funding Progress (Actuarial Value)
(Dollar Amounts in Millions of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets[1] (a)	Actuarial Liability (b)	UAL (Actuarial Value) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
2005	$4,159.5	$7,851.5	$3,692.0	53.0%	$1,270.7	290.5%
2006	4,168.5	8,083.7	3,915.2	51.6	1,319.4	296.7
2007	4,421.7	8,197.2	3,775.5	53.9	1,351.8	279.3
2008	4,623.6	8,402.2	3,778.7	55.0	1,456.5	259.4
2009	4,042.1	8,975.0	4,932.9	45.0	1,463.3	337.1
2010	4,380.9	9,317.0	4,936.1	47.0	1,421.2	347.3
2011	4,719.1[2]	9,487.5	4,768.4	49.7	1,371.3	347.7
2012	4,716.8[2]	9,799.9	5,083.1	48.1	1,372.2	370.4
2013	4,799.3	10,126.2	5,326.9	47.4	1,429.7	372.6
2014	4,814.9	10,521.8	5,706.9	45.8	1,495.4	381.6

Source: July 1, 2014 Valuation.

(1) The July 1, 2010 Actuarial Value of Assets includes the $150 million deferred contribution from Fiscal Year 2010 and each of the July 1, 2011 and July 1, 2012 Actuarial Value of Assets includes the total deferred contribution of $230 million.

(2) Reflects the assumed rate of return on deferred contributions at the time of the deferral.

Table 27
Schedule of Funding Progress (Market Value)
(Dollar Amounts in Millions of USD)

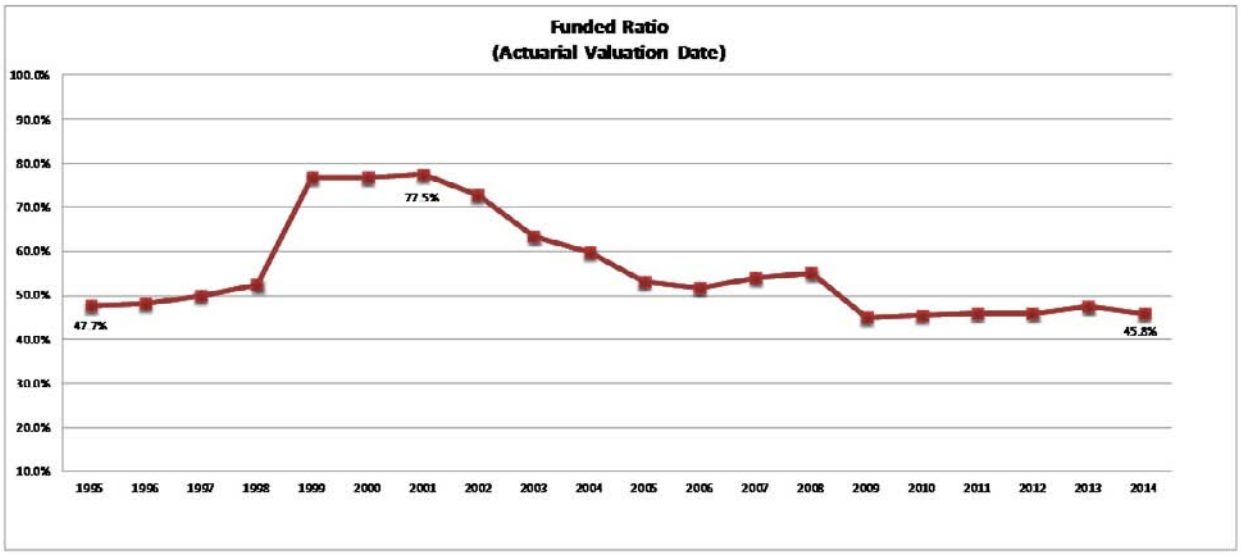
Actuarial Valuation Date (July 1)	Market Value of Net Assets[1] (a)	Actuarial Liability (b)	UAL (Market Value) (b-a)	Funded Ratio (Market Value) (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll (Market Value) [(b-a)/c]
2005	$4,100.6	$7,851.5	$3,750.9	52.2%	$1,270.7	295.2%
2006	4,315.6	8,083.7	3,768.1	53.4	1,319.4	285.6
2007	4,850.9	8,197.2	3,346.3	59.2	1,351.8	247.5
2008	4,383.5	8,402.2	4,018.7	52.2	1,456.5	275.9
2009	3,368.4	8,975.0	5,606.6	37.5	1,463.3	383.2
2010	3,650.7	9,317.0	5,666.3	39.2	1,421.2	398.7
2011	4,259.2	9,487.5	5,228.3	44.9	1,371.3	381.3
2012	4,151.8	9,799.9	5,648.1	42.4	1,372.2	411.6
2013	4,444.1	10,126.2	5,682.1	43.9	1,429.7	397.4
2014	4,854.3[2]	10,521.8	5,667.6	46.1	1,495.4	379.0

Source: 2005-2014 Actuarial Valuation Reports.

(1) The July 1, 2010 Market Value of Net Assets includes the $150 million deferred contribution from Fiscal Year 2010 and each of the July 1, 2011 and July 1, 2012 Market Value of Net Assets includes the total deferred contribution of $230 million.

(2) For purposes of this table, the Market Value of Net Assets excludes the PAF, which as of June 30, 2014 equaled $62,439,223.

The following chart reflects the funded ratios, using the actuarial value of assets, for the period 1995 – 2014.



Annual Contributions

Annual Municipal Pension Contributions

Table 28 shows the components of the City's annual pension contributions to the Municipal Pension Fund for the Fiscal Years 2005-2014.

Table 28
Total Contribution to Municipal Pension Fund
(Amounts in Millions of USD)

Fiscal Year	General Fund Contribution (A)	Commonwealth Contribution (B)	Aggregate General Fund Contribution (A+B)	Water Fund Contribution	Aviation Fund Contribution	Grants Funding and Other Funds Contribution[1]	Contributions from Quasi-governmental Agencies	Pension Bond Proceeds	Total Contribution (C)	MMO (D)	MMO (Deferred) Makeup Payments	% of MMO Contributed (C/D)
2005	209.0	49.8	258.8	22.2	9.8	9.6	8.6	0.0	309.0	$294.0		105.1%
2006	218.8	57.3	276.1	24.4	10.9	10.0	10.4	0.0	331.8	306.9		108.1
2007	304.6	57.7	362.3	31.5	14.3	11.2	13.0	0.0	432.3	400.3		108.0
2008	292.7	59.6	352.3	32.4	15.5	12.2	14.5	0.0	426.9	412.4		103.5
2009	315.0	59.6	374.6	36.4	17.5	11.5	15.4	0.0	455.4	438.5		103.9
2010	190.8[2]	59.2	250.0	25.1	11.6	10.8	15.1	0.0	312.6[2]	447.4	$(150.0)[3]	100.0[4]
2011	325.8[2]	61.8	387.6	37.7	17.1	13.6	14.2	0.0	470.2[2]	511.0	(80.0)[3]	100.0[4]
2012	352.7	95.0	447.7	43.8	20.6	27.4	16.2	0.0	555.7	507.0		109.7
2013	356.5	65.7	422.2	41.4	20.3	27.2	18.1	252.6[3]	781.8	492.0	230.0[3]	100.0[4]
2014	365.8	69.6	435.4	45.5	22.5	30.0	19.8	0.0	553.2	523.4		105.7

(1) Other Funds Contributions represents contributions to the Municipal Pension Fund from the City's Special Gasoline Tax Fund, Community Development Block Grant Fund, Municipal Pension Fund, Acute Care Hospital Assessment Fund, and General Capital Improvement Fund.

(2) Reflects the actual cash outlays for Fiscal Year 2010 and Fiscal Year 2011, which do not include the deferred contributions authorized pursuant to Act 44. See "– Funding Requirements; Funding Standards – Pennsylvania Law" above for a discussion of pension contribution deferrals authorized pursuant to Act 44.

(3) As authorized pursuant to Act 44, the City deferred payments to the Municipal Pension Fund of $150 million in fiscal year 2010 and $80 million in fiscal year 2011. Those amounts were repaid in fiscal year 2013, in which year the City made a contribution of $252.6 to the Municipal Pension Fund, consisting of $230 million of proceeds of Pension Bonds that were issued in October 2012 and $22.6 million in refunding savings from a refunding Pension Bond financing in December 2012. See " – Pension Bonds" below.

(4) Act 205 directs the Actuary, in performing the actuarial valuations, to disregard deferrals, and therefore for ease of presentation 100.0% is reflected in this column for both the years in which the deferrals occurred and the year in which the makeup payment was made.

Annual Debt Service Payments on the Pension Bonds

Table 29 shows the components of the City's annual debt service payments on the Pension Bonds for the Fiscal Years 2005-2014.

Table 29
Total Debt Service Payments on Pension Bonds
(Amounts in Millions of USD)

Fiscal Year	General Fund Payment	Water Fund Payment	Aviation Fund Payment	Other Funds Payment[1]	Grants Funding	Total Payment
2005	66.4	6.4	2.7	0.5	1.2	77.2
2006	70.4	6.9	2.9	0.5	1.3	82.0
2007	74.6	7.2	3.2	0.5	1.3	86.8
2008	78.4	7.8	3.5	0.6	1.3	91.6
2009	84.4	7.2	3.3	0.6	1.3	96.8
2010	96.7	7.6	3.4	0.6	1.5	109.8
2011	97.7	10.3	4.6	0.8	1.5	114.9
2012	100.1	10.7	4.8	0.7	3.4	119.7
2013[2]	196.6	21.5	10.1	1.3	3.8	233.3
2014[2]	211.0	23.6	11.2	1.4	3.7	250.9

(1) Other Funds Payments represents the allocable portion of debt service payments on the City's Pension Bonds from the City's Special Gasoline Tax Fund, Community Development Block Grant Fund, Municipal Pension Fund, Acute Care Hospital Assessment Fund, and General Capital Improvement Fund.

(2) The increase in debt service payments in fiscal years 2013 and 2014 over the fiscal year 2012 amounts reflect the debt service payments on the Pension Bonds that were issued in October 2012. See "– Pension Bonds" below.

Annual Pension Costs of the General Fund

Table 30 shows the annual pension costs of the General Fund for the Fiscal Years 2005-2014, being the sum of the General Fund Contribution to the Municipal Pension Fund (column (A) in Table 28 above) and the General Fund debt service payments on Pension Bonds (Table 29 above).

Table 30
Annual Pension Costs of the General Fund
(Amounts in Millions of USD)

Fiscal Year	General Fund Pension Fund Contribution (A)	General Fund Pension Bond Debt Service Payment (B)	Annual Pension Costs (A+B)	Total General Fund Expenditures (C)	General Fund portion of Annual Pension Costs as % of Total General Fund Expenditures (A+B) / C
2005	209.0	66.4	275.4	3,386.34	8.13%
2006	218.8	70.4	289.2	3,426.05	8.44%
2007	304.6	74.6	379.2	3,736.66	10.15%
2008	292.7	78.4	371.1	3,919.84	9.47%
2009	315.0	84.4	399.4	3,915.29	10.20%
2010	190.8	96.7	287.5	3,653.73	7.87%
2011	325.8	97.7	423.5	3,785.29	11.19%
2012	352.7	100.1	452.8	3,484.88	12.99%
2013	356.5	196.6	553.1	3,613.27	15.31%
2014	365.8	211.0	576.8	3,886.56	14.84%

The following table shows the annual City contribution to the Municipal Pension Fund as a percentage of the covered employee payroll.

Table 31
Annual City Contribution as % of Covered Employee Payroll
(Dollar Amounts in Thousands of USD)

Fiscal Year	Annual City Contribution	Fiscal Year Covered Employee Payroll	ACC as % of Payroll
2005	$299,266[1]	$1,270,700	23.55%
2006	331,765	1,319,400	25.15
2007	432,267	1,351,826	31.98
2008	426,934	1,461,640	29.21
2009	455,389	1,462,451	31.14
2010	312,556	1,422,987	21.96
2011	470,155	1,410,207	33.34
2012	556,031	1,387,086	40.06
2013	781,823	1,423,417	54.93
2014	553,179	1,556,660	35.54

Source: Municipal Pension Fund Financial Statements, June 30, 2014.

(1) There is a minor inconsistency for Fiscal Year 2005 between the audited financial statements of the Municipal Pension Fund and the City's internal records, which as reflected in Table 28, show an Annual City Contribution of approximately $309 million.

Pension Bonds. Pension funding bonds ("Pension Bonds") were issued in Fiscal Year 1999, at the request of the City, by PAID. Debt service on the Pension Bonds is payable pursuant to a Service Agreement between the City and PAID. The Service Agreement provides that the City is obligated to pay a service fee from its current revenues and the City covenanted in the agreement to include the annual amount in its operating budget and to make appropriations in such amounts as are required. If the City's revenues are insufficient to pay the full service fee in any Fiscal Year as the same becomes due and payable, the City has covenanted to include amounts not so paid in its operating budget for the ensuing Fiscal Year.

The 1999 Pension Bonds were issued in the principal amount of $1.3 billion, and the net proceeds were used, together with other funds of the City, to make a contribution in Fiscal Year 1999 to the Municipal Pension Fund in the amount of approximately $1.5 billion.

In October 2012, PAID, at the request of the City, issued Pension Bonds in the principal amount of $231.2 million, the proceeds of which were used principally to make the $230 million repayment of deferred contributions to the Municipal Pension Fund reflected in Table 28 above. These bonds had maturities of April 1, 2013 and 2014, and have been repaid.

In December 2012, PAID, at the request of the City, issued Pension Bonds in the approximate principal amount of $300 million, the proceeds of which were used to current refund a portion of the 1999 Pension Bonds. The refunding generated savings of approximately $22.6 million, which the City deposited into the Municipal Pension Fund.

Projections of Funded Status

Cautionary Note. The information under this subheading, "Projections of Funded Status," was prepared by Cheiron. The table below shows a five-year projection of MMO payments, Actuarial Value of Assets, Actuarial Liability, UAL, and Funded Ratio. The charts below show projections through 2034 of funded ratios and MMO contributions. All projections, whether for five years or for twenty years, are subject to actual experience deviating from the underlying assumptions and methods, and that is particularly the case for the charts below for the periods beyond the projections in the five-year table. **Projections and actuarial assessments are "forward looking" statements and are based upon assumptions which may not be fully realized in the future and are subject to change, including changes based upon the future experience of the City's Municipal Pension Fund and Municipal Pension Plan.**

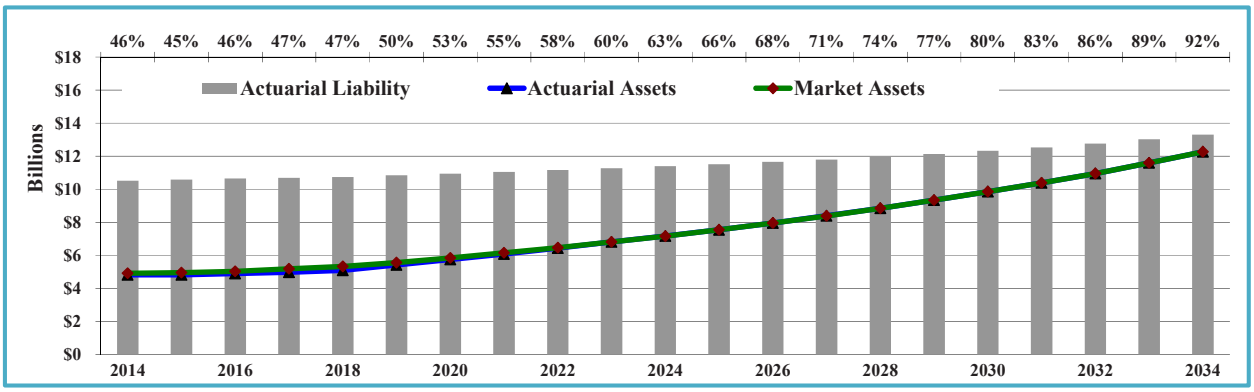
The projections are on the basis that all assumptions in the July 1, 2014 Valuation are exactly realized and the City makes all future MMO payments on schedule as required by Pennsylvania law, and must be understood in the context of the assumptions, methods and benefits in effect as described in the July 1, 2014 Valuation. Included among such assumptions are: (i) the rates of return for the Municipal Pension Fund over the projection period will equal 7.80% annually, (ii) MMO contributions will be made each year, and (iii) the provisions of Act 205 as amended by Act 44 will remain in force during the projection period. See the July 1, 2014 Valuation for a further discussion of the assumptions and methodologies used by the Actuary in preparing the July 1, 2014 Valuation and the following projections. In addition, the table and charts below reflect estimates of sales tax revenues that will be deposited by the City into the Municipal Pension Fund, which were provided by the City to Cheiron. Cheiron has not analyzed and makes no representation regarding the validity of the sales tax revenue assumptions and estimates provided by the City. See "REVENUES OF THE CITY – Sales and Use Tax."

Five-Year Projection. For the following chart, dollar amounts are in millions of USD.

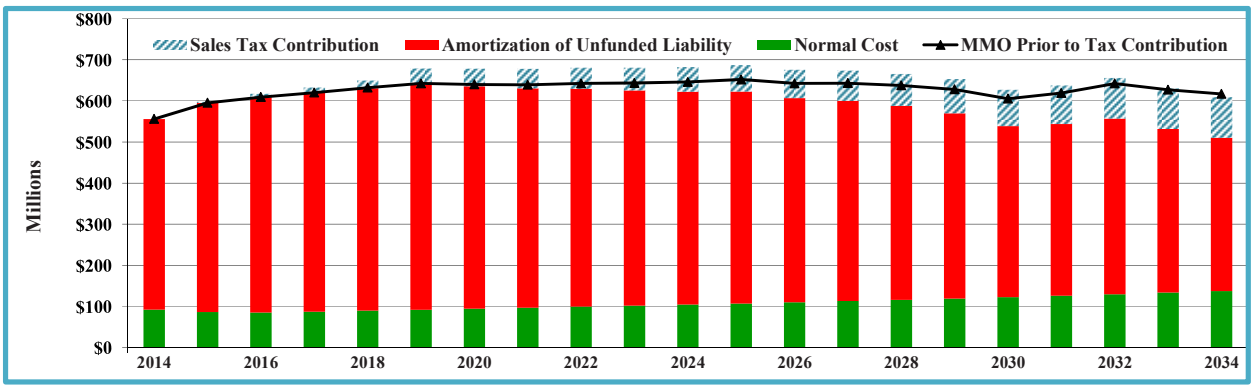
Fiscal Year End	MMO	Sales Tax Contribution	Actuarial Value of Assets	Actuarial Liability	UAL	Funded Ratio
2015	$ 556.0	$ 0.0	$ 4,814.9	$ 10,521.8	$ 5,706.9	45.8%
2016	595.0	2.8	4,815.5	10,584.8	5,769.3	45.5%
2017	609.4	7.8	4,900.0	10,640.2	5,740.2	46.1%
2018	619.5	13.2	4,976.2	10,689.7	5,713.5	46.6%
2019	630.9	18.6	5,085.4	10,733.2	5,647.7	47.4%
2020	639.9	38.9	5,410.4	10,836.9	5,426.5	49.9%

Twenty-Year Projections.

Funded Ratio Chart:



MMO Contribution Chart:



OTHER POST-EMPLOYMENT BENEFITS

The City self-administers a single employer, defined benefit plan for post-employment benefits other than pension benefits ("OPEB"), and funds such plan on a pay-as-you-go basis. The City's OPEB plan provides for those persons who retire from the City and are participants in the Municipal Pension Plan: (i) post-employment healthcare benefits for a period of five years following the date of retirement and (ii) lifetime life insurance coverage ($7,500 for firefighters who retired before July 1, 1990; $6,000 for all other retirees). In general, retirees eligible for OPEB are those who terminate their employment after ten years of continuous service to immediately become pensioned under the Municipal Pension Plan.

To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by the union contract for AFSCME DC 33 and is self-insured for all other eligible retirees. The City is responsible for the actual health care cost that is invoiced to the City's unions. The actual cost can be a combination of self-insured claim expenses, premiums, ancillary services, and administrative expenses. Eligible union represented employees receive five years of coverage through their union's health fund. The City's funding obligation for pre-Medicare retiree benefits is the same as for active employees. Union represented and non-union employees may defer their retiree health coverage until a later date. For some groups, the amount that the City pays for their deferred health care is based on the value of the health benefits at the time the retiree claims the benefits, but for police and fire retirees who retired after an established date, the City pays the cost of five years of coverage when the retiree claims the benefits.

The annual payments made by the City for OPEB for the last five Fiscal Years are shown in Table 32 below.

Table 32
Annual OPEB Payment
(Amounts in Thousands of USD)

Fiscal Year ended June 30,	Annual OPEB Payment
2010	$71,693
2011	65,533
2012	76,344
2013	57,096
2014	67,100

Source: See Note IV.3 to the City's audited Financial Statements for such Fiscal Years (as included in the City's CAFRs).

For financial reporting purposes, although the City funds OPEB on a pay-as-you-go basis, it is required to include in its financial statements (in accordance with GASB Statement No. 45) a calculation similar to that performed to calculate its pension liability. Pursuant to GASB 45, an annual required contribution is calculated which, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liability over a period not to exceed 30 years. As of July 1, 2013, the date of the most recent actuarial valuation, the UAL for the City's OPEB was $1.7 billion, the covered annual payroll was $1.4 billion, and the ratio of UAL to the covered payroll was 120.2%. See Note IV.3 to the City's audited Financial Statements for the Fiscal Year ended June 30, 2014.

PGW PENSION PLAN

General

PGW consists of all the real and personal property owned by the City and used for the acquisition, manufacture, storage, processing, and distribution of gas within the City, and all property, books, and records employed and maintained in connection with the operation, maintenance, and administration of PGW. The City Charter provides for a Gas Commission (the "Gas Commission") to be constituted and appointed in accordance with the provisions of contracts between the City and the operator of PGW as may from time to time be in effect, or, in the absence of a contract, as may be provided by ordinance. The Gas Commission consists of the City Controller, two members appointed by City Council and two members appointed by the Mayor.

PGW is operated by PFMC, pursuant to an agreement between the City and PFMC dated December 29, 1972, as amended, authorized by ordinances of City Council (the "Management Agreement"). Under the Management Agreement, various aspects of PFMC's management of PGW are subject to review and approval by the Gas Commission. The PUC has the regulatory responsibility for PGW with regard to rates, safety, and customer service.

The City sponsors the Philadelphia Gas Works Pension Plan (the "PGW Pension Plan"), a single employer defined benefit plan, to provide pension benefits for all of PGW's employees and other eligible class employees of PFMC and the Gas Commission. As plan sponsor, the City, through its General Fund, could be responsible for plan liabilities if the PGW Pension Plan does not satisfy its payment obligations to PGW retirees. At July 1, 2015, the PGW Pension Plan membership total was 3,800, comprised of (i) 2,526 retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them and (ii) 1,274 participants, of which 1,003 were vested and 271 were nonvested.

PGW Pension Plan

The PGW Pension Plan provides retirement benefits as well as death and disability benefits. Retirement benefits vest after five years of credited service. Retirement payments for vested employees commence (i) at age 65 and five years of credited service, (ii) age 55 and 15 years of credited service, or (iii) without regard to age, after 30 years of credited service. For covered employees hired prior to May 21, 2011 (union employees) or prior to December 21, 2011 (non-union employees), PGW pays the entire cost of the PGW Pension Plan. Union employees hired on or after May 21, 2011 and non-union employees hired on or after December 21, 2011 have the option to participate in the PGW Pension Plan and contribute 6% of applicable wages, or participate in a plan established in compliance with Section 401(a) of the Internal Revenue Code (deferred compensation plan) and have PGW contribute 5.5% of applicable wages.

PGW is required by statute to contribute the amounts necessary to fund the PGW Pension Plan. The PGW Pension Plan is being funded with contributions by PGW to the Sinking Fund Commission of the City. Benefit and contribution provisions are established by City ordinance and may be amended only as allowed by City ordinance. The pension payments are treated as an operating expense of PGW and are included as a component of PGW's base rate. As such, the payment amounts are subject to the approval of the PUC. To date, the PUC has approved the amounts requested that are allocable to pension payments. Payments to beneficiaries of the PGW Pension Plan are made by PGW through its payroll system. The financial statements for the PGW Pension Plan for the fiscal year ended June 30, 2014, show an amount due to PGW of approximately $5.3 million, which represents the cumulative excess of

payments made to the retirees and administrative expenses incurred by PGW, over the sum of PGW's required annual contribution and reimbursements received from the PGW Pension Plan.

Pension Costs and Funding

PGW pays an annual amount that is projected to be sufficient to cover its normal cost and an amortization of the PGW Pension Plan's UAL. The following table shows the normal cost, the amortization payment, and the resulting annual required contribution (being the amount also paid) for the last five PGW Fiscal Years. PGW has been using a 20-year open amortization period (and the payments in Table 33 are on the basis of a 20-year open amortization), but is considering whether to adopt a 30-year closed amortization period. An open amortization period is one that begins again or is recalculated at each actuarial valuation date. With a closed amortization period, the unfunded liability is amortized over a specific number of years to produce a level annual payment. Because the final amortization date is fixed, if all actuarial assumptions are achieved, the unfunded liability would decline to zero as of the final amortization date. To the extent future experience differs from the assumptions used to establish the 30-year fixed amortization payment schedule, new amortization bases attributable to a particular year's difference would be established and amortized over their own 30-year schedule.

Table 33
PGW Pension Payments
(Dollar Amounts in Thousands of USD)

Fiscal Year ended August 31,	Normal Cost	Amortization Payment	Annual Required Contribution (amount paid)[1]	Payments to Beneficiaries
2010	$8,292	$16,341	$24,633	$35,722
2011	8,499	14,098	22,597	38,232
2012	8,171	15,801	23,972	40,122
2013	8,782	14,832	23,614	41,614
2014	8,533	15,988	24,521	43,168
2015(est.)	9,856	12,130	21,986	47,969[2]

(1) As described above, PGW does not make a net cash contribution to the PGW Pension Plan, but rather pays beneficiaries through its payroll system, and then is reimbursed by the Plan.

(2) Reflects actual payments through July 2015 plus an estimated amount for August 2015.

Although PGW has paid its annual required contribution each year, the actuarial value of assets for the PGW Pension Plan is less than the actuarial accrued liability, as shown in the next table.

Table 34
Schedule of Pension Funding Progress
(Dollar Amounts in Thousands of USD)

Actuarial valuation date	Actuarial value of assets	Actuarial liability	UAL	Funded ratio
9/1/2011	$421,949	$572,190	$150,241	73.74%
9/1/2012	437,780	585,632	147,852	74.75
9/1/2013	462,691	623,612	160,921	74.20
9/1/2014	514,944	643,988	129,044	79.96
7/1/2015	515,287	706,704	191,417	72.91

The current significant actuarial assumptions for the PGW Pension Plan are (i) investment return rate of 7.65% compounded annually, (ii) salary increases assumed to reach 4.5% per year; and (iii) retirements that are assumed to occur, for those with 30 or more years of service, at a rate of 15% at ages 55 to 60, 30% at age 61, 50% at ages 62-69, and 100% at age 70 and older. The investment return for the period September 1, 2014 – June 30, 2015 was 2.99% (on a non-annualized basis), and for the period July 1, 2014 – June 30, 2015 was 4.57%.

The change in the actuarial value of assets from approximately $514.9 million (September 1, 2014) to approximately $515.3 million (July 1, 2015) reflects receipts, including employer contribution, employee contributions, and investment return, of approximately $40.1 million and disbursements, including benefit payments, refunds, and administrative expenses of approximately $39.8 million.

The increase in the UAL from $129.0 million at September 1, 2014 to $191.4 million at July 1, 2015 is the product of a number of factors, including: (i) the number of retirees who commenced benefits earlier than had been expected under the prior assumptions, (ii) the change in the discount rate from 7.95% to 7.65%, (iii) investment returns lower than anticipated, and (iv) the use of a new mortality table and a new scale for projections of future mortality improvements, which recognize longer life spans for workers and retirees.

PGW uses a September 1 – August 31 fiscal year, while the PGW Pension Plan uses a July 1 – June 30 fiscal year (the same as the City's fiscal year). Prior Actuarial Reports were prepared on the basis of a September 1 – August 31 plan year, while the most recent Actuarial Valuation Report is for the plan year July 1, 2015 – June 30, 2016. This is reflected in Table 34 above.

The PGW Pension Plan actuary prepared a separate actuarial valuation report ("GASB 67 Report") for the fiscal year ending June 30, 2015, for purposes of plan reporting information under Governmental Accounting Standards Board Statement No. 67, "Financial Reporting for Pension Plans." The GASB 67 Report shows for the fiscal year ending June 30, 2015, an unfunded liability of approximately $235.3 million (rather than the approximately $191.4 million reflected in Table 34), which results in a funded ratio of 68.65%. In addition, that report provides an interest rate sensitivity, which shows that were the investment rate to be 6.65% (1% lower than the assumed investment rate), the unfunded liability would be approximately $322.2 million.

Projections of Funded Status

The information under this subheading, "Projections of Funded Status," is extracted from tables prepared by Aon Hewitt, as actuary to the PGW Pension Plan, which were included in their "Actuarial Valuation Report for the Plan Year July 1, 2015 – June 30, 2016." The charts show 10-year projections, using both the current amortization method (20 year, open) and the alternative amortization method (30 year, fixed) under consideration. Projections are subject to actual experience deviating from the underlying assumptions and methods. Projections and actuarial assessments are "forward looking" statements and are based upon assumptions that may not be fully realized in the future and are subject to change, including changes based upon the future experience of the PGW Pension Plan.

Table 35
Schedule of Prospective Funded Status (20 Year Open Amortization)
(Dollar Amounts in Thousands of USD)

Actuarial Valuation Date (July 1)	Market Value of Assets	Actuarial Accrued Liability	UAL	Contribution	Funded Ratio
2015	$515,287	$706,704	$191,417	$26,476	72.91%
2016	529,269	717,666	188,396	26,131	73.75%
2017	543,175	727,092	183,917	25,735	74.71%
2018	556,774	735,975	179,200	25,162	75.65%
2019	569,645	744,361	174,716	24,672	76.53%
2020	581,781	752,606	170,826	24,111	77.30%
2021	592,936	759,992	167,056	23,418	78.02%
2022	602,971	765,489	162,518	22,657	78.77%
2023	611,704	769,438	157,734	21,887	79.50%
2024	619,048	772,467	153,419	20,807	80.14%

Table 36
Schedule of Prospective Funded Status (30 Year Closed Amortization)
(Dollar Amounts in Thousands of USD)

Actuarial Valuation Date (July 1)	Market Value of Assets	Actuarial Accrued Liability	UAL	Contribution	Funded Ratio
2015	$515,287	$706,704	$191,417	$24,020	72.91%
2016	526,719	717,666	190,946	24,075	73.39%
2017	538,295	727,092	188,797	24,092	74.03%
2018	549,816	735,975	186,159	23,923	74.71%
2019	560,868	744,361	183,493	23,828	75.35%
2020	571,455	752,606	181,151	23,645	75.93%
2021	581,337	759,992	178,655	23,323	76.49%
2022	590,386	765,489	175,103	22,929	77.13%
2023	598,439	769,438	170,999	22,517	77.78%
2024	605,422	772,467	167,045	21,780	78.38%

Additional Information

The City issues a publicly available financial report that includes financial statements and required supplementary information for the PGW Pension Plan. The report is not incorporated into this Official Statement by reference. The report may be obtained by writing to the Office of the Director of Finance of the City.

Further information on the PGW Pension Plan, including with respect to its membership, plan description, funding policy, actuarial assumptions and funded status is contained in the Fiscal Year 2014 CAFR.

PGW OTHER POST-EMPLOYMENT BENEFITS

PGW provides post-employment healthcare and life insurance benefits to its participating retirees and their beneficiaries and dependents. The City, through its General Fund, could be responsible for costs associated with post-employment healthcare and life insurance benefits if PGW fails to satisfy its post-employment benefit obligations.

PGW pays the full cost of medical, basic dental, and prescription coverage for employees who retired prior to December 1, 2001. Employees who retire after December 1, 2001 are provided a choice of three plans at PGW's expense and can elect to pay toward a more expensive plan. Union employees hired prior to May 21, 2011 and non-union employees hired prior to December 21, 2011 who retire from active service to immediately begin receiving pension benefits are entitled to receive lifetime post-retirement medical, prescription, and dental benefits for themselves and, depending on their retirement plan elections, their dependents. Employees hired on or after those dates are entitled to receive only five years of post-retirement benefits. Currently, PGW provides for the cost of healthcare and life insurance benefits for retirees and their beneficiaries on a pay-as-you-go-basis.

As part of a July 29, 2010 rate case settlement (the "Rate Settlement"), which provided for the establishment of an irrevocable trust for the deposit of funds derived through a rider from all customer classes to fund OPEB liabilities (the "OPEB Rider"), PGW established the trust in July 2010, and began funding the trust in accordance with the Rate Settlement in September 2010. The Rate Settlement provides that PGW shall deposit $15.0 million annually for an initial five-year period towards the ARC, and an additional $3.5 million annually, which represents a 30-year amortization of the OPEB liability at August 31, 2010. These deposits will be funded primarily through increased rates of $16.0 million granted in the Rate Settlement. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excesses) over a period of 30 years. PGW is currently in settlement talks with the PUC, which, among other things, involve the continued funding of OPEB liabilities through the OPEB Rider. PGW expects the OPEB Rider to continue past August 31, 2015 and that the deposits related thereto will total $18.5 million annually.

Table 37 provides detail of actual PGW OPEB payments for the last five PGW Fiscal Years and projected PGW OPEB payments for PGW Fiscal Years 2015-2020.

Table 37
PGW OPEB Payments
(Amounts in Millions of USD)

	Fiscal Year ended August 31,	Healthcare	Life Insurance	OPEB Trust	Total
Actual					
	2010	$20.6	$1.1	$0.0	$21.7
	2011	21.8	1.4	18.5	41.7
	2012	24.5	1.5	18.5	44.5
	2013	22.2	1.5	18.5	42.2
	2014	24.3	1.6	18.5	44.4
Projections					
	2015	24.3	1.7	18.5	44.5
	2016	29.3	1.7	18.5	49.5
	2017	31.9	1.7	18.5	52.1
	2018	34.5	1.7	18.5	54.7
	2019	37.1	1.7	18.5	57.3
	2020	39.7	1.7	18.5	59.9

Table 38 is the schedule of PGW OPEB funding progress, as of the actuarial valuation date of August 31 for 2011-2014.

Table 38
Schedule of OPEB Funding Progress
(Dollar Amounts in Thousands of USD)

Actuarial valuation date (August 31)	Actuarial value of assets	Actuarial liability	Unfunded actuarial liability	Funded ratio
2011	$17,886	$485,722	$467,836	3.68%
2012	38,860	443,982	405,122	8.75
2013	61,796	436,527	374,731	14.16
2014	90,838	450,289	359,451	20.17

Further information on PGW's annual OPEB expense, net OPEB obligation and the funded status of the OPEB benefits related to PGW is contained in the Fiscal Year 2014 CAFR.

CITY CASH MANAGEMENT AND INVESTMENT POLICIES

General Fund Cash Flow

Due to the fact that the receipt of revenues into the General Fund generally lag behind expenditures from the General Fund during each Fiscal Year, the City issues notes in anticipation of General Fund revenues and makes payments from the Consolidated Cash Account (described below) to finance its on-going operations. The City has issued, or PICA has issued on behalf of the City, tax and revenue anticipation notes in each Fiscal Year since Fiscal Year 1972. Each issue was repaid when due, prior to the end of the Fiscal Year. The City issued $130 million of tax and revenue anticipation notes on November 25, 2014, which matured on June 30, 2015. The City issued $175 million of tax and revenue anticipation notes on August 5, 2015, which mature on June 30, 2016.

The timing imbalance referred to above results from a number of factors, principally the following: (i) Real Estate Taxes, BIRT, and certain other taxes are not due until the latter part of the Fiscal Year; and (ii) the City experiences lags in reimbursement from other governmental entities for expenditures initially made by the City in connection with programs funded by other governments.

The repayment of the tax and revenue anticipation notes is funded through cash available in the General Fund.

Consolidated Cash

The Act of the General Assembly of June 25, 1919 (Pa. P.L. 581, No. 274, Art. XVII, § 6) authorizes the City to make temporary inter-fund loans between certain operating and capital funds. The City maintains a Consolidated Cash Account for the purpose of pooling the cash and investments of all City funds, except those which, for legal or contractual reasons, cannot be commingled (e.g., the Municipal Pension Fund, sinking funds, sinking fund reserves, funds of PGW, the Aviation Fund, the Water Fund, and certain other restricted purpose funds). A separate accounting is maintained to record the equity of each member fund that participates in the Consolidated Cash Account. The City manages the Consolidated Cash Account pursuant to the procedures described below.

To the extent that any member fund temporarily experiences the equivalent of a cash deficiency, an advance is made from the Consolidated Cash Account, in an amount necessary to result in a zero balance in the cash equivalent account of the borrowing fund. All subsequent net receipts of a member fund that has negative equity are applied in repayment of the advance.

All advances are made within the budgetary constraints of the borrowing funds. Within the General Fund, this system of inter-fund advances has historically resulted in the temporary use of tax revenues or other operating revenues for capital purposes and the temporary use of capital funds for operating purposes. With the movement of the reimbursable component of DHS activities from the General Fund to the Grants Revenue Fund, a similar system of advances has resulted in the use of tax revenues or other operating revenues in the General Fund to make expenditures from the Grants Revenue Fund, which advances may be outstanding for multiple Fiscal Years, but which are expected to be reimbursed by the Commonwealth.

Procedures governing the City's cash management operations require the General Fund-related operating fund to borrow initially from the General Fund-related capital fund, and only to the extent there is a deficiency in such fund may the General Fund-related operating fund borrow money from any other funds in the Consolidated Cash Account.

Investment Practices

Cash balances in each of the City's funds are managed to maintain daily liquidity to pay expenses, and to make investments that preserve principal while striving to obtain the maximum rate of return. In accordance with the City Charter, the City Treasurer is the City official responsible for managing cash collected into the City Treasury. The available cash balances in excess of daily expenses are placed in demand accounts, swept into money market mutual funds, or used to make investments directed by professional investment managers. These investments are held in segregated trust accounts at a separate financial institution. Cash balances related to revenue bonds for water and sewer and the airport are directly deposited and held separately in trust. A fiscal agent manages these cash balances per the related bond documents and the investment practice is guided by administrative direction of the City Treasurer per the Investment Committee and the Investment Policy (as described below). In addition, certain operating cash deposits (such as Community Behavioral Health, Special Gas/County Liquid and "911" surcharge) of the City are restricted by purpose and required to be segregated into accounts in compliance with federal or Commonwealth reporting.

Investment guidelines for the City are embodied in section 19-202 of the Philadelphia Code. In furtherance of these guidelines, as well as Commonwealth and federal legislative guidelines, the Director of Finance adopted a written Investment Policy (the "Policy") that went into effect in August 1994 and was most recently revised in September 2014. The Policy supplements other legal requirements and establishes guiding principles for the overall administration and effective management of all of the City's monetary funds (except the Municipal Pension Fund, the PGW Retirement Reserve Fund, the PGW OPEB Trust and the PGW Workers' Compensation Reserve Fund).

The Policy delineates the authorized investments as authorized by the Philadelphia Code and the funds to which the Policy applies. The authorized investments include U.S. government securities, U.S. treasuries, U.S. agencies, repurchase agreements, commercial paper, corporate bonds, money market mutual funds, obligations of the Commonwealth, collateralized banker's acceptances and certificates of deposit, and collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality, all of investment grade rating or better and with maturity limitations.

U.S. government treasury and agency securities carry no limitation as to the percent of the total portfolio. Repurchase agreements, money market mutual funds, commercial paper, and corporate bonds are limited to investment of no more than 25% of the total portfolio. Obligations of the Commonwealth and collateralized banker's acceptances and certificates of deposit are limited to no more than 15% of the total portfolio. Collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality are limited to no more than 5% of the total portfolio.

U.S. government securities carry no limitation as to the percent of the total portfolio per issuer. U.S. agency securities are limited to no more than 33% of the total portfolio per issuer. Repurchase agreements and money market mutual funds are limited to no more than 10% of the total portfolio per issuer. Commercial paper, corporate bonds, obligations of the Commonwealth, collateralized banker's acceptances and certificates of deposit, and collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality are limited to no more than 3% of the total portfolio per issuer.

The Policy provides for an ad hoc Investment Committee consisting of the Director of Finance, the City Treasurer and one representative each from the Water Department, the Division of Aviation, and PGW. The Investment Committee meets quarterly with each of the investment managers to review each manager's performance to date and to plan for the next quarter. Investment managers are given any changes in investment instructions at these meetings. The Investment Committee approves all

modifications to the Policy. The Investment Committee may from time to time review and revise the Policy and does from time to time approve temporary waivers of the restrictions on assets based on cash management needs and recommendations of investment managers.

The Policy expressly forbids the use of any derivative investment product as well as investments in any security whose yield or market value does not follow the normal swings in interest rates. Examples of these types of securities include, but are not limited to: structured notes, floating rate (excluding U.S. Treasury and U.S. agency floating rate securities) or inverse floating rate instruments, securities that could result in zero interest accrual if held to maturity, and mortgage derived interest and principal only strips. The City currently makes no investments in derivatives.

DEBT OF THE CITY

General

Section 12 of Article IX of the Constitution of the Commonwealth provides that the authorized debt of the City "may be increased in such amount that the total debt of [the] City shall not exceed 13.5% 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 [the] City shall not increase its indebtedness to an amount exceeding 3.0% 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." The Supreme Court of Pennsylvania has held that bond authorizations once approved by the voters need not be reduced as a result of a subsequent decline in the average assessed value of City property. The general obligation debt subject to the limitation described in this paragraph is referred to herein as "Tax-Supported Debt."

The Constitution of the Commonwealth further provides that there shall be excluded from the computation of debt for purposes of the Constitutional debt limit, debt (herein called "Self-Supporting Debt") incurred for revenue-producing capital improvements that may reasonably be expected to yield revenue in excess of operating expenses sufficient to pay interest and sinking fund charges thereon. In the case of general obligation debt, the amount of such Self-Supporting Debt to be so excluded must be determined by the Court of Common Pleas of Philadelphia County upon petition by the City. Self-Supporting Debt is general obligation debt of the City, with the only distinction from Tax-Supported Debt being that it is not used in the calculation of the Constitutional debt limit. Self-Supporting Debt has no lien on any particular revenues.

For purposes of this Official Statement, Tax-Supported Debt and Self-Supporting Debt are referred to collectively as "General Obligation Debt." The term "General Fund-Supported Debt" is comprised of (i) General Obligation Debt and (ii) PAID, PMA, PPA, and PRA bonds.

For purposes of the following discussion, the approximately $138 million of General Obligation Debt approved by the voters of the City on January 15, 2015 has been included. Using the methodology described above, as of July 1, 2015, the Constitutional debt limitation for Tax-Supported Debt was approximately $4,288,697,000. The total amount of authorized debt applicable to the debt limit was $1,691,990,000, including $724,949,000 of authorized but unissued debt, leaving a legal debt margin of $2,596,707,000. Based on the foregoing figures, the calculation of the legal debt margin is as follows:

Table 39
General Obligation Debt
July 1, 2015
(Amounts in Thousands of USD)

Authorized, issued and outstanding	$1,379,700
Authorized and unissued	724,949
Total	$2,104,649
Less: Self-Supporting Debt	(353,605)
Less: Serial bonds maturing within a year	59,054
Total amount of authorized debt applicable to debt limit	1,691,990
Legal debt limit	4,288,697
Legal debt margin	$2,596,707

As a result of the implementation of the City's AVI, the assessed value of taxable real estate within the City has increased substantially. See "REVENUES OF THE CITY – Real Property Taxes Assessment and Collection." The $4.289 billion Constitutional debt limit calculation includes two years of property values certified under the City's AVI program, and eight years of property values under the City's former property valuation process. Assuming no increase or decrease in property values used to calculate the Constitutional debt limit in Table 39, the Constitutional debt limit is estimated to be $14.473 billion by 2024.

The City is also empowered by statute to issue revenue bonds and, as of June 30, 2015, had outstanding $1,991,275,000 aggregate principal amount of Water and Wastewater Revenue Bonds ("Water Bonds"), $1,008,775,000 aggregate principal amount of Gas Works Revenue Bonds, and $1,193,915,000 aggregate principal amount of Airport Revenue Bonds. As of June 30, 2015, the principal amount of PICA bonds outstanding was $315,955,000. The City has enacted an ordinance authorizing the total issuance of approximately $120 million and $350 million aggregate principal amount in commercial paper for PGW and the Division of Aviation, respectively.

Short-Term Debt

The City issued $130 million of tax and revenue anticipation notes on November 25, 2014, which matured on June 30, 2015. The City issued $175 million of tax and revenue anticipation notes on August 5, 2015, which mature on June 30, 2016. See "CITY CASH MANAGEMENT AND INVESTMENT POLICIES – General Fund Cash Flow."

Long-Term Debt

The table below presents a synopsis of the bonded debt of the City and its component units as of the date indicated. Of the total balance of the City's general obligation bonds issued and outstanding as of June 30, 2015, approximately 30% is scheduled to mature within five Fiscal Years and approximately 57% is scheduled to mature within ten Fiscal Years. When PICA's outstanding bonds are included with the City's general obligation bonds, approximately 64% is scheduled to mature within ten Fiscal Years.

Table 40
Bonded Debt -- City of Philadelphia and Component Units
as of June 30, 2015
(Amounts in Thousands of USD)[(1), (2), (3)]

General Obligation Debt and PICA Bonds				
General Obligation Bonds		$1,373,165		
PICA Bonds		315,955		
Subtotal: General Obligation Debt and PICA Bonds			$1,689,120	
Other General Fund-Supported Debt[(3)]				
Philadelphia Municipal Authority				
Criminal Justice Center	$68,365			
Juvenile Justice Center	91,970			
Public Safety Campus	65,155			
Fleet Management Equipment Lease	12,836			
Energy Conservation	11,305			
		249,631		
Philadelphia Authority for Industrial Development				
Pension capital appreciation bonds	$601,385			
Pension fixed rate bonds	761,655			
Stadiums	289,900			
Library	6,655			
Cultural and Commercial Corridor	108,085			
One Parkway	37,010			
Philadelphia School District	43,280			
		1,847,970		
Parking Authority		13,020		
Redevelopment Authority		190,710		
Subtotal: Other General Fund-Supported Debt			$2,301,331	
Revenue Bonds				
Water Fund		1,991,275		
Aviation Fund		1,193,915		
Gas Works		1,008,775		
Subtotal: Revenue Bonds			$4,193,965	
Grand Total				**$8,184,416**

(1) Unaudited; figures may not add up due to rounding.
(2) For tables setting forth a ten-year historical summary of Tax-Supported Debt of the City and the School District and the debt service requirements to maturity of the City's outstanding bonded indebtedness as of June 30, 2014, see the Fiscal Year 2014 CAFR.
(3) Reflects the delivery of the City's $138,795,000 General Obligation Refunding Bonds, Series 2015A issued on July 8, 2015.
(4) The principal amount outstanding relating to the PAID 1999 Pension Obligation Bonds, Series B (capital appreciation bonds) is reflected as the accreted value thereon as of June 30, 2015.

Table 41
City of Philadelphia
Annual Debt Service on General Fund-Supported Debt
(as of June 30, 2015)
(Amounts in Millions of USD)[1]

	General Obligation Debt[2]			Other General Fund-Supported Debt[4]			Aggregate General Fund-Supported Debt		
Fiscal Year	Principal	Interest[3]	Total	Principal	Interest[5]	Total	Principal	Interest	Total
2016	$59.18	$64.78	$123.95	$101.86	$142.36	$244.21	$161.03	$207.13	$368.17
2017	62.09	64.76	126.85	101.03	142.00	243.03	163.11	206.76	369.88
2018	64.81	61.56	126.36	107.84	141.16	249.00	172.64	202.72	375.36
2019	67.99	58.26	126.24	74.66	140.37	215.03	142.65	198.62	341.27
2020	69.90	54.86	124.76	65.63	140.18	205.81	135.53	195.04	330.57
2021	62.91	51.62	114.52	80.88	125.01	205.89	143.78	176.63	320.42
2022	65.71	48.47	114.18	78.72	127.19	205.91	144.43	175.66	320.08
2023	70.05	45.01	115.06	116.17	89.73	205.90	186.21	134.75	320.96
2024	73.57	41.31	114.88	114.97	89.70	204.67	188.54	131.01	319.55
2025	77.19	37.46	114.64	119.47	85.21	204.68	196.66	122.67	319.32
2026	73.53	33.64	107.16	135.14	68.72	203.86	208.66	102.36	311.02
2027	77.07	29.80	106.87	160.36	45.64	205.99	237.42	75.44	312.86
2028	81.32	25.94	107.26	165.55	36.34	201.89	246.87	62.28	309.15
2029	55.47	22.74	78.20	277.79	19.34	297.12	333.25	42.08	375.33
2030	70.70	19.72	90.42	54.00	9.52	63.51	124.70	29.24	153.93
2031	75.00	16.19	91.18	56.52	7.01	63.53	131.52	23.19	154.71
2032	78.82	12.45	91.26	16.03	4.89	20.92	94.85	17.34	112.18
2033	43.22	9.37	52.59	7.40	4.29	11.69	50.61	13.67	64.28
2034	30.41	7.40	37.80	7.81	3.88	11.69	38.22	11.28	49.49
2035	15.55	6.15	21.69	8.26	3.43	11.69	23.80	9.58	33.38
2036	16.42	5.27	21.69	8.73	2.96	11.69	25.15	8.23	33.38
2037	17.33	4.36	21.69	9.23	2.46	11.69	26.56	6.82	33.38
2038	18.31	3.38	21.69	9.76	1.93	11.69	28.07	5.31	33.37
2039	19.37	2.32	21.69	10.33	1.37	11.69	29.70	3.69	33.38
2040	8.52	1.50	10.02	3.31	0.77	4.08	11.83	2.26	14.09
2041	9.10	0.93	10.02	3.45	0.62	4.07	12.55	1.55	14.10
2042	9.71	0.32	10.02	3.60	0.48	4.07	13.30	0.79	14.09
2043	0.00	0.00	0.00	3.75	0.33	4.08	3.75	0.33	4.08
2044	0.00	0.00	0.00	3.91	0.17	4.08	3.91	0.17	4.08
TOTAL	**$1,373.17**	**$729.56**	**$2,102.72**	**$1,906.10**	**$1,437.04**	**$3,343.14**	**$3,279.26**	**$2,166.60**	**$5,445.87**

(1) Does not include letter of credit fees.
(2) Includes both Tax-Supported Debt and Self-Supporting Debt. See "– General." Does not include PICA Bonds. Reflects the refunding of a portion of the City's outstanding General Obligation Bonds, Series 2006, Series 2008B, and Series 2011, and includes debt service on the City's $138,795,000 General Obligation Refunding Bonds, Series 2015A, issued on July 8, 2015.
(3) Assumes interest rate on hedged variable rate bonds to be the associated fixed swap rate.
(4) Includes PAID, PMA, PPA, and PRA bonds, with capital appreciation bonds including only actual amounts payable. The original issuance amount of such capital appreciation bonds is included under the "Principal" column in the Fiscal Year such bonds mature and the full accretion amount at maturity less the original issuance amount is included in the "Interest" column in the Fiscal Year such bonds mature.
(5) Assumes interest rate on hedged variable rate bonds to be the associated fixed swap rate plus any fixed spread. Net of capitalized interest on PAID 2012 Service Agreement Revenue Refunding Bonds.

Other Long-Term Debt Related Obligations

The City has entered into other contracts and leases to support the issuance of debt by public authorities related to the City pursuant to which the City is required to budget and appropriate tax or other general revenues to satisfy such obligations, as shown in Table 40. The City budgets all other long-term debt-related obligations as a single budget item with the exception of PPA, which has a budget of $1,339,375 for Fiscal Year 2016.

The Hospitals Authority and the State Public School Building Authority have issued bonds on behalf of the Community College of Philadelphia ("CCP"). Under the Community College Act (Pa. P.L. 103, No. 31 (1985)), each community college must have a local sponsor, which for CCP is the City. As the local sponsor, the City is obligated to pay up to 50% of the annual capital expenses of CCP, which includes debt service. The remaining 50% is paid by the Commonwealth. Additionally, the City annually appropriates funds for a portion of CCP's operating costs (less tuition and less the Commonwealth's payment). The amount paid by the City in Fiscal Year 2015 was $26.9 million. The budgeted amount and current estimate for Fiscal Year 2016 is $30.3 million.

The City expects to enter into a service agreement supporting PAID's guaranty of a $15 million letter of credit securing the funding of certain costs related to the 2016 Democratic National Convention. Such transaction is expected to close in the first quarter of Fiscal Year 2016.

PICA Bonds

PICA has issued 11 series of bonds at the request of the City (the "PICA Bonds"). PICA no longer has authority under the PICA Act to issue bonds for new money purposes, but may refund bonds previously issued. As of June 30, 2015, two series of bonds remain outstanding: (i) Special Tax Revenue Refunding Bonds (City of Philadelphia Funding Program), Series of 2009, in the outstanding aggregate principal amount of $190,120,000 and having a final stated maturity date of June 15, 2023, and (ii) Special Tax Revenue Refunding Bonds (City of Philadelphia Funding Program), Series of 2010, in the outstanding aggregate principal amount of $125,835,000 and having a final stated maturity date of June 15, 2022. The proceeds of the PICA Bonds were used to (a) make grants to the City to fund its General Fund deficits, to fund the costs of certain City capital projects, to provide other financial assistance to the City to enhance operational productivity, and to defease certain of the City's general obligation bonds, (b) refund other PICA Bonds, and (c) pay costs of issuance.

The PICA Act authorizes the City to impose a tax for the sole and exclusive purposes of PICA. In connection with the adoption of the Fiscal Year 1992 budget and the execution of the PICA Agreement, as so authorized by the PICA Act, the City reduced the wage, earnings, and net profits taxes on City residents by 1.5% and enacted a new tax of 1.5% on wages, earnings, and net profits of City residents (the "PICA Tax"), which continues in effect. The PICA Tax secures the PICA Bonds. Pursuant to the PICA Act, at such time when no PICA Bonds are outstanding, the PICA Tax will expire. At any time, the City is authorized to increase for its own use its various taxes, including its wage, earnings, and net profits taxes on City residents and could do so upon the expiration of the PICA Tax.

The PICA Tax is collected by the City's Department of Revenue, as agent of the State Treasurer, and deposited in the Pennsylvania Intergovernmental Cooperation Authority Tax Fund (the "PICA Tax Fund") of which the State Treasurer is custodian. The PICA Tax Fund is not subject to appropriation by City Council or the General Assembly. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – *Non-Mayoral-Appointed or Nominated Agencies* – PICA."

The PICA Act authorizes PICA to pledge the PICA Tax to secure its bonds and prohibits the Commonwealth and the City from repealing the PICA Tax or reducing its rate while any PICA Bonds are outstanding. PICA Bonds are payable from PICA revenues, including the PICA Tax, pledged to secure PICA's bonds, the Bond Payment Account (as described below) and any debt service reserve fund established for such bonds and have no claim on any revenues of the Commonwealth or the City.

The PICA Act establishes a "Bond Payment Account" for PICA as a trust fund for the benefit of PICA bondholders and authorizes the creation of a debt service reserve fund for bonds issued by PICA. The State Treasurer is required to pay the proceeds of the PICA Tax held in the PICA Tax Fund directly to the Bond Payment Account. The proceeds of the PICA Tax in excess of amounts required for (i) debt service, (ii) replenishment of any debt service reserve fund for bonds issued by PICA, and (iii) certain PICA operating expenses, are required to be deposited in a trust fund established exclusively to benefit the City and designated the "City Account." Amounts in the City Account are required to be remitted to the City not less often than monthly, unless PICA certifies the City's non-compliance with the then-current five-year financial plan.

The total amount of PICA Tax remitted by the State Treasurer to PICA (which is net of the costs of the State Treasurer in collecting the PICA Tax), PICA annual debt service and investment expenses, and net PICA tax revenue remitted to the City for each of the Fiscal Years 2011 through 2014 and the budgeted amount and current estimate for Fiscal Year 2015 are set forth below. The current estimates for Fiscal Year 2015 are from the Third Quarter QCMR.

Table 42
Summary of PICA Tax Remitted by the State Treasurer to PICA and Net Taxes Remitted by PICA to the City (Amounts in Millions of USD)

Fiscal Year	PICA Tax	PICA Annual Debt Service and Investment Expenses	Net taxes remitted to the City
2011 (Actual)	358.7	64.9	293.8
2012 (Actual)	357.5	62.3	295.2
2013 (Actual)	376.5	62.5	314.0
2014 (Actual)	384.5	65.8	318.7
2015 (Budget)	403.7	65.7	338.0
2015 (Current Estimate)	402.8	65.7	337.0

OTHER FINANCING RELATED MATTERS

Swap Information

The City has entered into various swaps related to its outstanding General Fund-Supported Debt as detailed in the following table:

Table 43
Summary of Swap Information for General Fund-Supported Debt as of June 30, 2015

City Entity	City GO	City Lease PAID 2007A (Stadium)[2]	City Lease PAID 2007B-2,3 (Stadium)[3],[5]	City Lease PAID 2014A (Stadium)[3]	City Lease PAID 2007B-2,3 (Stadium)[3],[6]	City Lease PAID 2014A (Stadium)[3]
Related Bond Series	2009B[1]					
Initial Notional Amount	$313,505,000	$298,485,000	$217,275,000	$87,961,255	$72,400,000	$29,313,745
Current Notional Amount	$100,000,000	$193,520,000	$87,758,745	$87,961,255	$29,246,255	$29,313,745
Termination Date	8/1/2031	10/1/2030	10/1/2030	10/1/2030	10/1/2030	10/1/2030
Product	Fixed Payer Swap	Basis Swap	Fixed Payer Swap	Fixed Payer Swap	Fixed Payer Swap	Fixed Payer Swap
Rate Paid by Dealer	SIFMA	67% 1-month LIBOR + 0.20% plus fixed annuity	SIFMA	70% 1-month LIBOR	SIFMA	70% 1- month LIBOR
Rate Paid by City Entity	3.829%	SIFMA	3.9713%	3.62%	3.9713%	3.632%
Dealer	Royal Bank of Canada	Merrill Lynch Capital Services, Inc.	JPMorgan Chase Bank, N.A.	JPMorgan Chase Bank, N.A.	Merrill Lynch Capital Services, Inc.	Merrill Lynch Capital Services, Inc.
Fair Value[4]	($21,878,134)	($2,204,546)	($17,554,744)	($16,586,861)	($5,850,838)	($5,560,227)
Additional Termination Events	For Dealer: Rating change below BBB- or Baa3 For City: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event.	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)

(1) On July 28, 2009, the City terminated a portion of the swap in the amount of $213,505,000 in conjunction with the refunding of its Series 2007B bonds with the Series 2009A fixed rate bonds and the Series 2009B variable rate bonds. The City made a termination payment of $15,450,000.

(2) PAID received annual fixed payments of $1,216,500 from July 1, 2004 through July 1, 2013. As the result of an amendment on July 14, 2006, $104,965,000 of the total notional amount was restructured as a constant maturity swap (the rate received by PAID on that portion was converted from a percentage of 1-month LIBOR to a percentage of the 5-year LIBOR swap rate from October 1, 2006 to October 1, 2020). The constant maturity swap was terminated in December 2009. The City received a termination payment of $3,049,000.

(3) On May 13, 2014, PAID converted a portion of the 2007B SIFMA Swap to a LIBOR-based swap in conjunction with the refunding of its Series 2007B bonds with the Series 2014A bonds. Under the conversion, PAID pays a fixed rate of 3.62% and 3.632% to JPMorgan and Merrill Lynch, respectively, and receives a floating rate of 70% of 1-month LIBOR.

(4) Fair values are as of June 30, 2015, and are shown from the City's perspective and include accrued interest.

(5) On July 21, 2014, PAID terminated a portion of the swap in the amount of $41,555,000 in conjunction with the refunding of its Series 2007B bonds with the Series 2014B fixed rate bonds. PAID made a termination payment of $4,171,000 to JPMorgan.

(6) On July 21, 2014, PAID terminated a portion of the swap in the amount of $13,840,000 in conjunction with the refunding of its Series 2007B bonds with the Series 2014B fixed rate bonds. PAID made a termination payment of $1,391,800 to MLCS.

While the City is party to several interest rate swap agreements, for which there is General Fund exposure and on which the swaps currently have a negative mark against the City, the City has no obligation to post collateral on these swaps while the City's underlying ratings are investment grade.

For more information related to certain swaps entered into in connection with revenue bonds issued for PGW, the Water Department, and the Division of Aviation, see the Fiscal Year 2014 CAFR. In addition, PICA has entered into swaps, which are detailed in the Fiscal Year 2014 CAFR.

Swap Policy

The City has adopted a swap policy for the use of swaps, caps, floors, collars and other derivative financial products (collectively, "swaps") in conjunction with the City's debt management. The swap program managed by the City includes swaps related to the City's general obligation bonds, tax-supported service contract debt issued by related authorities, debt of the Water Department, Division of Aviation, and debt of PGW. Swaps related to debt of the PICA, the School District, and the PPA are managed by those governmental entities, respectively.

The Director of Finance has overall responsibility for entering into swaps. Day-to-day management of swaps is the responsibility of the City Treasurer, and the Executive Director of the Sinking Fund Commission is responsible for making swap payments. The Office of the City Treasurer and the City Solicitor's Office coordinate their activities to ensure that all swaps that are entered into are in compliance with applicable federal, state, and local laws.

The swap policy addresses the circumstances when swaps can be used, the risks that need to be evaluated prior to entering into swaps and on an ongoing basis after swaps have been executed, the guidelines to be employed when swaps are used, and how swap counterparties will be chosen. The swap policy is used in conjunction with the City's Debt Management Policy, reviewed annually, and updated as needed.

Under the swap policy, permitted uses of swaps include: (i) managing the City's exposure to floating interest rates through interest rate swaps, caps, floors and collars; (ii) locking in fixed rates in current markets for use at a later date through the use of forward starting swaps and rate locks; (iii) reducing the cost of fixed or floating rate debt through swaps and related products to create "synthetic" fixed or floating rate debt; and (iv) managing the City's credit exposure to financial institutions and other entities through the use of offsetting swaps.

Since swaps can create exposure to the creditworthiness of financial institutions that serve as the City's counterparties on swap transactions, the City has established standards for swap counterparties. As a general rule, the City enters into transactions with counterparties whose obligations are rated in the double-A rated category or better from two nationally recognized rating agencies. If counterparty's credit rating is downgraded below the double-A rating category, the swap policy requires that the City's exposure be collateralized. If a counterparty's credit is downgraded below the A category, even with collateralization, the swap policy requires a provision in the swap permitting the City to exercise a right to terminate the transaction prior to its scheduled termination date.

Letter of Credit Agreements

The City has entered into various letter of credit agreements related to its General Fund-Supported Debt as detailed in the table below. Under the terms of such letter of credit agreements, following a purchase of the applicable bonds, the City may be required to amortize such bonds more quickly than as originally scheduled at issuance.

Table 44
Summary of Letter of Credit Agreements for General Fund-Supported Debt as of June 30, 2015

Variable Rate Bond Series	Amount Outstanding	Bond Maturity Date	Provider	Expiration Date	Rating Thresholds [1]
General Obligation Bonds, Series 2009B	$100,000,000	August 1, 2031	Bank of New York Mellon	March 7, 2016	The long-term rating assigned by any one of the rating agencies to any unenhanced long-term parity debt of the City is (i) withdrawn or suspended for credit-related reasons or (ii) reduced below investment grade.
PAID Multi-Modal Lease Revenue Refunding Bonds, Series 2007B-2	72,400,000	October 1, 2030	TD Bank	May 29, 2019	The long-term ratings assigned by at least two of the rating agencies to any unenhanced general obligation bonds of the City is (i) withdrawn or suspended for credit-related reasons, or (ii) reduced below investment grade.
PAID Multi-Modal Lease Revenue Refunding Bonds, Series 2007B-3	44,605,000	October 1, 2030	PNC Bank	May 23, 2017	The long-term ratings assigned by at least two of the rating agencies to any unenhanced general obligation bonds of the City is (i) withdrawn or suspended for credit-related reasons, or (ii) reduced below investment grade.

[1] The occurrence of a Rating Threshold event would result in an event of default under the reimbursement agreement with the related bank.

Recent and Upcoming Financings

Recent Financings. The following is a list of financings that the City has entered into since January 1, 2014:

- On August 5, 2015, the City issued $175 million of its tax and revenue anticipation notes to finance certain cash flow needs of the City. Such issue matures on June 30, 2016.
- In July 2015, the City issued $138,795,000 in General Obligation Refunding Bonds to refund certain outstanding General Obligation Bonds.
- In April 2015, the City, together with the Water Department, issued $417,560,000 in Water Bonds to finance capital improvements to the Water and Wastewater Systems and refund certain outstanding Water Bonds.

- In April 2015, the City, through PRA, issued $111,515,000 in City Service Agreement Bonds to refund certain outstanding PRA bonds.

- In November 2014, the City issued $130,000,000 of tax and revenue anticipation notes, which matured on June 30, 2015.

- In October 2014, the City, through PAID, issued $57,515,000 in City Service Agreement Bonds for the benefit of the School District and to refund the $27,275,000 in City Service Agreement Bonds that were issued for the benefit of the School District in June 2014.

- In August 2014, the City, together with PGW, authorized its $150,000,000 Gas Works Revenue Notes, CP Series G and its $120,000,000 Gas Works Revenue Capital Project Commercial Paper Notes, which are each secured by a dual-purpose letter of credit for up to $120,000,000.

- In July 2014, the City, through PAID, issued $56,655,000 of Lease Revenue Refunding Bonds, the proceeds of which were used to refund bonds previously issued to finance a portion of the costs of stadiums used by the Phillies and the Eagles.

- In the second quarter of 2014, the City, through PAID, refunded the Series 2007B-1 bonds with direct purchase floating rate notes, indexed to a percentage of 1-month LIBOR, and concurrently re-indexed associated portions of the related swaps to the same LIBOR index.

- In April 2014, the City, through PMA, issued City Service Agreement Bonds in the aggregate principal amount of $65,155,000.

- In February 2014, the City issued General Obligation Refunding Bonds in the amount of $154,275,000.

- In January 2014, the City, together with the Water Department, issued $123,170,000 in Water Bonds.

Upcoming Financings. The following is a list of planned financings for bonds and notes that the City expects to issue in calendar year 2015:

- The City expects to issue general obligation bonds to finance certain capital projects.

- The City, through PAID, expects to issue City Service Agreement Bonds to refund certain outstanding series of such bonds.

- The City, together with the Division of Aviation, expects to issue Airport Revenue Bonds to refund certain outstanding series of such bonds.

- The City, through PMA, expects to issue City Service Agreement Bonds to finance certain capital projects.

CITY CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program for Fiscal Years 2016-2021 was submitted to City Council on March 5, 2015, approved by City Council on June 18, 2015, and signed by the Mayor on June 18, 2015. The Capital Improvement Program is included as part of the Revised Twenty-Fourth Five-Year Plan and contemplates a total budget of $8,964,847,000. In the Capital Improvement Program, $3,574,338,000 is expected to be provided from federal, Commonwealth, and other sources and the remainder through City funding. The following table shows the amounts budgeted each year from various sources of funds for capital projects in the Capital Improvement Program.

Table 45
Capital Improvement Program for Fiscal Years 2016-2021
(Amounts in Thousands of USD)

	2016	2017	2018	2019	2020	2021	2016-2021
City Funds – Tax Supported							
Carried-Forward Loans	$326,185	$0	$0	$0	$0	$0	**$326,185**
Operating Revenue	24,764	4,014	2,514	2,514	2,514	2,514	**38,834**
New Loans	149,963	164,331	134,592	130,675	127,011	127,201	**833,773**
Pre-financed Loans	9,599	0	0	0	0	0	**9,599**
PICA Pre-financed Loans	7,507	0	0	0	0	0	**7,507**
Tax Supported Subtotal	$518,018	$168,345	$137,106	$133,189	$129,525	$129,715	**$1,215,898**
City Funds – Self Sustaining							
Self-Sustaining Carried-Forward Loans	$811,167	$0	$0	$0	$0	$0	**$811,167**
Self-Sustaining Operating Revenue	150,276	79,297	86,295	81,579	86,502	95,485	**579,434**
Self-Sustaining New Loans	501,750	465,811	449,493	454,736	456,444	440,776	**2,769,010**
Self-Sustaining Subtotal	$1,463,193	$545,108	$535,788	$536,315	542,946	536,261	**$4,159,611**
Other City Funds							
Revolving Funds	$15,000	$0	$0	$0	$0	$0	**$15,000**
Other Than City Funds							
Carried-Forward Other Government	$2,714	$0	$0	$0	$0	$0	**$2,714**
Other Governments Off Budget	2,253	2,429	1,746	1,744	1,684	1,573	**11,429**
Other Governments	7,000	0	0	0	0	0	**7,000**
Carried-Forward State	100,523	0	0	0	0	0	**100,523**
State Off Budget	181,842	207,356	213,810	214,097	214,122	211,865	**1,243,092**
State	35,850	36,126	41,210	43,046	41,259	40,861	**238,352**
Carried-Forward Private	114,046	0	0	0	0	0	**114,046**
Private	183,008	146,978	146,671	151,561	166,688	164,113	**959,019**
Carried-Forward Federal	154,189	0	0	0	0	0	**154,189**
Federal Off Budget	74,565	60,394	47,722	25,382	14,449	0	**222,512**
Federal	110,450	79,749	82,633	77,215	89,618	81,797	**521,462**
Other than City Funds Subtotal	$966,440	$533,032	$533,792	$513,045	$527,820	$500,209	**$3,574,338**
TOTAL – ALL FUNDS	**$2,962,651**	**$1,246,485**	**$1,206,686**	**$1,182,549**	**$1,200,291**	**$1,166,185**	**$8,964,847**

LITIGATION

Generally, judgments and settlements on claims against the City are payable from the General Fund, except for claims against the Water Department, the Division of Aviation, and PGW, which are paid out of their respective funds or revenues and only secondarily out of the General Fund.

The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act," (the "Tort Claims Act") establishes a $500,000 aggregate limitation on damages for injury to a person or property arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation on damages has been previously upheld by the Pennsylvania appellate courts, including in the recent decision of the Supreme Court of Pennsylvania in *Zauflik v. Pennsbury School District*, 104 A.3d 1096 (2014). Under Pennsylvania Rule of Civil Procedure 238, delay damages are not subject to the $500,000 limitation. The limit on damages is inapplicable to any suit against the City that does not arise under state tort law, such as claims made against the City under federal civil rights laws.

On June 16, 2015, legislation was introduced in the General Assembly that would increase the $500,000 limitation described in the preceding paragraph. Such legislation would increase the damages limitation to $2 million and have such limit adjusted annually to account for inflation. Such legislation was referred to the Committee on Judiciary on June 16, 2015. As of June 30, 2015, there has been no further action on this legislation.

General Fund

The following table presents the City's aggregate losses from settlements and judgments paid out of the General Fund for Fiscal Years 2011-2015 and the current estimate for Fiscal Year 2016.

Table 46
Aggregate Losses – General and Special Litigation Claims (General Fund)
Fiscal Years 2011-2015 (Actual) and 2016 (Current Estimate)
(Amounts in Millions of USD)

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Current Estimate 2016
Aggregate Losses	$33.6	$32.6	$30.3	$41.0	$37.3	$38.0

Source: The City's adopted budgets for Fiscal Years 2012-2016.

Based on the Revised Twenty-Fourth Five-Year Plan, the current estimate of settlements and judgments from the General Fund for Fiscal Years 2017-2021 is $38.0 million for each such Fiscal Year.

In budgeting for settlements and judgments in the annual Operating Budget and projecting settlements and judgments for each five-year plan, the City bases its estimates on past experience and on an analysis of estimated potential liabilities and the timing of outcomes, to the extent a proceeding is sufficiently advanced to permit a projection of the timing of a result. General and special litigation claims are budgeted separately from back-pay awards and similar settlements relating to labor disputes. Usually, some of the costs arising from labor litigation are reported as part of current payroll expenses. For Fiscal Year 2014, payments from the General Fund for these claims totaled $542,904 of which $522,404 was paid from the Indemnities account, and $20,500 from the operating budgets of the affected departments.

For Fiscal Year 2015, payments from the General Fund for these claims totaled $1,091,548, of which $911,548 was paid from the Indemnities account, and $180,000 from the operating budgets of the affected departments.

In addition to routine litigation incidental to performance of the City's governmental functions and litigation arising in the ordinary course relating to contract and tort claims and alleged violations of law, certain special litigation matters are currently being litigated and/or appealed and adverse final outcomes of such litigation could have a substantial or long-term adverse effect on the General Fund. These proceedings involve: (i) environmental-related actions and proceedings in which it has been or may be alleged that the City is liable for damages, including but not limited to property damage and bodily injury, or that the City should pay fines or penalties or the costs of response or remediation, because of the alleged generation, transport, or disposal of toxic or otherwise hazardous substances by the City, or the alleged disposal of such substances on or to City-owned property; (ii) contract disputes and other commercial litigation; (iii) union arbitrations and other employment-related litigation; (iv) potential and certified class action suits; and (v) civil rights litigation . The ultimate outcome and fiscal impact, if any, on the General Fund of the claims and proceedings described in this paragraph are not currently predictable.

Water Fund

Various claims have been asserted against the Water Department and in some cases lawsuits have been instituted. Many of these Water Department claims have been reduced to judgment or otherwise settled in a manner requiring payment by the Water Department. The following table presents the Water Department's aggregate losses from settlements and judgments paid out of the Water Fund for Fiscal Years 2011-2015 and the current estimate for Fiscal Year 2016. The Water Fund is the first source of payment for any of the claims against the Water Department.

Table 47
Aggregate Losses – General and Special Litigation Claims (Water Fund)
Fiscal Years 2011-2015 (Actual) and 2016 (Current Estimate)
(Amounts in Millions of USD)

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Current Estimate 2016
Aggregate Losses	$5.4	$3.1	$5.1	$6.1	$3.8	$6.5

Source: The City's adopted budgets for Fiscal Years 2012-2016.

Aviation Fund

Various claims have been asserted against the Division of Aviation and in some cases lawsuits have been instituted. Many of these Division of Aviation claims have been reduced to judgment or otherwise settled in a manner requiring payment by the Division of Aviation. The following table presents the Division of Aviation's aggregate losses from settlements and judgments paid out of the Aviation Fund for Fiscal Years 2011-2015 and the current estimate for Fiscal Year 2016. The Aviation Fund is the first source of payment for any of the claims against the Division of Aviation.

Table 48
Aggregate Losses – General and Special Litigation Claims (Aviation Fund)
Fiscal Years 2011-2015 (Actual) and 2016 (Current Estimate)

	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Current Estimate
Aggregate Losses	$1.7 million	$1.3 million	$1.4 million	$665,527	$750,793	$2.5 million

Source: The City's adopted budgets for Fiscal Years 2012-2016.

PGW

Various claims have been asserted against PGW and in some cases lawsuits have been instituted. Many of these PGW claims have been reduced to judgment or otherwise settled in a manner requiring payment by PGW. The following table presents PGW's settlements and judgments paid out of PGW revenues, with accompanying reserve information, in PGW Fiscal Years 2010 through 2014. PGW revenues are the first source of payment for any of the claims against PGW. PGW currently estimates approximately $4.7 million in settlements and judgments for PGW Fiscal Year 2015.

Table 49
Claims and Settlement Activity (PGW)
PGW Fiscal Years 2010-2014
(Amounts in Thousands of USD)[1]

Fiscal Year (ending August 31)	Beginning of Year Reserve	Current Year Claims and Adjustments	Claims Settled	End of Year Reserve	Current Liability Amount
2010	$11,881	$1,237	$(3,252)	$9,866	$5,380
2011	9,866	4,299	(3,468)	10,697	4,141
2012	10,697	3,725	(3,320)	11,102	7,664
2013	11,102	2,616	(3,307)	10,411	4,925
2014	10,411	2,498	(2,965)	9,944	4,728

(1) Source: PGW's audited financial statements.

APPENDIX D

THE CITY OF PHILADELPHIA SOCIOECONOMIC INFORMATION

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INTRODUCTION

The City of Philadelphia (the "City" or "Philadelphia") is the fifth-largest city in the nation, and is at the center of the United States' sixth largest metropolitan statistical area. The Philadelphia MSA (further described below) includes the fifth largest retail sales market in the nation, as well as a diverse network of business suppliers and complementary industries. Some of the City's top priorities include attracting and retaining knowledge workers, increasing educational attainment among Philadelphians, attracting development, and promoting Philadelphia as a desirable location for business.

According to the 2010 U.S. Census, the City increased its population by 0.6 percent in the ten years from 2000 to 2010 to 1.526 million residents, ending six decades of population decline. Although the increase was modest, it was an indicator of more recent growth and development in Philadelphia. From 2010 to 2013, the City increased its population by 1.8 percent to 1.553 million residents, which exceeded the rate of population growth projected by the Philadelphia City Planning Commission in its 2011 comprehensive plan.

Although facing challenges such as underfunded pension liabilities, high rates of poverty, and the School District of Philadelphia's (the "School District") ongoing fiscal crisis, the City benefits from its strategic geographical location, relative affordability, cultural and recreational amenities, and its growing strength in key industries.

Geography

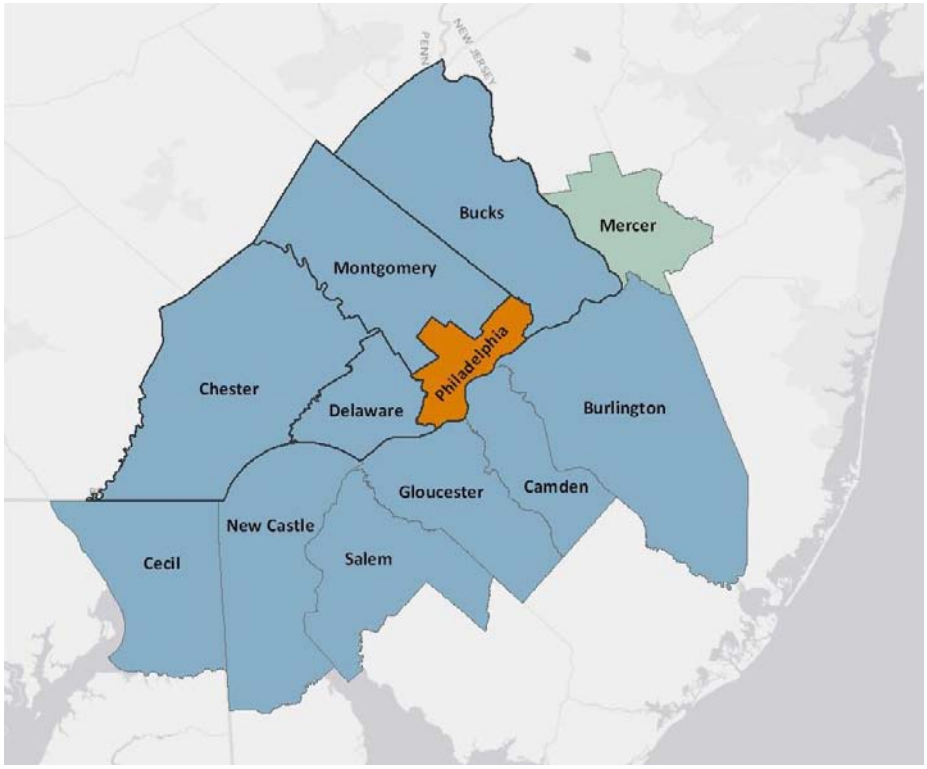
The City has an area of approximately 134 square miles, and is located along the southeastern border of the Commonwealth of Pennsylvania (the "Commonwealth"), at the confluence of the Delaware and Schuylkill Rivers. The City, highlighted in orange in Figure 1, lies at the geographical and economic center of the MSA and PMSA (described below). Philadelphia is the largest city in the Commonwealth, coterminous with the County of Philadelphia.

Philadelphia Metropolitan Statistical Area (the "MSA"), highlighted in blue in Figure 1, is the eleven-county area named the Philadelphia-Camden-Wilmington metropolitan statistical area, representing an area of approximately 5,118 square miles with approximately 6,034,678 residents.[1]

Philadelphia Primary Metropolitan Statistical Area (the "PMSA"), outlined in grey in Figure 1, is a five-county area that is within the MSA that lies in the Commonwealth and is sometimes called the Philadelphia Metropolitan Division. The counties of Bucks, Chester, Delaware, and Montgomery are referred to as the Suburban PMSA herein.

[1] Due to its close proximity and impact on the region's economy, Mercer County, New Jersey, highlighted in green in Figure 1, is included in the MSA by many regional agencies, although it is not included in the area defined by the U.S. Office of Management and Budget.

Figure 1
Map of Philadelphia Region, including the MSA, PMSA, and Mercer County, NJ



Source: 2009 TIGER County Shapefiles

Strategic Location

Philadelphia is at the center of the second largest MSA on the East Coast, and is served by a robust transportation infrastructure, including the Philadelphia International Airport, Amtrak's Northeast Corridor service, major interstate highway access, regional train service provided by Southeastern Pennsylvania Transportation Authority ("SEPTA") and New Jersey's PATCO (as defined herein), and the Port of Philadelphia. The City is within a day's drive of 50 percent of the nation's population and accessible to regional and international markets, due to the transportation infrastructure centered in the City. Philadelphia's central location along the East Coast, an hour from New York City and less than two hours from Washington, D.C. by high-speed rail, also allows for convenient access to these significant economic centers.

Essential to Philadelphia's strategic location is the region's access to public transit. The U.S. Census reports that 26.1 percent of Philadelphians used public transit to commute to work in 2013. SEPTA's regional rail service had record ridership in Fiscal Year 2014, and SEPTA public transit modes collectively had an average annual aggregate ridership increase of 1.9 percent over the last seven years.

Challenges

As evidenced by the City's development and population growth, Philadelphia has made progress transforming itself into a vibrant, attractive city over the past two decades. However, challenges still exist. At 26.3 percent, Philadelphia has the highest poverty rate of the nation's ten largest cities. The School District has experienced persistent budget deficits. The growth in charter school enrollment and state funding issues have exacerbated budget issues and resulted in spending cuts and the closure of 23 district schools in June 2013.

While Philadelphia's cultural amenities and quality of life attract millennials, generally defined as those born between 1980 and 2000, and now comprising the largest demographic group in the City, reports such as "Millennials in Philadelphia, A Promising but Fragile Boom," published by the Pew Charitable Trusts in 2014 (the "2014 Pew Report"), suggest that Philadelphia will struggle to retain these recent transplants unless it can alleviate these challenges. Although 59 percent of millennials said they would recommend the City to a friend as a place to live, only 36 percent of millennials surveyed said they would recommend Philadelphia as a place to raise children, and 56 percent responded they would not recommend the City as a place to raise children.

POPULATION AND DEMOGRAPHICS

Philadelphia is the nation's fifth largest city, with 1.553 million residents, based on 2013 U.S. Census estimates. The City's population gain from 2000 to 2010, while modest, was its first in 60 years. In the three years following the 2010 U.S. Census, the City's population grew by an additional 1.8 percent, adding an additional 27,159 residents, according to 2013 U.S. Census estimates.

From 2006 to 2012, the share of the population represented by citizens age 20 to 34 grew from 20 percent to 26 percent, becoming the largest share of Philadelphia's population. Of the 30 largest cities in the country, Philadelphia had the largest percentage point increase of millennials as a share of overall population from 2006 to 2012, according to the 2014 Pew Report referred to above. This demographic tends to be better educated than the City's and the nation's adult population as a whole. In 2013, 39.8 percent of 25- to 34-year-olds in Philadelphia held a bachelor's degree or higher, while only 32.9 percent of 25 to 34-year-olds in the United States were college graduates. The City's many universities and diverse employment opportunities are likely draws for residents in the 20 to 34 age group. In addition to an increase in the millennial population, the City's immigrant population also grew significantly, with the City's Asian population increasing 126.6 percent and the Hispanic or Latino population growing by 110.3 percent from 1990 to 2010[2].

Table 1
Population
City, MSA, Pennsylvania & Nation

	1990	2000	2010	2013	Percent Change 2000-2010	Percent Change 2010-2013
Philadelphia	**1,585,577**	**1,517,550**	**1,526,006**	**1,553,165**	**0.60%**	**1.77%**
Philadelphia-Camden-Wilmington MSA	5,437,468	5,687,147	5,965,343	6,034,678	4.89%	1.16%
Pennsylvania	11,881,643	12,281,054	12,702,379	12,773,801	3.40%	0.56%
United States	248,709,873	281,421,906	308,745,538	316,128,839	9.70%	2.39%

Source: U.S. Census Bureau, American Community Survey 2013, Census 2010, Census 2000, Census 1990.

Nearly 27 percent of Philadelphia's population is school aged and, in 2013, Philadelphia exceeded most selected peer cities in its share of students who are enrolled in an undergraduate, graduate or professional education program. Among the selected peer cities listed in Table 2, four of the six cities with the largest share of students in higher education were located in the Northeast region. Among these cities, while Boston had the highest percentage of its population enrolled in higher education, Philadelphia had 35,543 more students enrolled in higher education than Boston. Philadelphia had the sixth highest percentage of its population enrolled in higher education and the fifth largest university student population.

[2] Source: Pew Charitable Trusts Philadelphia Research Initiative 2011 report, "A City Transformed: the Racial and Ethnic Changes in Philadelphia Over the Last 20 Years."

Table 2
2013 Total Number of Students, as a Percent of Total Population of Selected Cities, Ranked by Total Number of Students Enrolled in Higher Education

City	Total Number of Students Enrolled in Higher Education	Total Number of Students Enrolled in School (all years)	Percent of All Students Enrolled in Higher Education	Percent of Total Population enrolled in Higher Education
Los Angeles, CA	349,769	1,033,797	33.83%	9.44%
Chicago, IL	237,382	718,978	33.02%	9.12%
Houston, TX	154,833	579,104	26.74%	7.50%
San Diego, CA	148,101	375,049	39.49%	11.51%
Philadelphia, PA	**147,779**	**413,283**	**35.76%**	**9.96%**
San Antonio, TX	115,793	402,022	28.80%	8.74%
Boston, MA	112,236	196,283	57.18%	18.19%
Phoenix, AZ	100,507	408,279	24.62%	7.07%
Washington, DC	75,213	160,155	46.96%	12.34%
Baltimore, MD	61,380	163,015	37.65%	10.28%
Milwaukee, WI	58,244	186,848	31.17%	10.19%
Detroit, MI	55,297	198,829	27.81%	8.27%
Memphis, TN	52,001	178,653	29.10%	12.56%
Cleveland, OH	30,009	102,704	29.22%	7.99%
United States	23,718,337	82,819,691	28.64%	7.85%

Source: 2013 American Community Survey, 3-Year Estimates

ECONOMIC BASE AND EMPLOYMENT

The Philadelphia Economy

The City's economy is composed of diverse industries, with virtually all classes of industrial and commercial businesses represented. The City is a major regional business and personal services center with strengths in insurance, law, finance, health, education, utilities, and the arts. As of 2011, approximately 174,000 residents of Philadelphia's four suburban counties (Bucks, Chester, Delaware, and Montgomery), and an additional 121,000 residents of counties outside the five-county region, worked within the City. The City also provides a destination for entertainment, arts, dining and sports for residents of the suburban counties, as well as for those residents of the counties comprising the MSA plus Mercer County, New Jersey.

The cost of living in the City is relatively moderate compared to other major metropolitan areas. The City, as one of the country's education centers, offers the business community a large, diverse, and industrious labor pool.

Key Industries

Table 3 provides location quotients for Philadelphia's most concentrated industry sectors. Location quotients quantify how concentrated a particular industry is in a region as compared to a base reference area, usually the nation. A location quotient greater than 1.00 indicates an industry with a greater share of the local area employment than is the case in the reference area.

As shown in Table 3, compared to the nation, Philadelphia County has higher concentrations in eight sectors: educational services; health care and social assistance; management of companies and enterprises; finance and insurance; professional and technical services; arts, entertainment, and recreation; transportation and warehousing; and other services[3]. Of these eight sectors, the City has a higher concentration of employment than the Commonwealth in six sectors: educational services; health care and social assistance; finance and insurance; professional and technical services; arts, entertainment and recreation; and other services.

Table 3
Ratio of Philadelphia County and Pennsylvania Industry Concentrations Compared to the United States

Industry	Philadelphia County to the US	Pennsylvania to the US
Educational Services	4.26	1.50
Health Care and Social Assistance	1.72	1.21
Management of Companies and Enterprises	1.28	1.47
Finance and Insurance	1.17	1.04
Professional and Technical Services	1.16	0.92
Arts, Entertainment, and Recreation	1.17	1.04
Transportation and Warehousing	1.08	1.15
Other Services	1.09	1.05

Source: Bureau of Labor Statistics: 2013 Location Quotient, Quarterly Census of Employment and Wages Data. Industry Location Quotients are calculated by comparing the industry's share of regional employment with its share of national employment.

The concentration of educational services not only provides stable support to the local economy, but also generates a steady and educated workforce, fueling the City's professional services and healthcare industries. The City is capitalizing on the region's assets to become a leader in research generated by life sciences and educational institutions. Several sites now foster life science incubator facilities, including the Navy Yard, the University City Science Center, University of Pennsylvania, Children's Hospital of Philadelphia, Jefferson Hospital, and Drexel University.

Employment

Table 4 shows non-farm payroll employment in the City over the last decade by industry sectors. In the past 10 years, the highest levels of growth have occurred in Professional and Business Services, Education and Health Services, and Leisure and Hospitality. These sectors provide stability to the City's overall economy. Government remains the second largest sector by number of employees. See "EXPENDITURES OF THE CITY – Personal Services (Personnel)" in APPENDIX C to this Official Statement.

[3] The Bureau of Labor Statistics ("BLS") defines the "Other Services" (except Public Administration) sector as establishments engaged in providing services not specifically provided for elsewhere in the BLS classification system, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, providing drycleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Table 4
Philadelphia Non-Farm Payroll Employment[1]
(Amounts in Thousands)

Sector	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% Change in 2004-2014	Average Annual % Change
Construction & Mining	11.4	12.0	12.4	11.9	12.1	10.1	10.0	10.0	10.2	10.4	11.0	-3.5%	-0.4%
Manufacturing	32.6	31.2	29.9	28.5	27.8	25.7	24.7	23.7	22.9	21.8	21.4	-34.4%	-4.1%
Trade, Transportation, & Utilities	90.9	90.0	88.5	87.8	87.6	85.9	86.6	87.4	88.9	89.5	90.9	0.0%	0.0%
Information	13.6	13.2	12.8	12.6	12.5	12.6	12.2	12.0	12.0	11.5	11.5	-15.4%	-1.7%
Financial Activities	49.0	48.2	47.7	47.1	46.5	44.9	42.6	41.6	41.0	41.1	41.7	-14.9%	-1.6%
Professional & Business Services	80.3	82.4	84.2	85.8	85.3	80.1	81.6	83.0	84.1	86.4	88.3	10.0%	1.0%
Education & Health Services	180.1	182.5	187.7	192.4	196.7	199.2	202.3	206.4	208.1	209.3	212.6	18.0%	1.7%
Leisure & Hospitality	54.6	56.6	58.0	58.0	57.9	56.9	58.4	60.6	63.2	64.8	67.1	22.9%	2.1%
Other Services	28.5	28.5	28.2	28.0	27.8	26.6	26.5	26.4	26.8	27.1	27.4	-3.9%	-0.4%
Private Sector Total	**541.0**	**544.6**	**549.4**	**552.1**	**554.2**	**542.0**	**544.9**	**551.1**	**557.2**	**561.9**	**572.0**	**5.7%**	**0.6%**
Government	116.9	115.7	113.2	110.6	109.2	110.4	112.1	109.0	105.3	103.5	102.2	-12.6%	-1.3%
Total	**657.9**	**660.3**	**662.5**	**662.7**	**663.3**	**652.6**	**657.1**	**660.0**	**662.3**	**665.4**	**674.2**	**2.5%**	**0.2%**

Source: Bureau of Labor Statistics, 2015.
[1] Includes persons employed within the City, without regard to residency.

Table 5
Philadelphia Change in Share of Employment Sectors[1]
(Amounts in Thousands)

Sector	Share of Total Employment 2004	Share of Total Employment 2014	Percent Change 2004 – 2014
Construction & Mining	1.7%	1.6%	-5.8%
Manufacturing	5.0%	3.2%	-35.9%
Trade, Transportation, & Utilities	13.8%	13.5%	-2.4%
Information	2.1%	1.7%	-17.5%
Financial Activities	7.5%	6.2%	-17.0%
Professional & Business Services	12.2%	13.1%	7.3%
Education & Health Services	27.4%	31.5%	15.2%
Leisure & Hospitality	8.3%	10.0%	19.9%
Other Services	4.3%	4.1%	-6.2%
Private Sector Total	**82.2%**	**84.8%**	3.2%
Government	17.8%	15.2%	-14.7%
Total	**100.00%**	**100.0%**	

Source: Bureau of Labor Statistics, 2015.
[1] Includes persons employed within the City, without regard to residency.

In 2014, the Education and Health Services, Professional and Business Services, Financial Activities, and Leisure and Hospitality sectors collectively represented 60.8 percent of total employment in the City for the year, and 76.6 percent of total private sector wages for the second quarter. Philadelphia has recovered 30,000 private sector jobs since the peak of the recession in 2009.

Unemployment

Throughout the 1990s and as late as 2009, Philadelphia narrowed the gap between its unemployment levels and the national unemployment levels. The effects of the recession on unemployment endured longer in Philadelphia than in many other parts of the country; however, Mayor Nutter has made lowering unemployment a top priority in his second term. To that end, the City has created a Jobs Commission, which in January 2013 released a strategic plan to lower unemployment.

Employment gains in the latter part of 2013 and in 2014 have resulted in a decline in Philadelphia's unemployment rate. According to preliminary data from the Bureau of Labor Statistics, Philadelphia's unemployment rate dropped to 6.2 percent in December 2014, a decline of 2.1 percentage points in 12 months, and is comparable to the City's pre-recession annual unemployment rates of 6.2 percent in 2006 and 6.0 percent in 2007.

Table 6 below shows unemployment information for Philadelphia, the MSA, the Commonwealth and the United States.

Table 6
Unemployment Rate in Selected Geographical Areas
(Annual Average 2004-2014)

Geographical Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Change in Rate 2004-2014
United States	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	**0.7%**
Pennsylvania	5.4%	5.0%	4.5%	4.4%	5.3%	7.9%	8.5%	8.0%	7.9%	7.4%	5.6%	**0.2%**
Philadelphia-Camden-Wilmington MSA	5.1%	4.7%	4.5%	4.3%	5.4%	8.2%	8.9%	8.6%	8.5%	7.8%	6.1%	**1.0%**
Philadelphia	**7.3%**	**6.7%**	**6.2%**	**6.0%**	**7.1%**	**9.6%**	**10.8%**	**10.9%**	**10.8%**	**10.0%**	**7.8%**	**0.5%**

Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

Principal Private Sector Employers in the City

Table 7 lists Philadelphia's 15 largest private sector employers, by wage tax revenue. Five are hospitals and providers of other medical services, four are renowned universities, and three are in the finance and insurance industry. Other sectors represented include food services, bio-tech, and broadcasting/cable.

Two of the City's largest employers, Aramark Corporation and Comcast Corporation are also Fortune 500 companies. Although not among the largest employers, other Fortune 500 companies with a presence in Philadelphia are Crown Holdings Inc., Cigna Corporation, and Sunoco Inc. A number of Fortune 1000 companies are also headquartered within the City, including FMC Corporation, Urban Outfitters Inc., and Radian Group Inc.

Table 7
Principal Private Sector Employers by Wage Tax Revenue
Ranked by Employment in Philadelphia*

Employer	Sector	Employees within Philadelphia
University of Pennsylvania	Education	25,287
University of Pennsylvania Health System	Health	15,290
Children's Hospital of Philadelphia	Health	10,294
Temple University Hospital, Inc.	Health	8,804
Temple University	Education	8,204
Thomas Jefferson University Hospitals	Health	7,860
Aramark Corporation	Food Service	6,347
Drexel University	Education	6,096
Albert Einstein Medical	Health	5,752
Thomas Jefferson University	Education	4,243
Independence Blue Cross	Insurance	3,505
PNC Bank N.A.	Finance	2,981
Ace Insurance Company	Insurance	1,568
GlaxoSmithKline LLC	Bio-tech	1,376
Comcast Corporation†	Broadcasting/Cable	
Total		**107,607**

Source: City of Philadelphia Department of Commerce
*As of June 2014
†Employment Data unavailable

Hospitals and Medical Centers

The City is a center for health, education, research and science facilities with the nation's largest concentration of healthcare resources within a 100-mile radius. There are presently more than 30 hospitals, five medical schools, two dental schools, two pharmacy schools, as well as schools of optometry, podiatry and veterinary medicine, and the Philadelphia Center for Health Care Sciences in West Philadelphia, located in the City. The City is one of the largest health care and health care education centers in the world, and a number of the nation's largest pharmaceutical companies are located in the Philadelphia area.

Major research facilities are also located in the City, including those located at its universities, its medical schools, The Wistar Institute, the Fox Chase Cancer Center, and the University City Science Center. In 2013, the Children's Hospital of Philadelphia completed the construction of a $400 million biomedical research facility located within the Philadelphia Center for Health Care Sciences in West Philadelphia. Philadelphia is home to two of the nation's 41 National Cancer Institute-designated Comprehensive Cancer Centers (the Abramson Cancer Center at the University of Pennsylvania and Fox Chase Cancer Center, which is part of the Temple University Health System). Additionally, Philadelphia is also home to two NCI-designated Cancer Centers (Kimmel Cancer Center and the Wistar Institute Cancer Center).

Table 8 lists the number of licensed and staffed beds in each of the major hospitals and medical centers in the City, as of June 2013, and does not reflect any mergers, consolidations or closures that have occurred since that date.

Table 8
Hospitals and Medical Centers as of June 2013

Institution Name	Total Licensed Beds	Total Staffed Beds
Aria Health[1]	480	480
Belmont Center for Comprehensive Treatment	147	147
Chestnut Hill Hospital	130	67
Einstein Medical Center-Philadelphia	772	445
Fox Chase Cancer Center	98	97
Hahnemann University Hospital	496	496
Hospital of the University of Pennsylvania	789	789
Jeanes Hospital	176	156
Kensington Hospital	45	45
Magee Rehabilitation Hospital	96	96
Mercy Philadelphia Hospital	178	157
Nazareth Hospital	203	173
Penn Presbyterian Medical Center	305	305
Pennsylvania Hospital	496	402
Roxborough Memorial Hospital	141	141
St. Joseph's Hospital[2]	197	182
St. Christopher's Hospital for Children	189	189
Shriners Hospitals for Children - Philadelphia	53	39
Temple University Hospital[3]	728	728
The Children's Hospital of Philadelphia	521	493
Thomas Jefferson University Hospital[4]	969	945

Source: PA Department of Health, Report 1A-1B, 2013.
[1]Aria Health System includes data for all three divisions - Frankford, Torresdale and Bucks County.
[2]St. Joseph's Hospital includes data for Girard Medical Center/Continuing Care Hospital of Philadelphia.
[3]Temple University Hospital includes data for Episcopal Hospital.
[4]Thomas Jefferson University Hospital includes data for the Methodist Hospital Division.

Children's Hospital of Philadelphia Expansion. Top ranked Children's Hospital of Philadelphia ("CHOP") is one of the largest and oldest children's hospitals in the world. Since 2002, CHOP has invested over $2.6 billion in its expansion in Philadelphia. The $500 million Ruth and Tristram Colket, Jr. Translational Research Building opened in 2010. CHOP recently approved an additional $2.7 billion expansion in Philadelphia through 2017. The $500 million, 700,000 square foot Buerger Center for Advanced Pediatric Care is currently under construction and is scheduled to open in 2015. Future projects include phase one of a nine-acre, 1.5 million square foot medical research campus along the east banks of the Schuylkill River, which is expected to be completed by the end of 2016.

The Wistar Institute. The Wistar Institute was founded in 1892 and was the nation's first independent biomedical research facility. The Institute recently completed construction of a $100 million expansion and renovation project that will significantly increase its ability to carry out its mission as an international leader in basic biomedical research and make advancements in the fields of genetics, cancer biology, translational research, immunology and virology.

Educational Institutions

The MSA plus Mercer County, New Jersey, has the second largest concentration of undergraduate and graduate students on the East Coast, with 101 degree granting institutions of higher education and a total enrollment of over 300,000 students, of which approximately 147,779 live within the geographic boundaries of the City. Included among these institutions are the University of Pennsylvania, Temple University, Drexel University, St. Joseph's University, and LaSalle University. Within a short drive from the City are such schools as Villanova University, Bryn Mawr College, Haverford College, Swarthmore College, Lincoln University, and the Camden Campus of Rutgers University.

University of Pennsylvania. The campus of the University of Pennsylvania ("Penn"), an Ivy League institution, sits in West Philadelphia across the Schuylkill River from downtown Philadelphia. More than 24,000 undergraduate, graduate and professional full-time students attend the university. Penn and its health system are the largest private sector employers in Philadelphia, employing over 40,577 combined staff and with a total university budget of $7.25 billion for Fiscal Year 2015. In 2011, Penn completed a $400 million medical research building, the Smilow Center for Translational Research. The Krishna P. Singh Center for Nanotechnology, an $88 million nanotechnology research facility, opened in October 2013.

In February 2014, Penn unveiled a master plan for a 23-acre Innovation and Research Park called Pennovation Works. In October 2014, Penn announced a $26 million project to redevelop an existing building within the complex to include 52,000 square feet of wet lab and incubator space that will house all of Penn's technology transfer facilities. The master planning process includes redevelopment plans for the entire acreage; however, Penn has been leasing various buildings with an innovation center end-use in mind since 2012, including leases with technology companies stemming from innovations developed at Penn.

Drexel University. Founded in 1891 as the Drexel Institute of Science, Art and Industry, Drexel University ("Drexel") occupies a 74-acre main campus in University City. Drexel's student body has grown considerably in the past two decades, from 4,500 in 1996 to approximately 26,000 students in 2015, resulting in expansion of both curriculum and campus. In September 2011, Drexel opened the doors to its new $69 million science building, the Constantine N. Papadakis Integrated Sciences Building. Drexel recently completed construction of a $92 million facility for its LeBow School of Business and a new mixed use residential and retail project on Chestnut Street. Design is also complete for a $44 million renovation of a 161,000 square foot building housing the College of Media Arts and Design. Most recently, Drexel has drafted a plan to develop more than 12 acres of underutilized land near Philadelphia's 30th Street Station into a transit-oriented live/learn/work neighborhood, called the Innovation Neighborhood. To facilitate redevelopment, Drexel expects to award master development rights for this area in May 2015.

Temple University. Temple University ("Temple") has undergone a significant transformation over the past three decades from a university with a mostly commuter-based enrollment to one in which on- and near-campus housing is now in high demand. To meet the increasingly residential nature of its student population, Temple has invested heavily in the renovation of its various existing student housing inventory as well as, most recently, the development of a new state-of-the art residence facility, Morgan Hall, which opened in summer 2013 and houses approximately 1,275 students. Temple has also actively partnered with private developers in the expansion of on-campus housing alternatives for students. Currently, an estimated 12,000 of Temple's 37,619 students live on or around the Temple campus. The university's Board of Trustees approved a master plan, "Visualize Temple," in December 2014, and the university has already begun $1.2 billion of investment. Planned upgrades include improved green space, a student recreation facility, and academic buildings such as a library and a new science research lab. Temple also purchased the vacant William Penn High School property on North Broad Street, and

received permission from the Planning Commission in February 2015 to tear down the high school building and construct a new facility.

Median and Average Household Income

Table 9 shows median family income, which includes related people living together, and median household income, which includes unrelated individuals living together, for Philadelphia, the MSA, the Commonwealth and the United States. Table 10 shows the average household income for the same areas, which is based on a more comprehensive measure of total income. Over the period 2005-2013, median family income for Philadelphia increased by 10.4 percent, while average household income increased by 39.6 percent over the period 2005-2014 as a result of an influx of higher income households.

Table 9
Median Family Income* for Selected Geographical Areas, 2005-2013
(Dollar Amounts in Thousands)

Year	Philadelphia	Philadelphia-Camden-Wilmington MSA	Pennsylvania	United States	Philadelphia as a percentage of the US
2005	$40.5	$67.8	$55.9	$55.8	72.60%
2006	$43.0	$70.8	$58.1	$58.5	73.56%
2007	$44.1	$73.5	$60.2	$60.4	73.10%
2008	$46.4	$77.0	$63.1	$63.2	73.35%
2009	$45.8	$76.8	$62.8	$62.4	73.48%
2010	$45.1	$76.7	$63.0	$62.1	72.69%
2011	$45.0	$78.1	$64.3	$62.7	71.80%
2012	$44.6	$77.8	$65.1	$63.1	70.71%
2013	$44.7	$78.5	$66.1	$63.8	70.15%
Change 2005-2013	$4.2	$10.7	$10.2	$8.0	

* Includes related people living together.
Source: American Community Survey, Annual and 3-Year Estimates

Given the high percentage of employers in knowledge-based industries in the City, including higher education, healthcare and other professional services, such as law, accounting and finance, the average household income within the City is higher than the median household income. Also contributing to the lower median household income is the fact that Philadelphia has the fifth largest undergraduate and graduate student population among major U.S. cities. These individuals, numbering approximately 147,800 according to the 2013 American Community Survey, or approximately 10 percent of the City's overall population, generally have very low or no income, as they are either unemployed or working only part-time while they complete their education. The City's large student population has also historically led to an overstatement of the City's percentage of residents living at or below the poverty level.

Table 10
Average Household Income for Selected Geographical Areas, 2005-2014
(Dollar Amounts in Thousands)

Year	Philadelphia	Philadelphia-Camden-Wilmington MSA	Pennsylvania	United States	Philadelphia as a percentage of the US
2005	$78.1	$109.7	$91.1	$93.7	83.35%
2006	$82.3	$117.2	$96.9	$99.5	82.67%
2007	$86.6	$121.3	$101.2	$103.6	83.55%
2008	$93.3	$125.1	$104.0	$106.9	87.29%
2009	$95.1	$123.5	$102.7	$103.8	91.56%
2010	$99.2	$126.1	$105.4	$106.1	93.45%
2011	$103.8	$132.3	$111.0	$111.6	92.97%
2012	$107.1	$137.8	$115.4	$116.2	92.15%
2013	$106.1	$140.5	$117.5	$117.4	90.38%
2014	$109.0	$145.4	$121.9	$121.5	89.72%

Source: iHS Economics

Cost of Living Index

Philadelphia has the second lowest cost of living index among major cities in the Northeast, as shown in Table 11 below. The City markets its relatively low labor costs and cost of living to attract businesses. Additionally, the City's Wage, Earnings, and Net Profits Tax Rates have decreased in Fiscal Years 2014 and 2015, which may further incentivize both business and residents to relocate into the City. See "REVENUES OF THE CITY – Wages, Earnings, and Net Profits Taxes" in APPENDIX C to this Official Statement.

Table 11
2014 Cost of Living Index* of Cities in the Northeastern U.S.

Metropolitan Area	Cost of Living Index
New York (Manhattan)	221.8
Washington-Arlington-Alexandria	141.2
Boston-Cambridge-Quincy	137.3
Philadelphia-Camden-Wilmington	119.1
Baltimore-Towson	109.2

*Data reflects Q1 2014 – Q3 2014
Source: 2014 ACCRA Cost of Living Index

Housing

For purposes of the information included under this "Housing" subheading, the City engaged an outside consultant, Kevin C. Gillen, Ph.D, who prepared the text and tables below and conducted the analysis related thereto. As a professional in the field of urban and real estate economics, the City has relied on the analysis Mr. Gillen has provided below.

Philadelphia's housing stock is among the oldest of any city in the country, and has suffered from decades of depopulation and abandonment since the late 1940s. Like many U.S. cities, Philadelphia has undergone a significant revitalization in the past 25 years, particularly in and around its downtown core of Center City, which is geographically defined as the approximately four square mile area between Washington and Girard Avenues, and from the Schuylkill to Delaware rivers. Philadelphia's recent population gains are overwhelmingly due to new household growth in the downtown core of Center City and adjacent neighborhoods. These same neighborhoods have undergone significant new construction and investment, leading to increases in the value of Philadelphia's housing stock. Large parts of the rest of the City have not yet benefitted from this real estate price appreciation or revitalization of its housing stock. The following table lists the values of key metrics for the Philadelphia housing market, including their percent changes from one year and five years ago, and the direction of their current trend.

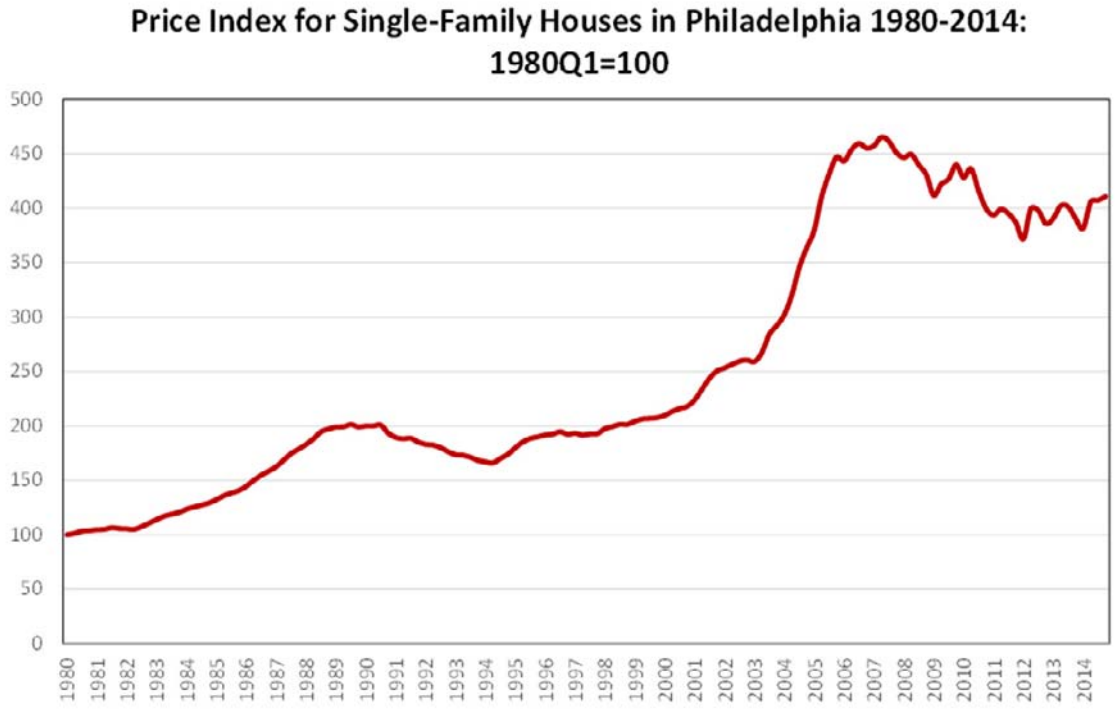
Table 12
Housing Market Metrics

Housing Market Metrics	2014	% Change from 1 Year Ago	% Change from 5 Years Ago	Trend
Total Housing Stock (number of properties)	499,703	0.12%	0.8%	↑
Number of Single-Family Units*	458,632	0.2%	1.3%	↑
Number of Multifamily Units**	94,220	3.0%	3.9%	↑
Median House Price	$125,000	-1.6%	7.5%	↑
Number of House Sales	14,261	6.2%	1.1%	↑
Months' Supply of Inventory	9.5	-18.8%	-37.5%	↓
Avg. Days-on-Market	87	-2.0%	-9.4%	↓
Number of New Units Permitted	3973	41.1%	319.5%	↑
Avg. Housing Rent (Monthly)	$1,194	8.4%	21.5%	↑
Homeownership Rate	52.2%	N/A	-9.7%	↓

* Structures with 1-4 dwelling units.
** Structures with 5 or more dwelling units.

Sources: Philadelphia Recorder of Deeds, Philadelphia Office of Property Assessment, U.S. Census, National Multifamily Housing Council, TREND MLS.

Consistent with national trends, the City's housing market experienced both inflation and deflation over the last ten years as a consequence of the mid-2000s housing boom and subsequent bust. The following chart shows an empirically estimated house price index that displays the trajectory and level of average house prices in Philadelphia on a quality- and seasonally-adjusted basis. The index is computed according to a methodology that is very similar to the methodology used in the computation of the Case-Shiller House Price Indices.

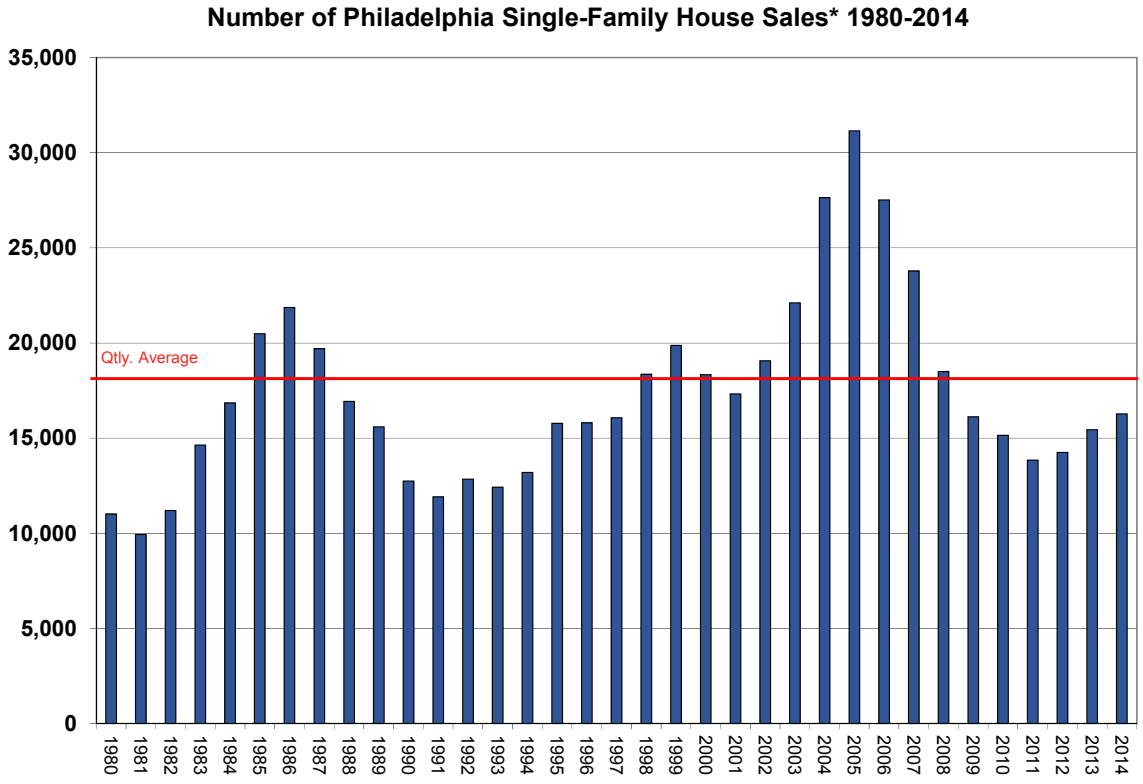


Source: Philadelphia Recorder of Deeds, Computed by Kevin C. Gillen, Ph.D.

The index is normalized to a starting value of 100 in its first period of the first quarter of 1980. The house price index rises steadily through the 1980s to achieve a value of 200 in 1989, indicating that the typical Philadelphia house doubled in value during that period. The index declines during the recession of the early 1990s, and begins to recover in the mid-to-late 1990s. House price appreciation began to proceed at an accelerated rate in the 2000s, with the index obtaining a value of 300 by 2004, thus indicating that Philadelphia house prices in 2004 were three times what their average values were in 1980.

As further indicated by the chart, average house prices rose by 136% during the boom years of the 2000s before peaking in 2007. They declined by 23% since then before hitting bottom in the winter of 2012. They have since recovered only modestly, in an uneven pattern, and are currently 16% below their 2007 peak.

Compared to prices, sales activity has made relatively steadier progress in recovering since the recession. The following chart shows the annual number of single-family house sales in Philadelphia since 1980. The chart depicts only arms-length home sales at market-rate prices.

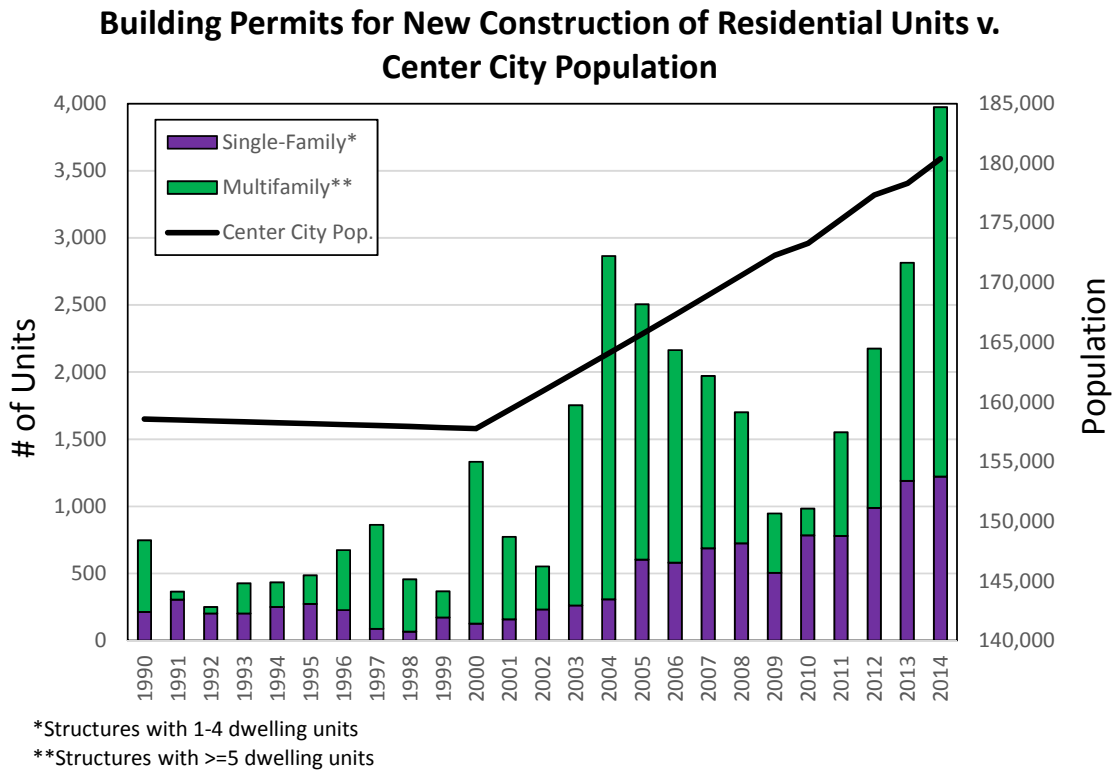


* Structures with 1-4 dwelling units

Source: Philadelphia Recorder of Deeds

Historically, the City has averaged approximately 17,000 transactions of single-family houses per year, but with significant cyclicality around this average. As exhibited in the chart above, sales exhibited increases during the expansionary markets of the mid-1980s and mid-2000s, and decreases during the contractionary markets of the early 1990s and 2008-2011 periods. From a peak of over 31,000 sales in 2005, transactions volume fell nearly 56% to nearly 13,850 sales in 2011. Since then, however, house sales in Philadelphia have steadily grown by 17.5% and are currently trending back to their historic average.

Homebuilding activity in Philadelphia has made significant progress since hitting its recessionary low in 2009. The following chart shows the number of newly constructed units being added to Philadelphia's housing stock, as represented by the number of building permits issued for such units, from 1990 through 2014.



Source: U.S. Census

Between 1990 and 2000, construction of new housing units in Philadelphia was low by both absolute and relative measures, averaging only 400 units per year. Following passage of a ten-year property tax abatement program in 2000, construction began to grow steadily, hitting a peak of nearly 3,000 units in 2004. After declining to 947 units during the recession in 2009, construction activity has recovered steadily, and currently stands well above the boom years of 2003 through 2007. In 2014, permits were issued to approve the construction of nearly 4,000 new housing units in Philadelphia, and the most recent numbers indicate that 2015 is on track to be another robust year.

Under the City's tax abatement program, the value of any new improvements to real estate in Philadelphia is untaxed for the first ten years after the improvements are made. In the case of new construction, this is a substantial tax break to the owner because the entire structure represents an improvement. As such, the owner only pays real estate taxes on the value of the land for the first ten years after a new building is completed.

A key fundamental driver of new housing construction is population and/or household growth, since net additions to the housing stock cannot typically be rationalized without net additions to the population that occupies it. However, the growth in Philadelphia's new construction currently exceeds the rate of the City's overall growth in population. Citywide population growth is significantly increasing in some neighborhoods, while still declining in others. As a consequence, new construction can be rationalized in growing neighborhoods if it is offset by demolitions and depreciations in shrinking neighborhoods.

Because the overwhelming amount of current new construction is in and around the Center City (downtown) neighborhoods of Philadelphia, the above chart also shows total population growth in those same neighborhoods, as represented by the black line.

Office Market and New Development

Philadelphia currently has approximately 40.9 million square feet of office space in the central business district. According to the Cushman and Wakefield Q4 2014 Office Market Beat, the positive trends of lowered vacancy, rising rents, and positive absorption seen in 2014 will continue into 2015. Year-to-date total net absorption in the fourth quarter of 2014 was positive, at 474,420 square feet, according to the same report.

Cushman and Wakefield also reported a continued increase in direct asking rental rates in Philadelphia's central business district, to $27.47 per square foot in the fourth quarter of 2014. The overall vacancy rate for the Philadelphia central business district continued to decline to 11.0 percent in the fourth quarter of 2014, down from 12.3 percent in the fourth quarter of 2013, according to Cushman and Wakefield data. Vacancy rates in suburban markets were 16.2 percent in the fourth quarter, up from 15.8 percent in the fourth quarter of the previous year, making vacancy rates in Philadelphia much lower than their suburban counterparts, even while rents in the Philadelphia central business district were $1.95 per square foot higher in the same quarter of 2014.

Table 13 shows comparative overall office vacancy rates for selected Office Markets. Due to differences in methodology and scale of analysis, Jones Lang LaSalle's national comparison lists Philadelphia's vacancy rate as 10.8 percent for the fourth quarter of 2014, while Cushman and Wakefield's area-specific analysis lists the Philadelphia central business district's vacancy rate as 11 percent for the same time period.

Table 13
Comparative Overall Office Vacancy Rates, Selected Office Markets
Fourth Quarter 2014

Market	Vacancy Rate
New York (Midtown South)	6.90%
New York (Midtown)	9.70%
Boston	10.30%
New York (Downtown)	10.70%
Philadelphia	**10.80%**
Washington DC	12.00%
United States CBD, All Markets	**12.60%**
Chicago	12.80%
Baltimore	13.40%
Houston	13.50%
San Diego	16.40%
San Antonio	16.80%
Cleveland	17.40%
Detroit	17.50%
Los Angeles	18.70%
Phoenix	23.70%

Source: Jones Lang LaSalle, National CBD Data, Fourth Quarter 2014

Two of the City's top corporate tenants, FMC Corporation and Comcast, continue to grow downtown. In May 2014, Brandywine Realty Trust broke ground on the new 49-story, 861,000 square foot FMC Tower at Cira Center South. FMC will lease 253,000 square feet of the new tower, the University of Pennsylvania will lease 100,000 square feet, and leasing activity is occurring to fill the remaining 248,000 square feet of space. Comcast Corporation broke ground in July 2014 on a 59-story, $1.2 billion Comcast Innovation and Technology Center office tower adjacent to its headquarters building in Center City Philadelphia. The new skyscraper will enable Comcast to consolidate employees currently scattered at several sites (in both Philadelphia and the surrounding suburbs) into a single location. The facility will also create a media center in the heart of the City by becoming home to the operations of local broadcast television stations NBC 10/WCAU and Telemundo 62/WWSI and offer space for local technology startups. When completed in 2017, the tower will also serve as the new home to the Four

Seasons Hotel, which will occupy the tower's top floors with approximately 200 rooms. The mixed-use tower is expected to be the tallest building in the United States outside of New York and Chicago and will be one of the largest private development projects in the history of Pennsylvania. Ultimately, the project is expected to create 1,500 permanent jobs in Philadelphia.

Retail Market, Food and Dining

Philadelphia continues to establish itself as a retail destination. In January 2015, Philadelphia was named the second of 24 "Best Shopping Cities in the World," by Condé Nast Traveler Magazine. In October 2013, Colliers International reported that the fastest rising retail rents in the nation were on Philadelphia's Walnut Street, with 33.8 percent growth since October 2012. Throughout Philadelphia's central business district, the tenant mix continues to move toward national brands that can support growing rents. Recent additions include Stuart Weitzman, Madewell, Theory, Ulta, Intermix, Nordstrom Rack, Calypso St. Barth, Forever 21, Michael Kors, Banana Republic Factory Store and Suit Supply, the European chain's fifth store in the United States. In October 2014, Japanese retailer Uniqlo opened its first Philadelphia location in Center City, the chain's only standalone store in the United States outside of New York City. Van's Off the Wall, Timberland, and Under Armour are also future central business district retailers.

Plans to revitalize East Market Street continue. Previously, in April 2013, Pennsylvania Real Estate Investment Trust (PREIT) acquired 430,000 square feet of retail and commercial space at 907 Market Street, giving a single entity ownership of The Gallery at Market East, a 130-store retail mall complex. In July 2014, Macerich Co, which owns 55 shopping centers across the nation, acquired a 50 percent interest in The Gallery. On April 15, 2015, Mayor Michael Nutter announced that Macerich had reached an agreement with PREIT on the $325 million redevelopment of the shopping center slated to commence this year after requisite approvals are obtained. Within a block of The Gallery, Marshalls opened a 28,000 square foot store in October 2012, also on East Market Street.

Most recently, in October 2014, New York-based department store Century 21 opened its first store outside of New York City, in a 95,000 square foot space that was previously vacant. In March 2014, NREA Development Services announced a mixed-use redevelopment project, called East Market, also located on East Market Street between 11th and 12th Streets. Once completed in 2016, the project will include 325 apartments, and up to 122,000 square feet of retail space. Future tenants of East Market will include Mom's Organics, a Maryland-based grocery chain. Just one block south of Market Street, Brickstone Co. announced in April 2014 that it would build a mixed-use redevelopment project for the 1100 block of Chestnut Street in April 2014. The project, a mix of new construction and historic preservation, is currently under construction and will include up to 115 apartments and 90,000 square feet of retail space. Future tenants of the project include Target Express.

Philadelphia has experienced a revival of restaurant establishments, especially in Center City and in the Greater Center City area, indicating an improved quality of life and vibrancy of those neighborhoods. The Center City District's investment in beautification of the area as well as the City's support in making the area more welcoming to visitors and diners sparked a significant increase in the number of indoor/outdoor dining establishments throughout Center City. In 1995, no sidewalk cafes existed in Center City. By 2013, the same area had 327 sidewalk cafes. Additionally, from 1992 to 2010, the number of fine dining establishments within the Center City District increased 322 percent. Rapid development is also reflected in South Philadelphia, where East Passyunk was named a Top Ten Best Foodie Street in America by Food and Wine Magazine in May 2013.

Preliminary data from the Bureau of Labor Statistics shows that about 49,400 people were employed in retail trades in Philadelphia in 2014, the highest employment number in that industry in over 10 years. Food service and drinking establishments employed about 45,400 people in 2014 according to these preliminary data, representing an average annual growth of 1.2 percent since 2004. The number of private retail establishments and private food services and drinking establishments has also recovered

from pre-recession levels; retail trade establishments increased by 213 between 2007 and 2013, and food services and drinking places have increased by 187 in the same time period, according to the Bureau of Labor Statistics' Quarterly Census of Employment Wages.

Table 14 reflects taxable retail sales for the City from Fiscal Years 2007 to 2013.

Table 14
Taxable Retail Sales 2007-2013
(Amounts in Thousands of USD)

Fiscal Year	Taxable Sales
2007	13,643,582
2008	13,704,958
2009	13,211,446
2010	13,050,202
2011	12,403,442
2012	12,721,337
2013	12,880,000

Source: Figures determined by dividing the City's local sales tax reported by the Pennsylvania Department of Revenue by the applicable local sales tax rate.

Airport System

The Airport System serves residents and visitors from a broad geographic area that includes eleven counties within four states: Pennsylvania, New Jersey, Delaware and Maryland. The Airport System consists of the following:

Philadelphia International Airport ("PHL"). PHL is classified by the Federal Aviation Administration as a large air traffic hub (enplaning 1.0 percent or more of the total passengers enplaned in the U.S.). According to data reported by Airports Council International – North America, PHL was ranked the eighteenth busiest airport in the United States, serving 30.5 million passengers in calendar year 2013 (i.e. total passengers enplaned and deplaned), and was ranked the tenth busiest in the nation based on aircraft operations. PHL consists of approximately 2,394 acres located partly in the southwestern section of the City and partly in the northeastern section of Delaware County, about 7.2 miles from Center City Philadelphia. PHL's runway system consists of parallel Runways 9L-27R and 9R-27L, crosswind Runway 17-35, commuter Runway 8-26, and interconnecting taxiways.

PHL terminal facilities include approximately 3.3 million square feet, consisting of seven terminal units (A-West, A-East, B, C, D, E and F). The terminal facilities principally include ticketing areas, passenger holdrooms, baggage claim areas and approximately 170 food, retail and service establishments. There are certain other buildings and areas located at PHL, consisting of six active cargo facilities, , an American Airlines aircraft maintenance hangar, and a former United States Postal Service building located at the western end of PHL. On July 2, 2015, PHL purchased an adjacent property to the airport known as International Plaza, which has two fully leased buildings with approximately 500,000 square feet of rentable space on a 27-acre tract of land. This property was acquired for future Airport expansion.

The outside terminal area consists of a 15-story, 419-room hotel (414 rooms and 5 suites), seven rental car facilities, a 150-vehicle cell-phone lot and two employee parking lots with a total of 4,200 spaces. This area also includes five parking garages and surface lots consisting of a total of 18,940 vehicle spaces, operated by the Philadelphia Parking Authority.

Northeast Philadelphia Airport ("PNE"). PNE is located on approximately 1,126 acres situated within the City limits, ten miles northeast of Center City Philadelphia. PNE serves as a reliever airport for PHL and provides for general aviation, air taxi, corporate, and occasional military use. PNE currently has no scheduled commercial service. There are presently 85 T-hangars, nine corporate hangars, and six open hangars for general aviation activities. There are approximately 175 general aviation aircraft based at PNE.

Airport Capital Projects. Since 2000, PHL has constructed more than $1.5 billion of capital improvements, including construction of new terminals, expansion and renovation of existing terminals, and an extension of one runway. PHL continues to upgrade its existing facilities under the Capital Improvement Program. Recently, PHL embarked on the Capacity Enhancement Program ("CEP"), which is PHL's long range plan to improving efficiency, modernizing airport facilities and providing additional capacity for future growth. The CEP will enable PHL to enhance the Greater Philadelphia region's position by providing more efficient access and increased competitive stature.

In September 2011, the Federal Aviation Administration issued a Letter of Intent to contribute $466.5 million toward the CEP over the life of the program. In addition to federal funds, the CEP will be financed by Airport Revenue Bonds and a variety of other funding sources, such as user fees and additional grants. PHL is evaluating the complex projects that are part of the CEP and is in discussions with the airlines and other key stakeholders regarding the phasing and timing of the projects.

New Use and Lease Agreement. Effective July 1, 2015, PHL and American Airlines, Inc., which operates a majority of the flights to and from PHL, executed a new Airport-Airline Use and Lease Agreement (the "New Airline Agreement"). The other airlines are expected to execute the New Airline Agreement in a timely manner which will have the same effective date of July 1, 2015. The New Airline Agreement has a term of five years with two one-year extensions upon mutual agreement. The financial structure of the New Airline Agreement is relatively the same as the previous agreement and provides for a residual rate-making structure for the recovery of rentals and fees from the airlines. In a residual rate-making structure, PHL sets rates and charges to recover the net budgeted operating cost or requirement after crediting all budgeted revenues from sources other than airlines. At the end of each Fiscal Year, the actual net operating requirement is calculated and compared with the actual airline revenues. Any surplus or deficit resulting from this comparison is included in the net operating cost or requirement for the following year. The New Airline Agreement also requires that the Signatory Airlines approve any new capital projects over $500,000, in excess of an aggregate annual total of $5,000,000. As a condition for the New Airline Agreement to be effective, the Signatory Airlines approved $173.25 million in new capital projects. These new capital projects will provide for the repair and rehabilitation of PHL infrastructure to enhance and improve the existing facility.

The implementation of additional CEP projects will be measured and deliberate as PHL continues to study, plan and modularly execute the mission to ensure its full potential benefit to PHL and its stakeholders. Table 15 provides the total project amounts approved since 2007.

Table 15
Ongoing Capital Projects Approved since 2007

Capital Projects	Current Project Amount (millions $)
Capacity Enhancement Program (CEP)[1]	$1,125.90
2007-2015 Capital Improvement Program (CIP)[2]	$309.92
2016 Capital Improvement Program (CIP)[3]	$173.25

Source: City of Philadelphia, Division of Aviation.

1. Includes redevelopment of existing terminals; relocations on-airport and off-airport facilities; environmental commitment start-up; Runway 9R-27L(future 9C-27C) extension and associated eastside taxiway work; stage 1 airfield site work and fuel line work; automated people mover (design); and ground transportation center.
2. Includes repair, rehabilitation and upgrade programs for roofs, restrooms, windows, passenger loading bridges, mechanical and electrical systems, and security and access control systems; airfield civil improvements; and landside infrastructure improvements.
3. Includes airfield repavement, emergency operations center, repair, rehabilitation and upgrade programs for curb doors, roofs, loading bridges, air handling units, HVAC and fire protection systems; Airfield repavement; emergency operations center; and LED conversion program.

PHL Passenger Traffic and Cargo. Beginning in the early part of Fiscal Year 2000, PHL began serving significantly more passengers. From Fiscal Year 2000-2014, the total number of passengers traveling through PHL increased 27.1%. Passenger traffic for PHL for Fiscal Years 2005-2014 is summarized in Tables 16 and 17 below. Table 18 summarizes cargo transported through PHL, segmented into mail and freight, from Fiscal Year 2005-2014.

Table 16
PHL Enplanements and Deplanements
Fiscal Year 2005-2014

Fiscal Year	Deplaned	Enplaned	Total	Percent Change over Prior Year
2005	15,583,885	15,490,569	31,074,454	-
2006	15,766,462	15,574,997	31,341,459	0.9%
2007	16,033,642	15,851,691	31,885,333	1.7%
2008	16,234,062	16,052,973	32,287,035	1.3%
2009	15,497,428	15,362,743	30,860,171	-4.4%
2010	15,276,158	15,193,741	30,469,899	-1.3%
2011	15,613,887	15,611,583	31,225,470	2.5%
2012	15,268,024	15,344,126	30,612,150	-2.0%
2013	15,143,020	15,215,885	30,358,905	-0.8%
2014	15,223,377	15,316,053	30,539,430	0.6%

Source: City of Philadelphia, Division of Aviation.

Table 17
PHL Domestic and International Passenger Traffic
Fiscal Year 2005-2014

Fiscal Year	Domestic	International	Total	Percent Change over Prior Year
2005	26,951,432	4,123,022	31,074,454	-
2006	27,327,488	4,013,971	31,341,459	0.9%
2007	27,912,154	3,973,179	31,885,333	1.7%
2008	28,135,663	4,151,372	32,287,035	1.3%
2009	26,870,636	3,989,535	30,860,171	-4.4%
2010	26,339,648	4,130,251	30,469,899	-1.3%
2011	26,852,566	4,372,904	31,225,470	2.5%
2012	26,218,341	4,393,809	30,612,150	-2.0%
2013	25,985,009	4,373,896	30,358,905	-0.8%
2014	26,055,259	4,484,171	30,539,430	0.6%

Source: City of Philadelphia, Division of Aviation.

Table 18
PHL Cargo Tonnage
Fiscal Year 2005 - 2014

Fiscal Year	Air Mail Tons (US)	Air Freight Tons (US)	Total	Percent Change over Prior Year
2005	24,447	599,758	624,205	-
2006	22,408	591,815	614,223	-1.6%
2007	18,131	571,452	589,583	-4.0%
2008	22,181	575,640	597,821	1.4%
2009	24,692	475,365	500,057	-16.4%
2010	20,544	440,495	461,039	-7.8%
2011	23,937	449,683	473,620	2.7%
2012	27,151	416,731	443,882	-6.3%
2013	28,285	388,383	416,668	-6.1%
2014	29,545	395,661	425,206	2.0%

Source: City of Philadelphia, Division of Aviation.

Southeastern Pennsylvania Transportation Authority (SEPTA)

SEPTA was established in 1964 for the purpose of planning, acquiring, holding, constructing, improving, maintaining, and operating a comprehensive public transportation system within the City and the local counties, which include Bucks, Chester, Delaware, and Montgomery. SEPTA operates facilities across this five-county area encompassing approximately 2,200 square miles and serving approximately 4.0 million inhabitants. SEPTA operates service 24 hours a day, seven days a week, 365 days a year. SEPTA's Fiscal Year 2015 operating budget totals $1.327 billion. This is supported by $794 million in federal, state, and local subsidies, as well as $533 million of operating revenue.

SEPTA's operations are accounted for in three separate divisions, the percentages following each division representing its approximate share of SEPTA's expense budget: City Transit (67%); Regional Rail Division (23%); and Suburban (10%). The City Transit Division serves the City with a network of 84 subway-elevated, light rail, trackless trolley and bus routes, providing approximately 902,000 unlinked passengers trips per weekday. The Regional Rail Division serves the City and the local counties with a network of 13 commuter rail lines providing approximately 123,000 passenger trips per weekday. The Suburban Division, which includes the Norristown High Speed Line, serves the western and northern suburbs of the City through a series of 46 interurban trolley, streetcar and bus routes providing approximately 67,000 unlinked passenger trips per weekday.

SEPTA ridership has trended upward over the past ten years with exceptions in Fiscal Years 2006, 2010, 2013, and 2014 (see Table 19). In each of Fiscal Years 2010, 2013, and 2014, the decrease in ridership occurred as the result of a one-time event. In Fiscal Year 2010, transit service was shut down for six days as the result of a Transport Worker's Union work stoppage causing a decline in ridership for the year. In Fiscal Year 2013, Hurricane Sandy caused service stoppages that accounted for the decrease of approximately 2 million rides over the previous year. Finally, in Fiscal Year 2014, SEPTA suspended some of its services during 14 days throughout the winter as a result of severely inclement weather. Demand for public transportation has steadily increased over the past decade in the City, and in Fiscal Year 2012, SEPTA experienced its highest ridership in 25 years. This trend is continuing in Fiscal Year 2015, with ridership increasing by approximately two percent in the first seven months (July – January) over the same period in Fiscal Year 2014.

Table 19
Annual SEPTA Ridership by Division

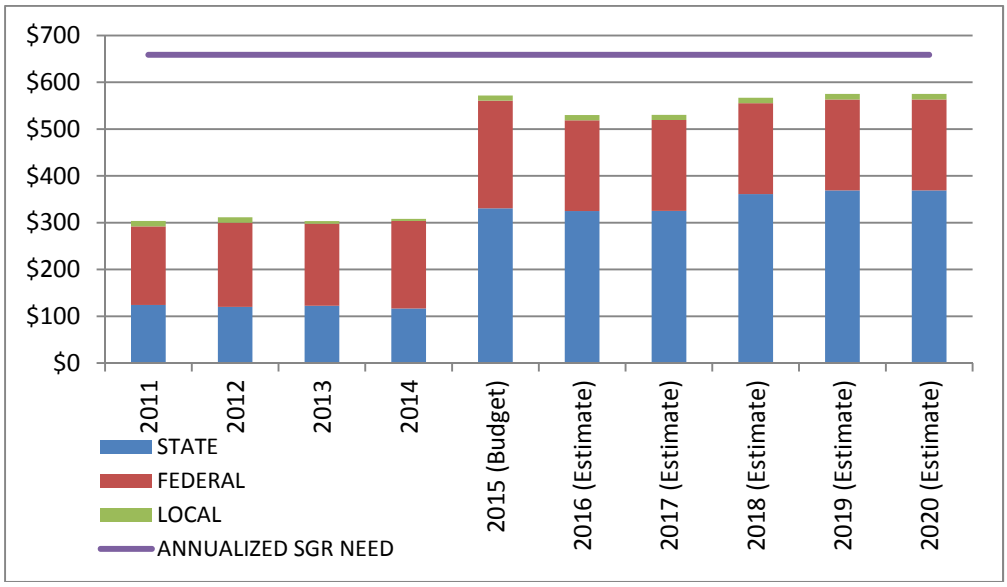
Fiscal Year	City Transit	Regional Rail	Suburban	Total
2005	251,887,150	28,632,676	18,210,677	298,730,503
2006	247,957,108	30,433,631	18,196,551	296,587,290
2007	256,120,000	31,712,000	19,356,000	307,188,000
2008	269,556,000	35,450,000	20,112,000	325,118,000
2009	273,890,000	35,443,000	20,248,000	329,581,000
2010	266,296,000	34,955,000	19,733,000	320,984,000
2011	277,877,000	35,387,000	20,702,000	333,966,000
2012	282,239,000	35,255,000	21,794,000	339,288,000
2013	279,296,000	36,023,000	21,995,000	337,314,000
2014	271,818,000	36,657,000	21,680,000	330,155,000

Source: SEPTA.

Beginning in Fiscal Year 2015, SEPTA's annual capital budget and 12-year capital program have increased significantly. The Fiscal Year 2015 capital budget is $571.8 million, representing an 86 percent increase over the Fiscal Year 2014 budget of $308 million. The Fiscal Year 2015-2026 capital program also increased significantly to $6.8 billion from $3.7 billion in the Fiscal Year 2014-2025 capital program. These increases are largely the result of the passage of Pennsylvania Act 89 in 2013 ("Act 89"), a state transportation funding bill that will result in additional liquid fuels tax payments to the City. By Fiscal Year 2018, the City is estimated to receive an additional $16.5 million in liquid fuels payments over Fiscal Year 2013 levels. Below, Table 20 shows the increase in capital program funding over the previous year, beginning in Fiscal Year 2015.

This increased capital budget will enable SEPTA to address a variety of needs. First, SEPTA will address its State of Good Repair backlog, which has grown as a result of funding shortfalls in previous years. In addition to renovating and upgrading substations, bridges, stations, and aging rail vehicles, SEPTA will also focus on expanding its capacity to serve a growing ridership and enhance accessibility to public transportation. Other projects and expenses supported by the capital program include the New Payment Technology project, expansion of the fleet of hybrid busses, installation of federally-mandated Positive Train Control signal technology, vehicle overhauls, capital leases, and debt service.

Table 20
Capital Program Spending and Budget, 2011 - 2020



Source: SEPTA.

Port of Philadelphia

The Port of Philadelphia (the "Port") is located on the Delaware River within the City limits. Philadelphia's Port facilities are serviced by three Class I railroads (Canadian Pacific Rail, CSX and Norfolk Southern) and provide service to major eastern Canadian points as well as midwestern, southern and southeastern U.S. destinations. Terminal facilities, encompassing four million square feet of warehousing, are located in close proximity to Interstate 95 and Interstate 76. Over 1,600 local general freight trucking companies operate in the MSA, according to Hoover's Inc.

The Philadelphia Regional Port Authority (the "PRPA") is working to increase the Port's competitiveness with increased capacity. The Port is 60 percent complete in deepening the main navigation channel of the Delaware River from 40 to 45 feet, and the next phase of the project is set to begin in the Spring of 2015. Future plans also include the construction of the Southport facility, a container terminal that will be located at the east end of The Navy Yard. Southport will be the first new terminal in Philadelphia in 50 years. In October 2014, the Port announced it is pursuing public-private partnerships to develop the Southport terminal. The first component of the project is projected to begin operating in 2018.

The PRPA reports approximately 5,970,480 metric tons of cargo moved through the Port in 2014, a 17 percent increase over 2013, and a 65 percent increase over 2010. The Port is in the midst of a $120 million expansion project which will ultimately increase cargo capacity for the entire MSA. The Port is the top ranked port for meat importing in the United States, and is among the nation's leaders for fruit, cocoa, forest products and steel imports. In September 2014, the Port welcomed Brazilian company Fibria Celulose S.A., the world's largest producer of bleached eucalyptus wood pulp, which relocated its Northeastern United States distribution center to the Tioga Marine Terminal from Baltimore. The move is expected to create 228 stevedore and terminal jobs and up to 380 total jobs, including rail workers and truckers.

ECONOMIC DEVELOPMENT STRATEGIES AND IMPLEMENTATION

City of Philadelphia Economic Development Mission and Goals

The goal of the City's economic development strategy is to create, maintain, and develop: (1) jobs by fostering an improved business environment; (2) increases in population; and (3) enhanced quality of life within the City—all in order to grow the City's tax base and market competitiveness. Strategic public and private investments, as well as location-based assets, have created a stable economic base and positioned Philadelphia for growth.

Economic Development Infrastructure

The Deputy Mayor for Economic Development and Commerce Director manages a portfolio of City and quasi-public agencies that work together to advance economic development strategies within the City. These agencies serve a variety of functions, including economic development, land use and planning, housing development and historical preservation, each discussed below. Furthermore, the City provides additional programs to businesses and individuals as incentives to relocate and/or develop within the City. These programs include tax incentives such as the City's real estate tax abatement program and access to designated Keystone Opportunity Zones. Finally, the City has found the private sector to be a valuable partner in advancing the overall economic development initiatives within the City, including but not limited to investment in Center City, the Parkway District, the Avenue of the Arts District and the Navy Yard.

The Philadelphia Department of Commerce oversees and implements policies to help both small businesses and major corporations in Philadelphia thrive. The Department of Commerce coordinates activities along neighborhood commercial corridors, with small businesses and entrepreneurs, major real estate development projects, large-scale business attraction and retention efforts, as well as efforts to increase minority-owned business contracting opportunities. The City works closely with economic development partners like the Philadelphia Industrial Development Corporation ("PIDC"), maintaining a relationship that is fully coordinated on business attraction and retention activities and development issues. In collaboration with the Department of Commerce, PIDC plans and implements real estate and financing transactions that attract investment, jobs and tax ratables to the City.

Lending, Land Use and Employer-Based Strategies to Expand Business and Investment. As the City's landholding and financing arm for large commercial and industrial properties well-positioned for industrial redevelopment, PIDC manages public and private resources that are used to leverage even greater investments from a diverse range of governmental, for-profit and non-profit clients throughout Philadelphia. Since its founding in 1958, PIDC has placed more than $11.8 billion of PIDC financing and conveyed more than 3,000 acres of land in commercial and industrial projects. These transactions have leveraged $21.7 billion in total project investment and attracted or retained more than 400,000 jobs.

Through PIDC, the City offers a broad range of financing incentives, including below-market loans, grants, and tax-exempt financing designed to encourage economic growth in Philadelphia. Generally, financing is targeted to capital projects (building acquisition and renovation, new construction, machinery and equipment) that maintain or increase employment levels in Philadelphia where the borrower is not otherwise able to fully fund the project with private-sector debt and equity. PIDC also offers financial assistance for working capital and additional capital programs for construction projects that incorporate sustainability measures. Incentives are capitalized by federal, Commonwealth and local governmental resources, as well as private sector funds, and are available to for-profit and non-profit corporations both small and large.

The City also utilizes several place-based economic development strategies to spur development in Philadelphia. These strategies include: (i) a 10-year real estate tax abatement on all construction, as well as on improvements to existing properties; (ii) Commonwealth-designated Keystone Opportunity

Zones in which eligible businesses may be exempt from all Commonwealth and local business taxes until a specified date; (iii) Commonwealth-designated Keystone Innovation Zones in which energy, defense, technology, and life-sciences companies may be eligible for saleable tax credits worth $100,000 annually for the first eight years of operations; (iv) tax increment financing; and (v) commercial corridor revitalization through support of Business Development Districts and reimbursement for certain storefront and interior retail improvements.

Additionally, the City supports business formation and job creation incentives in a variety of ways, including use of a Job Creation Tax Credit which may be applied against the City's Business Income and Receipts Tax liability. The City works with the Philadelphia business community to build internal and external alliances with minority, women and disabled owned business enterprises, and with private industries to help develop and promote these companies. The City also fosters entrepreneurship and small business formation through a dedicated office, the Office of Business Services. With the growth of Philadelphia's immigrant population, the City has actively pursued multilingual business outreach programming.

Land Use and Planning. The Philadelphia City Planning Commission is responsible for the City's land use and strategic planning policies. The Commission maintains the City's comprehensive plan and monitors land use by applying the zoning code to proposed development. After four years of work, a revised zoning code was adopted by City Council in December 2011 and went into effect August 2012. The new, streamlined code is designed to increase efficiency in the development process by expanding what is allowable by right, thus limiting the number of variance requests. When variances are needed, the Zoning Board of Adjustment is the appointed arbiter of those land use requests.

Housing Development. The Office of Housing and Community Development (the "OHCD") manages planning, policy and investment in low income housing through several assistance programs. Most significantly, the OHCD creates and manages implementation of the Consolidated Plan, a federally-mandated plan and budget that must be updated yearly in order to receive federal Community Development Block Grant funding. The Philadelphia Redevelopment Authority (the "PRA") is the public government agency charged with the redevelopment of the City's neighborhoods, and residential housing development in particular. The PRA focuses on planning and developing balanced, mixed-use communities to create thriving, well-served neighborhoods. The PRA manages disposition of City-owned land. Philadelphia Housing Development Corporation focuses on service to Philadelphia's low- and moderate-income households through development of new housing and rehabilitation of existing homes in partnership with community development corporations. The Philadelphia Housing Authority (the "PHA") is funded primarily by the federal government and is the largest landlord in Pennsylvania. PHA develops, acquires, leases and operates affordable housing for City residents with limited incomes. PHA works in partnership with the City and state governments, as well as private investors.

A new institutional partner in housing development is the newly established Philadelphia Land Bank (the "PLB"). The aim of the PLB is to consolidate many of the land acquisition and disposition processes of the City under one umbrella, making it easier for private individuals and organizations to acquire properties that otherwise contribute to neighborhood disinvestment and turn them into assets for the community in which they are located. The PLB can: acquire tax-delinquent properties through tax foreclosure; clear the title to those properties so that new owners are not burdened by old liens; consolidate properties owned by multiple public agencies into single ownership to speed property transfers to new, private owners; and assist in the assemblage and disposition of land for community, nonprofit and for-profit uses.

Historic Preservation. The City is home to historic resources documenting more than three centuries of local, regional, and national history. The Philadelphia Historical Commission is the City's regulatory agency responsible for ensuring the preservation of that collection of historic resources including buildings, structures, sites, objects, interiors, and districts. The Philadelphia Art Commission is the City's charter-mandated design review board for architecture and public art. The City of Philadelphia

has one of the largest collections of public art of any major city in the world, with more than 4,500 cataloged pieces.

Key Development Achievements

Over the last two decades the efforts of Philadelphia's economic development agencies and others have spurred significant economic changes throughout the City. In particular, a number of geographic areas have experienced concentrated developments: Philadelphia's Historic District, Avenue of the Arts, North Broad Street, and the Benjamin Franklin Parkway. Many of these developments, such as a significant increase to Philadelphia's hotel room inventory in Center City Philadelphia and expansion of the Pennsylvania Convention Center, are key to the growth of Philadelphia's leisure and hospitality sector.

Notable Districts. Several key areas within the City have been instrumental in the economic development of Philadelphia over the past twenty-five years and the population growth since 2000. Much of the real estate development referenced throughout this APPENDIX D has occurred in these districts.

- **Center City** – a district that has seen a resurgence over the last two decades, Center City is Philadelphia's central business and office region within the City. Center City is the strongest employment center in the City. In addition, the area contains a sizeable residential population and provides ample access to retail, dining, arts and culture, entertainment, and mass transportation services, to both residents and daily commuters. According to the Center City District, one of the City's business improvement districts, 291,251 riders took public transportation into Center City daily in 2014. The professional services and leisure and hospitality sectors play significant roles in the Center City area.

- **Greater Center City** – the areas of greater Center City result from a growing desire for urban living among people who find these areas more affordable than Center City. Like Center City, these areas have experienced increased population, educational attainment, and family income within the last decade. In 2011, 43.3 percent of all jobs in Philadelphia were located in Greater Center City and Center City together.

- **University City** – located west of Center City, University City is a hub for the health care, life sciences, and higher education sectors and accounted for 11 percent of the City's employment in 2011. It includes the campuses of the University of Pennsylvania, Drexel University, University of the Sciences, the University of Pennsylvania Health System, the Children's Hospital of Philadelphia and The Wistar Institute, as well as the University City Science Center, a biomedical incubator.

- **The Navy Yard** – deeded to the City by the U.S. Navy in 2000 as a result of the federal Base Realignment and Closure Act, the 1,000-acre Philadelphia Navy Yard represents a successful transition of a former naval property with a 125-year history as an active military base to a growing hub for business. Largely through the work of PIDC, the City invests in infrastructure at the Navy Yard, providing an urban alternative to suburban office parks and a base for the rejuvenation of the industrial sector. The Navy Yard surpassed 11,500 employees in January 2014, making the Navy Yard a growing employment area with close to 2 percent of the City's jobs.

As of February 2015, Philadelphia had 37 major projects under construction concurrently, representing almost $4.2 billion in combined public and private investment. Most significantly, in summer 2014, Comcast Corporation broke ground on a 59-story, $1.2 billion office tower adjacent to its headquarters building in Center City. Commercial developers are currently most actively engaged in project development, with $1.8 billion invested across 13 projects, the majority of which are concentrated in Center City and the Navy Yard, while an additional $990 million across 11 new residential and mixed

use projects are currently under construction across various neighborhoods throughout the City. Projects from higher education and health care institutions in the University City and North Broad neighborhoods represent over $1 billion in investment. Table 21 reflects major real estate developments under construction as of February 2015. From 2013 through the fourth quarter of 2014, 55 projects representing more than a $3 billion investment were completed.

Table 21
Selected Major Development Investments Under Construction
(As of February 2015)

Project Name, by Neighborhood	Project Type	Cost in Millions	Est. Completion Date
Center City		**$1,866.5**	
The Sterling - Redevelopment	Residential	$50.0	Q2 2015
1116-28 Chestnut	Mixed Use	$65.0	Q2 2015
8th and Market Parking Garage	Public	$18.0	Q4 2015
810 Arch Street - Project Home	Residential	$23.5	Q4 2015
Rodin Square, Wholefoods	Commercial	$160.0	Q1 2016
Mormon Temple	Religious	$70.0	Q2 2016
1919 Market	Mixed Use	$100.0	Q2 2016
East Market (formerly Girard Square)	Commercial	$180.0	Q3 2016
Comcast Innovation and Technology Center	Commercial / Hotel	$1,200.0	Q3 2017
University City		**$1,729.2**	
Advanced Care Hospital Pavilion - Penn Presbyterian Medical Center	Health Care	$92.0	Q1 2015
Buerger Center for Advanced Pediatric Care	Health Care	$500.0	Q1 2015
3601 Market - UCSC Apartment Tower	Residential	$110.0	Q2 2015
Lancaster Square	University Residential	$170.0	Q3 2015
New College House at Hill Field	University Residential	$127.0	Q3 2015
3737 Chestnut	Residential	$105.0	Q3 2015
Hub II	Residential	$19.5	Q3 2015
Dornsife Center	University	$15.7	Q4 2015
FMC Tower at Cira Centre South	Mixed Use	$340.0	Q3 2016
4601 Market - Public Safety Services Campus	Public	$250.0	Q2 2018
North Broad		**$18.0**	
Rodeph Shalom Expansion	Religious	$18.0	Q4 2015
Navy Yard*		**$19.4**	
Building 17 - URBN Expansion (Cont.)	Commercial	-	Q2 2015
Commerce 3 (4000 S 26th Street) - EcoSave	Commercial	-	Q2 2015
Central Green (Park)	Public	$9.4	Q2 2015
Center for Building Energy Education & Innovation	Commercial/Education	-	Q2 2015
4701 League Island Blvd	Commercial	-	Q2 2016
Pavilion	Commercial	$10.0	Q2 2017
1200 Intrepid	Commercial	-	Q4 2017
Other Neighborhoods**		**$416.4**	
Belmont Mansion	Non-Profit	$1.4	Q2 2015
Wynnefield Place Senior Apartments	Residential	-	Q3 2015

Project Name, by Neighborhood	Project Type	Cost in Millions	Est. Completion Date
St. Christopher's Hospital Expansion	Health Care	$92.0	Q4 2015
1700 S. Broad - CHOP Family Care Center	Health Care	$30.0	Q4 2015
Dietz & Watson Facility	Commercial	$50.0	Q4 2015
Philadelphia Mills	Commercial	$40.0	Q4 2015
Broad St Armory	Residential	-	Q2 2016
Park Towne Place - Redevelopment	Residential	$177.0	Q4 2016
University of Pennsylvania Pennovation Works	Commercial	$26.0	Q4 2016
Waterfronts		**$125.0**	
SugarHouse Casino Expansion	Commercial	$125.0	Q2 2015
Total		**$4,174.5**	

Source: Philadelphia Department of Commerce
* Many development costs for Liberty Property Trust buildings at the Philadelphia Navy Yard are confidential, and are not made available for reporting purposes.
** Many development costs are confidential, and are not made available for reporting purposes.

Navy Yard. The Navy Yard is a 1,200 acre mixed-use office, research and industrial park with 11,500 people working on site across 145 companies. The Navy Yard has diverse tenants such as the Aker Philadelphia Shipyard, one of the world's most advanced commercial shipbuilding facilities, the corporate headquarters for retailer Urban Outfitters, a new 205,000 square foot, LEED-certified office building for pharmaceutical company GlaxoSmithKline, and a LEED-Silver certified baking facility for the Tasty Baking Company. More than 6.0 million square feet of space is currently occupied with significant additional capacity available for office, industrial, retail and residential development. In October 2014, restaurateur Marc Vetri opened a 150-seat restaurant, Lo Spiedo, in a 4,700-square-foot former gatehouse.

The Navy Yard is also home to the Consortium for Building Energy Innovation (the "CBEI"), formerly the Energy Efficient Buildings Hub, a consortium of universities, businesses, and economic development groups, working to develop energy efficient building technologies. The CBEI is the recipient of $160 million in Commonwealth and federal funding and part of a U.S. Department of Energy program to create national Energy Innovation Hubs. In 2014, the CBEI relocated to The Center for Building Energy Science (Building 661). The 38,000 square foot building serves as a demonstration laboratory to showcase energy efficiency research. In spring 2015, the CBEI, in collaboration with Pennsylvania State University, plans to open a newly constructed 25,000 square foot educational facility, The Center for Building Energy Education & Innovation.

In February 2013, PIDC released an updated Navy Yard master plan, detailing a comprehensive vision for the Navy Yard. The plan calls for adding over 12 million square feet of new construction and historic renovation supporting office, R&D, industrial and residential development, complemented with commercial retail amenities, open spaces and expanded mass transit. At full build, the Navy Yard will support more than 20,000 employees and over $2 billion in private investment. Seven projects are currently under construction, bringing the Navy Yard closer to its strategic targets. Currently construction projects include: an 80,000 square foot headquarters for Franklin Square Partners, an investment firm; EcoSave, an Australian based energy and water efficiency company, will take 20,000 square feet for their North American headquarters in a new 75,000 square foot flex building; and a new five-acre, $9.4 million park broke ground in summer 2014 and will open in 2015. Current and upcoming construction of these developments is valued over $145 million.

Strategic Business Improvement Districts. Starting in 1990, the City began working with business owners, residents, and non-profit organizations to revitalize commercial corridors through the successful creation of key business improvement districts ("BIDs"). BIDs provide an agreed-upon set of

business services and improvements to businesses within an established boundary in exchange for a mandatory annual assessment based on property taxes from commercial and multi-family properties within the district. BIDs are authorized by City Council. Currently, Philadelphia has twelve BIDs/Special Services Districts and two voluntary services districts in neighborhoods throughout the City. Since their inception, these districts have seen population growth, increased property values and lowered vacancy rates, and are some of the most desirable places to live and work in Philadelphia. The Center City District and the University City District are the largest BIDs in the City and have played a pivotal role in the resurgence of their service areas.

The Center City District was founded in 1990. The district encompasses 120 blocks and more than 4,500 individual properties in an area that extends beyond the central business district, roughly from Vine Street to Spruce Street and 30th Street to 4th Street. Center City District provides security, cleaning and promotional services that supplement, but do not replace, basic services provided by the City and the fundamental responsibilities of property owners. Center City District also makes physical improvements to the downtown, installing and maintaining lighting, signs, banners, trees and landscape elements. The type of improvements managed by the Center City District are often credited with the area's increased desirability as a place to live and work, attracting a population with higher educational attainment and higher household income than national averages. At 36.9 percent of the population, Center City has more than twice the national average of residents ages 25-34, according to the 2013 five-year American Community Survey estimates. In 2013, 76.2 percent of Center City residents 25 and older had a bachelor degree or higher, compared to the national average of 28.8 percent. From 2010 to 2013, household income in Center City increased by 14.7 percent from $56,121 to $64,383.

The University City District, founded in 1997, is Philadelphia's second largest BID by area, population, and employment. There are approximately 72,997 jobs in the 2.2 square mile area, with an economy centered on its universities and hospitals. Like the Center City District, the University City District provides security, cleaning and promotional services. The district serves as an economic development entity through assisting both start-up and established businesses with regulatory compliance and in applying for grants, coordinating technical resources with neighborhood commercial corridors, and providing career networking opportunities for its residents. University City District also works with City agencies in planning and implementing improvements for public spaces and transportation infrastructure.

Convention, Hospitality and Tourism Achievements. Chief among Philadelphia's development achievements is the expansion of the City's hospitality sector since 1993. Beyond driving growth in employment, development of amenities and cultural assets improves the tourist experience as well as quality of life for Philadelphia residents. In January 2015, the *New York Times* ranked Philadelphia third on its listing of "52 Best Places to Visit in 2015," the top listing for a location in the United States.

With Philadelphia's historic assets, the City has natural appeal as a tourist destination. The City continues to invest and work to increase development and employment in the leisure and hospitality sector. In 1993, with support from the Commonwealth, the Pennsylvania Convention Center was completed, providing a total of 624,000 square feet of saleable space across its four exhibit halls, ballroom and banquet spaces. In 2011, a $786 million expansion, across 20 acres of central Philadelphia real estate, increased the facility to 2.3 million square feet. It is the largest single public works project in Pennsylvania history. In January 2014, SMG began managing and operating the Convention Center, instituting a number of measures intended to reduce and control show costs and improve customer service. In May 2014, SMG implemented new work rules through a customer service agreement signed by the Convention Center and four of six unions. The Convention Center continues to operate with no plans to replace the two unions which did not sign the agreement. Since the customer service agreement was implemented, five major conventions have booked future meetings, which is expected to bring an estimated $91 million in economic activity to the City.

Over three million hotel room nights were sold in Center City in 2013, a 3.1 percent increase over 2012. Contributing to these sales, the Philadelphia Convention and Visitors Bureau (the "PHLCVB")

hosted 453 meetings and conventions in 2013, filling 597,744 hotel room nights across the region, with an estimated economic impact of more than $973 million. The total Convention and Group segment of travelers, which includes smaller conferences and meetings not held in the Convention Center, purchased 35 percent of all hotel rooms booked in Center City in 2013, accounting for 1,010,000 room-nights. In 2014, the Convention Center sold over 484,496 total hotel room nights across the region, having an estimated economic impact of more than $729 million, while the total Convention and Group segment of Philadelphia hotel demand exceeded 1,045,000 hotel nights.

According to the PHLCVB, 2015 and 2016 leisure demand is projected to grow by four percent and two percent respectively, due in part to the City's hosting of high profile events such as the 2015 World Meeting of Families, culminating in a papal visit from Pope Francis, and the 2016 Democratic National Convention.

The number of hotel rooms available in the City in 1993 was 5,613, with annual demand of 1,331,684 hotel rooms, representing 65 percent occupancy. As of March 2014, the City's hotel room inventory was 11,410 rooms, with occupancy in 2013 at 73.8 percent. In October 2013, City Council approved a Tax Increment Financing assistance package for the development of a 755-room hotel, home to both the W and Element brands, which will serve as an anchor to the Convention Center. Additionally, in February 2014, Mayor Nutter announced plans for the adaptive reuse of the City's former Family Division of the Court of Common Pleas building to become a 199-room luxury hotel under the Kimpton name.

Table 22 lists notable hotel developments since 2008, representing $782.4 million dollars in investment.

Table 22
Notable Hotel Developments since 2008, in Millions

Four Points by Sheraton	$14.0 (Estimate)
Le Meridien	61.0 (Estimate)
Kimpton Hotel Palomar	94.0
Homewood Suites University City	43.0
Marriott Courtyard, Navy Yard	31.0
Hotel Monaco by Kimpton	88.0
Hilton Home2 Suites	60.0
Residence Inn by Marriott, Airport	26.0 (Estimate)
W Hotel / Element Hotel (Opening 2017)	280.4
Kimpton Hotel 1801 Vine St (Opening 2017)	85.0
101 N. Broad Hotel (Opening 2016)	-
Four Seasons Hotel in Comcast Tower (Opening 2017)	-
Total	**$782.4 million**

Source: City of Philadelphia Commerce Department and PIDC

Despite a drop during the national recession beginning in 2008, Philadelphia's employment in the leisure and hospitality sector had recovered by 2011, with 60,684 employed in the sector, and exceeded pre-recession levels in 2014 with 65,000 employed. The Bureau of Labor Statistics reports that employment in this sector grew 19 percent from 2004 to 2014, as illustrated in Table 4.

Beyond working to increase convention business, the City and its regional partners work to increase the number of leisure travelers as well. According to a 2013 report by Visit Philadelphia, the region's leisure tourism and marketing corporation, since 1997, the number of overnight leisure hotel stays has grown 80 percent. This can be attributed to a number of factors, notably, an increased supply of hotel rooms and marketing of the region. The City, through Visit Philadelphia, supports domestic marketing efforts.

The City supports international marketing efforts through the PHLCVB. The U.S. Office of Travel and Tourism Industries reported that international visitors to Philadelphia in 2013 numbered more than 673,000, an increase of 13 percent over 2012. Table 23 shows the Greater Philadelphia Region's visitation growth from 1997 to 2013.

Table 23
Greater Philadelphia† Visitation Growth, 1997-2013
(in millions)

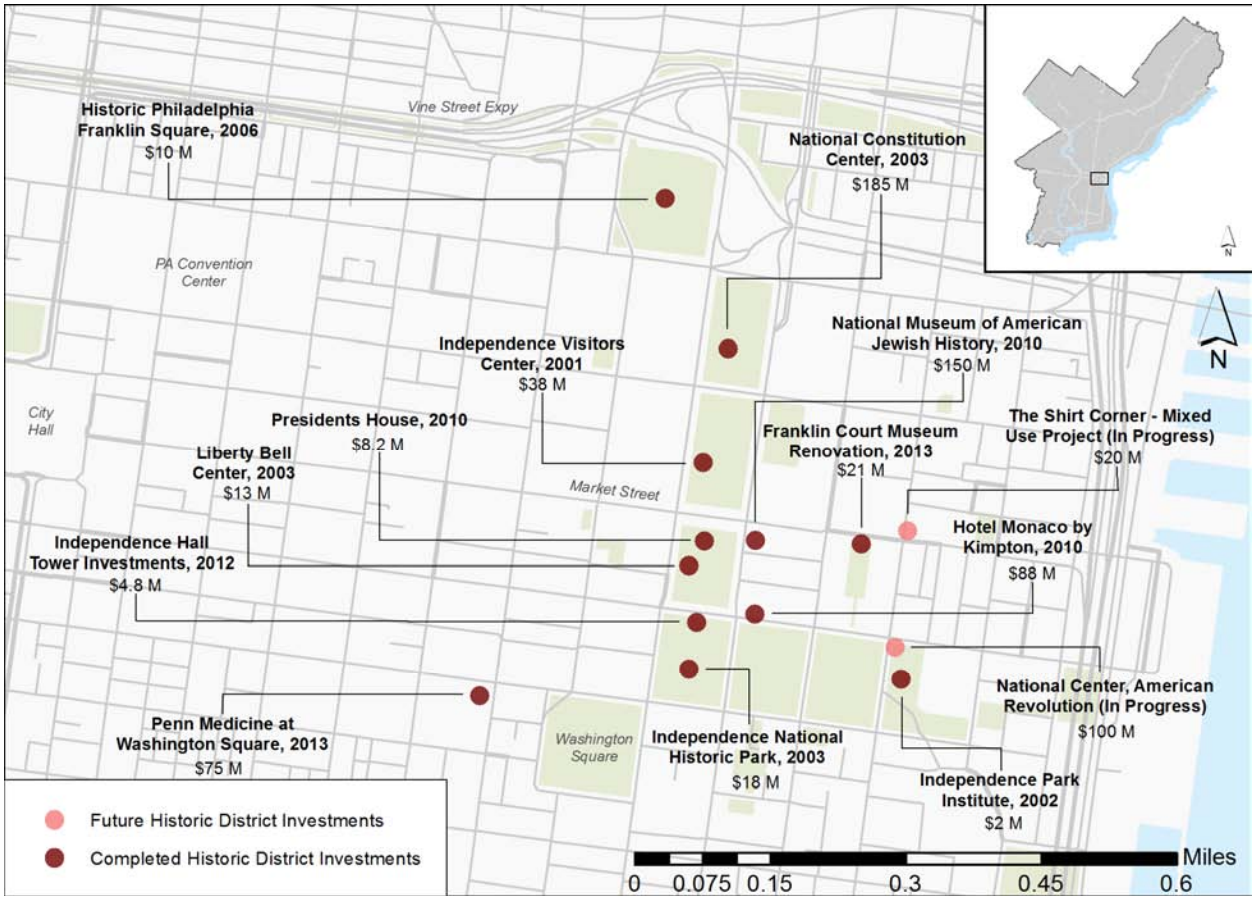
	1997	2013	Net Change	Percent Growth
Total Visitation	26.7	39.0	12.3	46%
Day - Leisure	15.5	20.9	5.4	35%
Overnight - Leisure	7.3	13.4	6.1	84%
Day - Business	2.5	2.6	0.1	4%
Overnight - Business	1.4	2.1	0.7	50%

†Bucks, Chester, Delaware, Montgomery and Philadelphia counties.
Source: Visit Philadelphia, Tourism Economics, Longwoods International.

Crucial to tourism is the City's robust arts and culture sector. The Center City District reports that one-in-three tourists who come to Center City Philadelphia cite museums and cultural events as the primary reason for their visit. In 2011, *Travel + Leisure* magazine ranked Philadelphia as the number one city for arts and culture in the United States. In 2013, major attractions in Center City, including the Liberty Bell Center, Reading Terminal Market, and the Philadelphia Zoo, had over 15.6 million visitors.

Organizations like the Philadelphia Museum of Art, the Kimmel Center, FringeArts, and the more than 400 smaller cultural organizations throughout the City help improve the quality of life for residents and visitors. The Greater Philadelphia Cultural Alliance reported in 2012 that cultural institutions in the PMSA contributed an estimated $1.4 billion in household income in 2011, with $490.3 million in Philadelphia County alone. Part of the wider economic impact generated by this revenue is demonstrated in the over 48,900 creative jobs that the sector supports within Philadelphia.

Figure 2
Map of Select Historic District Development Projects
Representing $733 Million in Selected Completed and Future Investment

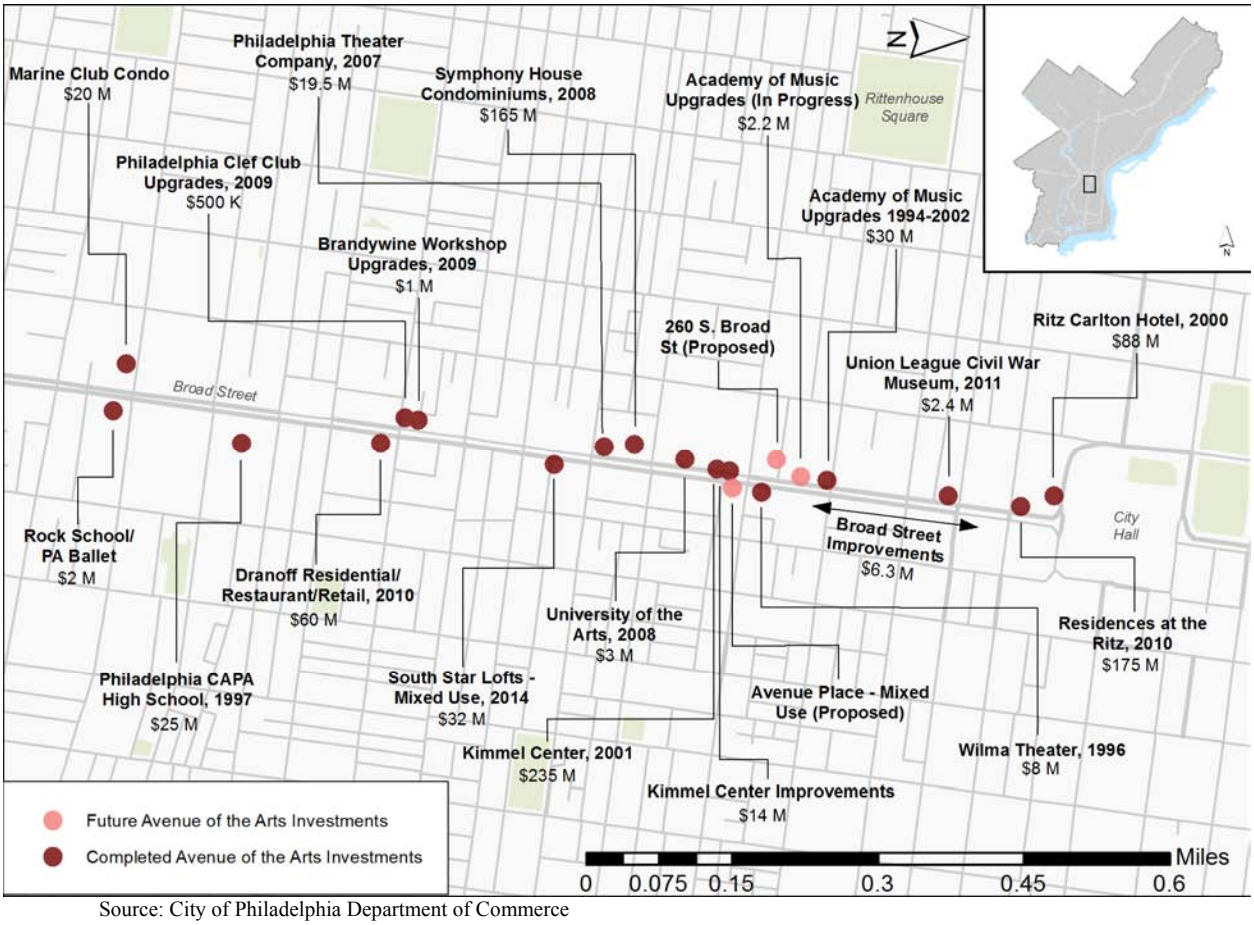


Source: City of Philadelphia Department of Commerce

Historic District Investments. Key to the City's leisure and hospitality growth is the maintenance and investment in the City's extraordinary historic assets. As the birthplace of the country, Philadelphia remains a major tourist destination year-round, particularly the City's Historic District, which includes such national treasures as the Liberty Bell, Independence Hall, Carpenters' Hall, Betsy Ross' house and Elfreth's Alley, the nation's oldest residential street. The City continues to invest in the maintenance and expansion of the Historic District's tourist experience.

Since 2001, $613 million of improvements have been made in Philadelphia's historic district, with an additional $120 million either under construction or planned over the next three years. Figure 2 shows select investments which have complemented the City's notable existing historic assets. Coupled with proposed developments, public and private, this district is expected to remain competitive in the national and international tourism markets for years to come.

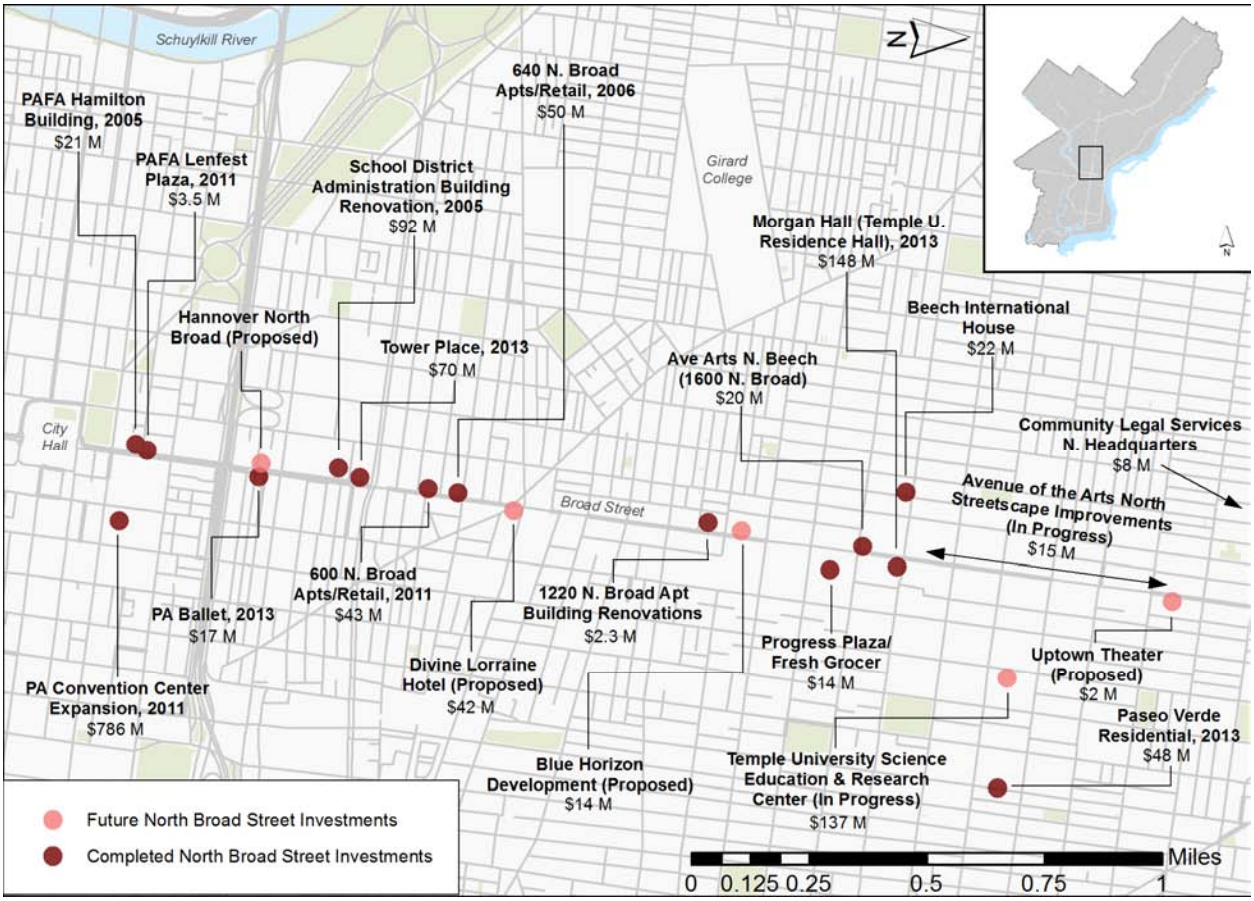
Figure 3
Map of Selected Avenue of the Arts (South Broad Street) Development Projects Representing $888.9 Million in Selected Completed and Future Investments



Source: City of Philadelphia Department of Commerce

Avenue of the Arts (South Broad Street) Investments. The Avenue of the Arts is located along a mile-long section of South Broad Street between City Hall and Washington Avenue, in the heart of Philadelphia's Center City. Reinventing South Broad Street as the Avenue of the Arts, a world class cultural destination, has been a civic goal in Philadelphia for nearly two decades. Cultural institutions, the William Penn Foundation, local property owners and civic leaders advanced the idea of a performing arts district on South Broad Street anchored by the Academy of Music and modeled after successful performing arts districts around the country. The Avenue of the Arts became a key element of the City's strategy to strengthen Center City as the region's premier cultural destination and an important element in the City's bid to expand its convention and tourism industries. Figure 3 provides an overview of investment to date in this district.

Figure 4
Map of Selected North Broad Street Development Projects
Representing $1.55 Billion in Selected Completed and Future Investments



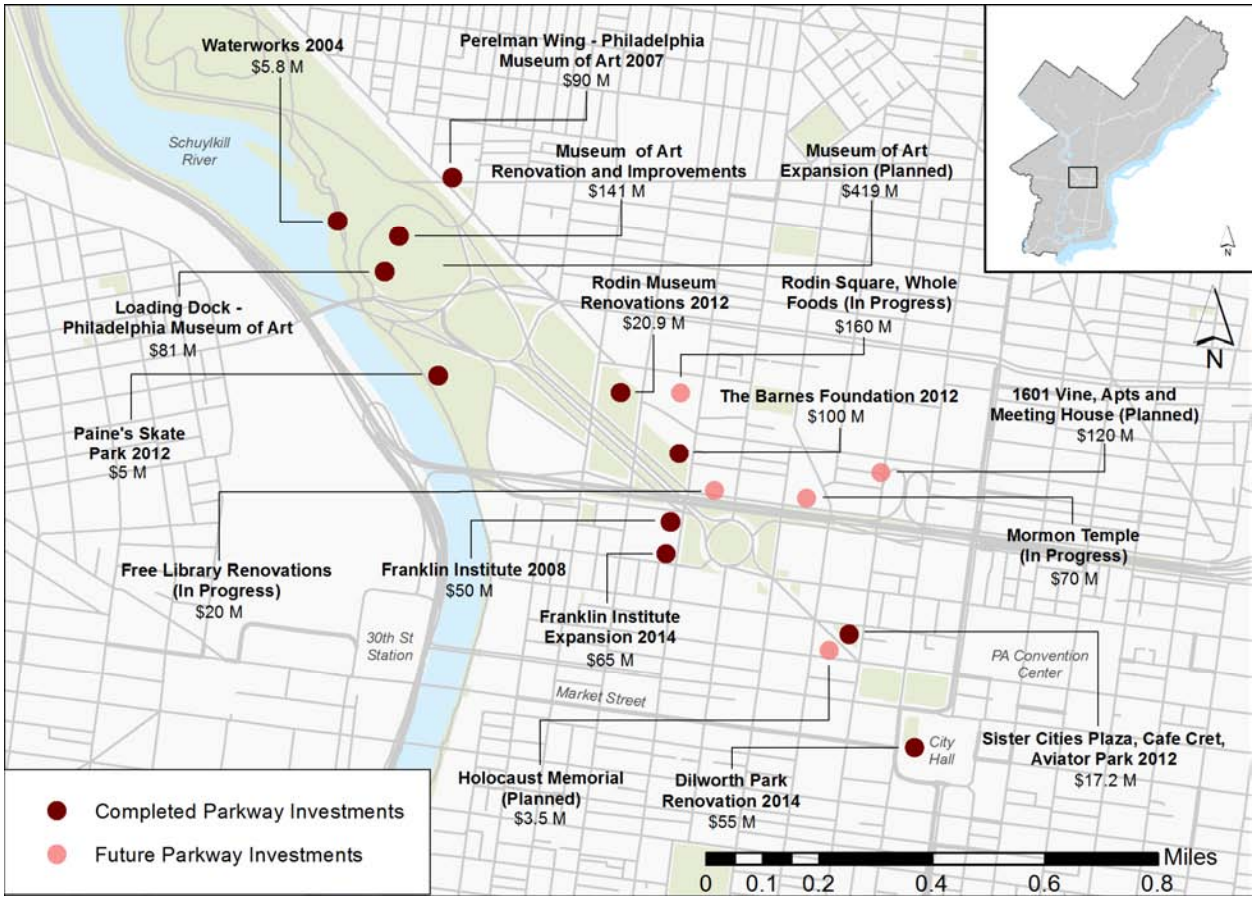
Source: City of Philadelphia Department of Commerce

North Broad Street Investments. The 2011 expansion of the Pennsylvania Convention Center reignited development efforts along the key corridor of North Broad Street. Improvements include Lenfest Plaza, which is adjacent to the Pennsylvania Academy of Fine Arts and across from the Pennsylvania Convention Center expansion's entrance. Lenfest Plaza is also home to Paint Torch, a sculpture by world-renowned American artist Claes Oldenburg.

At Spring Garden Street, the former State office building was redeveloped into 204 rental units and the former headquarters of the Philadelphia Inquirer and Philadelphia Daily News has been sold and is slated for housing and commercial development. Just north of Spring Garden, previously closed commercial businesses have been redeveloped to include 101 new residential lofts, new restaurants and a catering facility. The redevelopment of this block was initiated with the conversion of an empty building into a mixed use development with 250 fully-leased apartments. As discussed on page B-10, Temple University's $1.2 billion capital plans contribute to the revitalization of North Broad Street.

Tying the corridor together is a streetscape enhancement project featuring trees, landscaping and decorative light masts, funded with a mix of federal, state and City funding. Figure 4 shows a map of recent, planned, and proposed projects on the North Broad Street corridor.

Figure 5
Map of Selected Parkway Development Projects
Representing $1.42 Billion in Selected Completed and Future Investments



Source: City of Philadelphia Department of Commerce

Parkway Investments. Complementing the Avenue of the Arts theater district developments, the Philadelphia Parkway is a signature public investment. Conceived as early as 1871, and opened in 1929, the Benjamin Franklin Parkway was originally designed to ease traffic and beautify the City. It runs from the area of City Hall to the Philadelphia Museum of Art and is at the heart of the City's museum district. Today it is central public space and is a principal tourist attraction. Key Parkway features include the Philadelphia Museum of Art, the Rodin Museum, the Franklin Institute, The Barnes Foundation, the Free Library of Philadelphia, the Academy of Natural History, the Swann Memorial Fountain, Sister Cities Park, Cathedral Basilica of Saints Peter and Paul on Logan Square, and numerous pieces of public art.

Opened in May 2012, The Barnes Foundation is a welcome addition to the City's impressive roster of arts facilities, and has had a significant impact on the City's leisure and hospitality industry. In 2013, its first full year of operations, total attendance at The Barnes Foundation was approximately 305,000, and with membership over 25,000, it is ranked among the top institutions of its kind in the country.

Of overnight visitors, arts and culture visitors represent 17 percent, or about 1.36 million, of visitors to Philadelphia annually. According to a 2011 report from Visit Philadelphia, arts and culture visitors spend 54 percent more than the average visitor, stay longer, and are more likely to stay in a hotel.

As detailed in Figure 5, since 2004, the Parkway has undergone additional transformation, improving streetscape and pedestrian access, and adding additional amenities. Improvements include parks, open space and additions to the City's inventory of arts assets.

Waterfront Developments. Taking advantage of the City's geographic assets, the Schuylkill River and the Delaware River, the City is redeveloping its waterfront to accommodate a variety of developments, including mixed-use projects and housing, parks and recreational trails, and hotels. These projects improve quality of life for residents and improve the visitor experience, but also are an impetus for environmental remediation and private development of former industrial property within the City.

- **Delaware River Waterfront Corporation**. The Delaware River has historically been a center of activity, industry, and commerce, bounded at its north and south ends by active port facilities. The City adopted a Master Plan for the Central Delaware in 2011. The Delaware River Waterfront Corporation (the "DRWC"), in partnership with the City, is a nonprofit corporation that works to transform the central Delaware River waterfront into a vibrant destination for recreational, cultural, and commercial activities. Successful park projects include Race Street Pier in 2011 and Washington Avenue Green in 2014. Both parks are adaptive reuse projects built on former pier structures. Another project, Pier 68 is currently under construction, with an anticipated opening in summer 2015. In April 2014, the DRWC published a feasibility study for redevelopment of Penn's Landing, a major public space along the Delaware River waterfront. The Master Plan calls for a combination of public and private investment for the two million square foot development program.

- **Schuylkill River Development Corporation**. Redevelopment along the Schuylkill River is managed by a partnership between the Schuylkill River Development Corporation (the "SRDC"), the Department of Parks & Recreation, and the Department of Commerce. SRDC works with federal, Commonwealth, City and private agencies to coordinate, plan and implement economic, recreational, environmental and cultural improvements, and tourism initiatives on the Schuylkill River. From 1992 to 2014, SRDC has worked with the City to create 1.8 miles of riverfront trails within 17 acres of premiere park space in the heart of the City, and has added amenities to the Schuylkill River Park such as floating docks, fishing piers, composting toilets, and architectural bridge lighting. SRDC continues to work towards meeting its goal of creating and maintaining 10 miles of trail and 70 acres of green space along the tidal Schuylkill River in Philadelphia. The latest Schuylkill Trail extension running from Locust Street to South Street, called the Boardwalk, opened in October 2014 and plans to extend the trail farther south to Christian Street are in final design stages. Since 2005, Philadelphia has benefitted from more than $1 billion in development along the Schuylkill River, with more planned by private developers, universities, and healthcare institutions.

- **Penn Park**. Although not publicly funded, the University of Pennsylvania's Penn Park is a significant piece of infrastructure that strengthens the connection between University City and Center City, improving the resident and visitor experience. It lies along the west bank of the Schuylkill River, and complements the work of the SRDC.

  The University of Pennsylvania opened Penn Park in 2011, increasing the University's green space by 20 percent. The park includes 24 acres of playing fields, open recreational space and pedestrian walkways located between Walnut and South Streets. Formerly parking lots, the park embraces sustainable features, including underground basins that capture rainwater and mitigate storm water overflow into the Schuylkill River. 45,000 cubic yards of soil, 2,200 pilings and more than 500 trees were installed to create canopied hills and picnic areas.

- **SugarHouse Casino**. Legislation enacted by the Pennsylvania General Assembly authorized two stand-alone casino licenses for the City. Philadelphia's first casino, SugarHouse, opened in September 2010. SugarHouse Casino sits on the Delaware River waterfront offering an array of slot machines, table games and dining options. In May 2013, SugarHouse received approval from the Pennsylvania Gaming Control Board to expand its operations, including additional parking and a larger gaming floor. The $155 million expansion, which commenced in July 2014 with completion anticipated by September 2015, is expected to add 500

additional employees to the casino. After a period of significant gains from 2010 through 2012, SugarHouse revenue has leveled off. Until the casino's expansion is complete, current revenue levels are expected to remain relatively unchanged. In 2013, the casino's total revenue was $265,558,237, a decrease of 3.1 percent from 2012, and it employed 1,128 people, up from 1,098 in 2012.

South Philadelphia Sports Complex. Another key element of Philadelphia's hospitality industry is professional sports. Philadelphia is the only city to have a professional hockey, basketball, baseball, and football team playing in a single district within a city, the Sports Complex Special Services District, created by the City in 2000.

The South Philadelphia Sports Complex houses three professional sports facilities: The Wells Fargo Center opened in 1996 and is home to the Philadelphia Flyers (National Hockey League) and Philadelphia 76ers (National Basketball Association); Lincoln Financial Field opened in 2003 and is home to the Philadelphia Eagles (National Football League); and Citizens Bank Park opened in 2004 and is home to the Philadelphia Phillies (Major League Baseball). The Phillies and the Eagles are contractually obligated to play in Philadelphia until 2033 and 2034, respectively.

Average paid home season attendance for the Eagles in Lincoln Financial Field has exceeded 100 percent of actual seating, since its opening in 2003. In the 2009 through 2012 seasons, the Phillies had a paid home season attendance in excess of 100 percent of actual seating at Citizen's Bank Park. In 2010, the Phillies had the second highest attendance of any team in Major League Baseball and in both 2011 and 2012 the Phillies registered the highest home attendance of any team in Major League Baseball. The Phillies attendance rate declined in 2013, but remained in the top ten of Major League Baseball teams. However, 2014 team performance contributed to a significant decline in overall attendance, dropping the Phillies attendance ranking to 16 out of 30 teams.

In March 2012, Xfinity Live! Philadelphia, a 50,000 square foot sports entertainment and dining complex, opened. The privately funded, $60 million venue includes a miniature sports field hosting free concerts and other activities, an outdoor theater accommodating sports games and family films, and a dozen dining and bar establishments. The complex, a Comcast-Spectacor and Cordish-owned company, also hosts the first ever NBC Sports Arena, featuring a 32-foot LED HD television, displaying the NBC Sports Ticker and in-game promotions. The entire complex is open year-round and sustains 276 full-time equivalent jobs.

In November 2014, the Pennsylvania Gaming Control Board awarded the City's remaining casino license to Live! Hotel & Casino, a joint venture between Cordish Cos. and Greenwood Gaming and Entertainment Inc. Once complete in January 2018, the $425 million, 200,000-square-foot casino, will also include a 240-room hotel, 2,000 slots and 125 table games. It will also have a spa and conference center built in and around an existing Holiday Inn at the South Philadelphia Sports Complex.

TRANSPORTATION

The residents of the City and surrounding counties are served by a commuter transportation system operated by SEPTA. This system includes two subway lines, a network of buses and trolleys, and a commuter rail network joining Center City and other areas of the City to PHL and to the surrounding counties. For more information on SEPTA, see "ECONOMIC BASE AND EMPLOYMENT – Southeastern Pennsylvania Transportation Authority (SEPTA)" and APPENDIX C – "EXPENDITURES OF THE CITY – City Payments to SEPTA."

A high-speed train line runs from southern New Jersey to Center City and is operated by the Port Authority Transit Corporation ("PATCO"), a subsidiary of the Delaware River Port Authority. On the average weekday, PATCO brings approximately 15,000 individuals to Philadelphia.

An important addition to the area's transportation system was the opening of the airport high speed line between Center City and PHL in 1985. The line places PHL less than 25 minutes from the City's central business district and connects directly with the commuter rail network and the Pennsylvania Convention Center. The opening of the commuter rail tunnel in 1984 provided a unified City transportation system linking the commuter rail system, the SEPTA bus, trolley, and subway lines, the high speed line to New Jersey, and the airport high speed line.

New Jersey Transit operates 19 different bus routes and the Atlantic City Train Line, all of which serve to connect Philadelphia and New Jersey. On the average weekday, the New Jersey Transit bus routes bring approximately 2,000 individuals to Philadelphia and the Atlantic City Line brings approximately 700 individuals to Philadelphia.

Amtrak, SEPTA, Norfolk Southern, CSX Transportation, Conrail and the Canadian Pacific provide inter-city commuter and freight rail services connecting the City to other major cities and markets in the United States. According to Amtrak, Philadelphia's 30th Street Station is the third busiest station in the United States. Structural improvements of $30 million were recently completed to the station, and an additional $60 million restoration project is awaiting federal approval.

The City now has one of the most accessible downtown areas in the nation with respect to highway transportation by virtue of Interstate 95 ("I-95"); the Vine Street Expressway (Interstate 676), running east-to-west through the Central Business District between Interstate 76 ("I-76") and I-95; and the "Blue Route" (Interstate 476) in suburban Delaware and Montgomery Counties, which connects the Pennsylvania Turnpike and I-95 and connects to the Schuylkill Expressway (I-76), which runs to Center City Philadelphia. In addition, more than 100 truck lines serve the Philadelphia area.

The City is served within city limits by numerous private buses and shuttles. These buses and shuttles are operated by apartment complexes, universities, and private companies. These buses and shuttles connect Philadelphians to transit hubs, employment, and residences.

Philadelphia launched the Indego bike share program, sponsored by Independence Blue Cross, in April 2015. The system launched with 600 bicycles and 70 stations located from Temple University to Tasker Street and from the Delaware River to 44th Street. Indego is the first bike share system in the United States to launch with a cash payment option for members. In 2016, the City plans to expand Indego by adding 60 additional bike share stations.

KEY CITY-RELATED SERVICES AND BUSINESSES

Water and Wastewater

The water and wastewater systems of the City are owned by the City and operated by the City's Water Department. The water system provides water to the City (134 square mile service area), to Aqua Pennsylvania, Inc., formerly Philadelphia Suburban Water Company, and to the Bucks County Water and Sewer Authority. The City obtains approximately 58 percent of its water from the Delaware River and the balance from the Schuylkill River. The water system serves approximately 483,955 retail customers through 3,172 miles of mains, 3 water treatment plants, 15 pumping stations and provides fire protection through 25,321 fire hydrants. The water treatment plants continue to meet and/or exceed their Safe Drinking Water Act as well as partnership for Safe Water standards.

The wastewater system services a total of 364 square miles of which 134 square miles are within the City and 230 square miles are in suburban areas. The total number of retail customer accounts is approximately 528,938, including approximately 49,993 storm water only accounts. The wastewater and storm water systems contain three water pollution control plants, a biosolids processing facility, 19 pumping stations, and approximately 3,719 miles of sewers. The wastewater treatment plants continue to meet and/or exceed their National Pollutant Discharge Elimination System permit limits.

Solid Waste Disposal

The City is responsible for collecting solid waste, including recycling, from residential households and some commercial establishments. On average, approximately 2,300 tons of solid waste per day are collected by the City. Municipal solid waste is disposed of through a combination of recycling processing facilities, private and City transfer stations within the City limits, and at various landfills operated outside the City limits.

Parks

The City was originally designed by William Penn and Thomas Holme around five urban parks, each of which remains in Center City to this day. The City's parklands total over 10,300 acres, and include Fairmount Park, the world's largest landscaped urban park at 9,200 acres, Pennypack Park, and the Philadelphia Zoo, the country's first zoo. The City also offers its residents and visitors America's most historic square mile, which includes Independence Hall and the Liberty Bell.

Libraries

The Free Library of Philadelphia, the City's public library system, comprises 54 branches and an extensive online resource system.

Streets and Sanitation

The Philadelphia Streets Department (the "Streets Department") and the divisions within it are responsible for the City's large network of streets and roadways. The City's pavement condition is considered to be a "Fair" pavement condition. In order for the City to maintain its pavement in a state of good repair, local streets should be repaved once every 20 years and arterials should be repaved once every 10 years. This requires approximately 131 miles of paving every year. The pavement program has accumulated a backlog of approximately 1,100 miles since 1996. As a result of the new funding under Act 89, the Streets Department has funds to address long standing state of good repair needs without an additional allocation from the General Fund. During Fiscal Years 2014-2017, the Streets Department will invest in critical equipment replacements and begin to implement a strategy to address recurring state of good repair needs. This includes critical equipment replacement, street paving and pothole repair, and replacement of traffic control equipment.

The Streets Department is also responsible for the ongoing collection and disposal of residential trash and recyclables, as well as the construction, cleanliness and maintenance of the street system. The streets system in Philadelphia totals 2,575 miles - 2,180 miles of City streets, 35 miles of Fairmount Park roads and 360 miles of state highways. The Highway Unit and Sanitation Division annually collects and disposes of approximately 600,000 tons of rubbish and 125,000 tons of recycling, completes over 48,000 miles of mechanical street cleaning, clears 1,800 major illegal dump sites, and removes over 155,000 abandoned tires.

Sustainability and Green Initiatives

Mayor Nutter has stated one of his top priorities is to make Philadelphia the greenest and most sustainable city in America. To aid in achieving this goal, the newly created Philadelphia Energy Authority has been tasked with improving energy sustainability and affordability in the City and with educating consumers on their energy choices. The City is investing in and evaluating additional options and investing in green infrastructure to better manage storm water reclamation and reduce pollution of the City's public waters. There has been extensive investment in creating more and better public green spaces, such as Love Park in Center City as well as green spaces along both the Delaware and Schuylkill Rivers. Finally, the City has been taking steps to accommodate all modes of transportation including bicycling. As noted above, in April 2015, Philadelphia launched its new bicycle sharing system, Indego, with Independence Blue Cross as the title sponsor. Once fully implemented, this bicycle share program is expected to have up to 2,000 bicycles.

APPENDIX E

SUMMARY OF THE 1998 GENERAL ORDINANCE

The following are summaries of certain provisions of the 1998 General Ordinance. The summary does not purport to be comprehensive or definitive and is subject to the complete text of the terms and provisions of the 1998 General Ordinance, to which reference is hereby made. Copies of the complete text of the 1998 General Ordinance are available from the Office of the Director of Finance, Municipal Services Building, 1401 John F. Kennedy Boulevard, Suite 1330, Philadelphia, Pennsylvania 19102. Certain of the provisions summarized below reference the 1975 Ordinance Bonds, all of which are expected to be redeemed, refunded or defeased with a portion of the proceeds of the Bonds and other available funds. Such references are to be deemed deleted in their entirety if and when no 1975 Ordinance Bonds are outstanding. See "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF FUNDS" above.

Certain Definitions

Set forth below are definitions in summary form of certain terms used in the forepart of this Official Statement and in this APPENDIX E – "SUMMARY OF THE 1998 GENERAL ORDINANCE." Many of these terms and the complete text of the definitions can be found in the 1998 General Ordinance. Certain terms in this APPENDIX E vary from the terms defined in the 1998 General Ordinance. In that event, the defined term used in the 1998 General Ordinance is included in parentheses with the applicable summary definition below.

"Accreted Value" means, with respect to any Capital Appreciation 1998 Ordinance Bond as of any specified date, the Original Value of such 1998 Ordinance Bond plus interest accreted on such 1998 Ordinance Bond to such date, all as may be provided in an applicable Supplemental Ordinance.

"Act" means The First Class City Revenue Bond Act approved October 18, 1972 (Act No. 234, 53 P.S. 15901 to 15224), as from time to time amended.

"Bond Counsel" means any firm of nationally recognized bond counsel acceptable to the City.

"Bondholder or Holder" means the registered owner of any 1998 Ordinance Bonds.

"Bond Register" means the list of the names and addresses of Bondholders and the principal amounts and numbers of the 1998 Ordinance Bonds held by them maintained by the Fiscal Agent on behalf of the City.

"Capital Appreciation 1998 Ordinance Bonds" (Capital Appreciation Bonds) means any 1998 Ordinance Bonds issued under the 1998 General Ordinance which do not pay interest until maturity or until a specified date prior to maturity, but whose Original Value accretes periodically to the amount due on the maturity date.

"City Charges" means the proportionate charges, if any, for services performed for the Gas Works by all officers, departments, boards or commissions of the City which are contained in the computation of operating expenses of the Gas Works including, without limitation, the expenses of the Gas Commission, and also means the base payments to the City contained in the Management Agreement and all other payments made to the City from Gas Works Revenues.

"City Solicitor" means the head of the City's law department as provided by the Philadelphia Home Rule Charter.

"Code" means the Internal Revenue Code of 1986, as amended, or any successor legislation, and the regulations and published rulings promulgated thereunder or applicable thereto.

"Credit Facility" means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (other than a Qualified Swap or an Exchange Agreement) that is provided by a commercial bank, insurance company or other institution, with a current long term rating (or whose obligations thereunder are guaranteed by a financial institution with a long term rating) from Moody's and S&P not lower than "A."

"Credit Facility Issuer or issuer of a Credit Facility" means each issuer of a Credit Facility then in effect, and its successors. References to the Credit Facility Issuer shall be read to mean the issuer of the Credit Facility applicable to a particular Series of 1998 Ordinance Bonds or each issuer of a Credit Facility, as the context requires.

"Debt Service Requirements" means, for a specified period, the sum of (i) the principal of (whether at maturity or pursuant to mandatory redemption) and interest (other than capitalized interest) on Outstanding 1998 Ordinance Bonds payable during the period and (ii) all net amounts due and payable by the City under Qualified Swaps and Exchange Agreements during the period. For purposes of estimating Debt Service Requirements for any future period, (i) any Option 1998 Ordinance Bond outstanding during such period shall be assumed to mature on the stated maturity date thereof, except that the principal amount of any Option 1998 Ordinance Bond tendered for payment and cancellation before its stated maturity date shall be deemed to accrue on the date required for payment pursuant to such tender; (ii) Debt Service Requirements on 1998 Ordinance Bonds for which the City has entered into a Qualified Swap or an Exchange Agreement shall be calculated assuming that the interest rate on such 1998 Ordinance Bonds shall equal the stated fixed or variable rate payable by the City on the Qualified Swap or Exchange Agreement or, if applicable and if greater than such stated rate, the applicable rate for any 1998 Ordinance Bonds issued in connection with the Qualified Swap or Exchange Agreement adjusted, in the case of variable rate obligations, as described below in the second to last paragraph under the heading "**Covenants** – *Rate Covenant*"; and (iii) Debt Service Requirements with respect to Variable Rate 1998 Ordinance Bonds shall be subject to adjustments as described below in the second to last paragraph under the heading "**Covenants –** *Rate Covenant*."

"Director of Finance" means the chief financial, accounting and budget officer of the City as established by the Philadelphia Home Rule Charter, including a person acting as Director of Finance under applicable law.

"Engineer" means a consulting engineer or a firm of consulting engineers, in either case having broad experience in the design and analysis of the operation of gas works or gas distribution systems of the magnitude and scope of the Gas Works and a favorable reputation for competence in such field.

"Exchange Agreement" means, with respect to a Series of 1998 Ordinance Bonds, or any portion thereof to the extent from time to time permitted by applicable law, any interest exchange agreement, interest rate swap agreement, currency swap agreement or other contract or agreement, other than a Qualified Swap, authorized, recognized and approved by a Supplemental Ordinance as an Exchange Agreement and providing for payments to and from an entity whose senior long term debt obligations, other senior unsecured long term obligations, or claims paying ability or whose obligations under an Exchange Agreement are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, are rated not less than "A3" by Moody's, "A-" by S&P or "A-" by Fitch, or the equivalent thereof by any successor thereto as of the date the Exchange Agreement is entered into, which payments are calculated by reference to fixed or variable rates and constituting a financial accommodation between the City and the counterparty.

"Fiscal Agent" means any bank, bank and trust company or trust company named as such pursuant to the 1998 General Ordinance or its successor.

"Fiscal Year" means the Fiscal Year of the Gas Works.

"Fitch" means Fitch IBCA, Inc., a corporation organized and existing under the laws of the State of New York, its successors and assigns and if such corporation shall for any reason no longer perform the functions of a securities rating agency, "Fitch" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City. Whenever rating categories of Fitch are specified in the 1998 General Ordinance, such categories shall be irrespective of gradations within a category.

"Gas Commission" means the Gas Commission provided for by the Philadelphia Home Rule Charter as presently constituted or hereafter reconstituted in accordance with law.

"Gas Works" means all property, real and personal, owned by the City and used in the acquisition or manufacture, storage and distribution of natural, liquefied, synthetic or manufactured gas or in the maintenance, management or administration thereof and all activities ancillary and related thereto, and also means, as the context may require, the business entity managed by the Manager.

"Gas Works Revenues" means all operating and nonoperating revenues of the Gas Works derived from its activities and assets involved in the supply, manufacture, storage and distribution of gas, including all rents, rates and charges imposed or charged by the City upon the owners or occupants of properties connected to, and upon all users of, gas distributed by the Gas Works and all other revenues derived therefrom and all other income derived by the City from the Gas Works. Revenues derived from activities unrelated to the supply, manufacture, storage and distribution of gas or assets related thereto shall not be included in Gas Works Revenues, provided that the Gas Works receives fair payment for the use of gas related assets and personnel of the Gas Works used in such activities, which payments shall be included in Gas Works Revenues. In particular, Gas Works Revenues do not include revenues from enterprises or functions not related to gas activities (e.g., activities involving the supply, generation or distribution of electricity). Gas Works Revenues shall not include those portions of the Gas Works' rents, rates and charges which are securitized and sold pursuant to the 1998 General Ordinance as described below under "Permitted Securitization of Gas Works Revenues." Gas Works Revenues may be divided into separate components in one or more Supplemental Ordinances and any Series of 1998 Ordinance Bonds issued thereafter may be limited as to source of payment to one or more of such components as provided in the Supplemental Ordinance authorizing the particular Series of 1998 Ordinance Bonds.

"Government Obligations" means any of the following which are noncallable and which at the time of investment are legal investments under the Act for the moneys proposed to be invested therein:

(a) direct general obligations of, or obligations the payment of principal of and interest on which are unconditionally guaranteed as to full and timely payment by the United States of America;

(b) direct obligations and fully guaranteed certificates of beneficial interest of the Export-Import Bank of the United States; consolidated debt obligations and letter of credit-backed issues of the Federal Home Loan Banks; participation certificates and senior debt obligations of the Federal Home Loan Mortgage Corporation; debentures of the Federal Housing Administration; mortgage-backed securities (except stripped mortgage securities which are valued greater than par on the portion of unpaid principal) and senior debt obligations of the Federal National Mortgage Association; participation certificates of the General Services Administration; guaranteed mortgage-backed securities and guaranteed participation certificates of the Government National Mortgage Association; guaranteed participation certificates and guaranteed pool certificates of the Small Business Administration; debt obligations and letter of credit-backed issues of the Student Loan Marketing Association; local authority bonds of the U.S. Department of Housing & Urban Development; guaranteed Title XI financings of the U.S. Maritime Administration; or

(c) obligations issued by the Resolution Funding Corporation pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (the "FIRRE Act"), (i) the principal of which obligations is payable when due from payments of the maturing principal of non-interest bearing direct obligations of the United States of America which are issued by the Secretary of the Treasury and deposited in

the Funding Corporation Principal Fund established pursuant to the FIRRE Act, and (ii) the interest on which obligations, to the extent not paid from other specified sources, is payable when due by the Secretary of the Treasury pursuant to the FIRRE Act.

"Independent" means a person who is not a salaried employee or elected or appointed official of the City; provided, however, that the fact that such person is retained regularly by or transacts business with the City shall not make such person an employee within the meaning of this definition.

"Interim Debt" means any bond anticipation notes or other temporary borrowing which the City anticipates permanently financing with 1998 Ordinance Bonds or other long term indebtedness under the 1998 General Ordinance or otherwise.

"Management Agreement" means the Agreement dated December 29, 1972 between the City and the Manager for the management and operation of the Gas Works, as presently or hereafter amended, or any successor agreement which may be entered into by the City pertaining to the management of the Gas Works.

"Manager" means Philadelphia Facilities Management Corporation, currently managing the Gas Works pursuant to the Management Agreement, or its successor or such other person, corporation, board, commission or department of the City, which may be designated by the City to manage the Gas Works.

"Moody's" means Moody's Investors Service, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and if such corporation shall for any reason no longer perform the functions of a securities rating agency, "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City. Whenever rating categories of Moody's are specified in the 1998 General Ordinance, such categories shall be irrespective of gradations.

"Net Operating Expenses" means Operating Expenses exclusive of City Charges.

"1998 Ordinance Bond or Bonds" (Bond or Bonds) means any Gas Works Revenue bond or note issued and outstanding pursuant to the Act under the 1998 General Ordinance and any Supplemental Ordinance.

"Operating Expenses" means all costs and expenses of the Gas Works necessary and appropriate to operate and maintain the Gas Works in good operable condition during each Fiscal Year, and shall include, without limitation, the Manager's fee, salaries and wages, purchases of service by contract, costs of materials, supplies and expendable equipment, maintenance costs, costs of any property or the replacement thereof or for any work or project, related to the Gas Works, which does not have a probable useful life of at least five years, pension and welfare plan and workmen's compensation requirements, provision for claims, refunds and uncollectible receivables and for City Charges, all in accordance with generally accepted municipal accounting principles consistently applied, but shall exclude depreciation and interest and sinking fund charges. Operating Expenses shall not include Unrelated Expenses.

"Option 1998 Ordinance Bond" (Option Bond) means any 1998 Ordinance Bond which by its terms may be tendered by and at the option of the Holder thereof for payment by the City prior to its stated maturity date or the maturity date of which may be extended by and at the option of the Holder thereof.

"Original Value," with respect to a Series of 1998 Ordinance Bonds issued as Capital Appreciation 1998 Ordinance Bonds, means the principal amount paid by the initial purchasers thereof on the date of original issuance.

"Outstanding," when used with reference to the 1998 Ordinance Bonds, means, as of any particular date, all 1998 Ordinance Bonds which have been authenticated and delivered under the 1998 General Ordinance, except:

(a) 1998 Ordinance Bonds canceled after purchase in the open market or because of payment or redemption prior to maturity;

(b) 1998 Ordinance Bonds for the payment or redemption of which sufficient moneys shall have been theretofore deposited with the Fiscal Agent (whether upon or prior to the maturity or redemption date of any such 1998 Ordinance Bonds), provided that, if such 1998 Ordinance Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as provided in the 1998 General Ordinance or arrangements satisfactory to the Fiscal Agent shall have been made therefor, or waiver of such notice satisfactory in form to the Fiscal Agent shall have been filed with the Fiscal Agent; and

(c) 1998 Ordinance Bonds in lieu of which or in substitution for which others have been authenticated and delivered pursuant to the 1998 General Ordinance.

1998 Ordinance Bonds paid with the proceeds of any Credit Facility shall be Outstanding until the issuer of such Credit Facility has been reimbursed for the amount of the payment or has presented the 1998 Ordinance Bonds for cancellation.

"Philadelphia Home Rule Charter" means the Philadelphia Home Rule Charter, as amended or superseded by any new home rule charter, adopted pursuant to authorization of the First Class City Home Rule Act approved April 21, 1949, P.L. 665, §1 et seq. (53 P.S. §13101 et seq.).

"Qualified Escrow Securities" means funds which are represented by (i) demand deposits, interest-bearing time accounts, savings deposits or certificates of deposit, but only to the extent such deposits or accounts are fully insured by the Federal Deposit Insurance Corporation or any successor United States governmental agency, or to the extent not insured, fully secured and collateralized by Government Obligations having a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such deposits or accounts, (ii) if at the time permitted under the Act, obligations of any state or political subdivision thereof or any agency or instrumentality of such state or political subdivision for which cash, Government Obligations or a combination thereof have been irrevocably pledged to or deposited in a segregated escrow account for the payment when due of principal or redemption price of and interest on such obligations, and any such cash or Government Obligations pledged and deposited are payable as to principal or interest in such amounts and on such dates as may be necessary without reinvestment to provide for the payment when due of the principal or redemption price of and interest on such obligations, and such obligations are rated by any Rating Agency in the highest rating category assigned by such Rating Agency to obligations of the same type, or (iii) noncallable Government Obligations. In each case such funds (i) are subject to withdrawal, mature or are payable at the option of the holder at or prior to the dates needed for disbursement, provided such deposits or accounts, whether deposited by the City or by such depository, are insured or secured as public deposits with securities having at all times a market value exclusive of accrued interest equal to the principal amount thereof, (ii) are irrevocably pledged for the payment of such obligations and (iii) are sufficient, together with the interest to the disbursement date payable with respect thereto, if also pledged, to meet such obligations in full.

"Qualified Swap or Swap Agreement" means, with respect to a Series of 1998 Ordinance Bonds or any portion thereof, any financial arrangement that (i) is entered into by the City with an entity that is a Qualified Swap Provider at the time the arrangement is entered into; (ii) provides that (a) the City shall pay to such entity an amount based on the interest accruing at a fixed rate on an amount equal to the principal amount of the Outstanding 1998 Ordinance Bonds of such Series or portion thereof, and that such entity shall pay to the City an amount based on the interest accruing on a principal amount initially equal to the same principal amount as such 1998 Ordinance Bonds, at either a variable rate of interest or a fixed rate of interest computed according to a formula set forth in such arrangement (which need not be the same as the actual rate of interest borne by the 1998 Ordinance Bonds) or that one shall pay to the other any net amount due under such arrangement or (b) the City shall pay to such entity an amount based on the interest accruing on the principal amount of the Outstanding 1998 Ordinance Bonds of such Series or portion thereof at a variable rate of interest

as set forth in the arrangement and that such entity shall pay to the City an amount based on interest accruing on a principal amount equal to the same principal amount of such 1998 Ordinance Bonds at a variable rate of interest or a fixed rate of interest computed according to a formula set forth in such arrangement (which need not be the same as the actual rate of interest borne by the 1998 Ordinance Bonds) or that one shall pay to the other any net amount due under such arrangement; and (iii) which has been designated in writing to the Fiscal Agent by the City as a Qualified Swap with respect to such 1998 Ordinance Bonds.

"Qualified Swap Provider" means, with respect to a Series of 1998 Ordinance Bonds, an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, or whose payment obligations under a Qualified Swap are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, are rated (at the time the subject Qualified Swap is entered into) at least as high as "Aa" by Moody's and "AA" by S&P, or the equivalent thereof by any successor thereto.

"Rate Covenant" means the covenant described below under the subheading "**Covenants** – *Rate Covenant*."

"Rating Agency" means Moody's, S&P or Fitch, to the extent that any of such rating services have issued a credit rating on any of the Outstanding 1998 Ordinance Bonds or, upon discontinuance of any of such rating services, such other nationally recognized rating service or services if any such rating service has issued a credit rating on any of the Outstanding 1998 Ordinance Bonds.

"Rebate Amount" means the amount with respect to a Series of 1998 Ordinance Bonds, which is required to be paid to the United States of America, as of any computation date, in compliance with the restrictions imposed by the Code.

"S & P" means Standard & Poor's Ratings Services, a corporation organized and existing under the laws of the State of New York, its successors and assigns, and if such corporation shall for any reason no longer perform the functions of a securities rating agency, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City. Whenever rating categories of S&P are specified in the 1998 General Ordinance, such categories shall be irrespective of gradations within a category.

"Senior 1998 Ordinance Bonds" (Senior Bonds) means 1998 Ordinance Bonds which shall be first in right of payment and as to which the coverage requirement under the Rate Covenant shall be 150%.

"Series," when applied to 1998 Ordinance Bonds, means collectively all of the 1998 Ordinance Bonds of a given issue authorized by Supplemental Ordinance as described below under "Conditions to Issuing 1998 Ordinance Bonds – Additional Conditions" and may also mean, if appropriate, a subseries of any such issue if, for any reason, the City should determine to divide any such issue into one or more subseries of 1998 Ordinance Bonds.

"Sinking Fund" means the 1998 General Ordinance Gas Works Revenue Bond Sinking Fund established by the 1998 General Ordinance, as described below under "Sinking Fund."

"Sinking Fund Depositary" means the Fiscal Agent or any other bank, bank and trust company or trust company appointed as such by the City.

"Sinking Fund Reserve" means the Sinking Fund Reserve established by the 1998 General Ordinance, as described below under "Sinking Fund Reserve."

"Sinking Fund Reserve Requirement" means, with respect to all 1998 Ordinance Bonds secured by the Sinking Fund Reserve, an amount equal to the greatest amount of Debt Service Requirements payable in any Fiscal Year (except that such Debt Service Requirements will be computed as if any Qualified Swap did not

exist and the Debt Service Requirements attributable to any Variable Rate Bonds may be based upon the fixed rate of interest as set forth in the Supplemental Ordinance for such 1998 Ordinance Bonds), determined as of any particular date.

"Subordinate 1998 Ordinance Bonds" (Subordinate Bonds) means those 1998 Ordinance Bonds which shall be subordinate in right of payment to Senior 1998 Ordinance Bonds and as to which the coverage requirement under the Rate Covenant shall be 100%.

"Supplemental Ordinance" means an ordinance supplemental to the 1998 General Ordinance enacted pursuant to the Act and the 1998 General Ordinance by the Council of the City authorizing the issuance of a Series of 1998 Ordinance Bonds.

"Unrelated Expenses" means expenses unrelated to the supply, manufacture, storage and distribution of gas or assets related thereto.

"Variable Rate 1998 Ordinance Bond" (Variable Rate Bond) means any 1998 Ordinance Bond, the rate of interest on which is subject to change prior to maturity and cannot be determined in advance of such change.

Purpose of 1998 Ordinance Bonds

1998 Ordinance Bonds shall be issued for the purposes of (1) paying the cost of projects, as such term is defined in the Act, related to the Gas Works, (2) reimbursing any City fund from which such costs have been paid or advanced, (3) funding any such cost for which the City shall have outstanding bond anticipation notes or other obligations, (4) refunding any bonds of the City issued for the foregoing purposes under the Act, (5) refund any general obligation bonds of the City issued for the foregoing purposes, or (6) financing anything else relating to the Gas Works permitted under the Act.

The Act defines "projects" as any buildings, structures, facilities or improvements of a public nature, the related land, rights or leasehold estates in land, and the related furnishings, machinery, apparatus or equipment of a capital nature, which the City is authorized to own, construct, acquire, improve, lease as lessor or lessee, operate, maintain or support; any item of construction, acquisition or extraordinary maintenance or repair thereof, the City's share of the cost of any of the foregoing or any combination thereof undertaken jointly with others; and any combination of the foregoing or any undivided portion of the cost of any of the foregoing as may be designated a "project" by the City for financing purposes and in respect of which the City may reasonably be expected to receive Gas Works Revenues.

Pledge of Revenues; Grant of Security Interest; Limitation on Recourse

The City pledges, in the 1998 General Ordinance, for the security and payment of all 1998 Ordinance Bonds issued under the 1998 General Ordinance and grants a lien on and security interest in, all Gas Works Revenues, all accounts, contract rights and general intangibles representing the Gas Works Revenues and all funds and accounts established under the 1998 General Ordinance, and in each case, the proceeds of the foregoing, except as limited for a Series of 1998 Ordinance Bonds in the Supplemental Ordinance authorizing the issuance of such Series of 1998 Ordinance Bonds; provided, however, that the pledge of the 1998 General Ordinance may also be for the benefit of the provider of a Credit Facility, Qualified Swap or Exchange Agreement, or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price of and interest on any Series of 1998 Ordinance Bonds on an equal and ratable basis with the related Series of 1998 Ordinance Bonds, to the extent provided by any Supplemental Ordinance.

Neither the 1998 Ordinance Bonds nor the City's reimbursement or other contractual obligations with respect to any Credit Facility, Qualified Swap or Exchange Agreement shall constitute a general indebtedness or a pledge of the full faith and credit of the City within the meaning of any constitutional or statutory

provision or limitation of indebtedness. No Bondholder or beneficiary of any of the foregoing agreements shall ever have the right, directly or indirectly, to require or compel the exercise of the ad valorem taxing power of the City for the payment of the principal and redemption price of or interest on the 1998 Ordinance Bonds or the making of any payments under the 1998 General Ordinance. The 1998 Ordinance Bonds and the obligations evidenced thereby and by the foregoing agreements shall not constitute a lien on any property of the City other than the Gas Works Revenues.

Parity and Priority of 1998 Ordinance Bonds

All 1998 Ordinance Bonds issued pursuant to the 1998 General Ordinance shall be secured by the pledge of, and grant of a security interest in, the Gas Works Revenues, except as limited for a Series of 1998 Ordinance Bonds in the Supplemental Ordinance authorizing the issuance of such Series of 1998 Ordinance Bonds. Subordinate 1998 Ordinance Bonds shall be subordinate to Senior 1998 Ordinance Bonds in right of payment of principal, premium, if any, and interest. Senior 1998 Ordinance Bonds and Subordinate 1998 Ordinance Bonds shall not have any preference, priority or distinction as to lien or otherwise, except as otherwise provided in the 1998 General Ordinance or in a Supplemental Ordinance, over and other Senior 1998 Ordinance Bonds or Subordinate 1998 Ordinance Bonds, respectively.

Credit Enhancement; Exchange Agreements; Qualified Swaps

As provided by Supplemental Ordinance and subject to the requirements of the 1998 General Ordinance, the City may provide for a Credit Facility, Exchange Agreement or Qualified Swap with respect to any Series of 1998 Ordinance Bonds or portion thereof.

Order of Application of Gas Works Revenues

The 1998 General Ordinance provides that all Gas Works Revenues as and when collected in each Fiscal Year shall be applied in the following order, to the extent then payable:

First, to Net Operating Expenses then payable;

Second, to debt service on bonds issued under the 1975 General Ordinance and amounts required to be paid into the sinking fund reserve under the 1975 General Ordinance;

Third, to debt service on Senior 1998 Ordinance Bonds and payments (other than termination payments) due to the issuers of Qualified Swaps and Exchange Agreements related to Senior 1998 Ordinance Bonds;

Fourth, to payments due to issuers of Credit Facilities related to Senior 1998 Ordinance Bonds;

Fifth, to debt service on Subordinate 1998 Ordinance Bonds and payments due in respect of obligations of the Gas Works on a parity with Subordinate 1998 Ordinance Bonds (including notes issued under the Note Ordinance, or any similar ordinance, and amounts payable to the provider of a Credit Facility in respect of such notes) and payments (other than termination payments) due to the issuers of Qualified Swaps and Exchange Agreements related to Subordinate 1998 Ordinance Bonds;

Sixth, to payments due to issuers of Credit Facilities related to Subordinate 1998 Ordinance Bonds;

Seventh, to required payments of the Rebate Amount to the United States;

Eighth, to replenishment of any deficiency in the Sinking Fund Reserve;

Ninth, to payment of general obligation bonds of the City adjudged to be self-liquidating from Gas Works Revenues[†];

Tenth, to debt service on other general obligation issued for the Gas Works[†]; and

Eleventh, to City Charges and any other proper purpose of the Gas Works (including any termination payments to issuers of Qualified Swaps and Exchange Agreements and fees and expenses due under Credit Facilities), except Unrelated Expenses.

The 1998 General Ordinance does not require the segregation of revenues upon collection.

Covenants

Rate Covenant

The City covenants with the Holders of all 1998 Ordinance Bonds from time to time and at the time outstanding under the 1998 General Ordinance that, so long as any such 1998 Ordinance Bonds shall remain outstanding, the City will, at a minimum, impose, charge and collect in each Fiscal Year such gas rates and charges as shall, together with all other Gas Works Revenues to be received in such Fiscal Year, equal not less than the greater of:

A*:* The sum of:

i. all Net Operating Expenses payable during such Fiscal Year;

ii. all principal of and interest on bonds issued and outstanding under the 1975 General Ordinance payable during such Fiscal Year and amounts required to be paid into the sinking fund reserve under the 1975 Ordinance during such Fiscal Year;

iii. 150% of the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Senior 1998 Ordinance Bonds;

iv. the amount required to pay Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding Subordinate 1998 Ordinance Bonds and other obligations of the Gas Works on a parity with Subordinate 1998 Ordinance Bonds payable during such Fiscal Year;

v. the amount, if any, required to be paid into the Sinking Fund Reserve during such Fiscal Year,

vi. the Rebate Amount required to be paid to the United States during such Fiscal Year; and

vii. the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year;

OR

B*:* The sum of:

i. all Net Operating Expenses payable during such Fiscal Year;

[†] No general obligation bonds of the City described in items *Ninth* and *Tenth* above are currently outstanding.

ii. all principal of and interest on bonds issued and outstanding under the 1975 Ordinance payable during such Fiscal Year and amounts required to be paid into the sinking fund reserve under the 1975 General Ordinance during such Fiscal Year;

iii. all Sinking Fund deposits required during such Fiscal Year in respect of all Outstanding 1998 Ordinance Bonds and all amounts payable in respect of obligations of the Gas Works which are on a parity with any of the 1998 Ordinance Bonds and in respect of general obligation bonds issued for improvements to the Gas Works and all amounts, if any, required during such Fiscal Year to be paid into the Sinking Fund Reserve[†];

iv. the Rebate Amount required to be paid to the United States during such Fiscal Year; and

v. the amounts required to be paid to the issuers of Credit Facilities and the providers of Qualified Swaps and Exchange Agreements during such Fiscal Year.

For purposes of estimating Sinking Fund deposits with respect to Interim Debt and Variable Rate 1998 Ordinance Bonds, the City shall be entitled to assume that (1) Interim Debt will be amortized over a period of up to the maximum term permitted by the Act, but not in excess of the useful life of the assets to be financed, on an approximately level debt service basis and bear interest at the average interest rate on bonds of a similar maturity and credit rating (without any credit enhancement) as the 1998 Ordinance Bonds Outstanding under the 1998 General Ordinance and (2) Variable Rate 1998 Ordinance Bonds will bear interest at a rate equal to the average interest rate on such Variable Rate 1998 Ordinance Bonds during the period of twenty-four (24) consecutive calendar months immediately preceding the date of calculation or during such shorter period that such Variable Rate 1998 Ordinance Bonds have been Outstanding.

The Gas Commission is authorized and directed, without further authorization, to impose and charge and to collect, or cause to be collected, rents rates and charges which shall be sufficient in each Fiscal Year to comply with the Rate Covenant.[††]

Additional Covenants

The City covenants with the Holders of all 1998 Ordinance Bonds from time to time outstanding under the 1998 General Ordinance and at the time outstanding thereunder that: (1) it will pay or cause the Fiscal Agent or any paying agent appointed by the City to pay from the Gas Works Revenues deposited in the Sinking Fund the principal of, and premium, if any, and interest on all 1998 Ordinance Bonds as the same shall become due and payable and as more particularly set forth in such 1998 Ordinance Bonds; (2) it will continuously maintain in good condition and continuously operate the Gas Works; and (3) it will not, in any Fiscal Year, pay from the Gas Works Revenues any City Charges or deposit from the Gas Works Revenues in the general sinking fund of the City any sinking fund charges in respect of general obligation bonds of the City unless, prior thereto or concurrently therewith, all sinking fund charges then payable in respect of Outstanding 1998 Ordinance Bonds shall have been deposited in the Sinking Fund, all amounts then payable in respect of obligations of the Gas Works which are on a parity with 1998 Ordinance Bonds shall have been paid, all amounts then payable to issuers of Credit Facilities and providers of Qualified Swaps and Exchange Agreements shall have been paid and all deposits then required to the Sinking Fund Reserve shall have been made.

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† No general obligation bonds described in item B.iii. above are currently outstanding.

†† The Pennsylvania Public Utility Commission ("PUC") is now required under the the Pennsylvania Natural Gas Choice and Competition Act to set rates and charges to enable the City to satisfy the Rate Covenant.

Report Requirements

The City covenants with the Holders of all 1998 Ordinance Bonds from time to time outstanding under the 1998 General Ordinance and at the time outstanding thereunder that the City shall file with the Fiscal Agent, not later than 120 days after the close of each Fiscal Year, a report of the operation of the Gas Works that sets forth, (1) in reasonable detail, financial data concerning the Gas Works for such Fiscal Year (including a balance sheet, statements of income, equity and changes in financial condition, and an analysis of funds available to cover debt service (in each case not inconsistent with the statements of income, expenses, and other accounts of the City audited by the City Comptroller) prepared by the Manager in accordance with generally recognized municipal accounting principles consistently applied; and (2) complies with the Rate Covenant; which report is accompanied by a certificate of the Manager that the Gas Works are in good operating condition and by a certificate of the Director of Finance that, as of the date of such report, the City has complied with all covenants and requirements of the 1998 General Ordinance and of the ordinances supplemental thereto to be performed by the City. The Fiscal Agent will keep on file a copy of each such report and its accompanying certificates for a period of ten (10) years, and will make each available to any Bondholder or his authorized representative for inspection and copying at all reasonable times.

General Obligation Bonds - Junior Lien Revenue Bonds

The City reserves the right, and nothing in the 1998 General Ordinance shall be construed to impair such right, to finance improvements to the Gas Works by the issuance of its general obligation bonds or by the issuance, under ordinances other than the 1998 General Ordinance and Supplemental Ordinances, of Gas Works obligations for the payment of which Gas Works Revenues may be pledged subject and subordinate in each Fiscal Year to the prior payment from such revenues of all principal, premium, interest and sinking fund requirements payable during such Fiscal Year under the 1998 General Ordinance.

Conditions to Issuing 1998 Ordinance Bonds

Financial Report of the Director of Finance

The City covenants with the Holders of all 1998 Ordinance Bonds from time to time and at the time outstanding under the 1998 General Ordinance that, so long as any such 1998 Ordinance Bonds shall remain outstanding, the City will not issue any 1998 Ordinance Bonds unless the CFO Financial Report (as defined below) is filed with the City Council. The CFO Financial Report may be given in reliance on an engineering report of an Independent Engineer setting forth the qualifications of the Engineer and containing:

(a) a statement that the Engineer has made an investigation of the physical properties included in the Gas Works and of the books and records of the Gas Works maintained by the City or by the Manager, as it deemed necessary; and

(b) on the basis of such investigation containing:

(i) the same matters, statements and opinion as are required to be contained in the CFO Financial Report supported by appropriate schedules and summaries;

(ii) a statement that Gas Works rents, rates and charges, on the basis of which the statements required by clause (i) are made, are currently and will be sufficient to comply with the Rate Covenant; and

(iii) a statement that, in the opinion of the Engineer, the Gas Works are in good operating condition or that adequate steps are being taken to make them so.

The "CFO Financial Report" means the financial report required by the Act to be signed by the Director of Finance and to contain (supported by appropriate schedules and summaries): (1) a brief description of the project or projects related to the Gas Works for which the 1998 Ordinance Bonds are to be issued; (2) a statement identifying the sources from which the Gas Works Revenues are to be derived; (3) a statement that, on the basis of actual, if appropriate, and estimated future annual financial operations of the Gas Works, the Gas Works will, in the opinion of the Director of Finance, yield Gas Works Revenues over the amortization period of the 1998 Ordinance Bonds sufficient to meet the payment or deposit requirements of (a) all expenses of operation, maintenance, repair and replacement of the Gas Works, (b) all reserve or special funds established under the 1998 General Ordinance, (c) the principal of and interest on all 1998 Ordinance Bonds, as the same shall become due and payable, for which Gas Works Revenues are pledged, (d) any State taxes assumed by the City to be paid on 1998 Ordinance Bonds, and (e) the surplus requirements contained in the Rate Covenant; and (4) a statement that the Gas Works Revenues upon which the statements set forth in clause (3) are based comply with the definition of "Project Revenues" contained in the Act.

Additional Conditions

Prior to the issuance of any Series of 1998 Ordinance Bonds, the Council of the City shall adopt a Supplemental Ordinance that (1) authorizes the issuance of such 1998 Ordinance Bonds; (2) specifies the aggregate principal amount or maximum aggregate principal amount of the Series to be issued; (3) states that such 1998 Ordinance Bonds are issued in respect of capital costs of a Gas Works project or projects of the City or to fund or refund bond anticipation or other obligations of the City issued in respect thereof or for the purpose of refunding debt issued for such purpose; (4) makes a finding based on the required CFO Financial Report described above that the Gas Works Revenues pledged under the 1998 General Ordinance will be sufficient to comply with the Rate Covenant and also to pay all costs, expenses and payments required to be paid therefrom and in the order and priority stated in the 1998 General Ordinance; and (5) contains the covenant that, so long as any such 1998 Ordinance Bonds shall remain unpaid, the City will make payments or cause payments to be made out of the Sinking Fund at such times and in such amounts as shall be sufficient for the payment of the interest thereon and principal thereof when due (as required by Article IX, Section 10 of the Constitution of the Commonwealth).

Prior to the issuance of any 1998 Ordinance Bonds, the Director of Finance shall file with the Fiscal Agent a transcript of the proceedings authorizing the issuance of such 1998 Ordinance Bonds, which shall include (1) a certified copy of the 1998 General Ordinance (unless previously so filed); (2) a certified copy of the Supplemental Ordinance described in the immediately preceding paragraph; (3) an executed or certified copy of the CFO Financial Report; (4) an executed copy of an opinion of the City Solicitor to the effect that, under the 1998 General Ordinance and the related Supplemental Ordinance, the holders or registered holders of the 1998 Ordinance Bonds to be issued will have no claim upon the taxing power or general revenues of the City nor any lien upon any of the property of the City other than Gas Works Revenues pledged therefor; and (5) an opinion of Bond Counsel to the effect that (a) the Series of 1998 Ordinance Bonds has been duly issued for a permitted purpose under the Act and under the 1998 General Ordinance, (b) all conditions precedent to the issuance of the Series of 1998 Ordinance Bonds pursuant to the Act and the 1998 General Ordinance have been satisfied, (c) the Series of 1998 Ordinance Bonds has been duly authorized, executed and delivered and constitutes the legal, valid and binding obligation of the City, and (d) if the interest on the Series of 1998 Ordinance Bonds is intended to be excluded from gross income for Federal income tax purposes, interest on the Series of 1998 Ordinance Bonds will be so excluded.

The Director of Finance is also required, under the Act, prior to the issuance of any 1998 Ordinance Bonds, to file with court of common pleas of Philadelphia County items (1), (2), (3) and (4) described in the immediately preceding paragraph.

Sinking Fund

The 1998 General Ordinance establishes the Sinking Fund for the benefit and security of the Holders of all 1998 Ordinance Bonds. The Sinking Fund shall be held in the name of the City in an account or accounts separate and apart from all other accounts of the City and payments therefrom are made only as provided in the 1998 General Ordinance. The City covenants and the Director of Finance is directed to deposit in, and the 1998 General Ordinance appropriates to, the Sinking Fund from the Gas Works Revenues in each Fiscal Year such amounts as will, together with interest and profits earned and to be earned on investments held in the Sinking Fund, be sufficient to accumulate therein (exclusive of the amount in the Sinking Fund Reserve), on or before each interest and principal payment date of the 1998 Ordinance Bonds, the amounts required to pay the principal of and the interest on the 1998 Ordinance Bonds then becoming due and payable. Payments into the Sinking Fund shall be scheduled at such times and in such amounts in relation to the receipt of revenues and the operation and maintenance requirements of the Gas Works as the Director of Finance shall determine.

The Sinking Fund Depositary shall, on direction of the Director of Finance, or if for any reason he should fail to give such direction, on the direction of the Fiscal Agent, liquidate investments, if necessary, and pay over from the Sinking Fund in cash to the Fiscal Agent not later than the due date thereof the full amount of the principal, interest on, and premium, if any, payable upon redemption of, 1998 Ordinance Bonds. Any excess moneys in the Sinking Fund, including any excess amount in the Sinking Fund Reserve, shall be transferred to the operating accounts of the Gas Works.

The Sinking Fund shall be a consolidated fund for the equal and proportionate benefit of the Holders of all 1998 Ordinance Bonds from time to time Outstanding and may be invested and reinvested on a consolidated basis. The principal of and interest on and profits (and losses if any) realized on investments in the Sinking Fund are allocated pro rata for the Series of 1998 Ordinance Bonds or the specific 1998 Ordinance Bonds in respect of which such investments were made without distinction or priority, but moneys (and the investments thereof) specifically deposited for the payment of any particular installment of principal, interest (including capitalized interest) or premium in respect of particular 1998 Ordinance Bonds shall be held and applied exclusively to the payment of such particular principal, interest or premium.

Sinking Fund Reserve

The Sinking Fund Reserve is established as a separate account in the Sinking Fund and shall be held by the Sinking Fund Depositary as part of the Sinking Fund, but for which a separate account shall be maintained. Unless otherwise provided in the applicable Supplemental Ordinance, the City shall, under direction of the Director of Finance, deposit in the Sinking Fund Reserve from the proceeds of sale of each Series of 1998 Ordinance Bonds issued under the 1998 General Ordinance and/or Gas Works Revenues an amount which, together with other amounts in the Sinking Fund Reserve, will cause the amount in the Sinking Fund Reserve to equal the Sinking Fund Reserve Requirement. The money and investments (valued at market) in the Sinking Fund Reserve and amounts which can be drawn under Credit Facilities held for the Sinking Fund Reserve shall be held and maintained in an amount equal to the Sinking Fund Reserve Requirement.

In lieu of a deposit to the Sinking Fund Reserve or in substitution for amounts in the Sinking Fund Reserve, the City may provide one or more letters of credit or other Credit Facilities in the same aggregate amount issued by a provider or providers whose credit facilities are such that bonds secured by such credit facilities are rated in one of the three highest rating categories by Moody's or S&P, provided that (1) in the case of a substitution for moneys in the Sinking Fund Reserve, an opinion of Bond Counsel is delivered to the Fiscal Agent that such substitution will not adversely affect the exclusion from gross income for Federal income tax purposes of interest on the 1998 Ordinance Bonds the interest on which is intended to be so excluded, (2) each such Credit Facility permits the Fiscal Agent to make a draw thereon up to the principal amount thereof if the Sinking Fund Reserve is needed to cover a shortfall in the Sinking Fund and other

moneys in the Sinking Fund Reserve are insufficient, and (3) each such Credit Facility provides that a draw will be made thereon to replenish the Sinking Fund Reserve on the expiration thereof unless the City has otherwise made such deposit to the Sinking Fund Reserve or has obtained another Credit Facility meeting the above requirements.

If, at any time and for any reason, the moneys in the Sinking Fund, other than in the Sinking Fund Reserve, shall be insufficient to pay as and when due, the principal of, and premium, if any, and interest on, any 1998 Ordinance Bond or Bonds secured by the Sinking Fund Reserve, the Sinking Fund Depositary is authorized and directed by the 1998 General Ordinance to withdraw from the Sinking Fund Reserve and to draw on Credit Facilities held for the Sinking Fund Reserve and pay over to the Fiscal Agent the amount of such deficiency. If by reason of such withdrawal (including draws on any Credit Facilities held to satisfy the Sinking Fund Reserve Requirement) or for any other reason there shall be a deficiency in the Sinking Fund Reserve, the City covenants in the 1998 General Ordinance to restore such deficiency (either by a deposit of funds or the reinstatement of the cash limits of Credit Facilities) within twelve months. The Sinking Fund Reserve shall be valued by the Sinking Fund Depositary promptly after any withdrawal from the Sinking Fund Reserve or any other event indicating a possible deficiency in the Sinking Fund Reserve and on August 31 of each Fiscal Year.

Investment of Funds

The moneys on deposit in the funds and accounts established under the 1998 General Ordinance, to the extent not currently required, shall be invested and secured as required by the Act, all at the direction and under the management of the Director of Finance. All moneys deposited in any fund or account established under the 1998 General Ordinance or any Supplemental Ordinance may be invested by the Fiscal Agent, at the direction of the Director of Finance, in any investments then permitted by law, provided that any investments with respect to amounts on deposit in the funds and accounts established under the 1998 General Ordinance shall mature or shall be subject to redemption by the holder thereof upon demand at par no later than the date when such amounts are needed for the purposes of such funds or accounts. Investment earnings shall be included in Gas Works Revenues and, to the extent not require to be retained in the fund or account to which such earnings related, shall be transferred to the operating accounts of the Gas Works.

Defaults and Remedies

Defaults and Statutory Remedies

If the City shall fail or neglect to pay or to cause to be paid the principal of, redemption premium, if any, or the interest on any 1998 Ordinance Bond, whether at stated maturity or upon call for prior redemption, or if the City, after written notice to it, shall fail or neglect to make any payment owed by it to the provider of a Credit Facility, a Qualified Swap or an Exchange Agreement provided with respect to the 1998 Ordinance Bonds and such provider gives the Fiscal Agent written notice of such failure or neglect, or if the City shall fail to comply with any provision of the 1998 Ordinance Bonds or with any covenant of the City contained in the 1998 General Ordinance, then, under and subject to the terms and conditions stated in the Act, the Holder or Holders of any 1998 Ordinance Bond or 1998 Ordinance Bonds shall be entitled to all of the rights and remedies provided in the Act, which are as follows:

(1) if the City fails or neglects to pay or cause to be paid the principal of or the interest on any 1998 Ordinance Bonds as the same shall become due, whether at the stated maturity or upon call for prior redemption, the right to recover the amount due in an action in assumpsit in the court of common pleas of Philadelphia County;

(2) if the City defaults in the payment of the principal or of the interest on any Series of 1998 Ordinance Bonds after the same shall become due, whether at the stated maturity or upon call for prior redemption, and such default continues for 30 days, or if the City fails to comply with any provision of the

1998 Ordinance Bonds or the 1998 General Ordinance, the right, at the request of the Holders of 25% in aggregate principal amount of the 1998 Ordinance Bonds of such Series then outstanding, to appoint a trustee (who may be the Sinking Fund Depositary) to represent the Holders of all such 1998 Ordinance Bonds; and

(3) the right to instruct an appointed trustee, upon the written request of the Holders of 25% in principal amount of such 1998 Ordinance Bonds then outstanding and after furnishing indemnity satisfactory to such trustee, to take one or more of the following actions:

(a) by mandamus or other suit, action or proceeding at law or in equity enforce all rights of the Holders of the 1998 Ordinance Bonds, including the right to require the City to impose and collect rents, rates, tolls and charges for the use of the Gas Works, or to require the City to carry out any other agreements with the Holders of such 1998 Ordinance Bonds;

(b) bring suit on the 1998 Ordinance Bonds without the necessity for producing the bonds, and with the same effect as a suit by any Holder of the 1998 Ordinance Bonds;

(c) bring suit in equity to require the City to account as if it were a trustee of an express trust for the Holders of such 1998 Ordinance Bonds, for any Gas Works Revenues received and/or to enjoin any acts or things which may be unlawful or in violation of the rights of the Holders of any 1998 Ordinance Bonds; and

(d) after 30 days prior written notice to the City, declare the unpaid principal of all 1998 Ordinance Bonds to be immediately due and payable, together with interest thereon at the rates stated in the 1998 Ordinance Bonds until final payment, and, if all defaults shall be made good, to annul such declaration and its consequences.

Notwithstanding the foregoing and in accordance with the 1998 General Ordinance, the remedy described in paragraph 3(d) above may be exercised only upon the failure of the City to pay, when due, principal and redemption price of (including principal due as a result of a scheduled mandatory redemption) and interest on a Series of 1998 Ordinance Bonds. Upon the occurrence of an event of default described above, the Fiscal Agent shall, within thirty (30) days, give written notice thereof by first class mail to all Bondholders.

If and when a trustee takes any of the actions described in paragraph (3) above, individual Bondholders will be precluded from taking similar action, regardless of whether such action was previously or subsequently initiated. The court, in cases of extreme hardship, may provide for the payment of sums levied in five or less annual installments with interest at a rate sufficient to cover the interest accruing on the 1998 Ordinance Bonds. In any suit, action or proceeding by or on behalf of Holders of 1998 Ordinance Bonds, the fees and expenses of a trustee, including operating costs of the Gas Works and reasonable counsel fees, shall constitute taxable costs, and all such costs and disbursements allowed by the court shall be deemed additional principal due on the 1998 Ordinance Bonds and shall be paid in full from any recovery prior to any distribution to the Holders of the 1998 Ordinance Bonds.

Remedies Not Exclusive; Effect of Delay on Exercise of Remedies

No remedy in the 1998 General Ordinance or in the Act conferred upon or reserved to the trustee, if one be appointed, or to the Holder of any 1998 Ordinance Bonds is intended to be exclusive (except as specifically provided in the Act, as described above under "Defaults and Statutory Remedies") of any other remedy or remedies, and each and every such remedy shall be cumulative, and shall be in addition to every other remedy given under the 1998 General Ordinance or now or existing at law or in equity or by statute. No delay or omission of the trustee, if one be appointed, or of any Holder of any 1998 Ordinance Bond to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default, or an acquiescence therein; and every power and remedy given by the 1998

General Ordinance, by the Act or otherwise may be exercised from time to time as often as may be deemed expedient.

Remedies to be Enforced Only Against Pledged Revenues

Any decree or judgment for the payment of money against the City by reason of default under the 1998 General Ordinance shall be enforceable only against the Gas Works Revenues, amounts in the Sinking Fund Reserve and other amounts which may be specifically pledged therefor and investments thereof, and no decree or judgment against the City upon any action brought under the 1998 General Ordinance shall order, or be construed to permit the occupation, attachment, seizure or sale upon execution of any other property of the City.

Fiscal Agent

Such state or federally chartered bank, bank and trust company or trust company as may from time to time be appointed by the City in accordance with law, shall act as Fiscal Agent in respect of all 1998 Ordinance Bonds or in respect of any particular Series of 1998 Ordinance Bonds. The Fiscal Agent also acts as Sinking Fund Depositary of the Sinking Fund and as paying agent and registrar of the 1998 Ordinance Bonds in respect of which it is Fiscal Agent, unless others are appointed in such capacity by the City. The Fiscal Agent is the representative of the Holders of the 1998 Ordinance Bonds for the purpose of executing and filing financing statements to perfect the security interest granted in the 1998 General Ordinance under the Pennsylvania Uniform Commercial Code. Nothing in the 1998 General Ordinance shall be construed to prevent the City from engaging other or additional Sinking Fund Depositories, paying agents or registrars of the 1998 Ordinance Bonds or any Series thereof.[†]

Permitted Securitization of Gas Works Revenues

Notwithstanding the requirements of the Rate Covenant described under "Covenants – Rate Covenant" above and the pledge described above under "Pledge of Revenues; Grant of Security Interest; Limitation on Recourse," the City may, at such time as there are no bonds outstanding under the 1975 General Ordinance, pursuant to a Supplemental Ordinance, securitize and sell that portion of the Gas Works rents, rates and charges which relate to assets which are designated as non-performing by the Gas Commission[††] and as to which the Gas Commission[††] has designated specific rents, rates or charges (such rents, rates and charges are excluded from the definition of Gas Works Revenues); provided that prior to any such securitization and sale the City delivers to the Fiscal Agent (1) an Engineer's report including a statement that, for the three year period following such securitization and sale, the Gas Works rents, rates and charges (excluding those securitized and sold) are currently and will be sufficient to comply with the Rate Covenant applied as if the percentage in subsection A.iii under the heading "Covenants – Rate Covenant" were 175% rather than 150% and (2) an opinion of Bond Counsel that such securitization and sale will not adversely affect the exclusion from gross income for Federal income tax purposes of interest on any Outstanding 1998 Ordinance Bonds the interest on which is intended to be so excluded. Proceeds received from any such securitization and sale shall be excluded from Gas Works Revenues in all calculations relating to the Rate Covenant and, notwithstanding any provision of the 1998 General Ordinance to the contrary, may be used to redeem or refund obligations issued to finance the related assets designated as non-performing.

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† Under the terms of the Fiscal Agent Agreement, made as of January 1, 1993, by and between the City and the predecessor to the current Fiscal Agent, as amended and supplemented, the Fiscal Agent is the secured party with the right to enforce the City pledge of Gas Work Revenues on behalf of the holders of 1998 Ordinance Bonds, the issuers of any Credit Facilities and the providers of any Qualified Swaps and Exchange Agreements.

†† The PUC now has jurisdiction to make the designations described under this subheading.

Amendments and Modifications

In addition to the adoption of Supplemental Ordinances supplementing or amending the 1998 General Ordinance in connection with the issuance of successive Series of 1998 Ordinance Bonds, the 1998 General Ordinance and any Supplemental Ordinance may be further supplemented, modified or amended: (a) to cure any ambiguity, formal defect or omission therein; (b) to make such provisions in regard to matters or questions arising thereunder which shall not be inconsistent with the provisions thereof and which shall not adversely affect the interests of Bondholders; (c) to grant to or confer upon Bondholders or a trustee, if any, for the benefit of Bondholders any additional rights, remedies, powers, authority or security that may be lawfully granted or conferred; (d) to incorporate modifications requested by any Rating Agency to obtain or maintain a credit rating on any Series of 1998 Ordinance Bonds; (e) to comply with any mandatory provision of state or federal law or with any permissive provision of such law or regulation which does not substantially impair the security or right to payment of the 1998 Ordinance Bonds, but no amendment or modification shall be made with respect to any Outstanding 1998 Ordinance Bonds to alter the amount, rate or time of payment, respectively, of the principal thereof or the interest thereon or to alter the redemption provisions thereof without the written consent of the Holders of all affected Outstanding 1998 Ordinance Bonds; and (f) except as aforesaid, in such other respect as may be authorized in writing by the Holders of a majority in principal amount (using Accreted Value in the case of Capital Appreciation 1998 Ordinance Bonds) of the 1998 Ordinance Bonds Outstanding and affected. The written authorization of Bondholders of any supplement to or modification or amendment of the 1998 General Ordinance or any Supplemental Ordinance need not approve the particular form of any proposed supplement, modification or amendment but only the substance thereof.

Deposit of Funds for Payment of 1998 Ordinance Bonds

When interest on, and principal or redemption price (as the case may be) of, all 1998 Ordinance Bonds issued under the 1998 General Ordinance, and all amounts owed under any Credit Facility, Qualified Swap and Exchange Agreement entered into under the 1998 General Ordinance (other than termination payments), have been paid, or there shall have been deposited with the Fiscal Agent an amount, evidenced by moneys or Qualified Escrow Securities the principal of and interest on which, when due, will provide sufficient moneys to fully pay the 1998 Ordinance Bonds at the maturity date or date fixed for redemption thereof, and all amounts owed under any Credit Facility, Qualified Swap and Exchange Agreement entered into under the 1998 General Ordinance (other than termination payments), the pledge and grant of security interest in the Gas Works Revenues made under the 1998 General Ordinance shall cease and terminate, and the Fiscal Agent and any other depository of funds and accounts established under the 1998 General Ordinance shall turn over to the City or to such person, body or authority as may be entitled to receive the same all balances remaining in any funds and accounts established thereunder.

If the City deposits with the Fiscal Agent moneys or Qualified Escrow Securities sufficient to pay the principal or redemption price of any particular 1998 Ordinance Bond or 1998 Ordinance Bonds becoming due, either at maturity or by call for redemption or otherwise, together with all interest accruing thereon to the due date, interest on such 1998 Ordinance Bond or 1998 Ordinance Bonds shall cease to accrue on the due date and all liability of the City with respect to such 1998 Ordinance Bond or 1998 Ordinance Bonds shall likewise cease, except as provided in the following paragraph. From and after such deposit, such 1998 Ordinance Bond or 1998 Ordinance Bonds shall be deemed not to be Outstanding under the 1998 General Ordinance and the Holder or Holders thereof shall have recourse solely and exclusively to the funds so deposited for any claims of whatsoever nature with respect to such 1998 Ordinance Bond or 1998 Ordinance Bonds, and the Fiscal Agent shall hold such funds in trust for the Holder or Holders of such 1998 Ordinance Bond or 1998 Ordinance Bonds.

Moneys deposited with the Fiscal Agent pursuant to the preceding paragraphs which remain unclaimed two (2) years after the date payment thereof becomes due shall, upon written request of the City, if the City is not at the time to the knowledge of the Fiscal Agent (the Fiscal Agent having no responsibility to independently investigate) in default with respect to any covenant in the 1998 General Ordinance or the 1998

Ordinance Bonds, be paid to the City, and the Holders of the 1998 Ordinance Bond for which the deposit was made shall thereafter be limited to a claim against the City; provided, however, that before making any such payment to the City, the Fiscal Agent shall, at the expense of the City, publish in a newspaper of general circulation published in the City, a notice that said moneys remain unclaimed and that, after a date named in said notice, which date shall not be less than thirty (30) days after the date of publication of such notice, the balance of such moneys then unclaimed will be paid to the City.

Ordinances are Contracts with Bondholders

The 1998 General Ordinance and Supplemental Ordinances adopted pursuant thereto are contracts with the Holders of all 1998 Ordinance Bonds from time to time Outstanding under the 1998 General Ordinance and are enforceable in accordance with the provisions of the 1998 General Ordinance and the laws of the Commonwealth of Pennsylvania.

Parties Interested in the 1998 General Ordinance

Nothing in the 1998 General Ordinance expressed or implied is intended or shall be construed to confer upon, or to give to, any person or entity, other than the City, the Holders of 1998 Ordinance Bonds, the Fiscal Agent, and each provider of a Credit Facility, Qualified Swap or Exchange Agreement, any right, remedy or claim under or by reason of the 1998 General Ordinance or any covenants, condition or stipulation therefor; and all the covenants, stipulations, promises and agreements in the 1998 General Ordinance by and on behalf of the City shall be for the sole and exclusive benefit of the City, the Fiscal Agent, the Holders of 1998 Ordinance Bonds and each provider of a Credit Facility, Qualified Swap or Exchange Agreement.

Closure of the 1975 General Ordinance

After the adoption of the 1998 General Ordinance, the City shall not issue any bonds under the 1975 General Ordinance except to refund bonds issued under the 1975 General Ordinance or to replace bonds issued thereunder which have been mutilated, destroyed, lost or stolen as provided therein or in substitution for bonds issued thereunder upon transfer or exchange as provided therein.

Severability

In case any one or more of the provisions contained in the 1998 General Ordinance or in any 1998 Ordinance Bond issued pursuant to the 1998 General Ordinance shall for any reason to be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions in the 1998 General Ordinance or said 1998 Ordinance Bonds, and the 1998 General Ordinance or said 1998 Ordinance Bonds shall be construed and enforced as if such invalid, illegal or unenforceable provisions had never been contained therein.

APPENDIX F

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (this "Agreement") dated August 18, 2015, is by and between The City of Philadelphia, Pennsylvania (the "City") and Digital Assurance Certification, L.L.C., as dissemination agent (the "Dissemination Agent") in connection with the issuance and sale by the City of $261,770,000 aggregate principal amount of its Gas Works Revenue Refunding Bonds, Thirteenth Series (1998 General Ordinance) (the "Bonds"). The Bonds are being issued pursuant to the Act, the General Ordinance and the Bond Authorization. Capitalized terms used in this Agreement shall have the respective meanings specified above or in Article IV hereof.

In consideration of the mutual covenants, promises and agreements contained herein and intending to be legally bound hereby, the parties hereto agree as follows:

ARTICLE I

The Undertaking

Section 1.1. Purpose. This Agreement is authorized to be executed and delivered by the City pursuant to the General Ordinance and Section 11 of the Bond Authorization in order to assist the Underwriters in complying with subsection (b)(5) of the Rule.

Section 1.2. Annual Financial Information. (a) Commencing with the PGW Fiscal Year ending August 31, 2015, the Disclosure Representative shall deliver the Annual Financial Information to the Dissemination Agent for filing by the Dissemination Agent (on behalf of the City) with EMMA (as defined herein) no later than April 26, 2016, and no later than each succeeding April 26th for each preceding fiscal year thereafter. The Dissemination Agent promptly upon receipt thereof shall file the Annual Financial Information with EMMA.

(b) The Dissemination Agent shall provide, in a timely manner, notice of any failure of the City to provide the Annual Financial Information by the date specified in subsection (a) hereof.

Section 1.3. Audited Financial Statements. If not provided as part of Annual Financial Information by the date required by Section 1.2(a) hereof, the Disclosure Representative shall provide Audited Financial Statements, when and if available, to the Dissemination Agent. The Dissemination Agent shall promptly upon receipt thereof file such Audited Financial Statements with EMMA.

Section 1.4. Notice Events. (a) If a Notice Event occurs, the Disclosure Representative shall provide through the Dissemination Agent, in a timely manner not in excess of ten (10) business days after the occurrence of such Notice Event, notice of such Notice Event to EMMA.

(b) Any notice of a defeasance of the Bonds shall state whether the Bonds have been escrowed to maturity or to an earlier redemption date and the timing of such maturity or redemption.

(c) Each Notice Event notice relating to the Bonds shall include the CUSIP numbers of the Bonds to which such Notice Event notice relates or, if the Notice Event notice relates to all bond issues of the City including the Bonds, such Notice Event notice need only include the CUSIP number of the City.

(d) The Dissemination Agent shall promptly advise the City whenever, in the course of performing its duties as Dissemination Agent under this Agreement, the Dissemination Agent has actual notice of an occurrence which, if material, would require the City to provide notice of a Notice Event hereunder; provided, however, that the failure of the Dissemination Agent so to advise the City shall not constitute a breach by the Dissemination Agent of any of its duties and responsibilities under this Agreement.

Section 1.5. Additional Information. Nothing in this Agreement shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in this Agreement or any other means of communication, or including any other information in any Annual Financial Information or notice of Notice Event hereunder, in addition to that which is required by this Agreement. If the City chooses to do so, the City shall have no obligation under this Agreement to update such additional information or include it in any future Annual Financial Information or notice of a Notice Event hereunder.

Section 1.6. Additional Disclosure Obligations. The City acknowledges and understands that other state and federal laws, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the City and that, under some circumstances, compliance with this Agreement without additional disclosures or other action may not fully discharge all duties and obligations of the City under such laws.

ARTICLE II

Operating Rules

Section 2.1. Reference to Other Filed Documents. It shall be sufficient for purposes of Section 1.2 hereof if the City provides Annual Financial Information by specific reference to documents (i) available to the public on the MSRB Internet Web site (currently, www.emma.msrb.org) or (ii) filed with the SEC. The provisions of this Section shall not apply to notices of Notice Events pursuant to Section 1.4 hereof.

Section 2.2. Submission of Information. Annual Financial Information may be set forth or provided in one document or a set of documents, and at one time or in part from time to time.

Section 2.3. Dissemination Agent. The City has designated the Dissemination Agent as its agent to act on its behalf in providing or filing notices, documents and information as required of the City under this Agreement. The City may revoke or modify such designation. Upon any revocation of such designation, the City shall comply with its obligation to provide or file notices, documents and information as required under this Agreement or may designate another agent to act on its behalf.

Section 2.4. Transmission of Notices, Documents and Information. (a) Unless otherwise required by the MSRB, all notices, documents and information provided to the MSRB shall be provided to the MSRB's Electronic Municipal Markets Access ("EMMA") system, the current Internet Web address of which is www.emma.msrb.org.

(b) All notices, documents and information provided on EMMA shall be provided in an electronic format as prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

Section 2.5. Fiscal Year. (a) The Disclosure Representative shall file promptly a notification on EMMA, through the Dissemination Agent, of any change in the City Fiscal Year or the PGW Fiscal Year.

(b) Annual Financial Information shall be provided at least annually notwithstanding any fiscal year longer than 12 calendar months.

ARTICLE III

Effective Date, Termination, Amendment and Enforcement

Section 3.1. Effective Date; Termination. (a) This Agreement shall be effective upon the issuance of the Bonds.

(b) The City's and the Dissemination Agent's obligations under this Agreement shall terminate upon a legal defeasance, prior redemption or payment in full of all of the Bonds.

Section 3.2. Amendment. (a) This Agreement may be amended, by written agreement of the parties, without the consent of the holders of the Bonds (except to the extent required under clause (4)(ii) below), if all of the following conditions are satisfied: (1) such amendment is made in connection with a change in circumstances that arises from a change in legal (including regulatory) requirements, a change in law (including rules or regulations) or in interpretations thereof, or a change in the identity, nature or status of the City or the type of business conducted thereby, (2) this Agreement as so amended would have complied with the requirements of the Rule as of the date of this Agreement, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances, (3) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the same effect as set forth in clause (2) above, (4) either (i) the City shall have delivered to the Dissemination Agent an opinion of Counsel or a determination by an entity, in each case unaffiliated with the City (such as bond counsel or the Dissemination Agent), addressed to the City and the Dissemination Agent, to the effect that the amendment does not materially impair the interests of the holders of the Bonds or (ii) the holders of the Bonds consent to the amendment to this Agreement pursuant to the same procedures as are required for amendments to the General Ordinance with consent of holders of Bonds pursuant to the General Ordinance as in effect at the time of the amendment, and (5) the Disclosure Representative shall have delivered a copy the amendment, accompanied by copies of such opinion(s), to the Dissemination Agent. The items provided in clause (5) shall be promptly filed by the Dissemination Agent on EMMA and sent to each Registered Owner.

(b) This Agreement may be amended, by written agreement of the parties, without the consent of the holders of the Bonds, if all of the following conditions are satisfied: (1) an amendment to the Rule is adopted, or a new or modified official interpretation of the Rule is issued, after the effective date of this Agreement which is applicable to this Agreement, (2) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the effect that performance by the City and the Dissemination Agent under this Agreement as so amended will not result in a violation of the Rule and (3) the Disclosure Representative shall have delivered a copy of the amendment, accompanied by a copy of such opinion, to the Dissemination Agent. Such amendment shall be filed promptly by the Dissemination Agent on EMMA and sent to each Registered Owner.

(c) This Agreement may be amended by written agreement of the parties, without the consent of the holders of the Bonds, if all of the following conditions are satisfied: (1) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the effect that the amendment is permitted by rule, order or other official pronouncement, or is consistent with any interpretive advice or no-action positions of Staff of the SEC, and (2) the Disclosure Representative shall have delivered a copy of the amendment, accompanied by a copy of such opinion, to the Dissemination Agent. Such amendment shall be filed promptly by the Dissemination Agent on EMMA and sent to each Registered Owner.

(d) To the extent any amendment to this Agreement results in a change in the type of financial information or operating data provided pursuant to this Agreement, the first Annual Financial Information provided thereafter shall include a narrative explanation of the reasons for the amendment and the impact of the change in the type of operating data or financial information being provided.

(e) If an amendment is made pursuant to Section 3.2(a) hereof to the accounting principles to be followed by the City in preparing the financial statements of the City or PGW in preparing the financial statements of PGW, the Annual Financial Information for the fiscal year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. Such comparison shall include a qualitative and, to the extent reasonably feasible, quantitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information.

Section 3.3. Benefit; Third-Party Beneficiaries; Enforcement. (a) The provisions of this Agreement shall constitute a contract with and inure solely to the benefit of the holders from time to time of the Bonds, except that beneficial owners of Bonds shall be third-party beneficiaries of this Agreement. The provisions of this Agreement shall create no rights in any person or entity except as provided in this subsection (a) and in subsection (b) of this Section.

(b) The obligations of the City to comply with the provisions of this Agreement shall be enforceable by any holder of Outstanding Bonds. The holders' rights to enforce the provisions of this Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the City's obligations under this Agreement. In

consideration of the third-party beneficiary status of beneficial owners of Bonds pursuant to subsection (a) of this Section, beneficial owners shall be deemed to be holders of Bonds for purposes of this subsection (b).

(c) Any failure by the City or the Dissemination Agent to perform in accordance with this Agreement shall not constitute a default or an Event of Default under the General Ordinance, and the rights and remedies provided by the General Ordinance upon the occurrence of a default or an Event of Default shall not apply to any such failure.

(d) This Agreement shall be construed and interpreted in accordance with the laws of the Commonwealth, and any suits and actions arising out of this Agreement shall be instituted in a court of competent jurisdiction in the Commonwealth; provided, however, that to the extent this Agreement addresses matters of federal securities laws, including the Rule, this Agreement shall be construed in accordance with such federal securities laws and official interpretations thereof.

ARTICLE IV

Definitions

Section 4.1. Definitions. The following terms used in this Agreement shall have the following respective meanings:

(1) "Act" means The First Class City Revenue Bond Act, approved October 18, 1972 (Act No. 234, 53 P.S. §§15901 to 15924), as amended.

(2) "Annual Financial Information" means, collectively, (i) the Comprehensive Annual Financial Report of the Philadelphia Gas Works ("PGW's CAFR") for the most recently ended PGW Fiscal Year, which contains the Audited Financial Statement, and if PGW 's CAFR is not otherwise prepared, the Audited Financial Statements, (ii) the City's Comprehensive Annual Financial Report (the "City's CAFR") for the most recently ended City Fiscal Year, (iii) financial information or operating data with respect to PGW and the City, substantially similar to the type set forth in (A) Tables 1 through 14 of the Official Statement (except Table 3 and excluding any portions of tables not reflective of a full fiscal year) and (B) Tables 1 through 49 in Appendix C attached to the Official Statement (except Tables 19 and 45), and (iv) the information regarding amendments to this Agreement required pursuant to Sections 3.2(d) and (e) of this Agreement. Annual Financial Information shall include Audited Financial Statements and, if and only for so long as Audited Financial Statements are not available, Unaudited Financial Statements.

Annual Financial Information shall be delivered at least annually pursuant to Section 1.2(a) hereof. In connection with Section 4.1.(2), it is the City's intention to satisfy all or a portion of the obligations set forth therein by submitting to EMMA: (x) PGW's CAFR, (y) the City's CAFR, and (z) to the extent not otherwise updated in either PGW's CAFR or the City's CAFR, (1) an official statement or comparable offering document, or an appendix thereto, that includes annual updates to the Tables specified in clause (iii) of the preceding paragraph or (2) if the City does not have such an official statement, offering document or appendix prepared, then

annual updates to the Tables specified in clause (iii) of the preceding paragraph. If at anytime the City deletes, for purposes of a then-current offering document or appendix thereto, certain financial information or operating data from such offering document or appendix that is included in one of the Tables specified above, such deleted information will be submitted separately from the updated disclosure document or appendix.

The descriptions contained in this Section 4.1(2) of financial information and operating data constituting Annual Financial Information are of general categories of financial information and operating data. When such descriptions include information that no longer can be generated because the operations to which it related have been materially changed or discontinued, a statement to that effect shall be provided in lieu of such information. Any Annual Financial Information containing modified financial information or operating data shall explain, in narrative form, the reasons for the modification and the impact of the modification on the type of financial information or operating data being provided.

(3) "Audited Financial Statements" means the annual financial statements, if any, of PGW, audited by KPMG LLP, or such other auditor as shall then be required or permitted by Commonwealth law. Audited Financial Statements shall be prepared in accordance with GAAP; provided, however, that pursuant to Sections 3.2(a) and (e) hereof, the City may from time to time, if required by federal or Commonwealth legal requirements, modify the accounting principles to be followed in preparing the financial statements of the City or PGW. The notice of any such modification required by Section 3.2(a) hereof shall include a reference to the specific federal or Commonwealth law a regulation describing such accounting principles, or other description thereof.

(4) "Bond Authorization" means the Bond Authorization for the Bonds adopted by the Bond Committee of the City (consisting of the Mayor, the City Solicitor and the City Controller and acting by a majority thereof) on August 5, 2015.

(5) "City Fiscal Year" means the fiscal year of the City, currently beginning on July 1 and ending on June 30, as may be changed as contemplated under Section 2.5 hereof.

(6) "Commonwealth" means the Commonwealth of Pennsylvania.

(7) "Counsel" means any nationally recognized bond counsel or counsel expert in federal securities laws.

(8) "Disclosure Representative" means the Director of Finance of the City, the City Treasurer or such other official or employee of the City as the Director of Finance or the City Treasurer shall designate in writing to the Dissemination Agent.

(9) "GAAP" means generally accepted accounting principles as prescribed from time to time for governmental units by the Governmental Accounting Standards Board, the Financial Accounting Standards Board, or any successor to the duties and responsibilities of either of them.

(10) "Fiscal Agent" means U.S. Bank National Association, as fiscal agent and registrar for the Bonds.

(11) "General Ordinance" means the City's General Gas Works Revenue Bond Ordinance of 1998, as amended and supplemented, including as supplemented by the Thirteenth Supplemental Ordinance adopted by City Council on March 26, 2015 and signed by the Mayor on March 26, 2015.

(12) "MSRB" means the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934, or any successor thereto or to the functions of the MSRB contemplated by this Agreement.

(13) "Notice Event" means any of the following events with respect to the Bonds, whether relating to the City or otherwise:

(i) principal and interest payment delinquencies;

(ii) non-payment related defaults, if material;

(iii) unscheduled draws on debt service reserves reflecting financial difficulties;

(iv) unscheduled draws on credit enhancements reflecting financial difficulties;

(v) substitution of credit or liquidity providers, or their failure to perform;

(vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices of determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;

(vii) modifications to rights of Bondholders, if material;

(viii) Bond calls, if material, and tender offers;

(ix) defeasances;

(x) release, substitution, or sale of property securing repayment of the Bonds, if material;

(xi) rating changes;

(xii) bankruptcy, insolvency, receivership or similar event of the City;

(xiii) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

(xiv) appointment of a successor or additional paying agent, or the change of name of a paying agent, if material.

(14) "Official Statement" means the Official Statement dated August 5, 2015 of the City relating to the Bonds.

(15) "PGW" means the Philadelphia Gas Works of the City of Philadelphia.

(16) "PGW Fiscal Year" means the fiscal year of PGW, currently beginning on September 1 and ending on August 31, as may be changed as contemplated under Section 2.5 hereof.

(17) "Registered Owner" or "Registered Owners" means the person or persons in whose name a Bond is registered on the books of the City maintained by the Fiscal Agent in accordance with the General Ordinance and the Bonds. For so long as the Bonds shall be registered in the name of the Securities Depository or its nominee, the term "Registered Owner" or "Registered Owners" also means and includes, for the purposes of this Agreement, the owners of book-entry credits in the Bonds evidencing an interest in the Bonds; provided, however, that the Dissemination Agent shall have no obligation to provide notice hereunder to owners of book-entry credits in the Bonds except those who have filed their names and addresses with the Dissemination Agent for the purposes of receiving notices or giving direction under this Agreement.

(18) "Rule" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934 (17 CFR Part 240, §240.15c2-12), as amended, as in effect on the date of this Agreement, including any official interpretations thereof issued either before or after the effective date of this Agreement which are applicable to this Agreement.

(19) "SEC" means the United States Securities and Exchange Commission.

(20) "Securities Depository" shall mean The Depository Trust Company, New York, New York, or its nominee, Cede & Co., or successor thereto appointed pursuant to the General Ordinance.

(21) "Unaudited Financial Statements" means the same as Audited Financial Statements, except that they shall not have been audited.

(22) "Underwriters" means the financial institutions named on the cover of the Official Statement.

ARTICLE V

Miscellaneous

Section 5.1. Duties, Immunities and Liabilities of the Dissemination Agent. The Dissemination Agent shall have only such duties under the Agreement as are specifically set forth in this Agreement, and the City agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities

which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct in the performance of its duties hereunder. The obligations of the City under this Section shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 5.2. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, THE CITY OF PHILADELPHIA, PENNSYLVANIA, has caused this Continuing Disclosure Agreement to be executed by the Director of Finance and DIGITAL ASSURANCE CERTIFICATION, L.L.C., as Dissemination Agent, has caused this Disclosure Agreement to be executed by one of its authorized officers, all as of the day and year first above written.

CITY OF PHILADELPHIA, PENNSYLVANIA

By:_____
Name: Rob Dubow
Title: Director of Finance

DIGITAL ASSURANCE CERTIFICATION, L.L.C.,
as Dissemination Agent

By:_____
Name: Diana O'Brien
Title: Vice President

APPENDIX G

BOOK-ENTRY ONLY SYSTEM

The information set forth herein concerning The Depository Trust Company, New York, New York ("DTC") and the book-entry system described below has been extracted from materials provided by DTC for such purpose, is not guaranteed as to accuracy or completeness and is not to be construed as a representation by PGW, the City, PGW or the Underwriters. The websites referenced below are included for reference only and the information contained therein is not incorporated by reference in this Official Statement.

DTC, New York, New York, will act as securities depository for the Bonds. The Bonds will be issued as fully-registered Bonds registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a S&P rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no

knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant of such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to an issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, payments of principal, premium, if any, and interest on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Fiscal Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with Bonds held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the City or the Fiscal Agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments of redemption proceeds, principal, premium, if any, and interest on the Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of City or the Fiscal Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the City or the Fiscal Agent. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from DTC, and the City takes no responsibility for the accuracy thereof.

THE CITY, PGW AND THE FISCAL AGENT CANNOT AND DO NOT GIVE ANY ASSURANCES THAT DTC, THE DIRECT PARTICIPANTS OR THE INDIRECT PARTICIPANTS WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE BONDS (1) PAYMENTS OF PRINCIPAL OR INTEREST ON THE BONDS, (2) CONFIRMATION OF BENEFICIAL OWNERSHIP INTEREST IN THE BONDS, OR (3) NOTICES SENT TO DTC OR CEDE & CO., ITS NOMINEE, AS THE REGISTERED OWNER OF THE

BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT. THE CURRENT "RULES" APPLICABLE TO DTC ARE ON FILE WITH THE SECURITIES AND EXCHANGE COMMISSION, AND THE CURRENT "PROCEDURES" OF DTC TO BE FOLLOWED IN DEALING WITH DIRECT PARTICIPANTS ARE ON FILE WITH DTC.

NEITHER THE CITY, PGW NOR THE FISCAL AGENT SHALL HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY DIRECT PARTICIPANT, INDIRECT PARTICIPANT OR ANY BENEFICIAL OWNER OR ANY OTHER PERSON NOT SHOWN ON THE REGISTRATION BOOKS OF THE FISCAL AGENT AS BEING A BONDHOLDER WITH RESPECT TO (1) THE BONDS; (2) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT; (3) THE PAYMENT BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OR INTEREST ON THE BONDS; (4) THE DELIVERY BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE APPLICABLE GENERAL ORDINANCE TO BE GIVEN TO BONDHOLDERS; OR (5) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS REGISTERED OWNER OF THE BONDS.

The City may determine to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, bond certificates will be prepared and delivered as described in the applicable Supplemental Ordinance.

So long as Cede & Co. is the registered owner of the Bonds as nominee of DTC, references herein to the Holders, holders, owners or registered owners of such Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the Bonds.

In the event that the Book-Entry Only System is discontinued and the Beneficial Owners become registered owners of the Bonds, the following provisions applicable to registered owners would apply: (i) Bonds may be exchanged for an equal aggregate principal amount of Bonds of the same maturity and series in other authorized denominations, upon surrender thereof at the designated corporate trust office of the Fiscal Agent; (ii) the transfer of any Bonds may be registered on the books maintained by the Fiscal Agent for such purpose only upon the surrender thereof to the Fiscal Agent together with a duly executed assignment in form satisfactory to the City and the Fiscal Agent; and (iii) for every exchange or registration of transfer of Bonds, the Fiscal Agent may impose a charge sufficient to reimburse it for any tax, fee or governmental charge required to be paid with respect to such exchange or registration of transfer of the Bonds.

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APPENDIX H

PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL

August 18, 2015

Re: $261,770,000 City of Philadelphia, Pennsylvania Gas Works
Revenue Refunding Bonds, Thirteenth Series (1998 General Ordinance)

To the Purchasers of the Within-Described Bonds:

We have acted as Co-Bond Counsel to the City of Philadelphia, Pennsylvania ("City"), in connection with the authorization and issuance by the City of its Gas Works Revenue Refunding Bonds, Thirteenth Series (1998 General Ordinance) ("Bonds").

The Bonds are issued under and pursuant to provisions of: (i) the Constitution of the Commonwealth of Pennsylvania ("Commonwealth"); (ii) the First Class City Revenue Bond Act, approved October 18, 1972 (P.L. 955), Act No. 234 ("Act"); (iii) the City of Philadelphia General Gas Works Revenue Bond Ordinance of 1998, as amended and supplemented prior to March 26, 2015 ("Original Ordinance"); (iv) the Thirteenth Supplemental Ordinance to the Original Ordinance (Bill No. 150159), approved by the Mayor of the City on March 26, 2015 ("Thirteenth Supplemental Ordinance" and, together with the Original Ordinance, the "1998 General Ordinance"); and (v) a Bond Authorization of the Bond Committee of the City, comprised of the Mayor, the City Controller and the City Solicitor, acting by at least a majority thereof), dated August 5, 2015 ("Bond Authorization"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the 1998 General Ordinance.

The Bonds are being issued by the City to provide funds, together with other available moneys, to (i) the refund or redeem certain outstanding City of Philadelphia, Pennsylvania, Gas Works Revenue Bonds issued either under the Original Ordinance or under the City's General Gas Works Revenue Bond Ordinance of 1975, as further described in the Bond Authorization (collectively, the "Refunded Bonds"), (ii) make a deposit in the Sinking Fund Reserve established under the 1998 General Ordinance, and (iii) pay the costs of issuance of the Bonds.

The Bonds, together with all Senior Bonds presently Outstanding under 1998 General Ordinance and any parity obligations hereafter issued under the 1998 General Ordinance (collectively, the "1998 Ordinance Senior Bonds"), are equally and ratably payable solely from and secured solely by a lien on and security interest in all Gas Works Revenues, all accounts, contract rights and general intangibles representing Gas Works Revenues and the Sinking Fund, including the Sinking Fund Reserve established under the 1998 General Ordinance.

As Co-Bond Counsel, we have examined: (a) the relevant provisions of the Constitution of the Commonwealth; (b) the Act; (c) the Original Ordinance; (d) the Thirteenth Supplemental Ordinance; (e) the Bond Authorization; and (f) certain statements, certifications, affidavits and other documents and matters of law as we have deemed necessary to enable us to render the opinion set forth below, including, without limitation, an agreement of officials of the City and of the Gas Works having responsibility for issuing the Bonds ("Tax Compliance Agreement"), intended to satisfy certain provisions of the Internal Revenue Code of 1986, as amended ("Code"), and applicable Treasury Regulations, and the other documents and instruments listed on the Index of Closing Documents relating to the Bonds dated the date hereof. We have also examined a fully executed and authenticated Bond or a true copy thereof, and assume all other Bonds are in such form and are similarly executed and authenticated.

In rendering the opinion set forth below, we have relied upon the genuineness, accuracy and completeness of all of the documents, records, certifications and other instruments examined including,

without limitation, the authenticity of all signatures appearing thereon. We have also relied, in the opinion set forth below, upon the opinion of the City Solicitor as to all matters of fact and law set forth therein. We have not made any independent examination in rendering this opinion other than the examination referred to above. Our opinion is therefore qualified in all respects by the scope of that examination.

Except with respect to Paragraph 5 below, our opinion is given only with respect to the internal laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof.

Based upon and subject to the foregoing and subject to the qualifications hereinafter set forth, we are of the opinion that:

1. The City is authorized under the provisions of the Constitution and laws of the Commonwealth to perform its obligations under the Original Ordinance, the Thirteenth Supplemental Ordinance and the Bonds and to issue the Bonds for the purposes set forth in the Thirteenth Supplemental Ordinance.

2. The City has duly and properly authorized the issuance of the Bonds.

3. The Bonds have been duly executed, authenticated, issued and delivered, and are the legal, valid and binding obligations of the City, enforceable in accordance with the terms thereof, except as enforcement may be affected by bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer or other similar laws or legal or equitable principles affecting the enforcement of creditors' rights.

4. Under the laws of the Commonwealth as presently enacted and construed, interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax and the Bonds are exempt from personal property taxes in Pennsylvania; however, any profits, gains or income derived from the sale, exchange or other disposition of the Bonds will be subject to Commonwealth taxes and local taxes within the Commonwealth.

5. Under existing statutes, regulations, rulings and court decisions, interest on the Bonds will not be includible in the gross income of the holders thereof for federal income tax purposes, assuming continuing compliance by the City with the requirements of the Code. Interest on the Bonds will not be a specific preference item for purposes of computing the federal alternative minimum tax ("AMT"); however, interest on the Bonds held by corporations is included in the computation of "adjusted current earnings," a portion of which is taken into account in determining the AMT imposed on corporations.

In rendering this opinion, we have assumed compliance by the City with its covenants contained in the 1998 General Ordinance, the Bond Authorization and the Tax Compliance Agreement that are intended to comply with the provisions of the Code relating to actions to be taken by the City in respect of the Bonds after the issuance thereof to the extent necessary to effect or maintain the exclusion of interest on the Bonds from gross income for federal income tax purposes. These covenants relate to, inter alia, the use and investment of proceeds of the Bonds and the rebate to the United States Treasury of specified arbitrage earnings, if required. Failure to comply with such covenants could result in the interest on the Bonds becoming includible in gross income for federal income tax purposes from the date of issuance of the Bonds.

We call to your attention the fact that the Bonds are special obligations of the City payable solely from and secured solely by the Gas Works Revenues and amounts in the Sinking Fund, including the Sinking Fund Reserve, established pursuant to the 1998 General Ordinance. The Bonds are not general obligations of the City and do not pledge the full faith, credit or taxing power of the City or create any debt or charge against the general revenues of the City or create a lien or charge against any property of the City other than Gas Works Revenues.

We express no opinion as to any matter not set forth in the numbered paragraphs herein. This opinion is given as of the date hereof and we assume no obligation to supplement this opinion to reflect changes in law that may hereafter occur or changes in facts or circumstances that may hereafter come to our attention. Without limiting the generality of the foregoing, we express no opinion herein with respect to, and assume no responsibility for, the accuracy, adequacy or completeness of the Preliminary Official Statement or Official Statement prepared in respect of the Bonds, and make no representation that we have independently verified the contents thereof.

Very truly yours,

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