

Subject to compliance by the City with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Series 2016A-1 Bonds is excluded from the gross income of the owners thereof for federal income tax purposes and is not included as an item of tax preference in computing the federal alternative minimum tax imposed on individuals and corporations. Interest on the Series 2016A-1 Bonds will, however, be taken into account in computing the corporate alternative minimum tax for certain corporations. Interest on the Series 2016A-1 Bonds is not exempt from present State of Illinois income taxes.

Interest on the Series 2016A-2 Bonds is not excludable from gross income for federal or state income tax purposes. See “TAX MATTERS” herein for a more complete discussion.



\$81,715,000
CITY OF CHICAGO
Second Lien Water Revenue Bonds,
\$59,595,000 Series 2016A-1 (Tax-Exempt)
and
\$22,120,000 Series 2016A-2 (Taxable)

Dated: Date of Delivery

Prices, Yields and Maturities (as shown on inside front cover)

The City of Chicago (the “City”) is issuing its Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt) (the “Series 2016A-1 Bonds”) and its Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable) (the “Series 2016A-2 Bonds”) and together with the Series 2016A-1 Bonds, the “Bonds” or the “Series 2016A Bonds”) subject to the terms of the Indenture described herein.

Proceeds of the Bonds will be used to (a) repay amounts owed under a Line of Credit Note, the proceeds of which were used, together with other available funds, to pay termination amounts related to certain interest rate swaps terminated in connection with the conversion of the City’s outstanding Second Lien Water Revenue Bonds, Series 2000 (the “Series 2000 Bonds”) and Second Lien Water Revenue Refunding Bonds, Series 2004 (the “Series 2004 Bonds”) to bear interest at fixed rates, and (b) pay costs of issuance of the Bonds. See “SOURCES AND USES OF PROCEEDS” for a description of the amounts of Bond proceeds of each series applied to each use of such proceeds.

The Bonds will mature in the principal amounts and on the dates set forth on the inside cover of this Official Statement and interest on the Bonds will be payable on May 1 and November 1 of each year, commencing November 1, 2016. The Bonds are issuable in denominations of \$5,000 or integral multiples thereof. The Bonds are fully registered bonds, registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York (“DTC”), which acts as securities depository for the Bonds. Purchasers of the Bonds will not receive certificates representing their interests in the Bonds purchased. Principal of and interest on the Bonds will be paid by the Trustee to DTC, which in turn will remit such principal and interest payments to its participants for subsequent disbursement to the beneficial owners of the Bonds.

The Series 2016A-1 Bonds will be subject to optional redemption prior to maturity as described herein. The Series 2016A-2 Bonds will not be subject to redemption prior to maturity. See “DESCRIPTION OF THE BONDS – Redemption.”

The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from the Second Lien Bond Revenues pledged to their payment as described herein. The Bonds have a claim for payment from the Second Lien Bond Revenues on an equal and ratable basis with the City’s Outstanding Second Lien Bonds and any Second Lien Parity Bonds that may be issued from time to time in the future.

NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, REDEMPTION PREMIUM, IF ANY, OR INTEREST ON THE BONDS. THE BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AS TO INDEBTEDNESS. THE BONDS DO NOT HAVE A CLAIM FOR PAYMENT FROM ANY TAXES OF THE CITY. THE BONDS ARE NOT SECURED BY A LIEN ON OR SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE WATER SYSTEM.

The Bonds are being offered subject to withdrawal or modification of the offering without notice and to the issuance of the legal opinions of Pugh, Jones & Johnson, P.C., Chicago, Illinois, and Cotillas and Associates, Chicago, Illinois, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the City by (i) its Corporation Counsel, (ii) in connection with the preparation of this Official Statement, Greenberg Traurig, LLP, Chicago, Illinois, and Golden Holley James, LLP, Chicago, Illinois, Co-Disclosure Counsel to the City, and (iii) in connection with certain pension matters described in this Official Statement, Chapman and Cutler LLP, Chicago, Illinois, Special Disclosure Counsel to the City. Certain legal matters will be passed upon for the Underwriters by Kutak Rock LLP, Chicago, Illinois, Underwriters’ Counsel. It is expected that the Bonds will be available for delivery through the facilities of DTC on or about May 23, 2016.

PNC Capital Markets LLC

Ramirez & Co., Inc.

Stifel

Academy Securities, Inc.

Backstrom McCarley Berry & Co., LLC

Cabrera Capital Markets, Inc

J.J.B. Hilliard, W.L. Lyons, LLC

Morgan Stanley

Rice Financial Products Company

The Williams Capital Group, L.P.

MATURITIES, AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIPS¹

\$59,595,000
CITY OF CHICAGO
Second Lien Water Revenue Bonds,
Series 2016A-1 (Tax-Exempt)

<u>Maturity</u> <u>November 1</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Price</u>	<u>Yield</u>	<u>CUSIP</u> ⁽¹⁾
2023	\$5,435,000	5.00%	117.020%	2.48%	167736 F85
2024	5,710,000	5.00%	118.078%	2.60%	167736 F93
2025	5,995,000	5.00%	119.141%	2.69%	167736 G27
2026	6,295,000	4.00%	110.700%	2.81%	167736 G35
2027	6,545,000	5.00%	118.696% ^c	2.91% ^c	167736 G43
2028	6,870,000	5.00%	118.202% ^c	2.96% ^c	167736 G50
2029	7,215,000	5.00%	117.907% ^c	2.99% ^c	167736 G68
2030	7,575,000	5.00%	117.613% ^c	3.02% ^c	167736 G76
2031	7,955,000	5.00%	117.026% ^c	3.08% ^c	167736 G84

^c Price and Yield to November 1, 2026 call date.

\$22,120,000
CITY OF CHICAGO
Second Lien Water Revenue Bonds,
Series 2016A-2 (Taxable)

<u>Maturity</u> <u>November 1</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Price</u>	<u>Yield</u>	<u>CUSIP</u> ⁽¹⁾
2016	\$5,725,000	2.00%	100.414%	1.05%	167736 G92
2017	16,395,000	1.68%	100.000%	1.68%	167736 H26

¹ Copyright 2016; American Bankers Association. CUSIP data used herein are provided by Standard & Poor's CUSIP Service Bureau, a division of The McGraw Hill Companies, Inc. The CUSIP numbers listed are being provided solely for the convenience of the registered owners of the Bonds only at the time of issuance of the Bonds and neither the City nor the Underwriters make any representation with respect to such 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 the 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 certain maturities of the Bonds.

CITY OF CHICAGO

MAYOR

Rahm Emanuel

CITY TREASURER

Kurt A. Summers, Jr.

CITY CLERK

Susana A. Mendoza

CITY COUNCIL

COMMITTEE ON FINANCE

Edward M. Burke, Chairman

CHIEF FINANCIAL OFFICER

Carole L. Brown

ACTING CITY COMPTROLLER

Erin Keane

BUDGET DIRECTOR

Alexandra Holt

CORPORATION COUNSEL

Stephen R. Patton, Esq.

DEPARTMENT OF WATER MANAGEMENT

Barrett B. Murphy, Acting Commissioner

CO-BOND COUNSEL

Pugh Jones & Johnson, P.C.

Chicago, Illinois

Cotillas and Associates

Chicago, Illinois

FINANCIAL ADVISORS

Sycamore Advisors, LLC

Chicago, Illinois

Public Alternative Advisors, LLC

Brooklyn, New York

Certain information contained in, or incorporated by reference in, this Official Statement has been obtained by the City from DTC and from other sources that are deemed reliable. No representation or warranty is made, however, as to the accuracy or completeness of such information by the Underwriters or the City. The Underwriters have provided the following sentence for inclusion in this Official Statement. 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 and nothing contained in this Official Statement is or shall be relied upon as a promise or representation by the Underwriters. This Official Statement is being used in connection with the sale of securities as referred to herein and may not be used, in whole or in part, for any other purpose. The delivery of this Official Statement at any time does not imply that information herein is correct as of any time subsequent to its date.

No dealer, broker, salesperson or any other person has been authorized by the City or the Underwriters to give any information or to make any representation other than as contained in this Official Statement in connection with the offering described herein and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than those described on the cover page, nor shall there be any offer to sell, solicitation of an offer to buy or sale of such securities in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of the Bonds.

Any statements made in this Official Statement, including the Appendices, involving matters of opinion or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of such estimates will be realized. This Official Statement contains certain forward-looking statements and information that are based on the City's beliefs as well as assumptions made by and information currently available to the City. Such statements are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or expected.

The Bonds 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 Official Statement. Any representation to the contrary is a criminal offense.

IN CONNECTION WITH THE OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED, OR RECOMMENCED, AT ANY TIME. THE PRICES AND OTHER TERMS RESPECTING THE OFFERING AND SALE OF THE BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE BONDS ARE RELEASED FOR SALE, AND THE BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE BONDS INTO INVESTMENT ACCOUNTS.

OFFICIAL STATEMENT SUMMARY

This Summary does not constitute a part of this Official Statement for the issuance and sale of the Bonds and does not purport to be complete. This Summary is for informational purposes only and is subject to a more complete discussion contained in this Official Statement. Capitalized terms used in this Summary are defined in this Official Statement.

Issuer	City of Chicago.
The Bonds	\$59,595,000 Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt). \$22,120,000 Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable).
Interest; Interest Payment Dates	The Bonds will bear interest at the fixed interest rates set forth on the inside cover hereof through their respective maturity dates, which will be payable on each May 1 and November 1, commencing on November 1, 2016. Interest on the Bonds will be computed on the basis of a 360-day year consisting of twelve 30-day months.
Redemption	The Series 2016A-1 Bonds will be subject to optional redemption prior to maturity. The Series 2016A-2 Bonds will not be subject to redemption prior to maturity. See “DESCRIPTION OF THE BONDS – Redemption” in this Official Statement.
Ratings	The Bonds have received ratings of “A” (stable outlook) from S&P, “AA” (negative outlook) from Fitch and “AA” (stable outlook) from Kroll. See “RATINGS” in this Official Statement.
Security for the Bonds	The Bonds of each series are Second Lien Bonds secured on a parity with each other and, together with (i) the Outstanding Second Lien Bonds and any Second Lien Parity Bonds issued from time to time in the future and (ii) amounts constituting Section 2.08 Obligations and Section 2.09 Obligations under the Indenture are secured by a pledge of Second Lien Bond Revenues that are derived from the Net Revenues Available for Bonds in the Water Fund and deposited from time to time into the Second Lien Bonds Account (except for monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), which claim is junior and subordinate to the claim of Senior Lien Bonds to the Net Revenues Available for Bonds. See “SECURITY FOR THE BONDS” in this Official Statement.
Flow of Funds	The City maintains the Water Fund as a separate fund of the City to, among other things, carry out the provisions of the ordinances authorizing Water Revenue Bonds. Gross Revenues of the Water System are credited as they are deposited to the Water Fund, which is currently held by a depository bank which is different than the depository bank which holds the City’s General Fund. Moneys in the Water Fund may be expended only as provided in the Ordinance for (a) paying Operation and Maintenance Costs, (b) paying the principal of, redemption premium, if any, and interest on Senior Lien Bonds (or purchasing Senior Lien Bonds), and (c) establishing and maintaining (for the purposes specified in related ordinances) the Senior Lien Bonds Construction Accounts, the Accounts in the Water Fund established in the Ordinance including, without limitation, the Accounts securing the Bonds and other Second Lien Bonds (and described under the caption “SECURITY FOR THE BONDS – Flow of Funds” in this Official Statement) and all other reserve funds or accounts which are required to be established and maintained in the ordinances authorizing the issuance of Water Revenue Bonds. Any funds available after these requirements have been satisfied or which are not necessary to satisfy these requirements may be used for any lawful purpose of the Water System. Cash, cash equivalents or investments in the Senior Lien Principal and Interest Account, the Subaccounts of the Senior Lien Debt Service Reserve Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account, the Line of Credit Notes Account, the various construction accounts and the Senior Lien Rebate Accounts of the Water Fund are held in separate bank accounts and in separately identifiable investments. Other cash, cash equivalents or investments in the Water Fund are or may be (except to the extent prohibited by ordinances authorizing indebtedness of the Water System) deposited in bank

	accounts and invested on a pooled basis with a variety of other funds of the City, including its General Fund. Notwithstanding the foregoing, such cash, cash equivalents or investments may be expended only for lawful purposes of the Water System. See “SECURITY FOR THE BONDS – Flow of Funds,” and “– Cash and Investments” in this Official Statement.
Rate Covenant	The City has covenanted (the “Rate Covenant”) pursuant to ordinances authorizing its water revenue bonds to establish, maintain and collect at all times, the fees, charges and rates for the use and service of the Water System sufficient at all times to pay Operation and Maintenance Costs and produce Net Revenues Available for Bonds in each Fiscal Year at least equal to the greater of: (i) 120 percent of the sum required to pay promptly when due the Senior Lien Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds then Outstanding, or (ii) the sum of (A) 100 percent of the Senior Lien Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds Outstanding, plus (B) 110 percent of the Aggregate Second Lien Bonds Debt Service for the Fiscal Year with respect to all Second Lien Bonds Outstanding and all Section 2.08 Obligations and Section 2.09 Obligations, plus (C) 100 percent of the Subordinate Lien Debt Service Requirement for the Fiscal Year on all Subordinate Lien Obligations Outstanding, plus (D) the annual debt service requirement for the Fiscal Year on all Commercial Paper Notes Outstanding, plus (E) the annual debt service requirement for the Fiscal Year on all Water System Line of Credit Notes Outstanding. The City conducts an annual review of water rates to determine if the City has been and will be in compliance with the Rate Covenant described herein. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the Rate Covenant, the City prepares or has prepared a rate study for the Water System identifying the rate changes necessary to comply with the Rate Covenant and the Office of Budget and Management and the Chief Financial Officer recommends appropriate action to the City Council to comply with the Rate Covenant, which may include rate increases and/or expenditure reductions. See “INTRODUCTION – Rate Covenant” and “FINANCIAL OPERATIONS – Annual Budget Review and Implementation of Annual Budget.” The Rate Covenant will remain in effect so long as any Senior Lien Bonds remain outstanding. An additional covenant substantively similar to the Rate Covenant (the “Second Lien Bonds Rate Covenant”) as to items (i) and (ii)(A), (ii)(B) and (ii)(C) above, exists under the Master Indenture. For a description of the Second Lien Bonds Rate Covenant, see APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – Second Lien Bonds Rate Covenant” in this Official Statement.
Other Covenants	The City has covenanted in the Master Indenture to operate the Water System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants made by the City in the Master Indenture for so long as Second Lien Bonds are Outstanding. See “INTRODUCTION – Other Covenants” in this Official Statement for details of these covenants.
Limited Obligation	The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from the Trust Estate pledged to such payment under the Indenture. Neither the full faith and credit nor the taxing power of the City is pledged

	to the payment of the principal of, redemption premium, if any, or interest on the Bonds. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. The Bonds are not secured by a lien on or security interest in the physical assets of the Water System. See “SECURITY FOR THE BONDS” in this Official Statement.
Authority for Issuance	The Bonds have been authorized and are being issued pursuant to the “home rule” powers of the City under the Illinois Constitution of 1970 and an ordinance adopted by the City Council of the City on March 16, 2016 (the “Ordinance”). The Bonds are issued pursuant to a Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of December 15, 1999, as heretofore supplemented, from the City to The Bank of New York Mellon Trust Company, N.A., as trustee, as amended by Amendment No. 1 to Master Indenture dated as of August 1, 2004, and as further supplemented by the Ninth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Series 2016A, consisting of Series 2016A-1 (Tax-Exempt) and Series 2016A-2 (Taxable) dated as of May 1, 2016. See “INTRODUCTION” in this Official Statement.
Water System	The City-owned and operated municipal water system that provides the supply, treatment and distribution of water to customers in the City and to 125 suburban customers is referred to herein as the “Water System.” See “WATER SYSTEM,” “WATER SYSTEM SERVICE AREA” and “FINANCIAL OPERATIONS” in this Official Statement for a detailed description of the services, facilities, service area, customer base, rates, pumpage volume, and other features of the Water System.
Water System Rates	Water System rates are set by the City Council. No regulation by any administrative agency applies to the Water System rates. Water System rates for metered accounts are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula related to the size of the relevant property and other use-related factors. Water System rates in 2012 represented a 25% increase over the rates for the previous year. Water System rates in each of 2013, 2014 and 2015 represented a 15% increase over the rates for the respective previous year. Beginning June 1, 2016, and every year thereafter, annual Water System rates are required to be adjusted, if applicable, by applying to the previous year’s rates the rate of inflation, calculated based on the Consumer Price Index - Urban Wage Earners and Clerical Workers (Chicago All Items) published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January 1. Any such annual increase, however, shall be capped at 105% of the previous year’s rate. (There is not expected, however, to be any increase in Water System rates for the year beginning on June 1, 2016, due to the inflation rate for the previous year). The City Council may take action at any time to alter the then-current schedule of water rates. See “FINANCIAL OPERATIONS” in this Official Statement.
Use of Proceeds	Proceeds of the Bonds will be used to (a) repay all amounts owed under a Line of Credit Note, the proceeds of which were used, together with other available funds referenced herein, to pay termination amounts related to certain interest rate swaps which have been terminated in connection with the conversion of the City’s outstanding Second Lien Water Revenue Bonds, Series 2000 (the “Series 2000 Bonds”) and Second Lien Water Revenue Refunding Bonds, Series 2004 (the “Series 2004 Bonds”) to bear interest at fixed rates, and (b) pay costs of issuance of the Bonds. See “SOURCES AND USES OF PROCEEDS” for a description of the amounts of Bond proceeds of each series applied to each use of such proceeds.
Investment Considerations	There are a number of factors associated with owning the Bonds that prospective investors should consider prior to purchasing the Bonds. For a discussion of certain of these factors, see “INVESTMENT CONSIDERATIONS.”
Retirement Funds	The City participates in four defined-benefit retirement funds (collectively, the “Retirement Funds”). City employees who work for the Department of Water Management (the “Department”) participate in one of two of these Retirement Funds: the Municipal Employees’ Annuity and Benefit Fund of Chicago (“MEABF”) and the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago (“LABF”). The City’s contributions to

MEABF and LABF, of which the Water Fund contributes a portion, are determined pursuant to the formulas set forth in the Illinois Pension Code (the “Pension Code”). The City’s Retirement Funds have been actuarially determined to be significantly underfunded. Under the current provisions of the Pension Code, the respective actuaries for MEABF and LABF predict that such Retirement Funds will not have sufficient assets on hand to make payments to beneficiaries in 2025 and 2029, respectively. For additional information, see “FINANCIAL OPERATIONS–Pension and Other Post-Employment Benefit Costs” and APPENDIX D–“RETIREMENT FUNDS–Payment for Pension Benefits” in this Official Statement.

The City and the Retirement Funds share the cost of post-employment healthcare benefits available for certain retired City employees (“Health Plan”). The City has announced plans to phase-out such benefits by 2017 for certain retirees. Prior to June 30, 2013, the City contributed to the Health Plan pursuant to a settlement agreement between the City and the Retirement Funds. After expiration of the settlement, certain of the affected participants filed a lawsuit to reactivate the litigation covered by the settlement, which lawsuit remains pending. For further information on the status of the Health Plan after June 30, 2013, including certain State and federal litigation relating to the Health Plan and the settlement agreement, see APPENDIX D–“RETIREMENT FUNDS–Payment for Other Post-Employment Benefits” in this Official Statement.

Trustee

The Bank of New York Mellon Trust Company, N.A., Chicago, Illinois, will serve as Trustee and Paying Agent.

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E	FORM OF OPINIONS TO BE DELIVERED BY CO-BOND COUNSEL

\$81,715,000
CITY OF CHICAGO
Second Lien Water Revenue Bonds,
\$59,595,000 Series 2016A-1 (Tax-Exempt)
\$22,120,000 Series 2016A-2 (Taxable)

INTRODUCTION

This Official Statement, including the cover page hereof and the Appendices hereto, is furnished by the City of Chicago (the “City”) to provide information in connection with the issuance and sale of its Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt) (the “Series 2016A-1 Bonds”) and its Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable) (the “Series 2016A-2 Bonds” and together with the Series 2016A-1 Bonds, the “Bonds” or the “Series 2016A Bonds”). Unless expressly defined herein, capitalized words and terms used in this Official Statement are defined as set forth in APPENDIX A — “CERTAIN DEFINITIONS.”

Purpose

The proceeds of the sale of the Bonds will be used to (a) repay certain amounts owed under a Line of Credit Note, the proceeds of which were used, together with other available funds referenced herein, to pay termination amounts related to certain interest rate swaps which have been terminated in connection with the conversion of the City’s outstanding Second Lien Water Revenue Bonds, Series 2000 (the “Series 2000 Bonds”) and Second Lien Water Revenue Refunding Bonds, Series 2004 (the “Series 2004 Bonds”) to bear interest at fixed rates, and (b) pay costs of issuance of the Bonds. See “SOURCES AND USES OF PROCEEDS.”

Authorization; Reoffering of Series 2000 Bonds and Series 2004 Bonds

The Bonds have been authorized and are being issued pursuant to the “home rule” powers of the City under Article VII, Section 6(a) of the Illinois Constitution of 1970 and an ordinance adopted by the City Council of the City (the “City Council”) on March 16, 2016 (the “Ordinance”). The Bonds are also issued pursuant to a Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of December 15, 1999, as heretofore supplemented (the “Master Indenture”), from the City to The Bank of New York Mellon Trust Company, N.A., as trustee (as successor to American National Bank and Trust Company of Chicago and J.P. Morgan Trust Company, National Association) (the “Trustee”), as amended by Amendment No. 1 to Master Indenture dated as of August 1, 2004 (“Amendment No. 1”), and as further supplemented by the Ninth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Series 2016A, consisting of Series 2016A-1 (Tax-Exempt) and Series 2016A-2 (Taxable) dated as of May 1, 2016 (the “Ninth Supplemental Indenture,” and collectively with Amendment No. 1 and the Master Indenture, the “Indenture”).

Concurrently with the issuance of the Bonds, the City currently plans to reoffer \$100,000,000 outstanding principal amount of the Series 2000 Bonds and \$344,575,000 outstanding principal amount of the Series 2004 Bonds. On the date of issuance of the Bonds, all outstanding Series 2000 Bonds and Series 2004 Bonds (which currently bear interest at variable rates) are expected to be converted to new fixed interest rates, resulting in mandatory tender as provided in the indentures authorizing such Bonds. Proceeds from the reoffering of the Series 2000 Bonds and Series 2004 Bonds will be used (i) to pay the principal portion of the purchase price of the mandatorily tendered Series 2000 Bonds and Series 2004 Bonds, (ii) to fund costs of certain capital improvements to the Water System, and (iii) to pay the costs of the reoffering of the Series 2000 Bonds and Series 2004 Bonds.

Security for the Bonds

The Bonds are Second Lien Bonds under the Indenture. The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from amounts in the Second Lien Bonds Account (other than monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), the sources pledged under the Indenture and amounts on deposit in Accounts established by the Ordinance and related to the Bonds and, together with any Outstanding Second Lien Bonds, Second Lien Parity Bonds, Section 2.08 Obligations and Section 2.09 Obligations, from Second Lien Bond Revenues. A lien on and security interest in Second Lien Bond Revenues (except for monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued) is granted to the Registered Owners of the Second Lien Bonds Outstanding from time to time, and a lien on amounts in any Accounts related to the Bonds is granted to the Registered Owners of the Bonds Outstanding from time to time, subject to amounts in those Accounts being deposited, credited and expended as provided in the Ordinance and the Indenture. The claim of the Bonds to payment from amounts in the Water Fund is subordinate to the claim of Senior Lien Bonds. See “SECURITY FOR THE BONDS — General” and APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Source of Payment; Pledge of Second Lien Bond Revenues” and “— Flow of Funds.”

The Bonds are not secured by a lien on or security interest in the physical assets of the Water System. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. See “SECURITY FOR THE BONDS – General.”

Rate Covenant

The City has covenanted (the “Rate Covenant”) in the ordinances authorizing its water revenue bonds to establish, maintain and collect at all times, the fees, charges and rates for the use and service of the Water System sufficient at all times to pay Operation and Maintenance Costs and produce Net Revenues Available for Bonds in each Fiscal Year at least equal to the greater of:

- (i) 120 percent of the sum required to pay promptly when due the Senior Lien Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds then Outstanding, or
- (ii) the sum of
 - (A) 100 percent of the Senior Lien Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds Outstanding, plus
 - (B) 110 percent of the Aggregate Second Lien Bonds Debt Service for the Fiscal Year with respect to all Second Lien Bonds Outstanding and all Section 2.08 Obligations and Section 2.09 Obligations, plus
 - (C) 100 percent of the Subordinate Lien Debt Service Requirement for the Fiscal Year on all Subordinate Lien Obligations Outstanding, plus
 - (D) the annual debt service requirement for the Fiscal Year on all Commercial Paper Notes Outstanding, plus

- (E) the annual debt service requirement for the Fiscal Year on all Water System Line of Credit Notes Outstanding.

These fees, charges and rates shall not be reduced, while any Senior Lien Bonds are Outstanding, below the level necessary to ensure compliance with the covenants set forth above. An additional covenant substantively similar to the Rate Covenant as to items (i) and (ii)(A), (ii)(B) and (ii)(C) above (the “Second Lien Bonds Rate Covenant”), exists under the Master Indenture. For a description of the Second Lien Bonds Rate Covenant, see APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Second Lien Bonds Rate Covenant.”

The City will conduct an annual review of water rates to determine if the City has been and will be in compliance with the Rate Covenant described above. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the Rate Covenant, the City will prepare or have prepared a rate study for the Water System identifying the rate changes necessary to comply with the Rate Covenant and the Office of Budget and Management and the Chief Financial Officer will recommend appropriate action to the City Council to comply with the Rate Covenant, which may include rate increases and/or expenditure reductions. See “FINANCIAL OPERATIONS — Annual Budget Review and Implementation of Annual Budget” and Appendix B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Rate Covenant.”

Other Covenants

The City has covenanted in the Master Indenture to (i) maintain the Water System in good repair and working order; (ii) continuously operate the Water System on a fiscal year basis, (iii) punctually perform all duties with respect to the Water System as required by law, and (iv) so long as any Second Lien Bonds are Outstanding, continue to operate the Water System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of City in the Indenture. See also Appendix B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Covenant Against Pledge of Second Lien Bond Revenues” and “— Other Covenants.”

City of Chicago Water System

The City owns and operates a municipal water system that provides supply, treatment and distribution of water to customers in the City and to 125 suburban communities. The “Water System” includes all property, real, personal or otherwise, owned or to be owned by the City or under the control of the City and used for water supply, distribution or collection purposes, and any and all further extensions, improvements and additions to the Water System. The Water System currently serves a population of 5.3 million. The Water System’s water is allocated from Lake Michigan pursuant to regulations of the Illinois Department of Natural Resources. See “WATER SYSTEM SERVICE AREA— Lake Michigan Allocations.”

As of December 31, 2015, the Water System supplied water to a service area of approximately 806 square miles. The City accounted for approximately 228 square miles of this service area and the suburban customers accounted for approximately 578 square miles. The City’s service to suburban customers is based on various contracts as well as state law which requires the City to supply water at the City limits to any municipal corporation within a specified area at no greater price or charge than that applicable to similar large users in the City. The City considers it likely that current suburban customers will continue to purchase water from the Water System under these contracts for the following reasons: (i) large capital investments would be required for those customers otherwise to obtain water from Lake Michigan; (ii) the Water System provides a reliable supply of water; (iii) demand for available groundwater exceeds its potential yield; and (iv) the quality of Lake Michigan water is superior to local

groundwater. In 2015, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 47 percent (unaudited) of net water sales of the Water System.

Water System Rates

Water System rates are set by the City Council. No regulation by any administrative agency applies to the Water System rates. Water System rates for metered accounts are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula related to the size of the relevant property and other use-related factors. Beginning January 1, 2012, Water System rates set for that year represented a 25% increase over the rates for the previous year. Water System rates in each of 2013, 2014 and 2015 represented a 15% increase over the rates for the respective previous year. Beginning June 1, 2016, and every year thereafter, annual Water System rates are required to be adjusted, if applicable, by applying to the previous year's rates the rate of inflation, calculated based on the Consumer Price Index - Urban Wage Earners and Clerical Workers (Chicago All Items) published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January 1. Any such annual increase, however, shall be capped at 105% of the previous year's rate (There is not expected, however, to be any increase in Water System rates for the year beginning on June 1, 2016, due to the inflation rate for the previous year). The City Council may take action at any time to alter the then-current schedule of water rates. See "FINANCIAL OPERATIONS."

SOURCES AND USES OF PROCEEDS

Bonds

Simultaneously with the issuance of the Bonds, the City will convert each of the Series 2000 Bonds and the Series 2004 Bonds from variable rates of interest to fixed interest rates. The City has terminated the interest rate swap agreements related to the Series 2000 Bonds and the Series 2004 Bonds, and paid termination amounts with respect thereto totaling \$101,751,379 on May 11, 2016. The City paid such termination amounts with proceeds of a draw under the Line of Credit Agreement (as defined below) together with other amounts available therefor in the Principal and Interest Accounts under the Supplemental Indentures pursuant to which the Series 2000 Bonds and Series 2004 Bonds were issued. A portion of the Bond proceeds will be used to repay all amounts due under the Line of Credit Note (as defined below) related to such draw. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE – Water Line of Credit" and "Swaps" below.

The following table sets forth the estimated sources and uses of funds in connection with the issuance of the Bonds.

	Series 2016A-1 Bonds	Series 2016A-2 Bonds	Total
Sources of Funds:			
Principal	\$59,595,000	\$22,120,000	\$81,715,000
Premium	10,233,082	23,702	10,256,784
Total Sources	\$69,828,082	\$22,143,702	\$91,971,784
Uses of Funds:			
Repay Line of Credit Note	\$69,453,383	\$22,046,617	\$91,500,000
Costs of Issuance (including Underwriters' discount)	374,699	97,085	471,784
Total Uses	\$69,828,082	\$22,143,702	\$91,971,784

Reoffering of Series 2000 Bonds and Series 2004 Bonds

Proceeds of the reoffering of the Series 2000 Bonds and the Series 2004 Bonds, including reoffering premiums generated thereby in the aggregate amount of \$71,667,122 will be used to pay (i) the purchase price of the tendered Series 2000 Bonds and Series 2004 Bonds, (ii) costs of certain capital improvements to the Water System, and (iii) costs of reoffering the Series 2000 Bonds and the Series 2004 Bonds.

DESCRIPTION OF THE BONDS

General

The Bonds will be dated the date of their initial delivery and will mature on the dates and in the principal amounts set forth on the inside cover page of this Official Statement.

The Bonds are fully registered bonds and are issuable in denominations of \$5,000 and integral multiples thereof.

The Bonds are registered through a book-entry-only system operated by The Depository Trust Company, New York, New York ("DTC"). Details of payments of the Bonds and the book-entry system are described below under the subcaption "– Book-Entry System." Except as described under the subcaption "– Book-Entry System" below, beneficial owners of the Bonds will not receive or have the right to receive physical delivery of Bonds, and will not be or be considered to be the registered owners thereof. Accordingly, beneficial owners must rely upon (i) the procedures of DTC and, if such beneficial owner is not a DTC "Participant" (as defined below), the Participant who will act on behalf of such beneficial owner to receive notices and payments of principal and purchase price of, premium, if any, and interest on the Bonds, and to exercise voting rights and (ii) the records of DTC and, if such beneficial owner is not a Participant, such beneficial owner's Participant, to evidence its beneficial ownership of the Bonds. So long as DTC or its nominee is the registered owner of the Bonds, references herein to Bondholders or registered owners of such Bonds mean DTC or its nominee and do not mean the beneficial owners of such Bonds.

Interest

The Bonds will bear interest until payment of the principal or redemption price thereof has been made or provided for in accordance with the provisions of the Indenture, whether at the Maturity Dates thereof, upon redemption, or otherwise. Interest accrued on the Bonds will be paid in arrears on each May 1 and November 1, commencing November 1, 2016 (each, an “Interest Payment Date”). Interest on the Bonds will be computed upon the basis of a 360-day year for twelve 30-day months.

Redemption

Optional Redemption.

The Series 2016A-1 Bonds maturing on or after November 1, 2027 are subject to redemption prior to maturity at the option of the City, in whole or in part, on any date on or after November 1, 2026, and if in part, in such order of maturity as the City shall determine and within any maturity and interest rate by lot, at a redemption price equal to the outstanding principal amount of such Series 2016A-1 Bonds, together with accrued interest to the date fixed for redemption.

The Series 2016A-1 Bonds are not subject to mandatory redemption prior to their maturity.

The Series 2016A-2 Bonds are not subject to any redemption prior to their maturity.

Notice of Redemption.

For a description of the giving of notices while the Bonds are in the Book-Entry system, see “- Book-Entry System” below.

Unless waived by any owner of Series 2016A-1 Bonds to be redeemed, notice of the call for any optional redemption shall be given by the Trustee on behalf of the City by mailing the redemption notice by first class mail at least 30 days and not more than 45 days prior to the date fixed for redemption to the registered owner of the Series 2016A-1 Bond to be redeemed at the address shown on the Bond Register or at such other address as is furnished in writing by such registered owner to the Trustee. The failure to mail any such notice or any defect therein as to any Series 2016A-1 Bond shall not affect the validity of the proceedings for the redemption of any other Series 2016A-1 Bond. Any notice of redemption mailed as described above shall be conclusively presumed to have been given whether or not actually received by the addressee. Notice of the redemption of Series 2016A-1 Bonds or any portion thereof to be redeemed will specify, at a minimum, (i) the series name and designation and certificate numbers of Series 2016A-1 Bonds being redeemed, (ii) the CUSIP numbers of the Series 2016A-1 Bonds being redeemed, (iii) the principal amount of Series 2016A-1 Bonds being redeemed and the redeemed amount for each certificate (for partial calls), (iv) the redemption date, (v) the redemption price, (vi) the date of issuance of the Series 2016A-1 Bonds being redeemed, (vii) the interest rate and maturity date of the Series 2016A-1 Bonds being redeemed, (viii) the date of mailing of notices to registered owners and information services (if required), and (ix) the name of the employee of the Trustee who may be contacted with regard to such notice. With respect to an optional redemption of Series 2016A-1 Bonds, such notice may state that said redemption is conditioned upon the receipt by the Trustee on or prior to the date fixed for redemption of moneys sufficient to pay the redemption price of the Series 2016A-1 Bonds being redeemed. If such moneys are not so received, such redemption notice shall be of no force and effect, the City shall not redeem such Series 2016A-1 Bonds and the Trustee will give notice, in the same manner in which the notice of redemption was given, that such moneys were not so received and that such Series 2016A-1 Bonds will not be redeemed. Unless the notice of redemption shall be made conditional as provided above, on or prior to any redemption date for Series 2016A-1 Bonds, the City will deposit with the

Trustee an amount of money sufficient to pay the redemption price of all such Series 2016A-1 Bonds or portions thereof which are to be redeemed on that date.

Notice of redemption having been given as described above, the Series 2016A-1 Bonds, or portions thereof, to be redeemed will, on the redemption date (unless such redemption shall have been canceled as described above), become due and payable at the redemption price therein specified, and from and after such date (unless the City shall default in the payment of the redemption price) such Series 2016A-1 Bonds, or portions thereof, shall cease to bear interest. Upon surrender of such Series 2016A-1 Bonds for redemption in accordance with said notice, such Series 2016A-1 Bonds will be paid by the Trustee at the redemption price. Installments of interest due on or prior to the redemption date shall be payable as provided in the Indenture for payment of interest. Upon surrender for any partial redemption (i) of any Series 2016A-1 Bond, there will be prepared for the registered owner a new Series 2016A-1 Bond or Series 2016A-1 Bonds of the same interest rate and maturity in the amount of the unpaid principal. If any Series 2016A-1 Bond, or portion thereof, called for redemption shall not be so paid upon surrender thereof for redemption, the principal shall, until paid, bear interest from the redemption date at the rate borne by such Series 2016A-1 Bond, or portion thereof, so called for redemption.

Selection of Series 2016A-1 Bonds for Redemption. In the event of the redemption of fewer than all the Series 2016A-1 Bonds of the same maturity and interest rate, the aggregate principal amount thereof to be redeemed shall be in an Authorized Denomination, and the Trustee shall assign to each Series 2016A-1 Bond of such maturity and interest rate a distinctive number for each minimum Authorized Denomination of such Series 2016A-1 Bond and shall select by lot from the numbers so assigned as many numbers as, at such minimum Authorized Denomination for each number, equals the principal amount of such Series 2016A-1 Bonds to be redeemed. The Series 2016A-1 Bonds to be redeemed shall be those which were assigned numbers so selected; provided that only so much of the principal amount of each Series 2016A-1 Bond shall be redeemed as shall equal such minimum Authorized Denomination for each number assigned to it and so selected. For purposes of any redemption of fewer than all of the outstanding Series 2016A-1 Bonds of a single maturity and interest rate, the particular Series 2016A-1 Bonds or portions thereof to be redeemed shall be selected not more than 60 days prior to the redemption date by the Trustee. So long as DTC (as defined below) or its nominee is the registered owner of the Series 2016A-1 Bonds, if fewer than all of the Series 2016A-1 Bonds of any maturity and interest rate are called for redemption, the particular Series 2016A-1 Bonds or portions of Series 2016A-1 Bonds of such maturity and interest rate will be selected by lot by DTC in such manner as DTC may determine. See “— Book-Entry System.”

Book-Entry System

The following information has been furnished by The Depository Trust Company for use in this Official Statement, and neither the City nor any of the Underwriters takes any responsibility for its accuracy or completeness.

The Depository Trust Company (“DTC”), New York, New York, will act as securities depository for the Bonds. The Bonds will be issued as fully registered securities 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 bond certificate will be issued for each maturity of each series of the Bonds in the aggregate principal amount thereof set forth herein, 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 (the “Exchange Act”). 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 Standard & Poor’s rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission (the “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 the 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, defaults, and proposed amendments to bond documents. For example, Beneficial Owners of the 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 Trustee and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If fewer than all of the Bonds of a series and maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Bonds 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 the City 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, distributions, and interest payments 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 Trustee, on the 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 securities 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 Trustee or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Trustee, 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 securities depository with respect to the Bonds at any time by giving reasonable notice to the City or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, certificates for the Bonds are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, certificates for the Bonds will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

Additional Information

For every transfer and exchange of the Bonds, DTC, the Trustee and the Participants may charge the Beneficial Owner a sum sufficient to cover any tax, fee or other charge that may be imposed in relation thereto.

NEITHER THE CITY NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY PARTICIPANTS, OR TO THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE BONDS, OR TO ANY BENEFICIAL OWNER IN RESPECT OF THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT IN RESPECT OF THE PRINCIPAL OR INTEREST ON THE BONDS, OR ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN WITH RESPECT TO THE BONDS, INCLUDING ANY NOTICE OF REDEMPTION THE SELECTION OF

SPECIFIC BONDS FOR REDEMPTION OR ANY OTHER ACTION TAKEN, BY DTC AS REGISTERED OWNER OF THE BONDS.

In reading this Official Statement it should be understood that while the Bonds are in the Book-Entry System, references in other sections of this Official Statement to registered owners should be read to include the person for which a Participant acquires an interest in the Bonds, but (a) all rights of ownership must be exercised through DTC and the Book-Entry System and (b) notices that are to be given to registered owners will be given only to DTC.

General Provisions of the Bonds When Not in Book-Entry System

The Owners of the Bonds have no right to the appointment or retention of a securities depository for the Bonds. If (i) the City determines, or (ii) the City receives notice that the securities depository has received notice from its Participants having interests in at least 50 percent in principal amount of the Bonds of a given series, that the securities depository or its successor is incapable of discharging its responsibilities as a securities depository, or that it is in the best interests of the beneficial owners that they obtain certificated Bonds, the City may (or, in the case of clause (ii) above, the City shall) cause the Trustee to authenticate and deliver Bond certificates for such series. The City shall have no obligation to make any determination described in this paragraph.

If, following a determination or event specified in the preceding paragraph, the City discontinues the maintenance of the Bonds in book-entry form with the then-current securities depository, the City will issue replacement Bonds to the replacement securities depository, if any, or, if no replacement securities depository is selected for the Bonds, directly to the Participants as shown on the records of the former securities depository or, to the extent requested by any Participant, to the beneficial owners of the Bonds shown on the records of such Participant. The City and the Trustee may conclusively rely upon (i) a certificate of the securities depository as to the identity of the participants in the book-entry system and (ii) a certificate of such participants as to the identity of, and the respective principal amounts of Bonds beneficially owned by, the beneficial owners. Replacement Bonds shall be in fully registered form and in Authorized Denominations, be payable as to interest on the Interest Payment Dates of the Bonds by check mailed to each Owner at the address of such Owner as it appears on the Bond Register or at the option of any Owner of not less than \$1,000,000 principal amount of Bonds, by wire transfer to any address in the United States of America on such Interest Payment Date to such Owner as of such Record Date, if such Owner provides the Trustee with written notice of such wire transfer address not later than the Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless and until changed or revoked by subsequent notice). Principal and premium, if any, on the replacement Bonds are payable only upon presentation and surrender of such replacement Bond or Bonds at the designated corporate trust office of the Trustee.

SECURITY FOR THE BONDS

General

The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from the property conveyed by the City to the Trustee pursuant to the granting clauses of the Indenture (the "Trust Estate") and pledged to such payment under the Indenture. Neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of, redemption premium, if any, or interest on the Bonds. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. The Bonds are not secured by a lien on or security interest in the physical assets of the Water System.

As described herein, the Bonds of each series are Second Lien Bonds secured on a parity with each other and, together with (i) the Outstanding Second Lien Bonds and any Second Lien Parity Bonds issued from time to time in the future and (ii) amounts constituting Section 2.08 Obligations and Section 2.09 Obligations under the Indenture, are secured by a pledge of Second Lien Bond Revenues that are derived from the Net Revenues Available for Bonds in the City's Water Fund and deposited from time to time into the Second Lien Bonds Account (but excluding monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), which claim is junior and subordinate to the claim of Senior Lien Bonds. The Bonds are further secured by amounts on deposit from time to time in any Accounts established for the Bonds in the Ordinance and the Indenture. See APPENDIX B — "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Flow of Funds — Second Lien Bonds Account."

"Net Revenues Available for Bonds" means that portion of the Net Revenues remaining in any period, minus any amounts deposited during that period in the Water Rate Stabilization Account as provided in the Ordinance (other than amounts deposited to that Account upon the issuance of the Series 1993 Bonds or any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account.

Pledge of Second Lien Bond Revenues

Under the Ordinance and the Indenture, the Bonds are secured by, and payable from, the Trust Estate, including Second Lien Bond Revenues and amounts on deposit in the Second Lien Bonds Account (but excluding monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), and amounts held by the Trustee under the terms of the Indenture. Pursuant to the Ordinance and the Indenture, such Second Lien Bond Revenues are pledged to the payment of the principal of, premium, if any, and interest on all Second Lien Bonds (including the Bonds) without priority or distinction of one series of Second Lien Bonds over any other series of Second Lien Bonds.

To the extent set forth in the Indenture, the Trust Estate and all moneys and securities held or set aside or to be held or set aside by the Trustee under the Indenture or any Supplemental Indenture have been pledged to secure the payment of the principal and Redemption Price of, and interest on, the Second Lien Bonds and the payment of all amounts constituting Section 2.08 Obligations and Section 2.09 Obligations, subject only to the provisions of the Indenture or any Supplemental Indenture requiring or permitting the payment, setting apart or appropriation of such moneys and securities for or to the purposes and on the terms, conditions, priorities and orders set forth in or provided under the Indenture or such Supplemental Indenture.

The claim of the Second Lien Bonds, Section 2.08 Obligations and Section 2.09 Obligations to Net Revenues Available for Bonds is junior and subordinate to the claim of the Senior Lien Bonds (and all Senior Lien Debt Service Reserve Account Credit Instruments). The City has met certain of its Senior Lien Debt Service Reserve Account Requirements with certain credit instruments, including surety policies. Subject to the provisions of the Ordinance, the City reserves the right to issue unlimited amounts of Senior Lien Bonds.

Flow of Funds

The City maintains the Water Fund as a separate fund of the City to, among other things, carry out the provisions of the ordinances authorizing Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes (collectively, "Water

Revenue Bonds”). Gross Revenues of the Water System are credited as they are deposited to the Water Fund, which is held by a depository bank which is currently not the depository for the City’s General Fund. The Water Fund constitutes a trust fund and has been and is irrevocably pledged to the owners of the Senior Lien Bonds, Second Lien Bonds (but solely with respect to those amounts on deposit in the Second Lien Bonds Account as described in this Official Statement) and other Water Revenue Bonds (but solely with respect to funds on deposit in the respective applicable Account in the Water Fund). Moneys in the Water Fund are expended only as provided in the Ordinance and in the ordinances authorizing Water Revenue Bonds for (a) paying Operation and Maintenance Costs, (b) paying the principal of, redemption premium, if any, and interest on Senior Lien Bonds (or purchasing Senior Lien Bonds), and (c) establishing and maintaining (for the purposes specified in related ordinances) the Senior Lien Bonds Construction Accounts, the Accounts in the Water Fund established by the Ordinance and described below, including, without limitation, the Accounts securing the Bonds and other Second Lien Bonds, and all other reserve funds or accounts which are required to be established and maintained in the ordinances authorizing the issuance of Water Revenue Bonds. Any funds available after these requirements have been satisfied or which are not necessary to satisfy these requirements may be used for any lawful purpose of the Water System.

Net Revenues Available for Bonds are required to be transferred, without any further official action or direction, from the Water Fund to the following accounts in the following order of priority for the uses described below:

1. The *Senior Lien Principal and Interest Account* is used only to pay principal of, redemption premium, if any, and interest, whether upon maturity, redemption or otherwise, on the Outstanding Senior Lien Bonds. At least 10 days before each date that such debt service payments are due with respect to Senior Lien Bonds, sufficient amounts to make such payments are required to be deposited into this Account.

2. The *Senior Lien Debt Service Reserve Account* consists of one or more subaccounts established for each series of Senior Lien Bonds, each of which is required to contain a balance, either in cash on deposit in such subaccount or the deposit of one or more Senior Lien Debt Service Reserve Account Credit Instruments, equal to the Senior Lien Debt Service Reserve Requirement for the related series of Senior Lien Bonds. Funds or Senior Lien Debt Service Reserve Account Credit Instruments on deposit in any subaccount of the Senior Lien Debt Service Reserve Account are used to pay principal of, redemption premium, if any, and interest on the Outstanding Senior Lien Bonds of the series to which the subaccount relates (or when series of Senior Lien Bonds are secured on a parity basis by subaccounts relating to those various series, then funds in each such Subaccount shall be so used on a parity basis to pay principal of, redemption premium, if any, and interest on the Senior Lien Bonds to which those various Subaccounts relate) as the same become due at any time when there are insufficient funds available for such purpose in the Senior Lien Principal and Interest Account (after any available amounts in the Water Rate Stabilization Account have first been applied to that purpose). Within the next 12 months succeeding any deficiency in any subaccount of the Senior Lien Debt Service Reserve Account, the City is required to deposit funds from the Water Fund into such subaccount of the Senior Lien Debt Service Reserve Account sufficient to maintain the applicable balance in such subaccount at least equal to, in the aggregate, the Senior Lien Debt Service Reserve Requirement for such subaccount.

3. The *Senior Lien Rebate Accounts* are used at the direction of the City to make required rebate payments of arbitrage to the United States with respect to any Senior Lien Bonds and, to the extent not needed for such purpose, are then transferred to the Water Fund, provided that earnings on the investment of amounts on deposit in the Senior Lien Rebate Accounts shall

not be Investment Earnings, shall not be considered Gross Revenues and shall be retained in the respective Senior Lien Rebate Accounts except to the extent no longer required for rebate purposes.

4. The *Second Lien Bonds Account* is used to pay the principal of and interest on the Bonds and any other Second Lien Bonds. The City also is required to make deposits in the Second Lien Bonds Account to meet other payment obligations under the Indenture and any ordinance or indenture authorizing Second Lien Bonds, including deposits of monies and/or Qualified Reserve Account Credit Instruments to meet any series reserve account requirement. Moneys deposited in the Second Lien Bonds Account shall be transferred by the Chief Financial Officer on the date so deposited to the Trustee and the trustee or paying agent for each series of Second Lien Bonds in order to satisfy the debt service and other payment obligations under the Indenture and any ordinance or indenture authorizing such Second Lien Bonds. Moneys on deposit in the Second Lien Bonds Account shall be applied without priority as to any particular series of Second Lien Bonds (other than moneys, instruments and securities or any Qualified Reserve Account Credit Instrument in any Debt Service Reserve established within the Second Lien Bonds Account for any particular series of Second Lien Bonds).

5. The *Subordinate Lien Obligations Account* is used to make debt service payments and other required deposits with respect to any Subordinate Lien Obligations. The City is obligated to make required debt service and other deposits to all subaccounts established in the Subordinate Lien Obligations Account on the Business Day immediately preceding each May 1 and November 1 in amounts specified in a certificate of its Chief Financial Officer reflecting the amount required by any ordinance authorizing the issuance of Subordinate Lien Obligations. Moneys on deposit in the Subordinate Lien Obligations Account shall be applied without priority to any subaccounts established in the Subordinate Lien Obligations Account.

6. The *Commercial Paper Account* is used to make debt service payments and other required deposits with respect to any Commercial Paper Notes authorized and issued under any ordinances or related indentures. The moneys on deposit in the Commercial Paper Account are required to be transferred by the Chief Financial Officer on the date so deposited to the appropriate paying agents or trustees for the related Commercial Paper Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related indentures authorizing such Commercial Paper Notes.

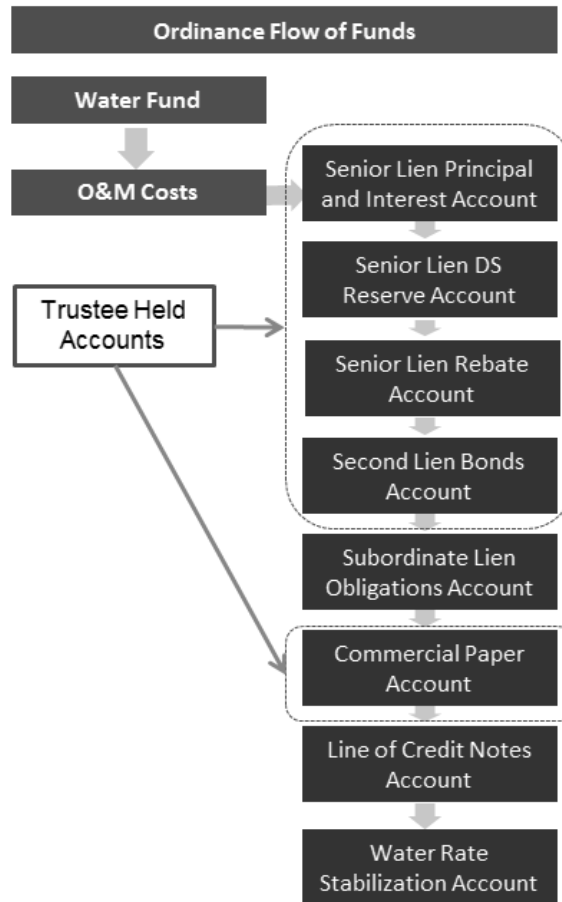
7. The *Line of Credit Notes Account* is used to make debt service payments and other required deposits with respect to any Water System Line of Credit Notes authorized and issued under any ordinances or related Water System Line of Credit Agreements. The moneys on deposit in the Line of Credit Notes Account are required to be transferred by the Chief Financial Officer on the date so deposited to the appropriate owners of or paying agents or trustees for the related Water System Line of Credit Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related Water System Line of Credit Agreements authorizing Water System Line of Credit Notes.

8. The *Water Rate Stabilization Account* is used at the City's discretion, in any year, to pay any expenses of or obligations of the Water System, including, without limitation, Operation and Maintenance Costs, deposits in the Senior Lien Principal and Interest Account, deposits in the Senior Lien Debt Service Reserve Account, deposits when due in the Second Lien Bonds Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account and the Senior Lien Debt Service Reserve Account), deposits when due in the Subordinate Lien Obligations Account (but only if and to the extent no

amounts are required to be deposited in the Senior Lien Principal and Interest Account, the Senior Lien Debt Service Reserve Account or the Second Lien Bonds Account), deposits when due in the Commercial Paper Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account, in the Second Lien Bonds Account or the Subordinate Lien Obligations Account), deposits when due in the Line of Credit Notes Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account, in the Second Lien Bond Accounts, in the Subordinate Lien Obligations Account or in the Commercial Paper Account), any costs of repairs, replacements, renewals, improvements, equipment or extensions to the Water System or any other cost or expense relating to the Water System or the financing or refinancing of the Water System. The Water Rate Stabilization Account must be used to make all required deposits to the Senior Lien Principal and Interest Account and the Senior Lien Debt Service Reserve Account when no other funds are available for that purpose. Any Net Revenues remaining in any period and not required to be deposited in the Senior Lien Principal and Interest Account, the Senior Lien Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account or the Line of Credit Notes Account may be transferred to the Water Rate Stabilization Account at any time upon the direction of the Chief Financial Officer.

See APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Flow of Funds.”

The following chart shows the priority of the flow of funds from the Water Fund into each of the accounts established pursuant to the Ordinance as described in greater detail above and in APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Flow of Funds.”



To provide for debt service on the Bonds, the City, on or before each May 1 and November 1 (each a “Deposit Date”), commencing November 1, 2016, is required to deposit into the 2016A Second Lien Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, from amounts on deposit in the Second Lien Bonds Account (other than monies, instruments or securities or any “Qualified Resource Account Credit Instrument” on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), an amount equal to the aggregate of the following amounts (such amounts are calculated by the Trustee and transferred by the City to the Trustee in accordance with the Ordinance on or before each such Deposit Date):

(a) for deposit into the Principal and Interest Account of the 2016A Second Lien Bonds Subaccount, an amount equal to the Principal and Interest Account Requirement; and

(b) for deposit into the Program Fee Account of the 2016A Second Lien Bonds Subaccount, the amount estimated by the City to be required as of the close of business on the related Deposit Date to pay all Program Fees payable from amounts in the Program Fee Account during the semi-annual period commencing on such related Deposit Date and, in the case of the initial Deposit Date, any fees payable from the Date of Issuance to, but not including, such initial Deposit Date.

“Principal and Interest Account Requirement,” as used in the preceding sentence, means an amount, calculated as of each Deposit Date, equal to the total principal installments and interest due on the Bonds on such Deposit Date. Except as otherwise provided in the Indenture, moneys on deposit in the

Principal and Interest Account will be held by the Trustee for the sole and exclusive benefit of the Bonds and used for the purpose of paying the principal of and interest on the Bonds when due. See APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Application of Bond Proceeds – Deposits into 2016A Second Lien Bond Subaccount and Accounts Therein.”

Debt Service Reserve Accounts

The Ordinance permits the establishment of Debt Service Reserve Accounts securing specific series of Senior Lien Bonds and Second Lien Bonds. No Debt Service Reserve Account has been funded for the Bonds, nor has any been established and funded with respect to any other Second Lien Bonds. Debt Service Reserve Accounts have been funded with respect to three series of Senior Lien Bonds as shown in the table below:

DEBT SERVICE RESERVE ACCOUNTS⁽¹⁾

SENIOR LIEN BONDS

<u>Series</u>	<u>Debt Service Reserve Provider</u>	<u>Amount</u>
1993	Federated Guarantee Insurance Company	\$4,988,000
1997	Federated Guarantee Insurance Company	\$8,080,000
2000	AMBAC	\$7,555,000

(1) Debt Service Reserve Accounts are available only for the respective series of bonds for which they were established.

As a result of the widespread losses in the mortgage market and overall credit market challenges, the debt service reserve providers may experience claims and/or reductions in capital such that their capital resources may no longer be sufficient to meet their ongoing additional capital needs and/or to respond to claims, including claims under the credit instruments issued for the benefit of the respective Debt Service Reserve Accounts. In the event of a rating downgrade or withdrawal with respect to a debt service provider, the City is under no obligation to replace the applicable credit instruments with cash or another credit instrument.

Deficiencies and Excesses

In the event of a deficiency in any Fiscal Year in the Senior Lien Principal and Interest Account, any subaccount of the Senior Lien Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account or the Line of Credit Notes Account, the amount of such deficiency shall be included in the amount to be transferred from the Water Fund and deposited into such account during the next 12-month period or succeeding Fiscal Year. Whenever the balance in any subaccount of the Senior Lien Debt Service Reserve Account exceeds the amount required to be on deposit in that subaccount, such excess may be transferred to the Senior Lien Principal and Interest Account and whenever the balance in any subaccount of any Senior Lien Rebate Account exceeds the amount required to be on deposit in such account, the excess may be transferred to the Water Fund, provided that no such transfers shall be made when any debt service payments on outstanding obligations of the City (including the Bonds) that are payable by their terms from the revenues of the Water System are past due. Any funds that remain in the Water Fund at the end of any Fiscal Year shall be retained in the Water Fund and shall be available for appropriation for any proper purpose of the Water System.

Cash and Investments

Cash, cash equivalents or investments in the Senior Lien Principal and Interest Account, the Subaccounts of the Senior Lien Debt Service Reserve Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account, the Line of Credit Notes Account, the various construction accounts and the Senior Lien Rebate Accounts of the Water Fund are to be held in separate bank accounts and in separately identifiable investments. Other cash, cash equivalents or investments in the Water Fund are or may be (except to the extent prohibited by ordinances authorizing indebtedness of the Water System) deposited in bank accounts and invested on a pooled basis with a variety of other funds of the City, including its General Fund. The City has maintained these pooled accounts and investments so as to meet obligations of the Water Fund in a timely fashion. Notwithstanding the foregoing, cash, cash equivalents or investments in any of the Accounts of the Water Fund are only expended for lawful purposes of the Water Fund. See APPENDIX C – “CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013, REQUIRED SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, STATISTICAL DATA AND INDEPENDENT AUDITORS’ REPORT.”

Investment of Funds

Money held in the funds, accounts and subaccounts established under the Indenture shall be invested and reinvested in Permitted Investments; provided however that moneys in the Principal and Interest Account shall only be invested in Government Obligations scheduled to mature on the earlier of (i) (A) 30 days from the date of investment for amounts representing principal of the Bonds, or (B) six months from the date of investment for amounts representing interest payable on the Bonds, or (ii) the date upon which such moneys will be required to be used in accordance with the Indenture. The interest earned on any investment of money held under the Indenture, any profit realized from such investment and any loss resulting from such investment shall be credited or charged to the fund, account or subaccount for which such investment was made.

Senior Lien Parity Bonds

As long as there are any Outstanding Senior Lien Bonds, no bonds, notes or other obligations of any kind which are payable from Net Revenues Available for Bonds or any Accounts of the Water Fund with a claim senior to that of the Senior Lien Bonds shall be issued. Senior Lien Parity Bonds may be issued for any lawful purpose of the Water System, including without limitation paying the cost of repairs, replacements, renewals, improvements, equipment or extensions to the Water System, funding capitalized interest and reserve funds for Senior Lien Bonds, funding working capital for the Water System, refunding Outstanding Senior Lien Bonds or obligations payable from revenues of the Water System on a basis subordinate to the Senior Lien Bonds, including Second Lien Bonds Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes, or for paying costs of issuance of Senior Lien Bonds. The issuance of Senior Lien Parity Bonds is subject to certain conditions, including compliance with debt service coverage covenants.

Second Lien Parity Bonds

As long as there are any Outstanding Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Water System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations or obligations payable from revenues of the Water System on a basis subordinate to the Second Lien Bonds and Subordinate Lien Obligations. The issuance of Second Lien Parity Bonds is subject to certain conditions, including compliance with debt service

coverage covenants, which are summarized in APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE” — Additional Second Lien Bonds.”

See “OUTSTANDING DEBT AND ANNUAL DEBT SERVICE — Additional Obligations” below for a description of certain additional Second Lien Bonds which have been authorized by the City Council of the City which may be issued subsequent to the issuance of the Bonds.

For additional descriptions of the Accounts in the Water Fund, the application of Net Revenues Available for Bonds, the Rate Covenant and the restrictions on the issuance of additional Water Revenue Bonds, see APPENDIX B — “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE.”

Subordinate Lien Obligations and Other Subordinate Obligations

The Ordinance does not restrict the City’s ability to issue obligations payable on a basis subordinate to the Bonds, including Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes. As of December 31, 2015, there was \$127,875,000 outstanding principal amount of Subordinate Lien Obligations in the form of IEPA loans. There are no amounts currently outstanding under any Water Lines of Credit nor are there any Commercial Paper Notes currently outstanding. See “OUTSTANDING DEBT AND ANNUAL DEBT SERVICE — Commercial Paper Notes and Line of Credit Notes - Generally” and “- “Water Line of Credit.”

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OUTSTANDING DEBT AND ANNUAL DEBT SERVICE

Annual Debt Service

Upon issuance of the Bonds, the outstanding indebtedness of the Water System will consist of \$26,207,196 aggregate principal amount of Senior Lien Bonds and \$2,303,970,000 aggregate principal amount of Second Lien Bonds. The Subordinate Lien Obligations and other subordinate obligations outstanding are described below. Debt service on the Senior Lien Bonds and the Second Lien Bonds is as shown in the following table.

Calendar Year	Outstanding Senior Lien Bonds Principal and Interest	Outstanding Second Lien Bonds Principal and Interest ⁽¹⁾	Series 2000 and 2004 Bonds Principal and Interest	Bonds Principal and Interest	Total Senior and Second Lien Bonds ⁽²⁾ Principal and Interest
2016	\$21,342,603	\$82,757,730	\$9,692,093	\$7,176,290	\$120,968,716
2017	15,590,000	134,992,719	26,933,250	19,587,236	197,103,205
2018	15,595,000	135,000,319	45,686,250	2,916,800	199,198,369
2019	7,550,000	135,005,157	48,761,250	2,916,800	194,233,207
2020	7,555,000	128,207,707	55,853,250	2,916,800	194,532,757
2021		127,966,707	56,105,750	2,916,800	186,989,257
2022		130,185,857	53,789,500	2,916,800	186,892,157
2023		132,940,844	45,142,750	8,351,800	186,435,394
2024		127,459,157	50,868,000	8,355,050	186,682,207
2025		127,586,412	50,733,500	8,354,550	186,674,462
2026		138,586,987	39,254,000	8,354,800	186,195,787
2027		137,861,854	40,012,250	8,353,000	186,227,104
2028		127,433,872	38,000,000	8,350,750	173,784,622
2029		128,290,467	36,350,000	8,352,250	172,992,717
2030		124,823,738	35,700,000	8,351,500	168,875,238
2031		126,156,838		8,352,750	134,509,588
2032		123,240,232			123,240,232
2033		122,794,720			122,794,720
2034		122,336,211			122,336,211
2035		121,851,246			121,851,246
2036		121,350,690			121,350,690
2037		111,259,597			111,259,597
2038		110,608,588			110,608,588
2039		93,341,126			93,341,126
2040		92,450,897			92,450,897
2041		50,204,750			50,204,750
2042		50,203,250			50,203,250
2043		23,803,000			23,803,000
2044		23,803,500			23,803,500
Total	<u>\$67,632,603</u>	<u>\$3,212,504,167</u>	<u>\$632,881,843</u>	<u>\$116,523,976</u>	<u>\$4,029,542,589</u>

Source: City of Chicago, Department of Finance.

⁽¹⁾ Interest for each year includes the full amount of the interest payable on the City's Series 2010B Bonds and Series 2010C Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U.S. Treasury. Excludes Series 2000 Bonds and Series 2004 Bonds.

⁽²⁾ Does not include the Subordinate Lien Obligations. See "—Outstanding Obligations" above.

Subordinate Obligations

IEPA Agreements

The City has also entered into 11 loan agreements with the Illinois Environmental Protection Agency (“IEPA”) as shown in the following table. The City is also currently negotiating one additional IEPA loan in an estimated principal amount of approximately \$44 million. The IEPA Loans constitute Subordinate Lien Obligations and the claim of the IEPA loans for payment from moneys in the Water Fund is subordinated to the claim of the Bonds.

IEPA Water Fund Loans Outstanding

Loan Nos.	Maturity Dates	Interest Rate	Amount of Loan Outstanding⁽¹⁾ (\$000)
L17-1247	11/01/22	2.905%	1,528
L17-2054	11/01/25	2.570	1,536
L17-3770	12/02/31	0.000	7,295
L17-3769	11/01/32	1.250	1,352
L17-4564	12/21/31	1.250	4,917
L17-4686	11/01/32	1.250	1,330
L17-4687	12/27/32	1.250	5,391
L17-4864	03/21/34	2.295	6,149
L17-4865	07/16/34	1.930	37,849
L17-5199	06/17/35	1.995	46,101
L17-5025	10/16/34	1.930	14,428
Total Outstanding Principal Balance ⁽²⁾			127,875

Source: City of Chicago, Department of Water Management.

⁽¹⁾ The outstanding principal amounts are as of December 31, 2015.

⁽²⁾ This total does not include four IEPA loans in the aggregate maximum amount of \$131.2 million with estimated terms of 20 years. Until disbursements of these loans are finalized, the exact principal amounts of the loans, the debt service schedules and the maturity dates are not set.

Commercial Paper Notes and Line of Credit Notes – Generally

Ordinances of the City authorizing the issuance of water revenue bonds also authorize the issuance from time to time of Commercial Paper Notes and Line of Credit Notes for the purposes of financing or refinancing capital improvements to the Water System or providing funds to meet the cash flow needs of the Water System, among others. The maximum aggregate principal amount of all Commercial Paper Notes and Water System Line of Credit Notes outstanding at any one time may not exceed \$200,000,000, without further authorization from the City Council. The City has drawn \$91.5 million on the Line of Credit Note described below under “- Water Line of Credit” to pay, together with other amounts available therefor, the termination amounts owed in connection with the termination of the interest rate swaps described below under “- Swaps,” and such draw will be repaid with proceeds of the Bonds. In addition, there are no Commercial Paper Notes outstanding (nor are there any letters of credit or other instruments in effect and available to support any Commercial Paper Notes). Should either of these obligations be issued in the future, the claim of any Commercial Paper Notes or Water System Line of Credit Notes for payment from moneys in the Water Fund will be subordinate to the claim of the Bonds.

Water Line of Credit

The City entered into a Water Revolving Credit Agreement dated as of October 16, 2015 (the “Line of Credit Agreement”) with Morgan Stanley Bank, N.A. (the “Line of Credit Provider”). Under the Line of Credit Agreement, the Line of Credit Provider extended a line of credit to the City evidenced by a line of credit note (the “Line of Credit Note”) from the City secured by and payable from Water System revenues. The Line of Credit Note is subordinate to the Bonds and all other Second Lien Bonds. The maximum amount which may be drawn under the Line of Credit Note is \$125,000,000 and the Line of Credit Agreement terminates on October 15, 2016 (unless earlier terminated upon the occurrence of certain events thereunder). The Line of Credit Note matures on such termination date. The City has drawn \$91.5 million on the Line of Credit to pay, together with other available amounts, the termination amounts owed in connection with the termination of the interest rate swaps described below under “-Swaps,” and such draw will be repaid with proceeds of the Bonds.

Later in 2016, the City anticipates that it will terminate the current Line of Credit Agreement and replace it with a new line of credit agreement with one or more banks in a principal amount of up to \$200,000,000. Proceeds of such new line of credit agreement are expected to be available to fund capital projects and/or other cash flow needs of the Water System.

Swaps

The City entered into three outstanding interest rate swaps in connection with the Series 2000 Bonds and the Series 2004 Bonds. In connection with the conversion of the Series 2000 Bonds and the Series 2004 Bonds to fixed rates, the City has terminated all three interest rate swap agreements and paid termination amounts with respect thereto totaling \$101,751,379 on May 11, 2016. The City has paid such termination amounts with proceeds of a draw under the Line of Credit Agreement together with other amounts available therefor in the Principal and Interest Accounts under the Supplemental Indentures pursuant to which the Series 2000 Bonds and Series 2004 Bonds were issued.

Additional Obligations

Pursuant to an ordinance adopted by the City Council of the City on January 13, 2016, the City has authorized the issuance of an additional taxable or tax-exempt series of Second Lien Bonds (the “Series 2016B Bonds”) in an aggregate principal amount of up to \$200,000,000 for the purpose of refunding Water Revenue Bonds, paying costs of capital improvements to the Water System and/or for related purposes. The City reserves the right, however, to issue such Series 2016B Bonds in whatever principal amount it deems appropriate or to not issue such Series 2016B Bonds at all.

DEPARTMENT OF WATER MANAGEMENT

The City’s Department of Water Management (the “Department”) is an executive department of the City with responsibility for the operation, maintenance, repair, improvement and extension of the Water System and the City’s sewer system (“Sewer System”). Separate water and sewer funds are maintained to comply with legal requirements.

The employment level of the Department as of December 31, 2014 for Water System employees was 1,504 and Sewer System employees was 593 (this represents the total number of employees on the City’s payroll and excludes leaves of absence and duty disability). The Department includes employees with professional qualifications in the fields of engineering, law, science, construction management, public sector management and financial management, as well as skilled technical personnel. Substantially all of the Department’s employees are covered by collective bargaining agreements that

expire in 2017. The Department has worked to increase use of seasonal employees, lower the hourly rates for apprentice workers, lengthen probationary periods and reduce overtime rates for certain trades. The Department believes these efforts will create greater flexibility in managing the Water System's work force and make it more competitive with private construction companies.

The Department is building efficiencies and cost savings for the City by coordinating the activities of the Water System with the work of other City agencies, the Office of the Mayor, other City departments and private utility providers. For example, the Department and other City agencies participate in regularly scheduled coordination meetings to review critical infrastructure requirements, share in the costs of administration, set program deadlines, work with tax-increment financing capital planning and ensure the Chicago Department of Transportation manages rights of way scheduling and construction. The Department has increased its use of mapping and technology. Some of the key benefits from these programs include but are not limited to:

- The ability to update existing systems like 311 from the field
- The ease of integrating the Geographic Information System with other systems such as the Department's work order management system, metering system, and scheduling software
- The ability to coordinate with field crews and off-site contractors directly
- Having live data presented in a visual format that provides a full operational picture and true status updates
- The Department pushes information out into the field using mobile devices so that the construction and maintenance crews can quickly and easily follow the plan and report back live information and progress of their work

In recent years the City's Water System has received several awards and accolades:

- Platinum Award for Utility Excellence, presented by the Association of Metropolitan Water Agencies, October 2014
- Certificate of Achievement for Excellence in Financial Reporting to the Water Fund, an Enterprise Fund of the City of Chicago presented by The Government Finance Officers Association of the United States and Canada for the last 16 years
- Operator of the Year to Alan Stark, Deputy Commissioner, Bureau of Water Supply, presented by Illinois Potable Water Supply Operators Association, September 2013
- Maintaining State-Mandated Fluoride Levels, presented by Illinois Environmental Protection Agency & Illinois Department of Public Health, 2013
- Best Water System, presented by Purdex, LLC, 2013
- Best Tasting Tap Water, presented by the Natural Resources Defense Council, 2001

WATER SYSTEM

Description of Facilities

Treatment Plants. The Department operates the world's two largest conventional water treatment facilities, the South Water Purification Plant and the James W. Jardine Water Purification Plant, aggregating a continuous service capacity of 2,160 million gallons per day ("MGD"). The South Water Purification Plant has a rated capacity of 720 MGD and serves the City south of 39th Street and the City's south and southwest suburban customers. This plant was placed into service in 1947 with a rated capacity of 480 MGD. In 1966, this plant was expanded by 50 percent which increased its capacity by 240 MGD to its current rated capacity. The James W. Jardine Water Purification Plant is the largest fresh water purification plant in the world with a rated capacity of 1,440 MGD. It has been in operation since 1964 serving the City north of 39th Street, the DuPage Water Commission ("DWC") and the City's other western and northern suburban customers.

These plants are supplied from four water intakes, two of which are water intake cribs located in Lake Michigan two to four miles from shore and two of which are shore intakes (one at each plant).

Pumping Stations; Water Supply Tunnels; Water Distribution. Water is transported throughout the Water System by 64 miles of water supply tunnels. These tunnels are located 40 to 100 feet below the surface of the ground and range in size from six feet to 20 feet in diameter. Water is raised from the tunnels by the pumps in the 12 pumping stations and delivered to customers through a water distribution system of approximately 4,311 miles of water mains (ranging in size from four to 60 inches in diameter), approximately 48,543 fire hydrants and approximately 48,954 valves.

Capital Improvement Program

The City, through the Department, is continually improving and rehabilitating the Water System. In 2012, the Department put in place a \$3.8 billion ten-year capital improvement plan (the "Capital Improvement Program") to provide for future additions to the Water System, replacement of facilities and rehabilitation of existing facilities. The Capital Improvement Program constitutes a series of annual benchmarks that the Department intends to achieve in order to implement the entire Capital Improvement Program. The Capital Improvement Program addresses the renewal and replacement of the Water System's infrastructure, and focuses on four major areas: (i) water main replacement, (ii) meter installation, (iii) electrification of pumping stations, and (iv) rehabilitation and upgrading of the Water System's two purification plants.

Now in the fifth year of the ten-year Capital Improvement Program, the Department has generally remained on track with its goals. Over the ten-year period from 2012 through 2021, the Department intends to replace 880 miles of water mains (320 miles have been completed), install 204,000 meters (72,176 meters have been installed), design the electrification of pumping stations (two designs are complete and one is in progress), electrify three pumping stations (one has been completed and one is in progress) and rehabilitate and upgrade the water system's two purification plants. More specifically, with respect to water main replacement, in 2012 the Department achieved its goal of replacing 70 miles of water mains, more than twice as many water mains as it had been replacing prior to the implementation of the Capital Improvement Program. In 2013, 2014 and 2015, the Department replaced 75 miles, 85 miles and 90 miles of water mains, respectively. The Department plans to replace an additional 90 miles of water mains in each of 2016, 2017 and 2018. With respect to water meter installations, 19,949 water meters were installed in 2014 and more than 23,000 water meters were installed in 2015, far exceeding the Department's goal of installing 15,000 water meters for each of those years, and the Department intends to install 20,000 water meters in each of years 2016, 2017 and 2018. With respect to the

electrification of pumping stations, the Department has completed the electrification of the Springfield pumping station and the Department is in the process of bidding the design plans for the conversion of the Central Park pumping station from steam to electric power. Lastly, with respect to the rehabilitation and upgrading of the Water System's two purification plants, the Department has completed a new roof on the East Filter Building at the Jardine Water Purification Plant and is in the process of replacing all the medium voltage electrical power distribution systems at the South Water Purification Plant.

The ongoing projects of the Department will ensure continued economic and reliable delivery of water. The Department may revise the list of specific improvements and revise cost allocations among improvements, as well as make substitutions to meet current needs and to provide for the efficient operation of the Water System.

For the purpose of determining the sources of funds for the expenditures necessary to implement the Capital Improvement Program and allocating those sources between revenues projected to be received and indebtedness, the Department addresses funding and expenditure in five-year increments. The information presented in the following table reflects the Department's proposed expenditures for capital improvements under the Capital Improvement Program.

<u>Year</u>	<u>Estimated Amount of Capital Improvements (in Thousands)</u>
2015	\$363,693
2016	376,860
2017	453,147
2018	435,799
2019	<u>451,992</u>
Total	<u>\$2,081,491</u>

Source: City of Chicago, Department of Water Management.

Actual expenditures are subject to annual approval of the City of Chicago Office of Budget and Management (the "Budget Office"). Under the Capital Improvement Program, it is expected that approximately 25 percent of the projects will be funded from net revenues of the Water System with the remainder funded through IEPA loans and the sale of Water Revenue Bonds.

Quality of Water Supplied

The quality of the water drawn by the City from Lake Michigan meets currently applicable federal and State standards in all material respects. The water operations of the Department are subject to the requirements of the federal Safe Drinking Water Act of 1974, 42 U.S.C. §300f et seq., as amended in 1986 and 1996 by Congress (the "Safe Drinking Water Act"). The Safe Drinking Water Act sets the regulatory agenda of the United States Environmental Protection Agency ("USEPA"), to include, among other things, the development of drinking water standards for more than 90 contaminants. In addition, the Department is subject to compliance of Title 35, Subtitle F, Chapter 1, Part 611 of Illinois Administrative Code as the IEPA has primary authority over drinking water utilities within Illinois.

The Department is in compliance with all physical, chemical, radiological, and bacteriological standards established by the regulations currently in effect under the Safe Drinking Water Act, and is studying the potential impacts of proposed rules as well as those still under development by the USEPA. As the USEPA promulgates additional regulations, there is a potential that the Department will be required to modify operations and/or construct facilities beyond those contemplated by the Capital

Improvement Program. The Department believes, however, that planned capital projects should address all current regulatory requirements.

Water treatment at each plant includes the addition of chlorine to disinfect, fluoride to help fight tooth decay, coagulants to settle out impurities in the water and blended phosphate to coat pipes and service lines.

The Department has microbiology and chemistry laboratories at each plant that conducts compliance sampling for the treatment process and distribution system. Additionally, the Department maintains water quality laboratories at each plant that analyze the water throughout the treatment process continuously.

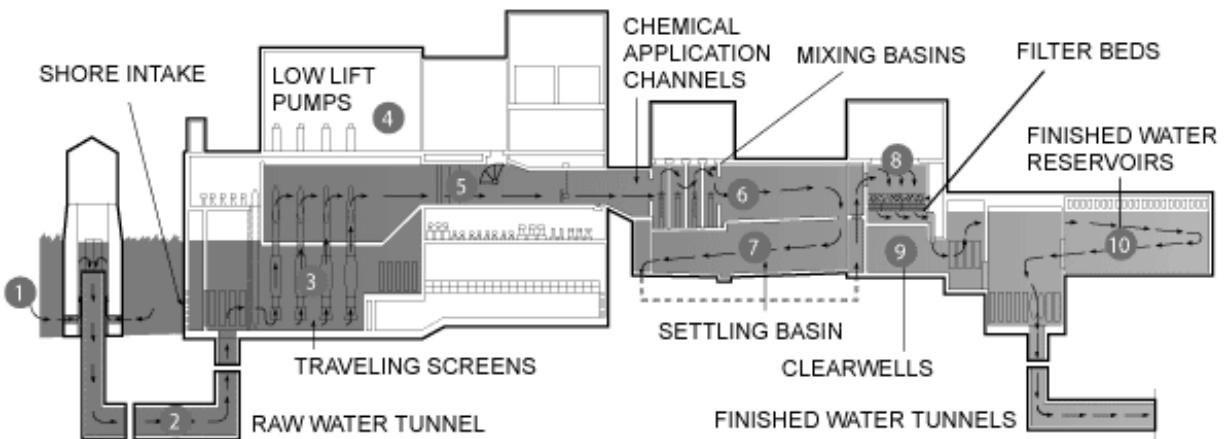
The IEPA implemented a Source Water Assessment Program (“SWAP”) to assist with watershed protection of public drinking water supplies. The SWAP inventoried potential sources of contamination and determined the susceptibility of the source water to contamination. The IEPA has completed the SWAP for the City’s water supply. At certain times of the year, however, the potential for contamination exists due to wet-weather flows. In addition, the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intakes and thus compromising the source water quality. Additionally, the shore intakes may be susceptible to contaminants from storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake. The Department continually monitors water quality throughout the treatment process to ensure compliance with all standards established by the regulations currently in effect under the Safe Drinking Water Act.

Lead and Copper Rule Compliance. Pursuant to the Safe Drinking Water Act, the Department is required to conduct Lead and Copper Rule (LCR) monitoring every three years. Compliance monitoring in 2015 demonstrated that the Department continues to be in compliance with the LCR; its only LCR violation was more than 20 years ago in 1993. Further, to reduce the leaching of metals, including lead, the Department adds a blended phosphate to the water before it enters the distribution system, which promotes the formation of a protective coating inside pipes and plumbing.

Monitoring. The City continues monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporidium has not been detected in these samples, but Giardia was detected in 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

Currently, the City has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources.

A diagram of the City's water treatment process is set forth below:



WATER SYSTEM SERVICE AREA

Service Area

The Water System supplied water to a service area of approximately 806 square miles as of December 31, 2015. The City accounted for approximately 228 square miles of this service area and the suburban customers supplied in 2015 accounted for approximately 578 square miles.

Included in the current service area are seven suburbs (Elk Grove Village, Hanover Park, Hoffman Estates, Mount Prospect, Rolling Meadows, Schaumburg and Streamwood) which formed the Northwest Suburban Municipal Joint Action Water Agency ("JAWA") which, in turn, has built facilities necessary to obtain water from the City. These facilities were acquired by the City from JAWA over time through a credit for a portion of charges for water purchased by JAWA under a contract between JAWA and the City.

In May 1992, 24 suburbs acting through DWC became customers of the Water System, expanding the Water System's service area by approximately 24 percent. The Department supplies water to DWC with existing facilities and has not incurred any substantial capital costs in providing such service. DWC is responsible for the construction of pumping, water retention and related facilities at delivery points just within the City's territorial limits. These facilities were acquired by the City from DWC over time through a credit for a portion of charges for water purchased by DWC under a contract between DWC and the City.

Population Served

The following table shows the population for the City and the suburban customers of the Water System as shown in each decennial census since 1960:

Population of Service Area⁽¹⁾

Year	Chicago	Suburban Customers	Total	Number of Suburbs Served
1960	3,550,404	833,424	4,383,828	58
1970	3,369,357	1,127,446	4,496,803	72
1980	3,005,072	1,152,614	4,157,686	75
1990 ⁽²⁾	2,783,726	1,589,557	4,373,283	95
2000	2,896,016	2,410,021	5,306,037	125
2010	2,695,598	2,600,496	5,296,094	125

⁽¹⁾ Source of population figures: U.S. Department of Commerce, Census Bureau.

⁽²⁾ Does not include 23 suburban municipalities served under the DWC contract which became effective as of May 1, 1992. As of May 1, 1992, these municipalities had a population of 610,478.

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The following table lists the suburban customers currently served, directly or indirectly, by the Water System.

Suburban Customers Served by the Water System

Addison	Elmhurst	Leyden Township	Phoenix
Alsip	Elmwood Park	Lincolnwood	Posen
Bedford Park	Evergreen Park	Lisle	River Forest
Bellwood	Flossmoor	Lombard	River Grove
Bensenville	Forest Park	Loyola Medical Center	Riverdale
Berkley	Forest View	Lyons	Riverside
Berwyn	Franklin Park	Markham	Robbins
Bloomington	Garden Homes	Matteson	Rolling Meadows
Blue Island	Sanitary District	Maywood	Roselle
Bolingbrook	Glen Ellyn	McCook	Rosemont
Bridgeview	Glendale Heights	Melrose Park	Schaumburg
Broadview	Glenview	Merrionette Park	Schiller Park
Brookfield	Golf	Midlothian	South Holland
Burnham	Hanover Park	Mokena	South Stickney
Burr Ridge	Harvey	Morton Grove	Sanitary District
Calumet City	Harwood Heights	Mount Prospect	Stickney
Calumet Park	Hazel Crest	Naperville	Stone Park
Carol Stream	Hickory Hills	New Lenox	Streamwood
Central Stickney	Hillside	Niles	Summit
Sanitary District	Hinsdale	Norridge	Thornton
Chicago Ridge	Hodgkins	North Riverside	Tinley Park
Cicero	Hoffman Estates	Northlake	Villa Park
Clarendon Hills	Homer Township	Oak Brook	Westchester
Country Club Hills	Hometown	Oak Forest	Westmont
Countryside	Homewood	Oak Lawn	Wheaton
Crestwood	IAWC ⁽¹⁾	Oak Park	Willow Springs
Darien	Indian Head Park	Oakbrook Terrace	Willowbrook
Des Plaines	Itasca	Olympia Fields	Winfield
Dixmoor	Justice	Orland Park	Wood Dale
Dolton	La Grange	Palos Heights	Woodridge
Downers Grove	La Grange Highland	Palos Hills	Worth
East Hazel Crest	Sanitary District	Palos Park	
Elk Grove Village	La Grange Park	Park Ridge	

Source: City of Chicago, Department of Water Management.

⁽¹⁾ IAWC (Illinois American Water Company, formerly Citizens' Utilities Company of Illinois) serves 11 unincorporated areas in Cook and DuPage Counties, Illinois.

Water Accounts

As of December 31, 2015, the Water System supplied 494,029 accounts. Of these, 228,191 were non-metered and 265,838 were metered. The number of metered accounts has recently exceeded the number of non-metered accounts as a result of the Meter Installation Program for all single-family and two-family dwellings within the City. Water meters are required on all new construction of single-family and two-family dwellings within the City and on any new services to existing buildings in the City. All suburban customers (primarily municipal corporations) are metered.

The following table reflects the total accounts of the Water System, non-metered and metered, for the past 10 years:

Water System Accounts

Year Ended December 31	Non-metered	Metered	Total
2006	322,193	171,861	494,054
2007	320,579	175,256	495,835
2008	319,205	178,457	497,662
2009	318,088	179,649	497,737
2010	314,002	183,618	497,620
2011	304,519	192,304	496,823
2012	290,863	205,097	495,960
2013	273,426	220,759	494,185
2014	250,304	241,304	491,608
2015	228,191	265,838	494,029

Source: City of Chicago, Department of Water Management.

Suburban Customers, State of Illinois as Customer

The Department's service to its suburban customers is based on various contracts and on an Illinois statute which establishes and authorizes the operation of the Metropolitan Water Reclamation District of Greater Chicago (the "Water Reclamation District"), formerly known as the Metropolitan Sanitary District of Greater Chicago. Among other things, the statute requires the City to supply water at the City limits to any municipal corporation within the Water Reclamation District at no greater price or charge than that applicable to similar large users in the City. The Water Reclamation District currently serves municipalities in the Chicago area and its function is to construct, maintain and operate sewage treatment plants, necessary sewers and drainage outlets.

Currently, the Department's outstanding contracts with its suburban customers generally have terms of 10 years with three 10-year extensions for a total of 40 years and include certain water supply and planning provisions, such as requiring the suburban customers to maintain storage capacity for a two-day supply of water and establishing the maximum rate at which suburban customers may withdraw water from the Department's mains. The Department has continued to supply water at the current water rate to those suburban customers that have not yet renewed their contracts. While the City may be precluded from shutting off water service to suburban customers for failure to pay amounts owed, the City has available legal remedies to enforce such contracts.

The respective contracts which the City has executed with JAWA and DWC are substantially similar, but are different from the standard contracts described above. The respective contracts with JAWA and DWC are for 40-year terms, expiring in 2022 and 2023, respectively. JAWA and DWC have made substantial capital investments to connect with the Water System. The Village of Oak Lawn (which serves several other south and southwestern suburban customers) entered a contract with the Department in 2013 with a 40-year term, expiring at the end of calendar year 2042. In 2014, DWC was the Department's largest suburban customer, Oak Lawn was the second largest suburban customer and JAWA was the third largest suburban customer, with sales of approximately \$90,238,000, \$35,011,000 and \$34,920,000, respectively.

The City considers it unlikely that any material number of current suburban customers will not continue to purchase water from the Water System under these contracts for the following reasons: (i) large capital investments would be required for those customers to otherwise obtain water from Lake Michigan; (ii) the Water System provides a reliable supply of water; (iii) demand for available groundwater exceeds its potential yield; and (iv) the quality of Lake Michigan water is superior to local groundwater. In 2015, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 47 percent (unaudited) of net water sales of the Water System.

Listed below are the Department's 10 largest suburban customers in 2014. Several of these customers supply one or more other suburban customers. In 2014, the Department's 10 largest customers, supplying a total of 58 suburban customers, accounted for approximately 34 percent of net water sales.

**10 Largest Suburban Customers of
the Water System in 2014**

Customer	Amount of Sales (in Thousands)
DuPage Water Commission.....	\$ 90,238
Oak Lawn, Illinois	35,011
Northwest Suburban Municipal Joint Action Water Agency	34,920
Bedford Park, Illinois.....	25,692
Harvey, Illinois	11,603
Melrose Park, Illinois.....	10,001
Cicero, Illinois	8,483
Des Plaines, Illinois	8,453
Alsip, Illinois	6,505
McCook, Illinois	6,335
Total.....	<u>\$237,241</u>

Source: City of Chicago, Department of Water Management.

One or more suburban communities that now receive water service from the City have from time to time considered, and may in the future consider, potential alternative sources for their water supply. The City has not received any official notification that any of the communities it now serves intends to discontinue receiving water services from the City. Unless and until the City is notified that one or more communities it now serves intends or plans to switch to an alternative water supplier, any attempt to assess or evaluate the impact on the Water System of suburban communities switching to another source would be purely speculative.

See "LITIGATION" for a discussion of certain litigation by the City against the City of Harvey, Illinois ("Harvey") to recover moneys owed by Harvey to the City under its water supply contract.

The State of Illinois (the "State") is obligated to make payments to the City in instances where it is a user of the Water System, except in situations and to the extent that the applicable State property qualifies for an exemption. The revenue from the State as user constitutes less than one percent of the Water System's annual operating revenues. No operating revenues from any users of the Water System (other than the State) flow through the State; all such revenues are paid directly to the City.

Water Pumpage

During 2015, the Water System pumped approximately 263 billion gallons of water. Because the Water System supplies water to non-metered customers and certain exempt users, many of which are also not metered, it is impossible for the Department to account exactly for its total system pumpage. However, the Department estimates that, in 2015, total water losses were approximately 12.8% of total pumpage. Further as reported to the Illinois Department of Natural Resources in the Department's 2015 LMO-2 report, the incremental cost of the total non-revenue water, which includes losses, as a percent of total operating revenue was less than 1%. Of the water pumped in 2015, approximately 37 percent was supplied to suburban customers.

Water Pumpage to City and Suburban Customers (in Millions of Gallons)

Year	City	JAWA	DWC	Other Suburban Customers	Total
2005	213,480	13,582	34,238	76,383	337,683
2006	196,800	12,534	30,757	70,436	310,527
2007	199,492	12,003	31,855	72,566	315,916
2008	192,203	11,532	29,741	68,434	301,910
2009	187,094	11,510	29,414	67,103	295,121
2010	176,773	11,119	28,815	65,661	282,368
2011	176,718	10,938	28,194	65,655	281,505
2012	182,050	11,364	29,800	66,331	289,545
2013	173,877	10,618	28,113	63,433	276,039
2014	173,804	10,503	27,219	63,026	274,552
2015	164,187	10,296	26,776	61,347	262,606

Source: City of Chicago, Department of Water Management.

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As the table below indicates, from 2006 through 2015 the Water System's maximum daily pumpage ranged from 41 percent to 64 percent of the Water System's capacity.

Water System Pumpage and Capacity

Year	Total Annual Pumpage (MGD)	Average Daily Pumpage (MGD)	Maximum Daily Pumpage (MGD)	System's Rated Pumpage Capacity (MGD)	Maximum Daily Pumpage as % of Capacity
2006	310,527	851	1,373	2,160	64
2007	315,916	866	1,200	2,160	56
2008	301,912	827	1,136	2,160	53
2009	295,121	809	1,112	2,160	51
2010	282,368	773	1,012	2,160	47
2011	281,506	771	1,317	2,160	61
2012	289,545	793	1,248	2,160	58
2013	276,039	756	1,095	2,160	51
2014	274,552	752	1,023	2,160	47
2015	262,606	719	890	2,160	41

Source: City of Chicago, Department of Water Management.

Lake Michigan Allocations

City Allocations. Diversion of water from Lake Michigan began in 1900 when the flow of the Chicago River was reversed. In 1922, the State of Wisconsin filed the first lawsuit relating to the diversion of Lake Michigan water at Chicago. The United States Supreme Court referred the case to a Special Master and a decree was issued in 1930 which allowed the State to divert 6,500 cubic feet per second ("cfs") until 1938 and 1,500 cfs thereafter. Water pumpage for potable water supply use was not chargeable to the amounts allowed for diversion under the decree. In 1957, the State of Wisconsin again filed suit in the United States Supreme Court. The suit led to the appointment of a Special Master and the resultant 1967 decree, based on the Special Master's findings, restricted the State from diverting more than 3,200 cfs (2,068 MGD). This limitation on diversion includes water pumpage for potable water supply.

In a related matter, on July 26, 1996, the State, the seven other Great Lakes states, the United States and the Water Reclamation District entered into a Memorandum of Understanding ("MOU") with respect to water diversion from Lake Michigan. The MOU was designed to address a dispute among the states as to an alleged violation of the decrees of the United States Supreme Court (discussed above) limiting the total amount of water diverted by the State and its political subdivisions. The other Great Lakes states contended that the water being diverted had exceeded the Supreme Court's limitation of 3,200 cfs.

To address the other Great Lakes states' concern that the State was exceeding its diversion limit, the State agreed to (1) maintain its diversions at the Supreme Court's limit and in fact, to use less than the 3,200 cfs for the next 20 years, (2) reduce leakage at the Chicago River Controlling Works, (3) reduce diversion for navigation make-up, and (4) complete allocation proceedings regarding all domestic and industrial Illinois Lake Michigan water users. The MOU also provided that the State shall use its power to ensure that municipalities using water from Lake Michigan, including the City, comply with allocation limits, unaccounted-for-flow requirements, and conservation requirements required by State law, regulation, court order, consent decree or settlement agreement.

The City was not a signatory to the MOU, but in 1996, in an effort to assist the State in meeting the diversion requirements set out in the MOU, voluntarily agreed to expand a Water Conservation Plan initially implemented by the Department in 1989. The City's 1996 Water Conservation Plan (the "1996 Plan") expanded the repair program to eliminate or prevent delays in leak repairs, expanded its public education program and required the metering of various large non-metered water users. Since the MOU, the City has seen a decrease in its actual water usage.

Illinois Allocations. The Illinois Department of Natural Resources ("IDNR"), previously a part of the Illinois Department of Transportation ("IDOT"), is responsible for the apportionment of Lake Michigan water within the State pursuant to the Level of Lake Michigan Act (615 ILCS 50/1 *et seq.*). On July 28, 1999, IDNR entered its allocation Order LMO 99-3 with respect to its allocations of Lake Michigan water. The allocations under Order LMO 99-3 are as follows:

**Lake Michigan Allocation under Order LMO 99-3
to City and Suburbs served by City (1)**

Year	City	Suburbs	Total
2000	713.0	334.3	1,047
2010	737.1	362.8	1,100
2020	750.1	391.3	1,141

⁽¹⁾ Source: IDNR. Allocations are rounded to tenths; actual allocations are specific to .001 MGD.

Order LMO 99-3 modified Order LMO 89-2 entered by IDOT in 1989 and decreased the allocations of Lake Michigan water to the City. For example, under Order 89-2 (as revised in 1995) the Year 2000 allocations to the City and the suburbs that the City serves would have been 833.3 MGD for the City and 344.0 MGD for the suburbs. But, under Order LMO 99-3 the same allocations for the year 2000 were decreased to 713 MGD for the City and 334.3 MGD for the suburbs, as reflected in the table above.

The IDNR reduced the City's allocation because: (1) the State had agreed in connection with the MOU to reduce State-wide usage; and (2) the City's actual water usage had decreased from over 800 MGD in the late 1980s to approximately 680 MGD in 1998. The City's decreased usage is, in part, a result of its successful undertaking to conserve water pursuant to its 1996 Plan.

The City fully expects that its allocation will be sufficient to meet its water needs for the next 20 years. In addition, IDNR rules allow the City to petition for an increase in its allocation in the event the City's expected water needs exceed its allocation.

Also, in 1999, the City amended the 1996 Plan to further conserve water and reduce unaccounted-for flow. This amended plan expands the 1996 Plan in four primary respects: (1) the continuation of water main replacements at an annual rate of approximately 45 miles; (2) increased leak detection and repair activities; (3) the installation of meters in certain un-metered municipal and commercial buildings; and (4) the adoption of an accelerated suburban meter repair program which provides for accuracy testing and repair if necessary of all active meters every two years. Order LMO 99-3 reflects the acceptance by the IDNR of the City's amended plan.

FINANCIAL OPERATIONS

Rates, Fees and Users

The Water Fund receives no share of any state or local property or income taxes. Revenues from the sale of water provide for the operation, maintenance and debt service of the Water System. The City obtains Water System operating revenues only from the users of the Water System. The operating revenues from users of the Water System do not flow through the State, any State agency or any other political subdivision, but are paid directly to the City. The State is, however, like any other user, obligated to make payments to the City in instances where it is a user of the Water System (with the exception of situations and to the extent that the applicable property qualifies for an exemption). See “WATER SYSTEM SERVICE AREA – Suburban Customers, State of Illinois as Customer.”

Water System rates are set by City Council. No regulation by any administrative agency applies to Water System rates. Water System rates for metered accounts is based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula primarily involving the front width of the building and the number of stories therein plus a charge for an outside hose connection and extra charges for large water-using devices such as water-cooled air conditioners. See “ – Water System Rates” below.

Certain publicly owned properties and not-for-profit organizations enjoy exemptions from the payment of water rates in connection with metered accounts. These exemptions range from 100% (e.g., for many publicly owned entities such as properties owned by the City and certain not-for-profit organizations that have net assets or fund balances at the end of the year preceding the water rate charge of less than \$1 million) to 25% (e.g., for not-for-profit organizations having net assets or fund balances at the end of the year preceding the water rate charge of greater than or equal to \$10 million but less than \$250 million).

Whenever projected Gross Revenues will not be sufficient to comply with the Rate Covenant in the Ordinance and the Indenture, the City is required to prepare a rate study for the Water System identifying the rate charges necessary to comply with the Rate Covenant and the Director of the Office of Budget and Management (the “Budget Director”) and the Chief Financial Officer are required to recommend appropriate action to the City Council to comply with the Rate Covenant, which may include rate increases and/or expenditure reductions. See “INTRODUCTION – Rate Covenant.”

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Water System Rates

Historical Water System rates, as authorized by the City Council, are summarized in the table below.

Historical Water Rate Increases					
	Gross Metered Water Rate		Net Metered Water Rate		
Date	1,000 Cubic		1,000 Cubic		Percentage
Effective	Feet	1,000 Gallons	Feet	1,000 Gallons	Increase Over Prior Rate
Jan. 1, 2006	\$ 9.95	\$ 1.326	\$ 9.70	\$ 1.291	0%
Jan. 1, 2007	9.95	1.326	9.70	1.291	0
Jan. 1, 2008	11.44	1.529	11.44	1.529	15
Jan. 1, 2009	13.15	1.758	13.15	1.758	15
Jan. 1, 2010	15.00	2.005	15.00	2.005	14
Jan. 1, 2011	15.00	2.005	15.00	2.005	0
Jan. 1, 2012	18.75	2.506	18.75	2.506	25
Jan. 1, 2013	21.56	2.882	21.56	2.882	15
Jan. 1, 2014	24.80	3.315	24.80	3.315	15
Jan. 1, 2015	28.52	3.810	28.52	3.810	15

Source: City of Chicago, Department of Water Management

Under currently applicable ordinances of the City, beginning June 1, 2016, and every year thereafter, Water System rates are scheduled to be adjusted, if applicable, by applying to the previous year's rates the rate of inflation, calculated based on the Consumer Price Index - Urban Wage Earners and Clerical Workers (Chicago All Items) published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January 1. Any such annual increase, however, will be capped at 105% of the previous year's rate (There is not expected, however, to be any increase in Water System rates for the year beginning on June 1, 2016, due to the inflation rate for the previous year). The City Council may take action at any time to alter the then-current schedule or water rates.

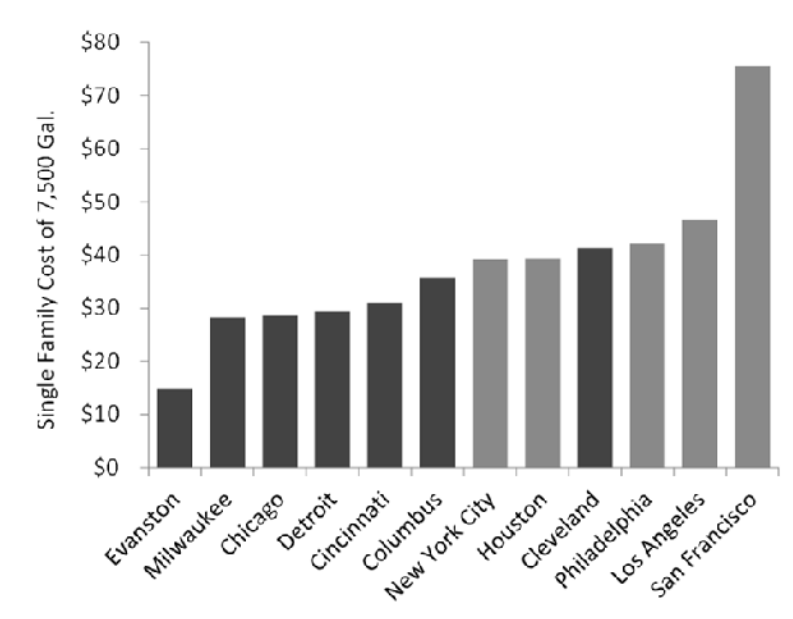
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Water Rate Comparisons

The Water System's rates compare favorably to those of water systems of other major cities in the United States. The following chart compares the Water System's single family cost per 7,500 gallons of water to the rates charged for the same level of water usage by water systems serving other selected U.S. cities. The chart compares the Water System's rates to the water rates of the other cities as of February 2016.

Water Rate Comparison (as of February 2016)

Chicago and Other Major U.S. Cities Single Family Cost per 7,500 Gallons of Water*



*Great Lakes region cities in solid black

Source: City of Chicago, Department of Water Management.

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Distribution of Revenues by Type of Account

The following table identifies the approximate percentage distribution of revenues by type of account for the years 2006 through 2015:

City Service Area

Year	Residential			Industrial and Commercial	Suburban Service Area
	Metered	Non-Metered	Total		
2006	13%	18%	31%	22%	47%
2007	14	19	33	20	47
2008	19	21	40	13	47
2009	19	21	40	13	47
2010	20	21	41	12	47
2011	19	18	37	15	48
2012	18	22	40	14	46
2013	20	19	39	14	47
2014	19	18	37	16	47
2015	21	17	38	15	47

Source: City of Chicago, Department of Water Management.

Annual Budget Review and Implementation of Annual Budget

The Department's annual budget is developed and implemented as part of the City's annual budget and is based upon an analysis of its historical Operation and Maintenance Costs. The results of this analysis are used to project the Department's revenue requirements for the next succeeding fiscal year. If the projected Gross Revenues are not sufficient to satisfy the Water System rate covenants, taking into account net transfers from the Water Rate Stabilization Account, proposed rate increases are included in the Department's proposed annual budget. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCES AND THE INDENTURES – Rate Covenant." In addition to or in lieu of rate increases, the City could take other steps to meet the Water System rate covenants. See "Historical and Projected Financial Operations" under this caption.

Once the Department has finalized its proposed annual budget, the Commissioner recommends it to the Budget Director. The Budget Director considers the Department's proposed budget along with the proposed annual budgets recommended and submitted by all of the other departments and agencies whose budgets become part of the City's proposed annual budget. The Budget Director reviews each recommended budget with the respective commissioner. After the Budget Director approves the proposed budget, it must be approved by the Mayor, the City Council's Committee on Budget and Governmental Operations and the City Council. The City's proposed budget may be changed by the Committee on Budget and Governmental Operations or by the City Council. When the City Council has approved the proposed annual budget as the annual appropriation ordinance, it is forwarded to the Mayor for approval.

Should the Mayor veto the approved annual appropriation ordinance, the City Council, with a two-thirds vote, may override the veto. The City Council may also refuse to approve the Mayor's proposed annual budget. In such a case, the appropriate process for passage of the City budget may have to be judicially determined. By law, the City's budget must be approved by December 31 of the year preceding the budget year. The City's 2016 budget was approved by the City Council on October 28, 2015.

During each year, the City Comptroller allocates certain funds to meet debt service requirements and central services and General Fund reimbursements. The Budget Director uses an allotment system to manage each department's expenditures against its respective annual appropriation. The Budget Director requires departments to submit quarterly allotment budgets which the Budget Director, in turn, monitors. Should any department's expenditures exceed its receipt of revenues, the Budget Director, through the quarterly budget allotment procedure, has the authority to institute economy measures against such department to ensure that its expenditures do not exceed or outpace its revenue collection.

Historical and Projected Financial Operations

Following are the Water Fund's Statements of Operations as summarized from the audited financial statements of the Water Fund for the years ended December 31, 2010 through December 31, 2014 together with projected financial operations and projected debt service coverage calculations for the years ending December 31, 2015 through December 31, 2018, reflecting the reoffering of the Series 2000 Bonds and Series 2004 Bonds, the issuance of the Bonds and the application of the proceeds therefrom.

Operating revenues are expected to increase by approximately 12% in 2015 based on already approved rate increases and offset by slight decreases in consumption. The Department projects that consumption will decrease by two percent in 2015. Operating revenues are expected to remain flat for 2016 through 2018. Operating expenses in 2015 to 2018 are reflective of expected annual 4% increases in all expense categories other than pension contributions, which are based on the Water Fund's percentage allocation of the most recent actuarial valuation available. The most recent actuarial valuation assumed P.A. 98-641 (as defined in "FINANCIAL OPERATIONS - Pension and Other Post-Employment Benefit Costs") was upheld. For 2015 and 2016, General Fund reimbursements, which consist primarily of indirect costs payable to the General Fund, are based on the budgeted amount. For 2017 and 2018, General Fund reimbursements are projected to increase at 4% annually.

In addition to rate increases, the City could achieve compliance with its covenant to maintain Net Revenues Available for Bonds (see APPENDIX B - "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCES AND THE INDENTURES - Rate Covenant") in some other manner. Such other manner could include any combination of rate increases, decreases in operating expenses, changes in its Capital Improvement Program or in the timing and amounts of future borrowings or changes in net transfer to (from) the Water Rate Stabilization Account. See "Annual Budget Review and Implementation of Annual Budget" under this caption.

The City has prepared the projections discussed herein and summarized in the tables below. The City believes that the underlying assumptions provide a reasonable basis for the projections, and that the projections present, to the best of the City's knowledge and belief, the City's expected course of action. However, some of the assumptions upon which the projections are based may not materialize and unanticipated events and circumstances may occur. The accompanying prospective financial information was not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but, in the view of the City's management, was prepared on a reasonable basis, reflects the best currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future financial performance of the Water System. Accordingly, these projections are not fact and should not be viewed as being necessarily indicative of future results. ***Readers of this Official Statement are cautioned not to place undue reliance on the projected operations of the Water System which are contained herein.***

Neither the City's independent auditors, nor any other independent accountants, have compiled, examined, or performed any procedures with respect to the prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability. Such parties assume no responsibility for, and disclaim any association with, the prospective financial information.

Water sales and other operating revenues comprise the Water Fund's \$715.2 million operating revenues in 2014. Water sales and other operating revenues for 2014 were \$693.1 million and \$22.1 million, respectively. The increase in 2014 operating revenues of \$78.1 million (12.3%) from 2013 was primarily due to a 15% increase in water rates effective January 1, 2014, offset by the conversion of approximately 20,000 non-metered accounts to metered accounts.

Fiscal year 2014 nonoperating revenues of \$1.0 million are comprised mainly of net interest income, grants, and net revenue that relates to construction done by the Department for other City departments and private companies totaling \$0.5 million.

Operating expenses before depreciation and amortization for the year ended December 31, 2014 increased by \$23.5 million (8.6%) from the year ended December 31, 2013 due primarily to increases in transmission and distribution of about \$14.2 million (48.1%) and central services of about \$10.5 million (9.7%). This was offset by a decrease in purification of about \$2.3 million resulting from a decrease in chemical costs.

See “– Pension and Other Post-Employment Benefit Costs” below and APPENDIX E – “RETIREMENT FUNDS” for a discussion of future employee benefit contributions that will be treated as operating expenses paid from the Water Fund.

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**City of Chicago
Water Fund
Historical and Projected Financial Operations
(Dollars in millions)**

	Actual					Projected			
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operating Revenues									
Water Sales ^{1,2}	445.5	441.8	562.6	620.5	693.1	783.2	783.2	783.2	783.2
Other operating revenues	12.9	12.4	13.7	16.6	22.1	15.0	15.0	15.0	15.0
Total Operating Revenues	458.4	454.2	576.3	637.1	715.2	798.2	798.2	798.2	798.2
Operating Expenses³									
Source of supply	0.1	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.4
Power and pumping	42.9	38.2	41.7	43.2	43.1	44.8	46.6	48.5	50.4
Purification	49.7	66.5	56.1	60.9	58.5	60.8	63.3	65.8	68.4
Transmission and distribution	38.7	39.0	36.5	29.5	43.7	45.4	47.3	49.2	51.1
Provision for doubtful accounts	15.9	14.0	15.7	25.4	22.5	23.4	24.3	25.3	26.3
Customer accounting and collection	10.3	10.6	10.0	11.6	11.9	12.4	12.9	13.4	13.9
Administrative and general	18.5	17.1	21.9	21.2	22.0	22.9	23.8	24.7	25.7
Central services and General Fund Reimbursement	103.0	96.6	107.4	108.7	119.3	114.6	133.7	139.1	144.6
Pension contribution	-	-	-	-	-	20.2	22.7	30.3	37.1
Total Operating Expenses	279.1	282.2	289.5	300.6	321.3	344.9	374.9	396.6	418.0
Interest Income (other than from construction accounts)	(0.3)	2.0	0.3	0.4	(0.5)	1.0	1.0	1.0	1.0
Net Revenues	\$179.0	\$174.0	\$287.1	\$336.9	\$393.4	\$454.3	\$424.3	\$402.6	\$381.2
Transfers from (to) Water Rate Stabilization Account	(10.0)	0.0	(13.5)	(13.5)	0.0	(2.8)	(1.0)	0.0	0.0
Net Revenue Available for Bonds	\$169.0	\$174.0	\$273.6	\$323.4	\$393.4	\$451.5	\$423.3	\$402.6	\$381.2
Water Rate Stabilization Account Year-End Balance	\$61.4	\$61.4	\$74.9	\$88.4	\$88.4	\$91.2	\$92.2	\$92.2	\$92.2

Source: Actual - City of Chicago, Water Fund Basic Financial Statements; Projected - City of Chicago, Department of Water Management, Department of Finance and Office of Budget and Management

- (1) For 2015, projected annual Water Sales increases are based on the increase rate of 15% offset by a 2% reduction due to water conservation efforts. The net annual projected increase is 13%. There are no projected rate increases for the years 2016 through 2018.
- (2) Projected annual Water Sales are based on earned revenue as reflected in the CAFR. Prior year collections have averaged 97.6% of gross billings.
- (3) Projected operating expenses in 2015, 2016, 2017 and 2018 are reflective of expected annual 4% increases in all expense categories other than pension contributions, which are based on the Water Fund's percentage allocation of the most recent actuarial valuation. The most recent actuarial valuation assumed P.A. 98-641 (as defined in "FINANCIAL OPERATIONS – Pension and Other Post-Employment Benefit Costs") was upheld. 2015 and 2016 General Fund reimbursements, which primarily consist of indirect costs payable to the General Fund are based on the budgeted amount, for 2017 and 2018 they are projected at 4% increases. Pension contributions and indirect costs allocable to the Water Fund were included in the central services and General Fund reimbursements until 2014.

**City of Chicago
Water Fund
Historical and Projected Financial Operations
(Dollars in millions)**

	Actual					Projected			
<u>Debt Service Requirement¹</u>	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net Revenue Available for Bonds	\$169.0	\$174.0	\$273.6	\$323.4	\$393.4	\$451.5	\$423.3	\$402.6	\$381.2
Senior Lien Debt Service	29.1	14.1	13.9	21.5	21.5	21.5	21.5	15.6	15.6
Senior Lien Debt Service Coverage	5.8x	12.3x	19.7x	15.0x	18.3x	21.0x	19.7x	25.8x	24.4x
Second Lien Bonds Debt Service ²	82.1	106.6	116.5	125.6	126.0	150.0	147.1	161.9	180.7
Subordinate Lien debt service requirement	0.4	0.4	1.2	1.3	1.9	5.4	11.3	11.3	11.3
Second Lien, Series 2016A	-	-	-	-	-	-	7.2	19.6	2.9
Second Lien, Additional New Money Bonds (projected) ³	-	-	-	-	-	-	-	6.5	6.5
Combined Senior, Second and Subordinate Lien Debt Service	<u>\$111.6</u>	<u>\$121.1</u>	<u>\$131.6</u>	<u>\$148.4</u>	<u>\$149.4</u>	<u>\$177.0</u>	<u>\$187.1</u>	<u>\$214.9</u>	<u>\$217.0</u>
Combined Senior and Second Lien Debt Service Coverage	1.5x	1.4x	2.1x	2.2x	2.6x	2.6x	2.4x	2.0x	1.9x

(1) 2010-2014 Senior, Second Lien and Subordinate (IEPA Loans) debt service amounts are sourced from FY 2014 Water Fund Basic Financial Statements.

(2) Reflects gross debt service. Includes interest on the Series 2000 Bonds calculated at 3.8694%, and interest on the Series 2004 Bonds calculated at 3.8694% on \$166.7 million and 3.8669% on \$177.8 million for actual years, 2015 and 2016, through the date of issuance of the Bonds. Includes proposed fixed rate interest costs for the Series 2000 and Series 2004 Bonds following the proposed date of reoffering.

(3) Expected new money tax-exempt bonds to be issued in 2016 structured to generate \$100 million in project funds with level debt service through 2046.

Collections and Delinquencies

The Department of Finance bills large industrial and suburban accounts each month, with a few exceptions that are billed quarterly. Metered commercial and residential accounts are billed once every two months. Non-metered accounts are billed once every six months.

Payments on both metered and non-metered accounts are due when bills are issued. A late payment penalty assessed at a monthly rate of one and one-fourth percent is imposed on all water charges in excess of \$10.00 for which payment in full is not received within twenty-four calendar days from the date the bill was sent as shown by the records of the Department of Finance.

Delinquency notices, which were generated at an average rate of 25,453 per week in 2015, are sent to delinquent accounts when their balances are thirty days past due. A second delinquency notice is sent after sixty days. A third delinquency notice is sent after ninety days. After an account reaches 210 days past due with a balance of greater than \$300, the account is referred to an outside law firm for collections. Inactive accounts that are 90 days past due with balances of \$200 or greater are referred to an outside law firm for collections. The outside law firm may pursue collections by obtaining a judgment at the City of Chicago Department of Administrative Hearings, placing a lien on the property or by additional legal collection actions.

Additionally, the Department of Finance, through its collection system refers any account for service shut-off to the Department if the account is in arrears and in accordance with its policy. Due to the concern for public safety, the Department of Finance makes every effort to collect delinquent accounts prior to terminating water service. Further, by ordinance, when a property is transferred, a deed cannot be recorded with the Cook County Recorder of Deeds unless the Department of Finance certifies that all water service charges due and owing with respect to such property have been paid in full.

As described below under “ - Unified Billing of Chicago Residents for Water, Sewer and Refuse Collection Services,” fees for water services will now appear on a unified utility bill for City-provided water, sewer and refuse collection services commencing between April and September 2016. See “INVESTMENT CONSIDERATIONS – Other Considerations – Combined Water, Sewer and Refuse Collection Fee Billing” for a discussion of certain risks related to the inclusion of the refuse collection services fee, together with water and sewer charges, on a unified City utility bill.

See also “LITIGATION” for a discussion of certain litigation by the City against Harvey to recover moneys owed by Harvey to the City under its water supply contract.

The amounts of annual net water sales and cash collected from current and prior years' billings are included in the following table:

Year	Net Water Sales⁽¹⁾	Cash Collected During Year for Current and Prior Years' Sales	Percentage of Sales Collected
2005	340,213,613	336,326,686	98.9
2006	320,470,772	320,979,596	100.2
2007	332,364,712	330,913,045	99.6
2008	355,135,872	350,809,042	98.8
2009	397,214,059	385,590,932	97.1
2010	446,723,999	427,570,333	95.7
2011	436,781,646	433,070,239	99.2
2012	572,402,645	542,570,130	94.8
2013	604,283,431	594,826,380	98.4
2014	692,966,242	666,968,092	96.2

Source: City of Chicago, Department of Water Management.

⁽¹⁾ Actual amounts billed during calendar year differs from Water Fund Basic Financial Statements which include charges accrued for calendar year regardless of year in which billed.

Unified Billing of Chicago Residents for Water, Sewer and Refuse Collection Services

Currently, for Chicago residents, the water usage charge is billed together with the sewer service charge relating to the delivery of sewer services on customer billings. The rates for sewer service charges are established by the Municipal Code of Chicago (the "Municipal Code"). Currently, the sewer service charge for a resident is set at 100% of the water usage charge for such resident. Any delinquencies for sewer service charges are carried on the books of the City's Sewer Revenue Fund. Billings and collections for both water usage charges and sewer service charges are handled by the Water Division of the Department of Finance. See "FINANCIAL OPERATIONS — Collections and Delinquencies."

Beginning in January 2016, Chicago residents who receive refuse collection services provided by the City's Department of Streets and Sanitation ("DSS") will begin paying a refuse collection service fee of \$9.50 per month per dwelling unit (subject to certain exceptions). The fee will appear on a unified utility bill for City-provided water, sewer and refuse collection services, which will be sent to residents on their current billing cycle (every six months for non-metered accounts and every other month for metered accounts). The first unified bills will be sent between April and September 2016 to residents. Refuse collection services are provided by DSS to approximately 613,000 Chicago households (which primarily represents residents in buildings with four or less units). Pursuant to the Municipal Code, payments on the unified bills will be allocated pro rata among the charges shown on the bills, with oldest unpaid amounts being paid first. See "INVESTMENT CONSIDERATIONS — Other Considerations — Combined Water, Sewer and Refuse Collection Fee Billing" for a discussion of certain risks related to the inclusion of the refuse collection services fee, together with the water and sewer charges, on a unified City utility bill.

Pension and Other Post-Employment Benefit Costs

The Department treats the pension costs paid out of the Water Fund as Operation and Maintenance Costs for purposes of determining Net Revenues Available for Bonds and for the City's compliance with its covenants (including the Rate Covenant) under the Ordinance and the Indenture. See

“INTRODUCTION – Rate Covenant,” and APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCES AND THE INDENTURES – Rate Covenant.” The Department expects to continue its current practice of treating pension costs as Operation and Maintenance Costs.

The City participates in four defined-benefit retirement funds (collectively, the “Retirement Funds”). Water System employees participate in one of two of these retirement Funds: the Municipal Employees’ Annuity and Benefit Fund of Chicago (“MEABF”), and the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago (“LABF”). The City’s Retirement Funds have been actuarially determined to be significantly underfunded. The Water System, through the Water Fund, pays for the estimated pension cost applicable to the covered payroll of Water System employees. As discussed above, those expenditures are recorded as Operation and Maintenance Costs of the Water Fund. See APPENDIX C – “CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013, REQUIRED SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, STATISTICAL DATA AND INDEPENDENT AUDITORS’ REPORT – Notes to Basic Financial Statements – 6. Pension Plans.”

The City’s contributions to MEABF and LABF, of which the Water Fund contributes a portion, are determined pursuant to the formulas set forth in the Illinois Pension Code (the “Pension Code”). Pursuant to Public Act 098-641 (“P.A. 98-641”), the City’s contributions to MEABF and LABF were scheduled to increase beginning in 2016; however, the Illinois Supreme Court determined P.A. 98-641 to be unconstitutional. As a result of such determination by the Illinois Supreme Court, the provisions of the Pension Code governing the City’s contributions to MEABF and LABF have reverted to the provisions in effect prior to the enactment of P.A. 98-641. The respective actuaries for MEABF and LABF project that such Retirement Funds will not have sufficient assets on hand to make payments to beneficiaries in 2025 and 2029, respectively. The City makes no prediction as to the impact of the insolvency of MEABF or LABF on the amount of the City’s contributions to these Retirement Funds. However, should the City be required to contribute the amounts necessary to fund directly such payments to beneficiaries on a pay-as-you-go basis upon the insolvency of such Retirement Funds, the amount of the City’s contributions to MEABF and LABF would substantially increase. For additional information, see APPENDIX D– “RETIREMENT FUNDS–Payment for Pension Benefits”.

As described in APPENDIX D – “RETIREMENT FUNDS – Other Post-Employment Benefits,” the City and the Retirement Funds currently share the cost of post-employment healthcare benefits available for certain retired City employees (the “Health Plan”). The City has announced plans to phase-out such benefits by 2017 for certain retirees. Prior to June 30, 2013, the City contributed to the Health Plan pursuant to a settlement agreement between the City and the Retirement Funds. After expiration of the settlement, certain of the affected participants filed a lawsuit to reactivate the litigation covered by the settlement, which lawsuit remains pending. In 2014, the Department paid \$4,158,052 from the Water Fund for Health Plan costs allocable to retirees who are former Water System employees. For 2015, the Department budgeted \$3,048,231 for this payment. For further information on the status of the Health Plan after June 30, 2013, including certain State and federal litigation relating to the Health Plan and the settlement agreement, see APPENDIX D – “RETIREMENT FUNDS – Other Post-Employment Benefits.”

INVESTMENT CONSIDERATIONS

The following discussion of investment considerations should be reviewed by prospective investors prior to purchasing the Bonds. Any one or more of the investment considerations discussed herein could lead to a decrease in the market value and the liquidity of the Bonds or, ultimately, a payment default on the Bonds. There can be no assurance that other factors not discussed herein will not become material in the future.

Effect of Potential Future Ratings Actions

In May 2015, both Moody's and S&P lowered their ratings on the Outstanding Senior Lien Bonds and Outstanding Second Lien Bonds, while Fitch placed its ratings on the Outstanding Second Lien Bonds on negative watch. In November 2015, Fitch affirmed its ratings on the Outstanding Senior Lien Bonds and Outstanding Second Lien Bonds and removed such ratings from negative watch. On April 16, 2016, S&P upgraded its rating of the Outstanding Senior Lien Bonds and Outstanding Second Lien Bonds. From time to time, outstanding credits of the City are subject to rating actions by the rating agencies. The City cannot predict if or when, or on what basis, the rating agencies may take further action with respect to such credit ratings, and no assurances can be provided that the City's credit ratings on its outstanding Senior Lien Bonds or Second Lien Bonds will not be subject to downgrades. Rating downgrades with respect to any of the City's outstanding credits, including its general obligation bonds, impact the City's borrowing costs and could affect the City's ability to identify funding sources for its financing needs.

The City does not anticipate that any potential credit downgrades would impact collection or availability of Net Revenues Available for Bonds in any material respect. However, such events could have an adverse impact on the Water System because the City funds ongoing capital improvement projects to the Water System, in part, through the sale of indebtedness of the Water System. Downgrades could increase the cost, or decrease the availability, or both, of such borrowing. If this occurred, additional pressure may be placed on water rates or capital funding. Additionally, ratings downgrades may have an adverse effect on the price at which the Bonds may be resold in the future.

Unfunded Pensions

The Retirement Funds have significant unfunded liabilities and low funding ratios. Under current law, the City's required contributions to the City's police and fire retirement funds will significantly increase beginning in 2016. Such increases will be funded primarily through increases in the City's property tax levy. However, the property taxes levied for such increased contributions assume the enactment of Senate Bill 777 ("SB 777"), which would reduce the contribution currently required by the Pension Code. If SB 777 or similar legislation is not enacted and the City must contribute to its police and fire retirement funds in the higher amounts required by the current provisions of the Pension Code, the City expects that it would fund such additional contributions through an increase in revenues, a reduction in expenditures or some combination thereof.

In addition, the actuaries for MEABF and LABF project that such Retirement Funds will not have sufficient assets on hand to make payments to beneficiaries beginning in 2025 and 2029, respectively, based on the provisions of the Pension Code currently in effect. The City makes no prediction as to the impact of the insolvency of MEABF or LABF on the amount of the City's contributions to these Retirement Funds. However, should the City be required to contribute the amounts necessary to fund directly such payments to beneficiaries on a pay-as-you-go basis upon the insolvency of such Retirement Funds, the amount of the City's contributions to MEABF and LABF would substantially increase.

See APPENDIX D – “RETIREMENT FUNDS” for additional information.

Environmental Regulations

As described herein under “WATER SYSTEM – Quality of Water Supplied,” the City is subject to state and federal environmental laws and regulations applicable to the Water System. These laws and regulations are subject to change, and the City may be required to expend substantial funds to meet the requirements of such changing laws and regulations in the future. Failure to comply with these laws and regulations may result in the imposition of administrative, civil and criminal penalties, or the imposition of an injunction requiring the City to take or refrain from taking certain actions. While the Department has budgeted for future capital and operating expenditures to comply with these laws and regulations, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise operating costs.

Security of the Water System

Damage to the Water System resulting from vandalism, sabotage, or terrorist activities may adversely affect the operations and finances of the Water System. There can be no assurance that the City’s security, emergency preparedness and response plans will be adequate to prevent or mitigate such damage, or that the costs of maintaining such security measures will not be greater than currently anticipated.

The Department relies on information technology systems with respect to customer service and billing and accounting. In addition, the Department relies on these systems to track utility assets and to manage maintenance and construction projects, materials and supplies. A loss of these systems, or major problems with the operation of these systems, could have a material adverse effect on the financial condition and results of operations of the Department. Information technology systems may be vulnerable to damage or interruption from the following types of cyber security attacks or other events:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;
- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to information technology systems; and
- fires, floods, severe weather events and other natural disasters.

Although the Department does not believe that its systems are at a materially greater risk of cyber security attacks than other similar utilities, its information technology systems may be vulnerable to damage or interruption from the types of cyber security attacks or other events listed above or other similar actions, and such incidents or other events may go undetected for a period of time.

Water Conservation

Decreased customer water consumption as a result of water conservation efforts would adversely affect demand for water services and may reduce revenues and earnings. There may be declines in water usage per customer as a result of an increase in conservation awareness, and the structural impact of an increased use of more efficient plumbing fixtures and appliances. Difficulty obtaining future rate increases to offset decreased customer water consumption to cover capital investments and expenses, may adversely affect the business, financial condition, and results of operations of the Department.

Adverse Change in Laws

There are a variety of State and federal laws, regulations and constitutional provisions that apply to the City's ability to raise taxes, fund its pension obligations or to reorganize its debts. There is no assurance that there will not be any change in, interpretation of, or addition to such applicable laws, regulations and provisions. Any such change, interpretation or addition may have a material adverse effect, either directly or indirectly, on the City or the taxing authority of the City, which could materially adversely affect the City's operations or financial condition.

Bankruptcy

Municipalities cannot file for protection under the U.S. Bankruptcy Code unless specifically authorized to be a debtor by state law. Illinois law does not currently provide such authorization for municipalities; however, legislation was recently introduced into the General Assembly of the State which, if enacted, would permit Illinois municipalities to file for bankruptcy under the U.S. Bankruptcy Code. No assurance can be provided as to whether any such legislation that would permit municipalities such as the City to file for bankruptcy will be enacted into law. In the event of a change in State law allowing the City to file for bankruptcy protection under the U.S. Bankruptcy Code, that does not mean that the City would file for protection under the U.S. Bankruptcy Code.

In the event that a change in State law were to allow the City to file for protection under the U.S. Bankruptcy Code and the City were to file for such protection, Second Lien Bond Revenues may continue to be subject to the pledge under the Indenture and the City may continue to deposit Gross Revenues into the Water Fund so that Gross Revenues would continue to be disbursed to the Accounts within the Water Fund in accordance with the Ordinance. While the Water Fund is an enterprise fund separate from the general operating fund of the City, there is some likelihood that Gross Revenues would not be considered trust funds for the period of time from their receipt by the City until they are deposited in the Principal and Interest Account or the Second Lien Bonds Account. Prior to the deposit of Gross Revenues in the Second Lien Bonds Account, a bankruptcy trustee may be able to intercept Gross Revenues and materially impair the City's ability to pay debt service on the Bonds when due.

Uncertain Enforcement Remedies

The remedies available to bondholders upon nonpayment of principal of or interest on the Bonds are uncertain and in many respects dependent upon discretionary judicial actions. See APPENDIX B—"SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE—Remedies."

Force Majeure Events

There are certain unanticipated events beyond the City's control that could have a material adverse impact on the Department's and City's operations and financial conditions if they were to occur.

These events include fire, flood, earthquake, epidemic, adverse health conditions or other unavoidable casualties or acts of God, freight embargo, labor strikes or work stoppages, civil commotion, new acts of war or escalation of existing war conditions, sabotage, terrorism or enemy action, pollution, unknown subsurface or concealed conditions affecting the environment, and any similar causes. No assurance can be provided that such events will not occur, and, if any such events were to occur, no prediction can be provided as to the actual impact or severity of the impact on the of Water Management's and City's operations and financial condition or of the impact on the Net Revenues Available for Bonds.

Other Considerations

Debt Covenants. The City is obligated to comply with the rate covenant. Failure to comply with such covenant, if not cured or waived, could result in the City being required to repay or finance the related borrowings before their due date, limit future borrowings, cause cross default issues, and increase borrowing costs. If forced to repay or refinance (on less favorable terms) these borrowings, the Department's business, financial condition, and results of operations could be adversely affected by increased costs and rates.

Water Rates. While there is currently no State statute regulating water rates, future State statutes or court decisions could limit or otherwise adversely affect the City's ability to set water rates.

Combined Water, Sewer and Refuse Collection Fee Billing. As described herein under "FINANCIAL OPERATIONS - Unified Billing of Chicago Residents for Water, Sewer and Refuse Collection Services," beginning between April and September 2016, a fee for City-provided refuse collection services will appear on a unified utility bill for City-provided water, sewer and refuse collection services. As described herein under "FINANCIAL OPERATIONS—Collections and Delinquencies," sewer and water charges currently appear on a combined bill to users, and any partial payments are allocated *pro rata* between the water and sewer charges. Under the Municipal Code, partial bill payments made pursuant to the unified bill would be allocated on a *pro rata* basis among the water, sewer and refuse collection charges and fees, with the oldest unpaid amounts being paid first. No assurance can be given, however, that this will always be the method of allocation of partial payments. It is possible that partial payments may be allocated in the future in a non-*pro rata* manner, in which event water charges could receive a lower priority than refuse collection fees and/or sewer charges in allocating partial payments. No assurance can be given as to the impact of the unified bill on the collection by the City of water charges.

Payment in Lieu of Taxes. The Ordinance does not authorize transfers from the Water Fund to the City's General Fund in order to make any payment in lieu of taxes ("PILOT"). Accordingly, if the City were to consider implementing such a transfer from the Water Fund to make PILOT payments, the City expects that all outstanding Bonds and other obligations payable from the Water System revenues would, as a precondition to such a transfer, be paid or defeased in whole.

Forward-Looking Statements

This Official Statement contains certain statements relating to future results that are forward-looking statements. When used in this Official Statement, the words "estimate," "intend," "expect" and similar expressions identify forward-looking statements. Any forward-looking statement is subject to uncertainty and risks that could cause actual results to differ, possibly materially, from those contemplated in such forward-looking statements. Inevitably, some assumptions used to develop forward-looking statements will not be realized or unanticipated events and circumstances may occur. Therefore, bondholders and potential investors should be aware that there are likely to be differences between forward-looking statements and actual results; those differences could be material. The City

does not undertake any obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

LITIGATION

There are no pending legal proceedings to which the City is a party or to which any of its property is subject which may materially affect the City's ability to pay the principal of and interest on the Bonds when they become due.

The City, like other large municipalities, is involved in various litigation relating principally to claims arising from contracts, personal injury, property damage, tax claims, police conduct and other matters. However, there is neither litigation pending nor, to the best of the City's knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of the Bonds, or except as disclosed herein, materially adversely affecting the collection, pledge or application of any moneys or security provided for the payment of the Bonds.

City of Harvey. In December 2012, the City filed suit in the Circuit Court of Cook County against Harvey, one of the suburban customers receiving water service from the City, to recover monies owed by Harvey to the City under its water supply contract. Harvey had been delinquent in fully paying for water service since November 2008, although some partial payments have been received by the City since then. The City's complaint further named five other suburbs which purchase water from Harvey and sought appointment of a trustee to collect funds paid by those five suburbs. On August 29, 2014, the court entered an order restraining Harvey from depositing its water revenues from its municipal customers in a fund other than a water fund and from using its water revenues on anything other than water-related expenses. On January 20, 2015, the court entered a Consent Decree requiring, inter alia, that Harvey pay its current water charges by their due date and pay monthly installments of past due principal. On February 5, 2016, the City sent Harvey a notice of default giving Harvey 45 days to cure its failure to pay the January 2016 invoices and February 1 past due settlement payment on time. Harvey has since paid the January 2016 invoices, and has cured the remaining default within the cure period. Harvey is otherwise up-to-date on payments.

Tatjana Blotkevic et al. v. City of Chicago. Three individual residents of the City filed a putative class action complaint against the City in the Circuit Court of Cook County on February 18, 2016, alleging that the City disrupts residential lead service lines when the Department performs work in the street including water and sewer main repairs and replacement. Plaintiffs also allege that the installation and repair of residential water meters and service line repairs create a similar disruption. The plaintiffs allege that such projects cause a disruption to the polyphosphate coating on the residential lead service lines resulting in an increase in lead levels in the drinking water supplied to the plaintiffs' homes. The plaintiffs also allege that partial lead service line replacement by the City can cause the release of lead into water through galvanic corrosion. The plaintiffs further allege that the City has failed to warn the putative class members of these alleged risks of lead exposure. The plaintiffs seek certification of a class consisting of City residents who have resided in an area where the City replaced water mains since January 1, 2008, as well as residents for whom the City installed water meters during the same period. In their complaint, the plaintiffs request that the court establish a trust fund to pay for medical monitoring of class members and that the City pay compensatory damages including an amount sufficient to fully replace existing lead service pipes with copper pipes or other appropriate lines and repair accompanying damage. The City filed a motion to dismiss the complaint on May 12, 2016. The City intends to defend this case vigorously.

RATINGS

The Bonds have received ratings of “A” (stable outlook) from Standard and Poor’s, a Division of The McGraw-Hill Companies, Inc. (“S&P”), “AA” (negative outlook) from Fitch Ratings (“Fitch”) and “AA” (stable outlook) from Kroll Bond Rating Agency, Inc. (“Kroll”). A rating reflects only the view of the rating agency giving such rating. An explanation of the significance of such rating may be obtained from such organization. There is no assurance that the rating will apply for any given period of time or that the rating will not be revised downward or withdrawn entirely if, in the judgment of the rating agency, circumstances so warrant. Any such downward revision or withdrawal may have an adverse effect on the price at which the Bonds may be resold.

CERTAIN LEGAL MATTERS

Issuance of the Bonds is subject to delivery of the approving legal opinions of Pugh, Jones & Johnson, P.C., Chicago, Illinois, and Cotillas and Associates, Chicago, Illinois, Co-Bond Counsel, and to certain other conditions. The proposed form of their opinions is included herein as APPENDIX E — “FORM OF OPINIONS TO BE DELIVERED BY CO-BOND COUNSEL.” Certain legal matters will be passed upon for the City by (i) its Corporation Counsel, (ii) in connection with the preparation of this Official Statement, Greenberg Traurig, LLP, Chicago, Illinois, and Golden, Holley James LLP, Chicago, Illinois, Co-Disclosure Counsel to the City, and (iii) in connection with certain pension matters described in this Official Statement, Chapman and Cutler LLP, Chicago, Illinois, Special Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Kutak Rock LLP, Chicago, Illinois, Underwriters’ Counsel.

INDEPENDENT AUDITORS

The audited financial statements of the Water Fund as of and for the years ended December 31, 2014 and 2013 included as APPENDIX C to this Official Statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein.

FINANCIAL ADVISORS AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR

The City has retained Sycamore Advisors, LLC, Chicago, Illinois and Public Alternative Advisors, LLC, Brooklyn, New York, to act as financial advisors (the “Financial Advisors”) in connection with the issuance and sale of the Bonds. The Financial Advisors are not obligated to undertake, and have not undertaken to make, an independent verification of, or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. Each Financial Advisor is a “*municipal advisor*” as defined in Rule 15Ba1-1-(d)(3)(vi) of the Commission.

The City has retained Martin J. Luby LLC as its independent registered municipal advisor (the “IRMA”) pursuant to Rule 15Ba1-1-(d)(3)(vi) of the Commission to evaluate financing proposals and recommendations in connection with the City’s various bond issuance programs and other financing ideas being considered by the City; however, the IRMA will not advise on the investment of City funds held by the Office of the City Treasurer. The IRMA’s compensation is not dependent on the issuance of the Bonds.

UNDERWRITING

PNC Capital Markets LLC (“PNCCM”) as representative on behalf of itself and the other underwriters listed on the cover of this Official Statement (the “Underwriters”), has agreed, subject to certain conditions, to purchase from the City (i) the Series 2016A-1 Bonds at a price of \$69,561,535.34 (representing the aggregate principal amount of the Series 2016A-1 Bonds plus a premium of \$10,233,082.45 less an underwriting discount of \$266,547.11), and (ii) the Series 2016A-2 Bonds at a price of \$22,090,943.92 (representing the aggregate principal amount of the Series 2016A-2 Bonds plus a premium of \$23,701.50, less an underwriting discount of \$52,757.58).

The Bonds may be offered and sold by the Underwriters to certain dealers at prices lower than the initial public offering prices set forth on the inside cover page of this Official Statement and the public offering prices may be changed from time to time.

The obligation of the Underwriters to accept delivery of the Bonds is subject to various conditions set forth in a Bond Purchase Agreement dated May 12, 2016, between the Underwriters and the City. The Underwriters are obligated to purchase all of the Bonds if any of the Bonds are purchased.

The Underwriters and their respective affiliates are full service financial institutions engage in various activities, which may include sales and trading, commercial investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the City and to persons and entities with relationships with the City, for which they received or will receive customary fees and expenses.

PNCCM may offer to sell to its affiliate, PNC Investments, LLC (“PNC Investments”) securities in PNCCM’s inventory for resale to PNC Investments’ customer, including securities such as those to be offered by the City. PNC Investments may share with PNCCM a portion of the fee or commission paid to PNC Investments if any Bonds are sold to customers of PNCCM.

Academy Securities, Inc., an Underwriter of the Bonds, has entered into Distribution Agreements with UBS Financial Services Inc., Wedbush Securities Inc., TD Ameritrade Inc., BNY Mellon Capital Markets LLC, Ladenburg Thalmann & Co. Inc., R. Seelaus & Co., Maxim Group LLC, World First Financial Services, Inc., Commonwealth Equity Services Inc., Winslow Evans and Crocker Inc., Securevest Financial Group, Moors & Cabot, Inc., Crews and Associates, Inc., Celadon Financial Group, Douglas & Co. Municipals, Inc., Detwiler Fenton & Co., Ross, Sinclair & Associates, Inc., CG Capital Markets, E K Riley Investments LLC, SWBC Investment Services LLC, W.H. Mell Associates, Inc., Intercoastal Capital Markets, Inc., UnionBanc Investment Services LLC, Chapin Davis Inc., Janney Montgomery Scott LLC, NBC Securities, Inc., CFG Capital Markets LLC, Brean Capital LLC, PHX Financial, Inc., Herbert J. Sims & Co., Inc., WFG Investments, Inc., Gates Capital Corporation, and FMS Bonds, Inc. for the retail distribution of certain municipal securities at the original issue prices. Pursuant to these Distribution Agreements (if applicable to this transaction), Academy Securities may share a portion of its underwriting compensation with these firms.

Morgan Stanley, parent company of Morgan Stanley & Co. LLC, an Underwriter of the Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Bonds.

In the ordinary course of their various business activity, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and activity trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, security and/or investments of the City (directly, as collateral security other obligations or otherwise and/or persons and entities with relationships with the City.

TAX MATTERS

Series 2016A-1 Bonds

Federal Tax Exemption

Federal tax law contains a number of requirements and restrictions which apply to the Series 2016A-1 Bonds, including investment restrictions, periodic payments of arbitrage profits to the United States, requirements regarding the proper use of bond proceeds and the facilities financed therewith, and certain other matters. The City has covenanted to comply with all requirements that must be satisfied in order for the interest on the Series 2016A-1 Bonds to be excluded from gross income for federal income tax purposes. Failure to comply with certain of such covenants could cause interest on the Series 2016A-1 Bonds to become includible in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2016A-1 Bonds.

Subject to the City's compliance with the above-referenced covenants, under present law, in the opinion of Co-Bond Counsel, interest on the Series 2016A-1 Bonds is excluded from the gross income of the owners thereof for federal income tax purposes, and is not included as an item of tax preference in computing the federal alternative minimum tax for individuals and corporations. Interest on the Series 2016A-1 Bonds is taken into account, however, in computing an adjustment used in determining the federal alternative minimum tax for certain corporations.

In rendering their opinions, Co-Bond Counsel will rely, without independent investigation, on the certificates of Swap Financial Group LLC and the validity of the estimates contained therein as to the economic changes resulting from certain amendments to each of the two interest rate swaps related to the Series 2004 Bonds. In rendering their opinions, Co-Bond Counsel will also rely upon certifications of the City and certain other parties with respect to certain material facts solely within their knowledge relating to the facilities financed or refinanced and to be financed or refinanced with the Series 2016A-1 Bonds, the application of the proceeds of the Series 2016A-1 Bonds and certain other matters pertinent to the tax exemption of the Series 2016A-1 Bonds. Co-Bond Counsel's opinions represent each firm's legal judgment based upon its review of the law and the facts that it deems relevant to render such opinion and is not a guarantee of a result. Co-Bond Counsel assumes no obligation to revise or supplement their opinions to reflect any facts and circumstances that may come to their attention or any changes in law that may occur after their opinions are delivered.

The Internal Revenue Code of 1986, as amended (the "Code"), includes provisions for an alternative minimum tax ("AMT") for corporations in addition to the corporate regular tax in certain cases. The AMT, if any, depends upon the corporation's alternative minimum taxable income ("AMTI"), which is the corporation's taxable income with certain adjustments. One of the adjustment items used in computing AMTI of a corporation (with certain exceptions) is an amount equal to 75% of the excess of such corporation's "adjusted current earnings" over an amount equal to its AMTI (before such adjustment item and the alternative tax net operating loss deduction). "Adjusted current earnings" would include certain tax-exempt interest, including interest on the Series 2016A-1 Bonds.

Ownership of the Series 2016A-1 Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, corporations subject to the branch profits tax, financial institutions, certain insurance companies, certain S corporations, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred (or continued) indebtedness to purchase or carry tax exempt obligations. Prospective purchasers of the Series 2016A-1 Bonds should consult their tax advisors as to applicability of any such collateral consequences.

The Internal Revenue Service (the “Service”) has an ongoing program of auditing tax-exempt obligations to determine whether in the view of the Service, interest on such tax-exempt obligations is includable in the gross income of the owners thereof for federal income tax purposes. It cannot be predicted whether or not the Service will commence an audit of the Series 2016A-1 Bonds. If an audit is commenced, under current procedures the Service will treat the City as the taxpayer and the Bondholders may have no right to participate in such procedure. The commencement of an audit could adversely affect the market value and liquidity of the Series 2016A-1 Bonds until the audit is concluded, regardless of the ultimate outcome.

There are or may be pending in the Congress of the United States legislative proposals, including some that carry retroactive effective dates, that, if enacted, could alter or amend the federal tax matters referred to above or affect the market value of the Series 2016A-1 Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to Series 2016A-1 Bonds issued prior to enactment. Prospective purchasers of the Series 2016A-1 Bonds should consult their own tax advisors regarding any pending or proposed federal tax legislation. Co-Bond Counsel expresses no opinion regarding any pending or proposed federal tax legislation.

Market Discount

If a Series 2016A-1 Bond is purchased at any time for a price that is less than the Series 2016A-1 Bond’s stated redemption price at maturity, the purchaser will be treated as having purchased a Series 2016A-1 Bond with market discount subject to the market discount rules of the Code (unless a statutory de minimis rule applies). Accrued market discount is treated as taxable ordinary income and is recognized when a Series 2016A-1 Bond is disposed of (to the extent such accrued discount does not exceed gain realized) or, at the purchaser’s election, as it accrues. The applicability of the market discount rules may adversely affect the liquidity or secondary market price of such Series 2016A-1 Bond. Purchasers should consult their own tax advisors regarding the potential implications of market discount with respect to the Series 2016A-1 Bonds.

Bond Premium

An investor may purchase a Series 2016A-1 Bond at a price in excess of its stated principal amount. Such excess is characterized for federal income tax purposes as “bond premium” and must be amortized by an investor on a constant yield basis over the remaining term of the Series 2016A-1 Bond in a manner that takes into account potential call dates and call prices. An investor cannot deduct amortized bond premium relating to a tax-exempt bond. The amortized bond premium in that case is treated as a reduction in the tax-exempt interest received. As bond premium is amortized, it reduces the investor’s basis in the Series 2016A-1 Bond.

The rules governing amortization of bond premium are complex. Investors who purchase a Series 2016A-1 Bond at a premium should consult their own tax advisors regarding the amortization of bond premium and its effect on the Series 2016A-1 Bond’s basis for purposes of computing gain or loss in connection with the sale, exchange, redemption or early retirement of the Series 2016A-1 Bond.

No State Tax Exemption

Interest on the Series 2016A-1 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2016A-1 Bonds may result in other state and local tax consequences to certain taxpayers. Co-Bond Counsel express no opinion regarding any such collateral consequences arising with respect to the Series 2016A-1 Bonds. Prospective purchasers of the Series 2016A-1 Bonds should consult their tax advisors regarding the applicability of any such state and local taxes.

Series 2016A-2 Bonds

General

In the opinion of Co-Bond Counsel, under existing law, interest on the Series 2016A-2 Bonds is not excludable from gross income of the owners thereof for federal income tax purposes. Co-Bond Counsel is also of the opinion, under existing law, that interest on the Series 2016A-2 Bonds is not exempt from income taxes imposed by the State. Co-Bond Counsel expresses no opinion regarding any other federal or state tax consequences relating to acquisition, ownership or disposition of, or the accrual or receipt of interest on the Series 2016A-2 Bonds. Prospective purchasers of the Series 2016A-2 Bonds should consult their own tax advisors as to the federal, state, local and foreign tax consequences of their acquisition, ownership or disposition of, or the accrual or receipt of interest on the Series 2016A-2 Bonds.

Circular 230 Disclaimer

The description of certain tax matters under the subheading “- Certain United States Federal Income Tax Consequences” below, prepared by Co-Bond Counsel, is not intended by Co-Bond Counsel to be used, and cannot be used by any purchaser of the Series 2016A-2 Bonds, for the purpose of avoiding penalties that may be imposed on such purchaser. This description is written to support the promotion or marketing of the Series 2016A-2 Bonds.

Certain United States Federal Income Tax Consequences

The following discussion summarizes certain U.S. federal tax considerations generally applicable to owners of the Series 2016A-2 Bonds that acquire their Series 2016A-2 Bonds in the initial offering. It deals only with Series 2016A-2 Bonds held as capital assets by initial purchasers, and not with special classes of holders, such as dealers in securities or currencies, banks, tax-exempt organizations, life insurance companies, persons that hold their Series 2016A-2 Bonds that are a hedge or that are hedged against currency risks or that are part of a straddle or conversion transaction, or persons whose functional currency is not the U.S. dollar. The discussion below is based upon the Code, other laws, regulations, rulings, and decisions in effect and available on the date hereof, all of which are subject to change, possibly with retroactive effect. Prospective purchasers of the Series 2016A-2 Bonds should consult their own tax advisors concerning the consequences, in their particular circumstances, under the Code and the laws of any other taxing jurisdiction, of ownership of the Series 2016A-2 Bonds.

Definitions of U.S. Holder and Non-U.S. Holder

You are a U.S. Holder for purposes of this discussion if you are a beneficial owner of a Series 2016A-2 Bond for U.S. federal income tax law purposes and you are:

- a citizen or resident of the United States;

- a corporation or partnership which is created or organized in or under the laws of the United States or of any political subdivision thereof;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or
- a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust or (2) the trust was in existence on August 10, 1996 and properly elected to continue to be treated as a U.S. person.

The term “Non-U.S. Holder” refers to any beneficial owner of a Series 2016A-2 Bond who or which is not a U.S. Holder.

For U.S. Holders

Payments of Interest. Interest on the Series 2016A-2 Bonds will be taxable to a U.S. Holder as ordinary income at the time it is received or accrued, depending on the holder’s method of accounting for tax purposes in accordance with generally applicable principles.

Sale and Retirement of the Series 2016A-2 Bonds. U.S. Holders of the Series 2016A-2 Bonds will recognize gain or loss on the sale, redemption, retirement or other disposition of such Series 2016A-2 Bonds. The gain or loss is measured by the difference between the amount realized on the disposition of the Series 2016A-2 Bonds and the U.S. Holder’s adjusted tax basis in the Series 2016A-2 Bond. Such gain or loss will be capital gain or loss, except to the extent of accrued market discount not previously included in income, and will be long term capital gain or loss if at the time of disposition such Series 2016A-2 Bond has been held for more than one year.

Backup Withholding and Information Reporting. Information reporting will apply to payments of interest made by the State, or the proceeds of the sale or other disposition of the Series 2016A-2 Bond with respect to certain non-corporate U.S. Holders, and backup withholding may apply unless the recipient of such payment supplies a taxpayer identification number, certified under penalties of perjury, as well as certain other information or otherwise establishes an exemption from backup withholding. Any amounts withheld under the backup withholding rules may be allowed as a refund or credit against that holder’s U.S. federal income tax liability provided the required information is furnished to the IRS.

For Non-U.S. Holders

Withholding Tax on Payments of Principal and Interest on Series 2016A-2 Bonds. Generally, payments of principal and interest on a Series 2016A-2 Bond will not be subject to U.S. federal withholding tax, *provided* that in the case of an interest payment:

- you are not a bank to whom the Series 2016A-2 Bonds would constitute an extension of credit made pursuant to a loan agreement entered into in the ordinary course of your trade or business; and
- either (A) the beneficial owner of the Series 2016A-2 Bond certifies to the applicable payor or its agent, under penalties of perjury on an IRS Form W-8BEN (or a suitable substitute form), that such owner is not a United States person and provides such owner’s name and address or (B) a securities clearing organization, bank or other financial institution, that holds customers’ securities in the ordinary course of its trade or business

(a “financial institution”) and holds the Series 2016A-2 Bond, certifies under penalties of perjury that such an IRS Form W-8BEN (or suitable substitute form) has been received from the beneficial owner by it or by a financial institution between it and the beneficial owner and furnishes the payor with a copy thereof.

Except to the extent otherwise provided under an applicable tax treaty, you generally will be taxed in the same manner as a U.S. Holder with respect to interest payments on a Series 2016A-2 Bond if such interest is effectively connected with your conduct of a trade or business in the United States. Effectively connected interest and original interest discount received by a corporate Non-U.S. Holder may also, under certain circumstances, be subject to an additional “branch profits tax” at a 30% rate (or, if applicable, a lower treaty rate), subject to certain adjustments. Such effectively connected interest will not be subject to withholding tax if the holder delivers an IRS Form W-8ECI to the payor.

Gain on Disposition of the Series 2016A-2 Bonds. You generally will not be subject to U.S. federal income tax on gain realized on the sale, exchange or redemption of a Series 2016A-2 Bond unless:

- you are an individual present in the United States for 183 days or more in the year of such sale, exchange or redemption and either (A) you have a “tax home” in the United States and certain other requirements are met, or (B) the gain from the disposition is attributable to your office or other fixed place of business in the United States; or
- the gain is effectively connected with your conduct of a trade or business in the United States.

U.S. Federal Estate Tax. A Series 2016A-2 Bond held by an individual who at the time of death is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) will not be subject to United States federal estate tax if at the time of the individual’s death, payments with respect to such Series 2016A-2 Bond would not have been effectively connected with the conduct by such individual of a trade or business in the United States.

Backup Withholding and Information Reporting. Backup withholding and information reporting on Form 1099 will not apply to payments of principal and interest on the Series 2016A-2 Bonds by the State or its agent to a Non-U.S. Holder provided the Non-U.S. Holder provides the certification described above under “Withholding Tax on Payments of Principal and Interest on Series 2016A-2 Bonds” or otherwise establishes an exemption (provided that neither the State nor its agent has actual knowledge that the holder is a United States person or that the conditions of any other exemptions are not in fact satisfied). Interest payments made to a Non U.S. Holder may, however, be reported to the IRS and to such Non U.S. Holder on Form 1042-S.

Information reporting and backup withholding generally will not apply to a payment of the proceeds of a sale of the Series 2016A-2 Bonds effected outside the United States by a foreign office of a foreign broker. However, information reporting requirements (but not backup withholding) will apply to a payment of the proceeds of a sale of the Series 2016A-2 Bonds effected outside the United States by a foreign office of a broker if the broker (i) is a United States person, (ii) derives 50 percent or more of its gross income for certain periods from the conduct of a trade or business in the United States, (iii) is a “controlled foreign corporation” as to the United States, or (iv) is a foreign partnership that, at any time during its taxable year is 50 percent or more (by income or capital interest) owned by United States persons or is engaged in the conduct of a U.S. trade or business, unless in any such case the broker has documentary evidence in its records that the holder is a Non-U.S. holder (and has no actual knowledge to the contrary) and certain conditions are met, or the holder otherwise establishes an exemption. Payment by a United States office of a broker of the proceeds of a sale of the Series 2016A-2 Bonds will be subject

to both backup withholding and information reporting unless the holder certifies its non-United States status under penalties of perjury or otherwise establishes an exemption.

Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against that holder's U.S. federal income tax liability provided the required information is furnished to the IRS.

SECONDARY MARKET DISCLOSURE

The City will enter into a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of the Beneficial Owners of the Bonds to send certain information annually and to provide notice of certain events to the Municipal Securities Rulemaking Board (the "MSRB") to enable the Underwriters to meet the requirements of Section 5(b) of Rule 15c2-12 (the "Rule") adopted by the Commission under the Exchange Act. The MSRB has designated its Electronic Municipal Market Access system, known as EMMA, as the system to be used for continuing disclosures to investors. The information to be provided on an annual basis, the events which will be noticed on an occurrence basis and a summary of other terms of the Undertaking, including termination, amendment and remedies, are set forth below.

A failure by the City to comply with the Undertaking will not constitute a default under the Bonds or the Ordinance and Beneficial Owners of the Bonds are limited to the remedies described in the Undertaking. See "– Consequences of Failure of the City to Provide Information" under this caption. A failure by the City to comply with the Undertaking must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Bonds and their market price.

The following is a brief summary of certain provisions of the Undertaking of the City and does not purport to be complete. The statements made under this caption are subject to the detailed provisions of the Undertaking, a copy of which is available upon request from the City.

Annual Financial Information Disclosure

The City covenants that it will disseminate to EMMA its Annual Financial Information and its Audited Financial Statements (as described below) to the MSRB prepared in accordance with generally accepted accounting principles applicable to government units (as described below).

"Annual Financial Information" means financial information and statistical data generally consistent with that contained under the table included under the caption "WATER SYSTEM – Capital Improvement Program," the tables captioned "Population of Service Area," "Water System Accounts" and "Water System Pumpage and Capacity" under the caption "WATER SYSTEM SERVICE AREA" and the five-year historical data contained in the tables captioned "Historical and Projected Financial Operations" under the caption "FINANCIAL OPERATIONS."

"Audited Financial Statements" means the audited basic financial statements of the City of Chicago, Illinois Water Fund prepared in accordance with generally accepted accounting principles applicable to governmental units as in effect from time to time.

Annual Financial Information exclusive of Audited Financial Statements (commencing with the Audited Financial Statements for the fiscal year ended December 31, 2015) will be provided to the MSRB not more than 210 days after the last day of the City's fiscal year, which currently is December 31. If Audited Financial Statements are not available when the Annual Financial Information is filed,

unaudited financial statements will be included, and Audited Financial Statements will be filed when available.

Reportable Events Disclosure

The City covenants that it will disseminate in a timely manner, not in excess of ten business days after occurrence, to the MSRB the disclosure of the occurrence of a Reportable Event (defined below). Certain Reportable Events are required to be disclosed only to the extent that such Reportable Event is material, as materiality is interpreted under the Exchange Act. The “Reportable Events,” certain of which may not be applicable to the Bonds, are:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults, if material;
- (c) unscheduled draws on debt service reserves reflecting financial difficulties;
- (d) unscheduled draws on credit enhancements reflecting financial difficulties;
- (e) substitution of credit or liquidity providers, or their failure to perform;
- (f) 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 or determinations with respect to the tax status of the Series 2016A-1 Bonds, or other material events affecting the tax status of the Series 2016A-1 Bonds;
- (g) modifications to rights of security holders, if material;
- (h) bond calls, if material, and tender offers;
- (i) defeasances;
- (j) release, substitution or sale of property securing repayment of the securities, if material;
- (k) rating changes;
- (l) bankruptcy, insolvency, receivership or similar event of the City (considered to have occurred in the following instances: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if the jurisdiction of the City has been assumed by leaving the City Council and the City’s officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City);
- (m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the Water System, 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

(n) appointment of a successor or additional trustee or the change of name of a trustee, if material.

Consequences of Failure of the City to Provide Information

The City shall give notice in a timely manner to the MSRB of any failure to provide disclosure of Annual Financial Information and Audited Financial Statements when the same are due under the Undertaking.

In the event of a failure of the City to comply with any provision of the Undertaking, the beneficial owner of any Bond may seek mandamus or specific performance by court order, to cause the City to comply with its obligations under the Undertaking. The Undertaking provides that any court action must be initiated in the Circuit Court of Cook County, Illinois. A default under the Undertaking shall not be deemed a default under the Bonds or the Ordinance, and the sole remedy under the Undertaking in the event of any failure of the City to comply with the Undertaking shall be an action to compel performance.

Amendment; Waiver

Notwithstanding any other provision of the Undertaking, the City may amend the Undertaking, and any provision of the Undertaking may be waived, if:

(a) (i) the amendment or waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the City or type of business conducted;

(ii) the Undertaking, as amended, or the provision, as waived, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(iii) the amendment or waiver does not materially impair the interests of the beneficial owners of the Bonds, as determined by a party unaffiliated with the City (such as the Trustee or co-bond counsel), or by approving vote of the owners of the Bonds at the time of the amendment or waiver; or

(b) the amendment or waiver is otherwise permitted by the Rule.

EMMA

All documents submitted to the MSRB through EMMA pursuant to the Undertaking shall be in electronic format and accompanied by identifying information as prescribed by the MSRB, in accordance with the Rule. All documents submitted to the MSRB through EMMA will be word-searchable PDFs, configured to permit documents to be saved, viewed, printed and electronically retransmitted.

Termination of Undertaking

The Undertaking shall be terminated if the City shall no longer have any legal liability for any obligation on or relating to repayment of the Bonds.

Additional Information

Nothing in the Undertaking shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in the Undertaking or any other means of communication, or including any other information in any Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event, in addition to that which is required by the Undertaking. If the City chooses to include any information in any Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event in addition to that which is specifically required by the Undertaking, the City shall have no obligation under the Undertaking to update such information or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event.

Corrective Action Related to Certain Bond Disclosure Requirements

The City is in compliance in all material respects with continuing disclosure undertakings previously entered into by it pursuant to the Rule, except insofar as any of the following paragraphs describe material non-compliance.

Annual reports were not filed by the City in 2011 and 2012 with respect to its Chicago-O'Hare International Airport General Airport Revenue Bonds, Series 2010 and Series 2011, and its Chicago-O'Hare International Airport Passenger Facility Charge Revenue Bonds, Series 2010 and Series 2011.

With respect to the City's Collateralized Single Family Mortgage Revenue Bonds, Series 2006A (the "Series 2006A Bonds"), S&P lowered its rating on the Series 2006A Bonds from "AA+" to "AA" and placed the Series 2006A Bonds on "Credit Watch with negative implications" effective December 16, 2011. The City did not cause the trustee as dissemination agent to file a notice of a reportable event with EMMA at that time. Subsequently, S&P upgraded the rating on the Series 2006A Bonds from "AA" to "AA+" effective March 12, 2012. On March 18, 2012, S&P removed the "Credit Watch with negative implications" characterization from the Series 2006A Bonds. The City caused the trustee, as dissemination agent, for the Series 2006A Bonds to file a notice of a reportable event with EMMA on March 26, 2012 disclosing the downgrade and subsequent upgrade of the Series 2006A Bonds by S&P.

With respect to the City's Chicago O'Hare International Airport General Airport Third Lien Revenue Bonds, Series 2011, American Airlines is an "obligated person" with respect to such bonds. On November 29, 2011, AMR Corporation (the parent company of American Airlines and American Eagle) and certain of its United States-based subsidiaries (including American Airlines and American Eagle) filed voluntary petitions for Chapter 11 reorganization in the United States Bankruptcy Court for the Southern District of New York. The City filed a notice with EMMA with respect to this event on March 30, 2012 (not within the ten business-day deadline imposed by the Rule). On December 9, 2013, American Airlines merged with US Airways. The City filed a notice with EMMA with respect to this event on August 25, 2014.

With respect to the City's Outstanding Motor Fuel Tax Revenue Bonds, the City's pledge of Additional City Revenues to the payment of such bonds (in addition to the pledge of Motor Fuel Tax Revenues) became effective as of March 19, 2013. The City filed a notice with EMMA describing the pledge of this additional source of revenue on May 16, 2013.

With respect to the City's Outstanding O'Hare International Airport Customer Facility Charge Senior Lien Revenue Bonds, Series 2013, Simply Wheelz, LLC d/b/a Advantage Rent A Car ("Advantage") is an "obligated person" with respect to such bonds. Advantage filed a voluntary

bankruptcy petition in the Southern District of Mississippi on November 5, 2013. The City filed a notice with EMMA with respect to this event on December 5, 2013.

The Rating Agencies took certain rating actions with respect to the ratings of Ambac Assurance Corporation and Financial Security Assurance Inc. (collectively, the “Bond Insurers”). The Bond Insurers provided municipal bond insurance policies relating to certain series of the City’s Chicago Midway Airport revenue bonds. Event notices with respect to such rating changes were not filed with EMMA. The City made such filings on May 22, 2014.

Ambac provided a municipal bond insurance policy relating to the City’s Motor Fuel Tax Revenue Bonds, Series 2003A and Assured Guaranty Corp. provided municipal bond insurance policies relating to the City’s Motor Fuel Tax Revenue Bonds, Series 2008. Event notices with respect to the rating changes taken by the Rating Agencies with respect to these insurers were not filed. The City made filings with EMMA on June 3, 2014 and August 22, 2014 with respect to these rating changes.

The City failed to file material event notices with respect to certain rating changes affecting the City’s bonds subject to the Rule and for which the City is an “obligated person” under the Rule (collectively, the “Prior Bonds”) or affecting bond insurance companies which insured any Prior Bonds (collectively, the “Bond Insurers”). The City filed with EMMA on August 29, 2014 a notice with respect to all rating changes known to the City affecting the Prior Bonds occurring over the last ten years. The City filed with EMMA on August 27, 2014 a notice with respect to all rating changes, known to the City and affecting the Bond Insurers, occurring during the last seven years.

MISCELLANEOUS

The foregoing summaries or descriptions of provisions of the Ordinance and the Indenture and all references to other materials not purporting to be quoted in full, are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described. Copies of these documents may be obtained from the office of the Chief Financial Officer of the City.

The Bonds are authorized and are being issued pursuant to the City Council's approval under the powers of the City as a home rule unit under Article VII of the Illinois Constitution of 1970. This Official Statement has been authorized by the City Council.

CITY OF CHICAGO

/s/ Carole L. Brown
Chief Financial Officer

APPENDIX A
CERTAIN DEFINITIONS

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APPENDIX A

CERTAIN DEFINITIONS

Capitalized words and terms used in this Official Statement that are not otherwise defined in this Official Statement shall have the meanings set forth below in this Appendix A, unless the context clearly indicates that some other meaning is intended.

“Aggregate Second Lien Bonds Requirement” means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to 110 percent of Aggregate Second Lien Debt Service with respect to such Bond Year or other specified 12-month period with respect to the Second Lien Bonds of all series and all Section 2.08 Obligations and Section 2.09 Obligations, provided that for purposes of the provisions of the Master Indenture relating to the issuance of Second Lien Parity Bonds, “Aggregate Second Lien Bonds Requirement” means, as of any particular date of computation and with respect to a particular Bond Year or other specific 12-month period, 110 percent of Annual Second Debt Lien Debt Service with respect to such Bond Year or other specified 12-month period, and for purposes of calculating interest payable during such Bond Year or other specified 12-month period in respect of any Variable Rate Bonds, the rate of interest shall be assumed to equal the average of the BMA Municipal Index for the immediately preceding 36 months or, if higher, the rate of interest paid with respect to such Variable Rate Bonds on the Interest Payment Date immediately preceding the date of calculation.

“Aggregate Second Lien Debt Service” means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate amounts required by the provisions of all Supplemental Indentures creating series of Second Lien Bonds and all instruments creating Section 2.08 Obligations and Section 2.09 Obligations to be deposited from Second Lien Bond Revenues in all sub-funds, accounts and subaccounts created under such Supplemental Indentures in such Bond Year or other specified 12-month period, provided that for purposes of calculating interest payable during such Bond Year or other specified 12-month period in respect to any Variable Rate Bonds, the rate of interest shall be assumed to equal the average of the BMA Municipal Index for the immediately preceding 36 months or, if higher, the rate of interest paid with respect to such Variable Rate Bonds on the Interest Payment Date immediately preceding the date of calculation.

“Aggregate Senior Lien Debt Service” means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate of the amounts of Annual Senior Lien Debt Service with respect to such Bond Year or other specified 12-month period and to the Senior Lien Bonds of all series.

“Aggregate Subordinate Lien Debt Service” means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate of the amounts of Annual Subordinate Lien Debt Service with respect to such Bond Year or other specified 12-month period and to the Subordinate Lien Obligations of all series.

“Annual Second Lien Debt Service” means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.08 Obligation or Section 2.09 Obligation, an amount of money equal to the sum of (a) all interest, costs or fees payable during such Bond Year or other specified 12-month period with respect to all Second Lien Bonds of said series, such Section 2.08 Obligation and Section 2.09 Obligation Outstanding on said date of computation and (b) all Principal Installments payable during such Bond Year or other specified 12-month period with respect to

all Second Lien Bonds of said series, such Section 2.08 Obligation and Section 2.09 Obligation Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds, Section 2.08 Obligation and Section 2.09 Obligation will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Master Indenture and the Supplemental Indenture creating such series or the instrument creating such Section 2.08 Obligation or Section 2.09 Obligation of Principal Installments payable at or after said date of computation.

“Annual Senior Lien Debt Service” means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period and with respect to Senior Lien Bonds of a particular series, an amount of money equal to the sum of (a) all interest payable during such Bond Year or other specified 12-month period on all Senior Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Bond Year or other specified 12-month period with respect to all Senior Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that Senior Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation.

“Annual Subordinate Lien Debt Service” means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period and with respect to Subordinate Lien Obligations of a particular series, an amount of money equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Subordinate Lien Obligations of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Subordinate Lien Obligations of said series Outstanding on said date of computation, all calculated on the assumption that Subordinate Lien Obligations will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Subordinate Lien Obligation Ordinances of Principal Installments payable at or after said date of computation.

“Authorized Denominations” means, with respect to a particular Bond, \$5,000 and any integral multiple of \$5,000.

“BMA Municipal Index” means The Bond Market Association Municipal Swap Index as of the most recent date for which such index was published or such other weekly, high-grade index comprised of seven-day, tax-exempt variable rate demand notes produced by Municipal Market Data, Inc. or its successor, or as otherwise designated by The Bond Market Association; provided, however, that if such index is no longer produced by Municipal Market Date, Inc. or its successor, then “BMA Municipal Index” means such other reasonably comparable index selected by the City.

“Bond Registrar” means the Trustee.

“Bond Year” means a 12-month period commencing on November 1 of a calendar year to and including October 31 of the next succeeding calendar year.

“Bonds” means the Series 2016A-1 Bonds and the Series 2016A-2 Bonds.

“Business Day” means any day of the year on which banks located in the city, or cities, respectively, in which are located the designated corporate trust office of the Trustee are not required or authorized to remain closed on and which The New York Stock Exchange is not closed.

“Chief Financial Officer” means the Chief Financial Officer appointed by the Mayor of the City or, in the event no person is at the time then so appointed and acting, the City Comptroller of the City.

“City Clerk” means the duly elected and qualified person serving as the City Clerk of the City.

“Code” means the United States Internal Revenue Code of 1986, as amended. References to the Code and to sections of the Code shall include relevant final, temporary or proposed regulations as in effect from time to time and, with reference to any series of Second Lien Bonds, as applicable, to obligations issued on the date of issuance of such series.

“Commercial Paper Account” means the separate and segregated account of that name established and existing in the Water Fund.

“Commercial Paper Notes” means obligations commonly described as “Commercial Paper” issued by City from time to time and payable from the Commercial Paper Account.

“Constitution” means the 1970 Constitution of the State of Illinois.

“Costs of Issuance” means all fees and costs incurred by the City relating to the issuance of the Bonds, including, without limitation, printing costs, authenticating agent’s initial fees and charges, Bond Registrar’s fees and charges, Paying Agent’s fees and charges, financial advisory fees, costs of credit ratings, engineering fees, legal fees, accounting fees, the cost of any premiums for municipal bond insurance to insure the Bonds, and the cost of any related services with respect to the Bonds.

“Deposit Date” means May 1 and November 1 of each year.

“Fiscal Year” means the period beginning January 1 and ending December 31 of any year.

“Governmental Obligations” means securities which are obligations described in clauses (a) and (b) of the definition of “Permitted Investments” set forth below.

“Gross Revenues” means all income and receipts from any source which under generally accepted accounting principles are properly recognized as being derived from the operation of the Water System, including without limitation (a) charges imposed for water service and usage, (b) charges imposed for sales of water to municipalities (other than the City) and other users of water service, (c) charges imposed for inspections and permits for connection to the Water System, (d) grants (excluding grants received for capital projects) and (e) Investment Earnings. Gross Revenues do not include amounts credited to customers on their bills, such as for payment of the price of purchasing from them capital assets of the water systems.

“IEPA” means the Illinois Environmental Protection Agency, and its successors and assigns, or in the case of Loans made pursuant to the IEPA Program, the authorized lender under such program.

“IEPA Program” means the Illinois Public Water Supply Program or any successor program administered by the State, and any similar program through which funds authorized by the United States Government, including the United States Environmental Protection Agency, and administered by the State or any federally authorized agency.

“Interest Payment Date” means each May 1 and November 1, commencing on November 1, 2016.

“Investment Earnings” means interest plus net profits and less net losses derived from investments made with any portion of the Gross Revenues or with any money in the Accounts in the Water Fund (other than the Senior Lien Rebate Accounts) specified in the Ordinance. Investment earnings do not include interest or earnings on investments of the 2016A Bond Proceeds Account or any Second Lien Rebate Accounts established under the Indenture.

“Line of Credit Notes Account” means the separate and segregated account of that name established and existing in the Water Fund.

“Loan” means, collectively, the borrowing or borrowings by the City from the IEPA under the IEPA Program and evidenced by one or more Loan Agreements.

“Loan Agreement” means each loan agreement to be entered into or to be entered into between the City and the IEPA setting forth the terms of the Loan.

“Maturity Date” means November 1 of any year in which Principal Installments become due on the Bonds.

“Mayor” means the Mayor of the City.

“Net Revenues” means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs.

“Net Revenues Available for Bonds” means that portion of the Net Revenues remaining in any period, minus any amounts deposited during that period in the Water Rate Stabilization Account as provided in the Ordinance (other than amounts deposited to that Account upon the issuance of the Series 1993 Bonds or upon the issuance of any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account.

“Operation and Maintenance Costs” means all expenses reasonably incurred by the City in connection with the operation, maintenance, renewal, replacement and repair of the Water System, which under generally accepted accounting principles are properly chargeable to the Water System and not capitalized, including, without limitation, salaries, wages, taxes, contracts for services, costs of materials and supplies, purchase of power, fuel, insurance, reasonable repairs and extensions necessary to render efficient service, the costs related to any agreements or other arrangements entered into pursuant to the Ordinance, Paying Agent’s fees, and all incidental expenses, but excluding any provision for depreciation or for interest on Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes, Water System Line of Credit Notes or other obligations for borrowed money payable from the Net Revenues, Net Revenues Available for Bonds, Second Lien Bond Revenues or Subordinate Lien Obligation Revenues and, from and after the earlier to occur of (i) the date all Senior Lien Bonds issued prior to the date of issuance of the Series 2000 Senior Lien Bonds are no longer Outstanding or (ii) the effective date of amendments to the ordinances authorizing Outstanding Senior Lien Bonds issued prior to the date of issuance of the Series 2000 Senior Lien Bonds which permit the following to be included in the definition of Operation and Maintenance Costs, the fees of the trustee and any remarketing agent, paying agent or bond registrar for the Second Lien Bonds, and the paying agent, if any, for Subordinate Lien Obligations, the costs related to any agreements or other arrangements entered into pursuant to the Ordinance or the Master Indenture.

“Opinion of Bond Counsel” means a written opinion of one or more firms of nationally recognized bond counsel designated by the Corporation Counsel of the City in form and substance

acceptable to the City and the Trustee, which opinion may be based on a ruling or rulings of the Internal Revenue Service.

“Ordinance” means the ordinance passed by the City Council on March 16, 2016, authorizing the Bonds, the Ninth Supplemental Indenture and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Bonds as modified or amended from time to time pursuant to the terms of the ordinance.

“Outstanding” means, with reference to any series of Second Lien Bonds, all of such obligations issued under the Master Indenture or incurred pursuant to the Master Indenture that are outstanding and unpaid, provided that such term shall not include obligations:

- (i) which have been paid or redeemed in full both as to principal, redemption, premium, if any, and interest; or

- (ii) which have matured or which have been duly called for redemption and for the payment of which money is on deposit with designated paying agents for such Second Lien Bonds or are otherwise properly available, sufficient to pay the principal of, redemption premium, if any, and interest on such Second Lien Bonds; or

- (iii) for which the City has provided for payment by depositing in an irrevocable trust or escrow, cash or Governmental Obligations, in each case the maturing principal of and interest on which will be sufficient, without reinvestment, to pay at maturity, or if called for redemption on the applicable redemption date, the principal of, redemption premium, if any, and interest on such Second Lien Bonds; or

- (iv) which are owned by the City.

When used with respect to Senior Lien Bonds or Subordinate Lien Obligations, **“Outstanding”** shall have the meaning ascribed to such term in the related Senior Lien Bond Ordinances or Subordinate Lien Obligation Ordinance as applicable.

“Paying Agent” means the Trustee and any other bank, national banking association or trust company designated by the City or the Trustee pursuant to the Ninth Supplemental Indenture as a paying agent for the Bonds, and any successor or successors appointed by the Chief Financial Officer or the Trustee under the Ninth Supplemental Indenture.

“Payment Date” means any date on which a Principal Installment or interest on any series of Second Lien Bonds is payable in accordance with its terms and the terms of the Master Indenture and the Supplemental Indenture creating such series, or, in the case of any Section 2.08 Obligation or amounts which are payable under any Section 2.09 Obligation, in accordance with the terms of the instrument creating such Section 2.08 Obligation or such Section 2.09 Obligation.

“Permitted Investments” means to the extent permitted by law and under the Master Indenture at the time of such investment, any of the following:

- (a) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America;

- (b) trust receipts or other certificates of ownership evidencing an ownership interest in the principal of or interest on, or both principal of and interest on, obligations described in

clause (a) of this definition, which obligations are held in trust by a bank described in clause (d) of this definition, provided that such bank holds such obligations separate and segregated from all other funds and accounts of the City and of such bank and that a perfected first security interest under the Illinois Uniform Commercial Code, or under book entry procedures prescribed at 31 C.F.R. 306.0 et seq. or 31 C.F.R. 350.0 et seq. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of the execution and delivery of the Ninth Supplemental Indenture), has been created in such obligations for the benefit of the applicable account in the Water Fund or, to the extent permitted, in any irrevocable trust or escrow established to make provision for the payment and discharge of the indebtedness on any Bonds or other obligations that are payable from Net Revenues Available for Bonds;

(c) obligations of Fannie Mae or of any agency or instrumentality of the United States of America now existing or created after the issuance and delivery of the Bonds, including but not limited to the Federal Home Loan Mortgage Corporation, the United States Postal Service, the Government National Mortgage Association and the Federal Financing Bank;

(d) negotiable or non-negotiable time deposits evidenced (i) by certificates of deposit issued by any bank, trust company, national banking association or savings and loan association that has capital of not less than \$250,000,000 (including the Trustee and its affiliates), or (ii) by certificates of deposit that are continuously and fully insured by (A) any federal agency, or (B) an insurer that, at the time of issuance of the policy securing such deposits, has been assigned a credit rating on its long-term unsecured debt within one of the two highest rating categories, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, from at least two Rating Agencies;

(e) repurchase agreements with banks described in clause (d) of this definition or with government bond dealers reporting to, trading with, and recognized as primary dealers by a Federal Reserve Bank, provided (i) that the underlying securities are obligations described in clauses (a) or (c) of this definition and are required to be continuously maintained at a market value not less than the amount so invested, (ii) the City has received an opinion of counsel to the effect that a custodian for the City has possession of the underlying securities as collateral and has a perfected first security interest in the collateral, and (iii) the collateral is in the opinion of such counsel free and clear of claims by third parties;

(f) obligations of any state of the United States of America or any political subdivision of a state or any agency or instrumentality of a state or political subdivision that are, at the time of purchase, rated by at least two Rating Agencies in one of their two highest respective long-term rating categories, without regard to any refinement or gradation of rating category by numerical modifier or otherwise (if not rated by at least two Rating Agencies then a rating by a single Rating Agency shall be satisfactory) for comparable types of debt obligations;

(g) bonds, notes, debentures or other evidences of indebtedness issued or guaranteed by any corporation that are, at the time of purchase, rated by at least two Rating Agencies, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, in their highest rating category (if not rated by at least two Rating Agencies then a rating by a single Rating Agency shall be satisfactory), for comparable types of debt obligations;

(h) repurchase agreements and investment agreements (including forward purchase agreements pursuant to which the City agrees to purchase securities of the type described in clauses (a), (b), (c), (f), (g) and (i) of this definition of "Permitted Investment"), with any bank, trust company, national banking association (which may include any Paying Agent or Bond

Registrar), insurance company or any other financial institution that at the date of the agreement has an outstanding, unsecured, uninsured and unguaranteed debt issue rated by at least two Rating Agencies in one of their three highest long-term rating categories, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, or if such institution is not so rated, that the agreement is secured by such securities as are described in clauses (a) through (d) above, inclusive, having a market value at all times (exclusive of accrued interest, other than accrued interest paid in connection with the purchase of such securities) at least equal to the principal amount invested pursuant to the agreement, provided that (i) a custodian for the City (which custodian is not the entity with which the City has the repurchase or investment agreement) has a perfected first security interest in the collateral and the City has received an opinion of counsel to that effect, (ii) the custodian or an agent of the custodian (which agent is not the entity with which the City has the repurchase or investment agreement) has possession of the collateral, and (iii) such obligations are in the opinion of such counsel free and clear of claims by third parties;

(i) prime commercial paper of a corporation incorporated under the laws of any state of the United States of America, rated by at least one Rating Agency in its highest short-term rating category, without regard to any refinement or gradation of rating category by numerical modifier or otherwise;

(j) certificates of deposit of national banks (including the Trustee and its affiliates) that are either fully collateralized at least 110 percent by marketable U.S. government securities marked to market at least monthly or secured by a corporate surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the top rating category, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, as rated by at least one Rating Agency and maintaining such rating during the term of such investment; and

(k) shares of a money market fund registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933, as amended, including those for which the Trustee or an affiliate performs services for a fee, whether as custodian, transfer agent, investment advisor or otherwise.

“Principal Installment” means:

(a) as of any particular date of computation and with respect to Senior Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Senior Lien Bonds of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Senior Lien Bonds which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Senior Lien Bond Ordinances authorizing the issuance of each series of Senior Lien Bonds of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Senior Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Senior Lien Bonds of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment;

(b) as of any particular date of computation and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.08 Obligation, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Second Lien Bonds of said series or Section 2.08 Obligation which mature on a single future date, reduced by the aggregate

principal amount of such Outstanding Second Lien Bonds which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Indenture, with respect to the Second Lien Bonds, or the ordinance or trust indenture creating any other series of Second Lien Bonds or the instrument creating such Section 2.08 Obligation, of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Second Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of such Outstanding Second Lien Bonds, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment; and

(c) as of any particular date of computation and with respect to Subordinate Lien Obligations of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Subordinate Lien Obligations of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Subordinate Lien Obligations which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Subordinate Lien Obligation Ordinance authorizing the issuance of each series of Subordinate Lien Obligations of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Subordinate Lien Obligations, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Subordinate Lien Obligations of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.

“Program Fee Account” means the account designated the “Series 2016A Bonds, Program Fee Account” established in the 2016A Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount, and 2016A Bond Proceeds Account.

“Program Fees” means:

(a) the fees, expenses and other charges payable to each fiduciary, including the applicable Trustee, the applicable Trustee’s Agent and any Paying Agent, pursuant to the provisions of the corresponding Indenture; provided that if at any time there shall be any Series of Second Lien Bonds Outstanding under a Supplemental Indenture other than the corresponding series of Bonds, then “Program Fees” for such purposes, shall mean only such portion of such fees, expenses and other charges as shall be payable with respect to, or properly allocable to, the duties performed by each such fiduciary with respect to such Bonds;

(b) ongoing fees payable to any Rating Agency maintaining a rating on such Bonds, and

(c) any other fees, expenses and other charges of a similar nature payable by the City to any person under such Supplemental Indenture or otherwise with respect to such Bonds.

“Project Costs” means the Tax-Exempt Project Costs and the Taxable Project Costs.

“Qualified Reserve Account Credit Instrument” means, with respect to Second Lien Bonds, a letter of credit, surety bond or non-cancelable insurance policy issued by a domestic or foreign bank, insurance company or other financial institution whose debt obligations are rated “Aa” or “AA” or better by a Rating Agency as of its date of issuance.

“Qualified Second Lien Swap Agreement” means an agreement between the City and a swap provider under which the City agrees to pay the swap provider an amount calculated at an agreed-upon rate or index based upon a notional amount and the swap provider agrees to pay the City for a specified period of time an amount calculated at an agreed-upon rate or index based upon such notional amount, where (i) each Rating Agency (if such Rating Agency also rates the unsecured obligations of the swap provider or its guarantor) has assigned to the unsecured obligations of the swap provider or of the person or entity who guarantees the obligation of the swap provider to make its payments to the City, as of the date the swap agreement is entered into, in one of the highest credit rating categories (without regard to any refinement or gradation of such rating by a numerical modifier or otherwise) of such Rating Agency, and (ii) the City has notified each Rating Agency (whether or not such Rating Agency also rates the unsecured obligations of the swap provider or its guarantor) in writing, at least 15 days prior to executing and delivering the swap agreement of its intention to enter into the swap agreement and, if the City’s Second Lien Bonds have an unenhanced rating from such Rating Agency, the City has received from such Rating Agency a written indication that the entering into of the swap agreement by the City will not in and of itself cause a reduction or withdrawal by such Rating Agency of its unenhanced rating on the Second Lien Bonds.

“Rating Agencies” or **“Rating Services”** means the nationally recognized rating services, or any of them, that shall have assigned ratings to any Bonds Outstanding as requested by or on behalf of the City, and which ratings are then currently in effect.

“Record Date” means, with respect to the Bonds, each April 15 and October 15 (whether or not a Business Day).

“Redemption Price” means with respect to the Bonds, the redemption prices set forth under the caption “DESCRIPTION OF THE BONDS — Redemption” and, with respect to any other series of Second Lien Bonds, the redemption price of such Second Lien Bonds pursuant to the provisions of the such Second Lien Bonds or the Supplemental Indenture creating such Second Lien Bonds, or such other redemption price as may be specified in such Second Lien Bonds or Supplemental Indenture.

“Registered Owner” means the person or persons in whose name or names a Bond is registered in the registration books kept by the Bond Registrar.

“Second Lien Bond Determination Certificate” means the certificate of the Chief Financial Officer with respect to the Bonds filed with the Office of the City Clerk or the Deputy City Clerk, addressed to the City Council as provided in the Ordinance.

“Second Lien Bond Revenues” means all sums, amounts, funds or moneys which are deposited to the Second Lien Bonds Account pursuant to the Ordinance, subject to the priority for the deposit of Net Revenues Available for Bonds established in the Ordinance.

“Second Lien Bonds” means the Series 2016A Bonds, Series 2014 Bonds, the Series 2012 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2004 Bonds, the 2001 Second Lien Bonds, the Series 2000 Second Lien Bonds and all Second Lien Parity Bonds.

“Second Lien Bonds Account” means the separate account of that name previously established in the Water Fund as described in the Ordinance.

“Second Lien Parity Bonds” means obligations which may be issued after the issuance of the Bonds which are payable from Second Lien Bond Revenues on an equal and ratable basis with the Bonds and all other Outstanding Second Lien Bonds.

“Second Lien Revenue Fund” means the fund of that name established by the Master Indenture.

“Section 2.08 Obligations” means any obligations incurred by the City to reimburse or otherwise make payments to the issuer or issuers of one or more letters of credit, lines of credit, standby purchase agreements, financial guaranty insurance policies or surety bonds (including Qualified Reserve Account Credit Instruments) securing one or more series of Second Lien Bonds as described in the Master Indenture, including any fees or other amounts payable to the issuer of any such letter of credit, line of credit, standby purchase agreement, financial guaranty insurance policy or surety bond, whether such obligations are set forth in one or more reimbursement agreements entered into between the City and the issuer of any such letter of credit, line of credit, standby purchase agreement, financial guaranty insurance policy or surety bond, or in one or more notes or other evidences of indebtedness executed and delivered by the City pursuant thereto, or any combination thereof.

“Section 2.09 Obligations” means any obligations incurred by the City to any one or more swap providers pursuant to the Master Indenture, including any fees or amounts payable by the City under each related Qualified Second Lien Swap Agreement or agreement described in the Master Indenture.

“Senior Lien Bond Provider” means a company, banking institution or other financial institution which is the issuer of a Senior Lien Debt Service Reserve Account Credit Instrument or a municipal bond insurance policy as described in the Ordinance.

“Senior Lien Bond Ordinances” means the ordinances of the City authorizing the issuance of Senior Lien Bonds.

“Senior Lien Bond Reimbursement Agreement” means an agreement between the City and a Senior Lien Bond Provider entered into with respect to a Senior Lien Debt Service Reserve Account Credit Instrument and which pertains to the repayment of the Senior Lien Bond Provider, with interest, if any, of amounts advanced pursuant to that Senior Lien Debt Service Reserve Account Credit Instrument.

“Senior Lien Bonds” means the Series 1993 Senior Lien Bonds, the Series 1997 Senior Lien Bonds, the 2000 Senior Lien Bonds, the 2001 Senior Lien Bonds and all Senior Lien Parity Bonds.

“Senior Lien Bonds Construction Accounts” means the various accounts established for construction purposes by the Senior Lien Bond Ordinances.

“Senior Lien Debt Service Requirement” means, for any Fiscal Year, the principal of and interest on Senior Lien Bonds required to be paid in that Fiscal Year. With respect to any Senior Lien Bonds for which any interest is payable by appreciation in principal amount, the Senior Lien Debt Service Requirement for a Fiscal Year includes all appreciated principal payable in that Fiscal Year but does not include the increase in principal which occurs in that Fiscal Year but is not payable in that Fiscal Year. Any Senior Lien Bonds required to be redeemed pursuant to a mandatory sinking fund redemption shall be treated for these purposes as being due on the date they are required to be redeemed and not on their stated maturity dates.

“Senior Lien Debt Service Reserve Account” means the separate account entitled “Bond Debt Service Reserve Account” previously established by the City in the Water Fund and described in the Ordinance and each Subaccount of that Account.

“Senior Lien Debt Service Reserve Account Credit Instrument” means a non-cancelable insurance policy, a non-cancelable surety bond or an irrevocable letter of credit which may be delivered to the City in lieu of or in partial substitution for cash or securities required to be on deposit in a Subaccount of the Senior Lien Debt Service Reserve Account. In the case of an insurance policy or surety bond, the Senior Lien Bond Provider of such insurance policy or surety bond shall be an insurer which, at the time of issuance of the insurance policy or surety bond, has been assigned a credit rating which is within one of the two highest ratings, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, accorded insurers by at least two Rating Agencies. Letters of credit shall be issued by a banking institution which has, or the parent of which has, or the holding corporation of which it is the principal bank has, at the time of issuance of the letter of credit, a credit rating on its long-term unsecured debt within one of the two highest rating categories, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, from at least two Rating Agencies. The insurance policy, surety bond or letter of credit shall grant to the City the right to receive payment for the purposes of which the Subaccount of the Senior Lien Debt Service Reserve Account may be used or for deposit in that Subaccount and shall be irrevocable during its term.

“Senior Lien Debt Service Reserve Account Credit Instrument Coverage” means, with respect to any Senior Lien Debt Service Reserve Account Credit Instrument on any date of determination, the amount available to pay principal of and interest on the Senior Lien Bonds under that Senior Lien Debt Service Reserve Account Credit Instrument.

“Senior Lien Debt Service Reserve Requirement” means (i) with respect to each of the Series 1993 Bonds, the Series 1997 Senior Lien Bonds and the 2000 Senior Lien Bonds, the amount, as of any date of computation, specified in the respective ordinance of the City, as amended, authorizing those bonds; and (ii) and with respect to any series of Senior Lien Parity Bonds, as of any date of computation, such amounts as shall be established by the ordinance authorizing that series of Senior Lien Parity Bonds, not to exceed the least of (A) the highest future Senior Lien Debt Service Requirement of that series of Senior Lien Parity Bonds in any Fiscal Year including the Fiscal Year in which the date of computation falls; (B) 10 percent of the original principal amount of that series of Senior Lien Parity Bonds (less original issue discount); or (C) 125 percent of the average annual Senior Lien Debt Service Requirement for that series of Senior Lien Parity Bonds. Any Senior Lien Bonds required to be redeemed pursuant to a mandatory sinking fund redemption shall be treated for purposes of this definition as being due on the dates they are required to be redeemed and not on their stated maturity dates.

“Senior Lien Parity Bonds” means obligations which may be issued after the issuance of the Series 2014 Bonds which are payable from Net Revenues Available for Bonds on an equal and ratable basis with all Outstanding Senior Lien Bonds.

“Senior Lien Principal and Interest Account” means the separate account entitled “Bond Principal and Interest Account” previously established by the City in the Water Fund and described in the Ordinance.

“Senior Lien Rebate Accounts” means the separate accounts with that title in the Water Fund referred to in the Ordinance.

“Series 1993 Bonds” means the Water Revenue Bonds, Refunding Series 1993, of the City which are Outstanding from time to time.

“Series 1997 Bonds” means the Water Revenue Bonds, Series 1997, of the City which are Outstanding from time to time.

“Series 2000 Bond Ordinance” means the ordinance passed by the City Council on November 17, 1999, authorizing the issuance of the Series 2000 Bonds, and the Senior Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2000 Bonds.

“Series 2000 Bonds” means the \$100,000 aggregate principal amount of Second Lien Water Revenue Bonds, Series 2000, of the City.

“Series 2001 Second Lien Bond Ordinance” means the ordinance passed by the City Council on March 7, 2001, authorizing the issuance of the 2001 Second Lien Bonds, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the 2001 Second Lien Bonds.

“Series 2001 Subordinate Lien Bond Ordinance” means the ordinance passed by the City Council on October 31, 2001, authorizing the issuance of the 2001 Subordinate Lien Obligations.

“Series 2004 Second Lien Bond Ordinance” means the ordinance passed by the City Council on May 26, 2004, as amended by the Series 2012 Second Lien Bond Ordinance, authorizing the issuance of the Series 2004 Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2004 Bonds.

“Series 2004 Bonds” means the \$344,575,000 aggregate principal amount of Second Lien Water Revenue Refunding Bonds, Series 2004, of the City.

“Series 2006 Bonds” means the Series 2006 Second Lien Bonds and the 2006 Subordinate Lien Obligations of the City which are Outstanding from time to time.

“Series 2006 Second Lien Bond Ordinance” means the ordinance passed by the City Council on June 28, 2006, authorizing the issuance of the Series 2006 Second Lien Bonds and the 2006 Subordinate Lien Obligations, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2006 Second Lien Bonds.

“Series 2006 Second Lien Bonds” means the Second Lien Water Revenue Project and Refunding Bonds, Series 2006, of the City, which are Outstanding from time to time.

“Series 2008 Bonds” means the Series 2008 Second Lien Bonds and the 2008 Subordinate Lien Obligations of the City which are Outstanding from time to time.

“Series 2008 Second Lien Bonds” means the Second Lien Water Revenue Project and Refunding Bonds, Series 2008, of the City, which are Outstanding from time to time.

Series 2008 Second Lien Bond Ordinance” means the ordinance passed by the City Council on September 27, 2007, authorizing the Series 2008 Second Lien Bonds.

“Series 2012 Second Lien Bond Ordinance” means the ordinance passed by the City Council on March 14, 2012 as amended by the ordinance passed by the City Council on May 9, 2012, authorizing, among other things, the issuance of the Series 2012 Second Lien Bonds and the 2012 Subordinate Lien Obligations, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2012 Second Lien Bonds.

“Series 2010 Second Lien Bonds” means, collectively, the 2010A Second Lien Bonds, the 2010B Second Lien Bonds and the 2010C Second Lien Bonds which are Outstanding from time to time.

“Series 2012 Second Lien Bonds” means the Second Lien Water Revenue Bonds, Project Series 2012, of the City, which are Outstanding from time to time.

“Series 2014 Bonds” means, the Second Lien Water Revenue Bonds, Project Series 2014, of the City, which are Outstanding from time to time.

“Series 2016A-1 Bonds” means the \$59,595,000 aggregate principal amount of Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt) of the City authorized to be issued pursuant to the Ninth Supplemental Indenture.

“Series 2016A-2 Bonds” means the \$22,120,000 aggregate principal amount of Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable) of the City authorized to be issued pursuant to the Ninth Supplemental Indenture.

“Series 2016A-1 Debt Service Reserve Account” means the account designated the “Series 2016A-1, Debt Service Reserve Account” established within the 2016A Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount.”

“Series 2016A-2 Debt Service Reserve Account” means the account designated the “Series 2016A-2, Debt Service Reserve Account” established within the 2016A Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount.”

“Series 2016A Deposit Requirement” has the meaning set forth in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Application of Bond Proceeds — Deposits into 2016A Second Lien Bonds Subaccount and Accounts Therein.”

“Series 2016A-1 Principal and Interest Account” means the account designated the “Series 2016A-1 Bonds, Principal and Interest Account” established in the 2016A Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount.”

“Series 2016A-2 Principal and Interest Account” means the account designated the “Series 2016A-2 Bonds, Principal and Interest Account” established in the 2016A Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount.”

“Sinking Fund Payment” means:

(a) as of any particular date of determination and with respect to the Outstanding Senior Lien Bonds of any series, the amount required by the Senior Lien Bond Ordinances to be paid in any event by the City on a single future date for the retirement of Senior Lien Bonds of such series which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Senior Lien Bond;

(b) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series or consisting of any Section 2.08 Obligation, the amount

required by the Supplemental Indenture creating such series or the instrument creating such Section 2.08 Obligation to be paid in any event by the City on a single future date for the retirement of such Second Lien Bonds which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Second Lien Bond; and

(c) as of any particular date of determination and with respect to the Outstanding Subordinate Lien Obligations of any series, the amount required by a Subordinate Lien Obligation Ordinance to be paid in any event by the City on a single future date for the retirement of Subordinate Lien Obligations of such series which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Subordinate Lien Obligation.

“State” means the State of Illinois.

“Subordinate Lien Debt Service Requirement” means, for any Fiscal Year, the principal of and interest on Subordinate Lien Obligations required to be paid in that Fiscal Year.

“Subordinate Lien Debt Service Reserve Subaccount” means the separate Subaccount of that name previously established by the City in the Subordinate Lien Obligations Account and described in the Ordinance.

“Subordinate Lien Obligation Ordinances” means each ordinance of the City authorizing the issuance of Subordinate Lien Obligations.

“Subordinate Lien Obligation Revenues” means all sums, amounts, funds or moneys which are deposited to the Subordinate Lien Obligations Account.

“Subordinate Lien Obligations” means the 2000 Subordinate Lien Obligations, the 2001 Subordinate Lien Obligations, the 2006 Subordinate Lien Obligations, the 2008 Subordinate Lien Obligations, the 2012 Subordinate Obligations and all Subordinate Lien Parity Obligations.

“Subordinate Lien Obligations Account” means the separate account of that name established in the Water Fund as described in the Ordinance.

“Subordinate Lien Parity Obligations” means obligations which are payable from Subordinate Lien Obligation Revenues on an equal and ratable basis with all Outstanding Subordinate Lien Obligations.

“Subordinate Lien Principal and Interest Subaccount” means the separate Subaccount of that name established by the City in the Subordinate Lien Obligations Account and described in the Ordinance.

“Supplemental Indenture” means any indenture modifying, altering, supplementing or conforming the terms of the Master Indenture duly entered into in accordance with the terms of the Master Indenture, including, without limitation, the Ninth Supplemental Indenture.

“Tax-Exempt Project Costs” means one or more of the purposes of: (1) paying costs of restructuring the Outstanding Series 2000 Bonds by converting those bonds to fixed interest rates; (2) paying the costs of terminating the RBC Swap, (3) paying costs of restructuring the Outstanding Series 2004 Bonds by converting those bonds to fixed interest rates; (4) paying Costs of Issuance of the Bonds; (5) paying costs of acquiring a Qualified Reserve Account Credit Instrument for the Series 2000

Bonds or making a deposit to a debt service reserve account for the Series 2000 Bonds in the amount required by the Supplemental Indenture for such bonds; (6) paying costs of acquiring a Qualified Reserved Account Credit Instrument for the Series 2004 Bonds or making a deposit to a debt service reserve account for the Series 2004 Bonds in the amount required by the Supplemental Indenture for such bonds; (7) paying the costs of acquiring a Qualified Reserve Account Credit Instrument for the Bonds or making a deposit to the Series 2016A Bonds Dedicated Subaccount in the amount required by this Ninth Supplemental Indenture or a Supplemental Indenture and (8) providing for any discount on the Bonds.

“Taxable Project Costs” means one or more of the purposes of: (1) paying the costs of terminating the Barclays Swaps; (2) paying Costs of Issuance of the Series 2016A-2 Bonds; (3) paying the costs of acquiring a Qualified Reserve Account Credit Instrument for the Series 2016A-2 Bonds or making a deposit to the Series 2016A-2 Bonds Dedicated Subaccount in the amount required by this Ninth Supplemental Indenture or a Supplemental Indenture and (4) providing for any discount on the Series 2016A-2 Bonds.

“Trust Estate” means the property conveyed to the Trustee pursuant to the granting clauses of the Ninth Supplemental Indenture.

“2000 Senior Lien Bonds” means the Senior Lien Water Revenue Bonds, Series 2000, of the City which are Outstanding from time to time.

“2000 Series Debt Instruments” means, collectively, the 2000 Senior Lien Bonds, the Series 2000 Bonds and the 2000 Subordinate Lien Obligations of the City which are Outstanding from time to time.

“2000 Subordinate Lien Obligations” means the Loans authorized by and defined in the Series 2000 Bond Ordinance which are Outstanding from time to time.

“2001 Second Lien Bonds” means the Second Lien Water Revenue Refunding Bonds, Series 2001, of the City which are Outstanding from time to time.

“2001 Senior Lien Bonds” means the Senior Lien Water Revenue Bonds, Series 2001 of the City which are Outstanding from time to time.

“2001 Subordinate Lien Obligations” means the Loans authorized by and defined in the Series 2001 Subordinate Lien Bond Ordinance.

“2006 Subordinate Lien Obligations” means the Loans authorized by and defined in the Series 2006 Second Lien Bond Ordinance.

“2010A Second Lien Bonds” means the Second Lien Water Revenue Bonds, Project and Refunding Series 2010A (Tax-Exempt), of the City, which are Outstanding from time to time.

“2010B Second Lien Bonds” means the Second Lien Water Revenue Bonds, Taxable Project Series 2010B (Build America Bonds – Direct Payment), of the City, which are Outstanding from time to time.

“2010C Second Lien Bonds” means the Second Lien Water Revenue Bonds, Taxable Project Series 2010C (Qualified Energy Conservation Bonds – Direct Payment), of the City, which are Outstanding from time to time.

“2016A-1 Bond Proceeds Account” means the Bond Proceeds Account: 2016A-1 Second Lien Bonds established pursuant to the Ordinance, as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Use of Moneys in 2016A-1 Bond Proceeds Account and 2016A-2 Bond Proceeds Account.”

“2016A-2 Bond Proceeds Account” means the Bond Proceeds Account: 2016A-2 Second Lien Bonds established pursuant to the Ordinance, as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — Use of Moneys in 2016A-1 Bond Proceeds Account and 2016A-2 Bond Proceeds Account.”

“2016A Second Lien Bonds Subaccount” means the 2016A Second Lien Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 2016A Second Lien Bonds Subaccount.”

“Variable Rate Bonds” means any Second Lien Bonds the interest rate on which is not established at the time of their issuance at a single numerical rate for the entire term of such Second Lien Bonds.

“Water Fund” means the separate fund designated the “Water Fund of the Municipality of Chicago” previously established by the City and described in the Ordinance.

“Water Rate Stabilization Account” means the separate account of that name established in the Water Fund as provided in the Ordinance.

“Water Revenue Bonds” means collectively, the Senior Lien Bonds, the Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes Outstanding from time to time.

“Water System” means all property, real, personal or otherwise, owned or to be owned by the City or under the control of the City and used for water supply, distribution or collection purposes, including any and all further extensions, improvements and additions to the Water System.

“Water System Line of Credit Agreement” means a line of credit agreement with a commercial bank or other financial institution in the form customarily used to provide borrowers with a revolving line of credit.

“Water System Line of Credit Notes” means obligations issued by the City from time to time pursuant to a Water System Line of Credit Agreement, payable from the Line of Credit Notes Account.

APPENDIX B

SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE

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APPENDIX B

SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE

The following is a composite summary of certain provisions of the Ordinance and the Indenture to which reference is made for a complete statement of the provisions and contents of each of such documents. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to the Ordinance and the Indenture, copies of which are on file with the Trustee.

Source of Payment; Pledge of Second Lien Bond Revenues

The provisions of the Ordinance and the Indenture constitute a contract among the City, the Trustee and the Registered Owners of the Bonds. The Bonds are issued under the Ordinance and the Indenture as Second Lien Bonds.

The Bonds shall be limited obligations of the City having a claim for payment of principal, redemption premium and interest solely from amounts in the 2016A Second Lien Bonds Subaccount of the Second Lien Bonds Account, the sources pledged under the Indenture and from amounts on deposit in the 2016A Bond Proceeds Account and, together with any Outstanding and Second Lien Parity Bonds, from Second Lien Bond Revenues. The Bonds shall not constitute an indebtedness of the City within the meaning of any constitutional or statutory provisions or limitation as to indebtedness and shall have no claim to be paid from taxes of the City. A lien on and security interest in Second Lien Bond Revenues is granted to the registered owners of the Second Lien Bonds Outstanding from time to time, and a lien on amounts in the 2016A Second Lien Bonds Subaccount and the 2016A Bond Proceeds Account is granted to the Registered Owners of the Bonds Outstanding from time to time, subject to amounts in those Accounts being deposited, credited and expended as provided in the Ordinance. See “– Flow of Funds – *Application of Net Revenues Available for Bonds* – Second Lien Bonds Account,” “–” and “– Section 2.08 and Section 2.09 Obligations” below.

Section 2.08 and Section 2.09 Obligations

The City reserves the right under the Indenture to provide one or more irrevocable letters of credit, lines of credit, standby purchase agreements, financial guaranty insurance policies or surety bonds (including Qualified Reserve Account Credit Instruments) or a combination of the foregoing to secure the payment of the principal of, premium, if any, and interest on one or more series of Second Lien Bonds, including the Bonds, or in the event owners of such series of Second Lien Bonds have the right to require tender or purchase thereof, to secure the payment of the tender or purchase price of such Second Lien Bonds upon the demand of their owners. Any Section 2.08 Obligation constitutes a Second Lien Bond under the Indenture to the same extent as any series of Second Lien Bonds issued pursuant to a Supplemental Indenture, and any and all amounts payable by the City under Section 2.08 Obligations, together with interest on such amounts, shall for purposes of the Indenture be deemed to constitute the payment of principal of, premium, if any, and interest on Second Lien Bonds.

If the City enters into Qualified Second Lien Swap Agreements with swap providers requiring the City to pay a fixed interest rate on a notional amount, or requiring the City to pay a variable interest rate on a notional amount, where the City has made a determination that such Qualified Second Lien Swap Agreement was entered into for the purpose of providing substitute interest payments for Senior Lien Bonds or Second Lien Bonds of a particular maturity or maturities in a principal amount equal to the notional amount of the Qualified Second Lien Swap Agreement and so long as the swap provider is not in default under such Qualified Second Lien Swap Agreement: (i) for purposes of any calculation of Annual

Senior Lien Debt Service or Annual Second Lien Debt Service, as applicable, the interest rate on the Senior Lien Bonds or Second Lien Bonds of such maturity or maturities, as applicable, shall be determined as if such Senior Lien Bonds or Second Lien Bonds, as applicable, bore interest at the fixed interest rate or the variable interest rate, as the case may be, payable by the City under such Qualified Second Lien Swap Agreement, (ii) any net payments required to be made by the City to the swap provider pursuant to such Qualified Second Lien Swap Agreement from Net Revenues shall be deemed payments on Senior Lien Bonds or Second Lien Bonds, as applicable, and be made on a parity with payments due on other Senior Lien Bonds or Second Lien Bonds, as applicable, and (iii) any net payments received by the City from the swap provider pursuant to such Qualified Second Lien Swap Agreement shall be applied in the Senior Lien Revenue Fund or Second Lien Revenue Fund, as applicable.

If the City shall enter into a swap agreement of the type generally described in the immediately preceding paragraph that does not satisfy the requirements for qualification as a Qualified Second Lien Swap Agreement as a result of its failure to make the determination described therein or otherwise, then: (i) the interest rate adjustment or assumptions referred to in (i) of the immediately preceding paragraph shall not be made, (ii) any net payments required to be made by the City to the swap provider pursuant to such swap agreement from Gross Revenues shall be made only from amounts available after the payment of all Second Lien Bonds, and (iii) any net payments received by the City from the swap provider pursuant to such swap agreement may be treated as Gross Revenues at the option of the City and applied as directed by the City.

Termination payments made with respect to a swap agreement described in the immediately preceding paragraphs shall be subordinate to payments due on Second Lien Bonds.

Second Lien Bonds Rate Covenant

The City will establish, maintain and collect at all times fees, charges and rates for the use and service of the Water System sufficient at all times to (a) pay Operation and Maintenance Costs, and (b) produce Net Revenues Available for Bonds sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and applicable redemption premium and interest on all Water Revenue Bonds Outstanding from time to time and to establish and maintain the Senior Lien Principal and Interest Account and various subaccounts of the Senior Lien Debt Service Reserve Account as may be covenanted in Senior Lien Bond Ordinances, which Net Revenues Available for Bonds shall in each Fiscal Year at least equal the greater of:

- (i) 120 percent of the sum required to pay promptly when due the Aggregate Senior Lien Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds then Outstanding, or
- (ii) the sum of
 - (A) 100 percent of the Aggregate Senior Lien Debt Service for the Fiscal Year with respect to all Senior Lien Bonds Outstanding, plus
 - (B) 110 percent of the Aggregate Second Lien Bonds Debt Service for the Fiscal Year with respect to all Second Lien Bonds Outstanding and all Section 2.08 Obligations and Section 2.09 Obligations, plus
 - (C) 100 percent of the Subordinate Lien Debt Service Requirement for the Fiscal Year on all Subordinate Lien Obligations Outstanding.

These fees, charges and rates shall not be reduced, while any Second Lien Bonds are Outstanding, below the level necessary to ensure compliance with the covenants set forth above.

The City will, prior to the end of each Fiscal Year, conduct a review to determine if it has been and will be in compliance with the rate covenant set forth above. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the rate covenant, the City shall have prepared a rate study for the Water System identifying the rate changes necessary to comply with the rate covenant and the Office of Budget and Management of the City and the Chief Financial Officer shall recommend appropriate action to the City Council to comply with this rate covenant.

Flow of Funds

There has been created and there exists a separate fund of the City designated the Water Fund into which the Gross Revenues of the Water System are and shall be deposited as collected. The Water Fund shall continue as a separate fund of the City. The Water Fund shall constitute a trust fund and has been and is irrevocably pledged to the owners of the Senior Lien Bonds, Second Lien Bonds (but solely with respect to amounts on deposit in the Second Lien Bonds Account), Subordinate Lien Obligations (but solely with respect to amounts on deposit in the Subordinate Lien Obligations Account), Commercial Paper Notes (but solely with respect to amounts on deposit in the Commercial Paper Account) and Water System Line of Credit Notes (but solely with respect to amounts on deposit in the Line of Credit Notes Account), from time to time Outstanding for the sole purpose of carrying out the covenants, terms and conditions of the ordinances authorizing the Senior Lien Bonds, Second Lien Bonds (but solely with respect to amounts on deposit in the Second Lien Bonds Account), Subordinate Lien Obligations (but solely with respect to amounts on deposit in the Subordinate Lien Obligations Account), Commercial Paper Notes (but solely with respect to amounts on deposit in the Commercial Paper Account) and Water System Line of Credit Notes (but solely with respect to amounts on deposit in the Line of Credit Notes Account).

Moneys in the Water Fund are expended only as provided in the Ordinance and in the ordinances authorizing Water Revenue Bonds for (a) paying Operation and Maintenance Costs, (b) paying the principal of, redemption premium, if any, and interest on Senior Lien Bonds (or purchasing Senior Lien Bonds), and (c) establishing and maintaining (for the purposes specified in those ordinances) the Senior Lien Bonds Construction Accounts and the Accounts in the Water Fund described in the Ordinance and all other reserve funds or accounts which are required to be established and maintained in the ordinances authorizing the issuance of Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes; provided that any funds available after these requirements have been satisfied or which are not necessary to satisfy these requirements may be used for any lawful purpose of the Water System.

A lien on and security interest in the Net Revenues Available for Bonds and the various Accounts of the Water Fund established as provided in the Ordinances (other than the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account and the Line of Credit Notes Account) are granted to the Registered Owners of the Senior Lien Bonds Outstanding from time to time, subject to amounts in the various Accounts being deposited, credited and expended as provided in the Ordinances, and with amounts in various Subaccounts of the Senior Lien Debt Service Reserve Account securing only the series or set of series of Senior Lien Bonds to which such Subaccounts relate. Nothing in the Ordinances shall prevent the City from commingling money in the Water Fund (other than the Senior Lien Principal and Interest Account, Senior Lien Debt Service Reserve Account, Senior Lien Rebate Accounts, Second Lien Bonds Account, Subordinate Lien Obligations Account, Commercial Paper Account and Line of Credit Notes Account) with other money, funds and accounts of the City. Any advance by the City to the Water Fund from other funds of the City shall have a claim for reimbursement

only from amounts in the Water Fund not required for deposit in the various Accounts specified in the previous sentence as provided in the Ordinances.

Application of Net Revenues Available for Bonds. There have been created and there exist and shall be maintained in the Water Fund, the following separate accounts: the Senior Lien Principal and Interest Account, the Senior Lien Debt Service Reserve Account and its various Subaccounts, the Water Rate Stabilization Account and the Senior Lien Rebate Accounts. There have also been created and shall be maintained in the Water Fund, (i) the Second Lien Bonds Account and its various Subaccounts for each series of Second Lien Bonds, (ii) the Subordinate Lien Obligations Account and its various Subaccounts for each series of Subordinate Lien Obligations, (iii) the Commercial Paper Account and its various Subaccounts and (iv) the Line of Credit Notes Account and its various Subaccounts. The Net Revenues Available for Bonds shall be transferred, without any further official action or direction, to the Senior Lien Principal and Interest Account, the Senior Lien Debt Service Reserve Account, the Senior Lien Rebate Accounts, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account, the Line of Credit Notes Account and the Water Rate Stabilization Account in the order in which those accounts are listed below, for use in accordance with the provisions described below.

Senior Lien Principal and Interest Account. Not later than 10 days prior to each principal or interest payment date for the Senior Lien Bonds, there shall be transferred to the Senior Lien Principal and Interest Account sufficient funds to pay the amount of the principal, redemption premium, if any, and interest becoming due, whether upon maturity, redemption or otherwise, on such payment date on all Outstanding Senior Lien Bonds.

Funds in the Senior Lien Principal and Interest Account shall be used only for the purpose of paying principal of, redemption premium, if any, and interest on Outstanding Senior Lien Bonds as the same become due.

Senior Lien Debt Service Reserve Account.

(1) There may be established by any ordinances authorizing the issuance of any series of Senior Lien Parity Bonds one or more Subaccounts in the Senior Lien Debt Service Reserve Account with respect to one or more series of Senior Lien Parity Bonds.

(2) Whenever the balance in the various Subaccounts of the Senior Lien Debt Service Reserve Account is less than the Senior Lien Debt Service Reserve Requirement for the various series of Senior Lien Bonds, except as otherwise provided in the Senior Lien Bond Ordinances, there shall be transferred to the Senior Lien Debt Service Reserve Account within the next 12 months sufficient funds to maintain balances in the various Subaccounts of the Senior Lien Debt Service Reserve Account at least equal to the Senior Lien Debt Service Reserve Requirement for the various series of Senior Lien Bonds.

Funds in any Subaccount of the Senior Lien Debt Service Reserve Account and any Senior Lien Debt Service Reserve Account Credit Instruments in that Subaccount shall be used to pay principal of, redemption premium, if any, and interest on the Senior Lien Bonds of the series to which the Subaccount relates (or when series of Senior Lien Bonds are secured on a parity basis by Subaccounts relating to those various series, then funds in each such Subaccount shall be so used on a parity basis to pay principal of, redemption premium, if any, and interest on the Senior Lien Bonds to which those various Subaccounts relate) as the same become due at any time when there are insufficient funds available for such purpose in the Senior Lien Principal and Interest Account (after any available amounts in the Water Rate Stabilization Account have first been applied to that purpose).

(3) All or any part of the Senior Lien Debt Service Reserve Requirement for any series of Senior Lien Bonds may be met by deposit with the City of one or more Senior Lien Debt Service Reserve Account Credit Instruments. A Senior Lien Debt Service Reserve Account Credit Instrument shall, for purposes of determining the value of the amounts on deposit in the Senior Lien Debt Service Reserve Account and the Subaccount or Subaccounts to which it relates, be valued at the Senior Lien Debt Service Reserve Account Credit Instrument Coverage for such Senior Lien Debt Service Reserve Account Credit Instrument except as provided in the next sentence. If a Senior Lien Debt Service Reserve Account Credit Instrument is to terminate (or is subject to termination) prior to the last principal payment date on any Outstanding Senior Lien Bond of the series of Senior Lien Bonds to which it relates, then the Senior Lien Debt Service Reserve Account Credit Instrument Coverage of that Senior Lien Debt Service Reserve Account Credit Instrument shall be reduced each year, beginning on the date which is four years prior to the first date on which the Senior Lien Debt Service Reserve Account Credit Instrument is to terminate (or is subject to termination), by 25 percent of the coverage in each of the years remaining prior to such date, provided that if by the terms of the Senior Lien Debt Service Reserve Account Credit Instrument and the terms of the related Senior Lien Bond ordinance, the City has the right and duty to draw upon such Senior Lien Debt Service Reserve Account Credit Instrument prior to its termination for deposit in the related Subaccount of the Senior Lien Debt Service Reserve Account (if and to the extent a substitute Senior Lien Debt Service Reserve Account Credit Instrument is not deposited in that related Subaccount) all or part of its Senior Lien Debt Service Reserve Account Credit Instrument Coverage, then the reduction shall be in an amount equal to the difference between (A) the Senior Lien Debt Service Reserve Requirement for that series of Senior Lien Bonds and (B) the sum of the amounts on deposit in the related Subaccount of the Senior Lien Debt Service Reserve Account and the amount which the City may draw under the Senior Lien Debt Service Reserve Account Credit Instrument prior to its termination for deposit in the related Subaccount of the Senior Lien Debt Service Reserve Account. Any amounts in any Subaccount of the Senior Lien Debt Service Reserve Account which are not required to be transferred to the Senior Lien Principal and Interest Account may, from time to time, be used to pay costs of acquiring a Senior Lien Debt Service Reserve Account Credit Instrument for that Subaccount or to make payments due under a Senior Lien Bond Reimbursement Agreement with respect to such Senior Lien Debt Service Reserve Account Credit Instrument, but only if after such payment, the value of the amounts on deposit in the Subaccount of the Senior Lien Debt Service Reserve Account shall not be less than the Senior Lien Debt Service Reserve Requirement for that series of Senior Lien Bonds. The City pledges and grants a lien on and security interest in the amounts on deposit in the Subaccounts of the Senior Lien Debt Service Reserve Account to any Senior Lien Bond Provider with respect to the particular Subaccount corresponding to such Senior Lien Bond Provider's Senior Lien Debt Service Reserve Account Credit Instrument, provided that the pledge, lien and security interest shall be junior to any claim for the benefit of the registered owners of Senior Lien Bonds of that series.

After the deposit of a Senior Lien Debt Service Reserve Account Credit Instrument into any Subaccount of the Senior Lien Debt Service Reserve Account and after the City has received notice of the value of the amounts on deposit in the Subaccount of the Senior Lien Debt Service Reserve Account after such deposit, the Chief Financial Officer may then direct the transfer from the Subaccount of the Senior Lien Debt Service Reserve Account to any account of the Water Fund of any amounts in the Subaccount of the Senior Lien Debt Service Reserve Account in excess of the Senior Lien Debt Service Reserve Requirement for that series of Senior Lien Bonds for use in accordance with the Senior Lien Ordinances.

Senior Lien Rebate Accounts. There shall be transferred from the Water Fund from Net Revenues Available for Bonds and deposited to the credit of the various Senior Lien Rebate Accounts the amounts as shall be required to be held available for rebate to the United States of America with respect to each series of Water Revenue Bonds as required by the Senior Lien Bond Ordinances. Each such Senior Lien Rebate Account shall be deposited in a separate bank account in a bank or banks designated

by the Chief Financial Officer pursuant to a depository agreement. The amount so to be held available shall be determined from time to time by the City pursuant to the Senior Lien Bond Ordinances.

Amounts in such Senior Lien Rebate Accounts shall be used at the direction of the City to make rebate payments to the United States of America and to the extent not needed for such purpose shall be transferred to the Water Fund, provided that earnings on the investment of amounts on deposit in the Senior Lien Rebate Accounts shall not be Investment Earnings, shall not be considered Gross Revenues and shall be retained in the respective Senior Lien Rebate Accounts except to the extent no longer required for rebate purposes.

Second Lien Bonds Account. There is established in the Second Lien Bonds Account with respect to the Bonds a separate and segregated 2016A Second Lien Bonds Subaccount. There may be established by any ordinances or related indentures authorizing the issuance of any series of Second Lien Parity Bonds one or more other Subaccounts in the Second Lien Bonds Account with respect to such Second Lien Parity Bonds, including a debt service reserve account for such series of Second Lien Parity Bonds, and such ordinance or indenture may also authorize the establishment of a series reserve account requirement for such series of Second Line Parity Bonds and the purchase of a Qualified Reserve Account Credit Instrument for purposes of fulfilling such requirement. There shall be transferred to the Second Lien Bonds Account and to the Subaccounts in the Second Lien Bonds Account such amounts on such dates as are required to be so transferred by the Ninth Supplemental Indenture and each other Supplemental Indenture without priority of one Subaccount over any other Subaccount. The moneys in the various Subaccounts of the Second Lien Bonds Account shall be transferred by the Chief Financial Officer on the date so deposited in such various Subaccounts to the appropriate paying agents or trustees for the related series of Second Lien Bonds for the purpose of paying such amounts as may be required to be paid by the ordinances and related Supplemental Indentures authorizing such Second Lien Bonds. See “—2016A Second Lien Bonds Subaccount” below.

Subordinate Lien Obligations Account. There have been established and there shall exist and be maintained in the Subordinate Lien Obligations Account the following separate and segregated Subaccounts: the Subordinate Lien Principal and Interest Subaccount and the Subordinate Lien Debt Service Reserve Subaccount. There may be established by any ordinances authorizing the issuance of any series of Subordinate Lien Parity Obligations one or more Sub-subaccounts in the Subordinate Lien Principal and Interest Subaccount and Subordinate Lien Debt Service Reserve Subaccount with respect to such Subordinate Lien Parity Obligations. On the Business Day immediately preceding each May 1 and November 1, there shall be transferred to the Subordinate Lien Obligations Account, the amount required by any ordinance authorizing the issuance of Subordinate Lien Obligations to be deposited in the Subordinate Lien Obligations Account on such date without priority, one over the other, to any Subaccounts within the Subordinate Lien Obligations Account, the amount to be so deposited specified in a certificate of the Chief Financial Officer. The moneys in the various Subaccounts of the Subordinate Lien Obligations Account and Sub-subaccounts described in this paragraph shall be used to pay such amounts as may be required to be paid by the Ordinance and any ordinance authorizing Subordinate Lien Parity Obligations.

Commercial Paper Account. There has been established and there shall exist and be maintained in the Water Fund a separate and segregated Commercial Paper Account. There may be established by any ordinances or related indentures authorizing the issuance of any Commercial Paper Notes one or more other Subaccounts in the Commercial Paper Account with respect to such Commercial Paper Notes. There shall be transferred to the Commercial Paper Account and to the Subaccounts in the Commercial Paper Account such amounts on such dates as are required to be so transferred by the indenture pursuant to which the Commercial Paper Notes are issued. The moneys in the various Subaccounts of the Commercial Paper Account shall be transferred by the Chief Financial Officer on the date so deposited in

such various Subaccounts to the appropriate paying agents or trustees for the related Commercial Paper Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related indentures authorizing such Commercial Paper Notes.

Line of Credit Notes Account. There has been established in the Ordinance and there shall exist and be maintained in the Water Fund a separate and segregated Line of Credit Notes Account. There may be established by any ordinances or related Water System Line of Credit Agreements authorizing the issuance of any Water System Line of Credit Notes one or more other Subaccounts in the Line of Credit Notes Account with respect to such Water System Line of Credit Notes. There shall be transferred to the Line of Credit Notes Account and to the Subaccounts in the Line of Credit Notes Account such amounts on such dates as are required to be so transferred by the Water System Line of Credit Agreements pursuant to which the Water System Line of Credit Notes are issued. The moneys in the various Subaccounts of the Line of Credit Notes Account shall be transferred by the Chief Financial Officer on the date so deposited in such various Subaccounts to the appropriate owners of or paying agents or trustees for the related Water System Line of Credit Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related Water System Line of Credit Agreements authorizing such Water System Line of Credit Notes.

Water Rate Stabilization Account. The City has caused amounts to be credited to the Water Rate Stabilization Account. In any year the City may withdraw any amounts from the Water Rate Stabilization Account and use those amounts for (i) paying any expenses or obligations of the Water System, including, without limitation, any Operation and Maintenance Costs, (ii) making deposits in the Senior Lien Principal and Interest Account, (iii) making deposits in the various Subaccounts of the Senior Lien Debt Service Reserve Account, (iv) making deposits when due in the Second Lien Bonds Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account and in the various Subaccounts of the Senior Lien Debt Service Reserve Account as provided in the immediately succeeding sentence), (v) making deposits when due in the Subordinate Lien Obligations Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account as provided in the immediately succeeding sentence or in the Second Lien Bonds Account), (vi) making deposits when due in the Commercial Paper Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account, in the Second Lien Bonds Account or the Subordinate Lien Obligations Account), (vii) making deposits when due in the Line of Credit Notes Account (but only if and to the extent no amounts are required to be deposited in the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account, in the Second Lien Bond Accounts, in the Subordinate Lien Obligations Account or in the Commercial Paper Account), (viii) any cost of repairs, replacements, renewals, improvements, equipment or extensions to the Water System or (ix) any other cost or expense relating to the Water System or the financing or refinancing of the Water System. The Water Rate Stabilization Account shall be used to make all required deposits in the Senior Lien Principal and Interest Account and the various Subaccounts of the Senior Lien Debt Service Reserve Account when no other funds are available for that purpose. Any Net Revenues remaining in any period not required for transfer to the Senior Lien Principal and Interest Account, the various Subaccounts of the Senior Lien Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account or the Line of Credit Notes Account may be transferred to the Water Rate Stabilization Account at any time upon the direction of the Chief Financial Officer.

2016A Second Lien Bonds Subaccount

Except as otherwise provided in the Indenture, moneys on deposit in the 2016A Second Lien Bonds Subaccount, and in each Account established in it as described below, shall be held in trust by the Trustee for the sole and exclusive benefit of the Registered Owners of the Bonds. In the Ninth Supplemental Indenture, the City creates and establishes with the Trustee separate Accounts within the 2016A Second Lien Bonds Subaccount as follows:

- (i) the Program Fee Account;
- (ii) the Series 2016A-1 Principal and Interest Account; and
- (iii) the Series 2016A-2 Principal and Interest Account.

Application of Bond Proceeds

The aggregate proceeds received by the City from the sale of the Series 2016A Bonds (exclusive of underwriters' discount), shall be applied as follows:

- (i) the Trustee shall deposit into the 2016A-1 Bond Proceeds Account the proceeds received by the City from the sale of the Series 2016A-1 Bonds to be applied to pay Tax-Exempt Project Costs; and
- (ii) the Trustee shall deposit into the 2016A-2 Bond Proceeds Account the proceeds received by the City from the sale of the Series 2016A-2 Bonds to be applied to pay Taxable Project Costs.

Deposits into 2016A Second Lien Bonds Subaccount and Accounts Therein. On each Deposit Date, there shall be deposited into the 2016A Second Lien Bonds Subaccount from amounts on deposit in the Second Lien Bonds Account an amount equal to the aggregate of the following amounts, which amounts shall have been calculated by the Trustee and certified by the Chief Financial Officer and transferred by the City to the Trustee in accordance with the Ordinance on or before the Business Day next preceding each such Deposit Date, respectively (such aggregate amount with respect to any Deposit Date being referred to as the "Series 2016A Deposit Requirement"):

- (a) for deposit into the 2016A-1 Principal and Interest Account, an amount equal to the 2016A-1 Principal and Interest Account Requirement; and
- (b) for deposit into the 2016A-2 Principal and Interest Account, an amount equal to the 2016A-2 Principal and Interest Account Requirement; and
- (c) for deposit into the Program Fee Account, the amount estimated by the City to be required as of the close of business on the related Deposit Date to pay all Program Fees payable from amounts in the Program Fee Account during the semi-annual period commencing on such related Deposit Date and, in the case of the initial Deposit Date, any Program Fees payable from the Date of Issuance to, but not including, such initial Deposit Date.

In addition to the Series 2016A Deposit Requirement, there shall be deposited into the 2016A Second Lien Bonds Subaccount any other moneys received by the Trustee under and pursuant to the Master Indenture or the Ninth Supplemental Indenture, when accompanied by directions from the person

depositing such moneys that such moneys are to be paid into the 2016A Second Lien Bonds Subaccount or to one or more accounts in that Subaccount.

Upon calculation by the Trustee of each Series 2016A Deposit Requirement, the Trustee shall notify the City of the Series 2016A Deposit Requirement and the Deposit Date to which it relates, and shall provide the City with such supporting documentation and calculations as the City may reasonably request.

Use of Moneys in the Series 2016A-1 Principal and Interest Account and Series 2016A-2 Principal and Interest Account. Moneys in the Series 2016A-1 Principal and Interest Account shall be used solely for the payment of the principal of, premium, if any, and interest on the Series 2016A-1 Bonds, for the redemption of the Series 2016A-1 Bonds prior to their respective Maturity Dates and for the payment of Section 2.08 Obligations and Section 2.09 Obligations. Funds for payment of principal of, premium, if any, and interest due on each Payment Date with respect to the Series 2016A-1 Bonds (including the optional redemption of the Series 2016A-1 Bonds pursuant to the Ninth Supplemental Indenture and not otherwise provided for, and with respect to Section 2.08 Obligations and Section 2.09 Obligations), shall be derived from moneys held in the Series 2016A-1 Principal and Interest Account, ratably, without preference or priority of any kind, except that termination and other non-scheduled payments with respect to Section 2.09 Obligations shall be paid on a subordinate basis.

Moneys in the Series 2016A-2 Principal and Interest Account shall be used solely for the payment of the principal of, premium, if any, and interest on the Series 2016A-2 Bonds, for the redemption of the Series 2016A-2 Bonds prior to their respective Maturity Dates and for the payment of any Section 2.08 Obligations and any Section 2.09 Obligations. Funds for payment of principal of, premium, if any, and interest due on each Payment Date with respect to the Series 2016A-2 Bonds (including the optional redemption of the Series 2016A-2 Bonds pursuant to the Ninth Supplemental Indenture and not otherwise provided for, and with respect to any Section 2.08 Obligations and any Section 2.09 Obligations), shall be derived from moneys held in the Series 2016A-2 Principal and Interest Account, ratably, without preference or priority of any kind, except that termination and other non-scheduled payments with respect to any Section 2.09 Obligations shall be paid on a subordinate basis.

Use of Moneys in Program Fee Account. Moneys deposited into the Program Fee Account shall be used solely for the payment of Program Fees payable by the City to third parties with respect to the Bonds as set forth in a certificate of the City filed with the Trustee.

Use of Moneys in the 2016A-1 Bond Proceeds Account and 2016A-2 Bond Proceeds Account. Except as otherwise provided in the Ordinance and the Ninth Supplemental Indenture, moneys on deposit in the 2016A-1 Bond Proceeds Account shall be disbursed and applied to pay, or to reimburse the payment of, Tax-Exempt Project Costs, and moneys on deposit in the 2016A-2 Bond Proceeds Account shall be disbursed and applied to pay, or to reimburse the payment of, Taxable Project Costs.

Deficiencies, Excess

In the event of a deficiency in any Fiscal Year in the Senior Lien Principal and Interest Account, any Subaccount of the Senior Lien Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account or the Line of Credit Notes Account, the amount of such deficiency shall be included in the amount to be transferred from the Water Fund and deposited into such Account or Subaccount during the next 12-month period or succeeding Fiscal Year, as required by the Ordinance.

Whenever the balance in any Subaccount of the Senior Lien Debt Service Reserve Account exceeds the amount required to be on deposit in that Account or Subaccount, such excess may be transferred to the Senior Lien Principal and Interest Account, and whenever the balance in any Subaccount of any Senior Lien Rebate Account exceeds the amount required to be on deposit in that Account or Subaccount, such excess may be transferred to the Water Fund, provided in each case that no such transfers shall be made when any debt service payments on outstanding obligations of the City that are payable by their terms from the revenues of the Water System are past due. Any funds which remain in the Water Fund at the end of any Fiscal Year shall be retained in the Water Fund and shall be available for appropriation for any proper purpose of the Water System.

Additional Second Lien Bonds

As long as there are any Outstanding Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Water System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations or obligations payable from revenues of the Water System on a basis subordinate to the Second Lien Bonds and Subordinate Lien Obligations, upon compliance with the following conditions:

- (i) the funds required to be transferred to the Second Lien Revenue Fund and its sub-funds, accounts and subaccounts shall have been transferred in full up to the date of delivery of such Second Lien Parity Bonds; and

- (ii) (1) Net Revenues Available for Bonds for the last completed Fiscal Year prior to the issuance of the Second Lien Parity Bonds (as shown by the audit of an independent certified public accountant), or Net Revenues Available for Bonds for such last completed Fiscal Year, adjusted as described below, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a *pro forma* basis assuming (w) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery and (x) any projected withdrawal from or deposits into the Water Rate Stabilization Account of such amounts as shall be estimated by the Chief Financial Officer in the current or any future Fiscal Year. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

- (A) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Water System from the rates in effect for such last completed Fiscal Year, Net Revenues Available for Bonds may be adjusted to reflect the Net Revenues Available for Bonds for such last completed Fiscal Year as they would have been had the increased rates been in effect during all of that last completed Fiscal Year; and

- (B) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Water System scheduled to take effect in a future Fiscal Year, such rate increase may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for such last completed Fiscal Year;

Any such adjustment shall be evidenced by a certificate of the Chief Financial Officer.

(2) The conditions of paragraph (ii)(1), above, shall be deemed to have been satisfied if (A) Net Revenues Available for Bonds for the current or next succeeding Fiscal Year (as estimated by the Chief Financial Officer), adjusted as described in paragraph (ii)(1), shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a *pro forma* basis assuming (y) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or Supplemental Indenture authorizing their issuance, sale and delivery and (z) any projected withdrawal from or deposits into the Water Rate Stabilization Account of such amounts as shall be estimated by the Chief Financial Officer in the current or any future Fiscal Year. In estimating Net Revenues Available for Bonds for the next succeeding Fiscal Year, the City shall engage the services of and be guided by a consultant of national reputation for advising municipalities with respect to setting rates and charges for water systems.

The City may issue Second Lien Parity Bonds without complying with the requirements stated above:

(i) to pay, redeem or refund Outstanding Water Revenue Bonds if in the judgment of the City there will be insufficient money available to make payments of interest on or principal of those Outstanding Water Revenue Bonds (at maturity or on Sinking Fund Payments dates) as such amounts become due; or

(ii) to pay, redeem or refund any Outstanding Water Revenue Bonds if (A) the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Debt Service and the Aggregate Subordinate Lien Debt Service in each Fiscal Year in which there was to be any Aggregate Senior Lien Debt Service, Aggregate Second Lien Debt Service or Aggregate Subordinate Lien Debt Service on Outstanding Water Revenue Bonds after the issuance of the Second Lien Parity Bonds and the payment, redemption or refunding of such Outstanding Water Revenue Bonds will not be in excess of (B) the sum of the Aggregate Senior Lien Debt Service, Aggregate Second Lien Debt Service and Aggregate Subordinate Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each such Fiscal Year.

For purposes of the above requirements, Net Revenues shall be substituted for Net Revenues Available for Bonds in each place the term Net Revenues Available for Bonds appears if in any Fiscal Year actual or estimated Net Revenues exceed Net Revenues Available for Bonds for that Fiscal Year.

Other obligations, including bonds, may be issued payable from Net Revenues Available for Bonds on a basis subordinate to the Second Lien Bonds.

Covenant Against Pledge of Second Lien Bond Revenues

The City has covenanted that it will not, other than in connection with the issuance of Second Lien Parity Bonds, issue any bonds, notes or other evidences of indebtedness secured by a pledge of Second Lien Bond Revenues or create or cause to be created any lien or charge on Net Revenues Available for Bonds, or on any other amounts pledged for the benefit of owners of the Second Lien Bonds under the Indenture; except that the City has the right to issue (i) Senior Lien Bonds, (ii) Subordinate Lien Obligations, (iii) bonds, notes or other evidences of indebtedness payable from or secured by a pledge of Net Revenues Available for Bonds to be derived on and after the discharge and satisfaction of the pledge related to all Second Lien Bonds and (iv) bonds, notes or other evidences of indebtedness payable from or secured by a pledge of amounts which may be withdrawn from the Second Lien Bonds Account held

under the Ordinance so long as such pledge is expressly subordinate to the pledge securing the Second Lien Bonds.

Other Covenants

In addition to the covenants referred to above, the City covenants under the Indenture as follows:

(a) The City will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on, all Second Lien Bonds, including, without limitation, Section 2.08 Obligations, in strict conformity with the terms of such Second Lien Bonds and of the Master Indenture, the Supplemental Indentures creating the Second Lien Bonds of each series and the instruments creating Section 2.08 Obligations or Section 2.09 Obligations, and that it will faithfully observe and perform all the conditions, covenants and requirements of the Indenture, each such Supplemental Indenture and instrument and of the Second Lien Bonds issued or incurred under such Supplemental Indenture.

(b) The City will maintain the Water System in good repair and working order, will continuously operate it on a Fiscal Year basis, and will punctually perform all duties with respect to the Water System required by the Constitution and laws of the State.

(c) So long as any Second Lien Bonds are Outstanding, the City will continue to operate the Water System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of the Indenture.

(d) The City from time to time will make all necessary and proper repairs, replacements, additions and betterments to the Water System so that the Water System may at all times be operated efficiently, economically and properly. When any necessary equipment or facility shall have been worn out, destroyed or otherwise is insufficient for proper use, it shall be promptly replaced so that the value and efficiency of the Water System shall be at all times fully maintained.

(e) The City will establish such rules and regulations for the control and operation of the Water System as are necessary for the safe, lawful, efficient and economical operation of the Water System.

(f) The City will faithfully perform at all times to the extent applicable to the City any and all covenants, undertakings, stipulations and provisions contained in the Indenture, in any and every Second Lien Bond executed, authenticated and delivered under the Indenture, and in all proceedings pertaining to the Indenture.

(g) (i) The City will not direct or permit any action which (or fail to take any action the failure of which) would cause any Second Lien Bond to be an "arbitrage bond" within the meaning of the Code.

(ii) The covenants and agreements of the City described in this paragraph (g) shall apply as long as any of the Second Lien Bonds continue to bear interest (whether or not they are Outstanding Water Revenue Bonds) and shall also apply after the Second Lien Bonds cease to bear interest but only within such subsequent period as shall be required for the City to comply with the covenants described in this paragraph (g).

(iii) The City (A) will take all actions that are necessary to be taken (and avoid taking any action that it is necessary to avoid being taken) so that interest on tax-exempt Second Lien Bonds will not be or become subject to federal income taxation under present law, and (B) will

take all actions reasonably within its power to take that are necessary to be taken (and avoid taking any actions that are reasonably within its power to avoid taking and that it is necessary to avoid) so that interest on tax-exempt Second Lien Bonds will not be or become includible in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

(iv) The City will, without limitation, (A) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the Second Lien Bonds and other amounts, and (B) timely rebate to the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the Water Fund, all as shall be necessary to comply with this paragraph (g). The City shall also make or cause to be made identifiable investments of amounts allocable to the Second Lien Bonds as shall be necessary or appropriate to be able to ascertain the amounts that may be required so to be rebated to the United States of America. The City shall from time to time determine the amounts in accounts of the Water Fund that shall be subject so to be rebated and those amounts from time to time shall be held by the City in the second lien rebate account established under the Indenture and shall be rebated to the United States of America in the amounts and at the times as required. Such amounts so subject from time to time so to be rebated shall not be available for the other purposes for which the Water Fund and its accounts and accounts and sub-accounts established by the Indenture may be applied, and, for purposes of computing the balance in the Water Fund and such various accounts shall be disregarded.

(v) The City will not take any of the following actions without in each such event obtaining the Opinion of Bond Counsel (which may represent the City from time to time in other matters) that such action will not contravene any covenant of the Indenture and will not make compliance with those covenants impossible: (A) defease any Second Lien Bonds; (B) sell, lease or otherwise dispose of any material portion of the Water System; (C) enter into or amend any short-term or long-term contract for water service by the City other than pursuant to general rates charged to the general public; or (D) enter into or amend any contract or arrangement for persons other than its employees to manage the Water System.

(vi) The provisions described in this paragraph (g) are not to be interpreted to impose upon the City any obligation to redeem or to purchase any Second Lien Bonds other than with proceeds or other amounts available under the Indenture.

Defaults and Remedies

Each of the following events constitutes an event of default under the Indenture:

(a) payment of the principal or Redemption Price, if any, of any Second Lien Bond shall not be made when and as the same shall become due, whether at maturity or upon call for redemption or otherwise; or

(b) payment of any installment of interest on any Second Lien Bond shall not be made when the same shall become due; or

(c) the City shall fail or refuse to comply with the provisions of the Indenture, or shall default in the performance or observance of any of the covenants, agreements or conditions on its part contained therein or in the Second Lien Bonds, which materially affects the rights of the owners of the Second Lien Bonds, and such failure, refusal or default shall continue for a period of 45 days after written notice thereof by the Trustee or the owners of not less than 25 percent in principal amount of the

Outstanding Second Lien Bonds; provided, however, that in the case of any such default which can be cured by due diligence but which cannot be cured within the 45-day period, the time to cure shall be extended for such period as may be necessary to remedy the default with all due diligence; or

(d) an event of default shall occur and be continuing under the provisions of any Supplemental Indenture.

Upon the happening and continuance of any event of default specified in paragraph (a) or (b) above, the Trustee shall proceed, or upon the happening and continuance of any event of default specified in paragraph (c) or (d) above (and as specified in any Supplemental Indenture with respect to additional events of default described under such Supplemental Indenture), the Trustee may unless otherwise directed pursuant to the Indenture, proceed, and upon the written direction of the owners of not less than a majority in principal amount of the Outstanding Second Lien Bonds given in accordance with the Indenture, shall proceed in its own name to protect and enforce its rights and the rights of the owners of the Second Lien Bonds by such of the following remedies or any additional remedies specified in one or more Supplemental Indentures with respect to a particular series as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

(a) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the owners of the Second Lien Bonds, including the right to require the City to receive and collect Gross Revenues adequate to carry out the covenants and agreements as to such Gross Revenues and their pledge under the Indenture and to require the City to carry out any other covenant or agreement with the owners of the Second Lien Bonds and to perform its duties under the Indenture;

(b) by bringing suit upon the Second Lien Bonds;

(c) by action or suit in equity, require the City to account as if it were the trustee of an express trust for the owners of the Second Lien Bonds; or

(d) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the owners of the Second Lien Bonds.

In the enforcement of any rights and remedies under the Indenture, the Trustee shall be entitled to sue for, enforce payment on and receive any and all amounts then or during any default becoming, and at any time remaining, due from the City but only out of moneys pledged as security for the Second Lien Bonds for principal, Redemption Price, interest or otherwise, under any provision of the Indenture or any Supplemental Indenture or of the Second Lien Bonds, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Second Lien Bonds, together with any and all costs and expenses of collection and of all proceedings under the Indenture of the owners of the Second Lien Bonds, and to recover and enforce a judgment or decree against the City for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect from any moneys available under the Indenture for such purpose, in any manner provided by law the moneys adjudged to be payable.

Under no circumstance may the Trustee declare the principal of or interest on the Bonds to be due and payable prior to the Maturity Date following the occurrence of an Event of Default under the Master Indenture or the Ninth Supplemental Indenture.

In the event that upon the happening and continuance of any event of default, the moneys held by the Trustee shall be insufficient for the payment of principal or Redemption Price, if any, and interest then due on the Second Lien Bonds, such moneys (other than moneys held for the payment or redemption of particular Second Lien Bonds which have theretofore become due at maturity or by call for redemption)

and any other moneys received or collected by the Trustee acting under the Master Indenture, after making provision for the payment of any expenses necessary in the opinion of the Trustee to protect the interests of the owners of the Second Lien Bonds and for the payment of the charges and expenses and liabilities incurred and advances made by the Trustee in the performance of its duties under the Master Indenture, shall, except as otherwise provided with respect to moneys held for the exclusive benefit of Second Lien Bonds of a particular series or particular Section 2.08 Obligations or Section 2.09 Obligations under the provisions of a Supplemental Indenture be applied as follows:

FIRST: to the payment to the persons entitled to the following payment, of all installments of interest then due in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment of such installment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and

SECOND: to the payment to the persons entitled to the following payment, of the unpaid principal or Redemption Price of any Second Lien Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates with interest on such Second Lien Bonds from the respective dates upon which such principal or Redemption Price became due at the rate borne by the Second Lien Bonds and, if the amounts available shall not be sufficient to pay in full all the Second Lien Bonds due on any date, then to the payment of the Second Lien Bonds ratably, according to the amounts of principal or Redemption Price, if any, due on such date, to the persons entitled thereto, without any discrimination or preference.

Whenever moneys are to be applied by the Trustee pursuant to the provisions described above, such moneys shall be applied by the Trustee at such times, and from time to time, as the Trustee in its sole discretion shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. The deposit of such moneys with the Trustee, or otherwise setting aside such moneys in trust for the proper purpose, shall constitute proper application by the Trustee and the Trustee shall incur no liability whatsoever to the City, to the owner of any Second Lien Bond or to any other person for any delay in applying any such moneys, so long as the Trustee acts with reasonable diligence, having due regard for the circumstances, and ultimately applies the same in accordance with such provisions of the Master Indenture as may be applicable at the time of application by the Trustee. Whenever the Trustee shall exercise such discretion in applying such moneys, it shall fix the date (which shall be a Payment Date unless the Trustee shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such date shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the fixing of any such date. The Trustee shall not be required to make payment to the owner of any unpaid Second Lien Bond unless such Second Lien Bond shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

In case any proceedings taken by the Trustee on account of any event of default shall have been discontinued or abandoned for any reason, then in every such case the City, the Trustee and the owners of the Second Lien Bonds shall be restored to their former positions and rights under the Master Indenture, respectively, and all rights, remedies, powers and duties of the Trustee shall continue as though no such proceeding had been taken.

Except as otherwise described herein, the owners of the majority in principal amount of the Second Lien Bonds then Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method of conducting all remedial proceedings to be taken by the Trustee under the Master Indenture, except that such direction shall not be otherwise than in accordance with law or the provisions of the Master Indenture, and the Trustee shall have the right

to decline to follow any such direction which in the opinion of the Trustee would be unjustly prejudicial to owners of the Second Lien Bonds not parties to such direction.

No owner of any Second Lien Bond shall have any right to institute any suit, action, mandamus or other proceeding in equity or at law under the Master Indenture, or for the protection or enforcement of any right or remedy under the Master Indenture or any right under law unless such owner shall have given to the Trustee written notice of the event of default or breach of duty on account of which such suit, action or proceeding is to be taken, and unless the owners of not less than 25 percent in principal amount of the Second Lien Bonds then Outstanding shall have made written request of the Trustee after the right to exercise such powers or right of action, as the case may be, shall have occurred, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted in the Master Indenture or granted under law to institute such action, suit or proceeding in its name and unless, also, there shall have been offered to the Trustee reasonable security and indemnity against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall have refused or neglected to comply with such request within a reasonable time; and such notification, request and offer of indemnity are declared in every such case (except with respect to the enforcement of credit enhancement devices securing Second Lien Bonds), at the option of the Trustee, to be conditions precedent to the execution of the powers under the Master Indenture or for any other remedy under the Master Indenture or under law.

Supplemental Indentures without Consent of Owners

A Supplemental Indenture may be authorized at any time by an ordinance of the City Council and shall be fully effective upon the execution thereof by the City and the Trustee and the filing with the Trustee of a copy of such ordinance certified by the City Clerk, for the following purposes:

(a) to close the Master Indenture against, or provide limitations and restrictions in addition to the limitations and restrictions contained in the Master Indenture on, the issuance of Second Lien Bonds or other evidences of indebtedness;

(b) to add to the covenants and agreements of the City in the Master Indenture other covenants and agreements to be observed by the City which are not contrary to or inconsistent with the Master Indenture as theretofore in effect;

(c) to add to the limitations and restrictions in the Master Indenture other limitations and restrictions to be observed by the City which are not contrary to or inconsistent with the Master Indenture as theretofore in effect;

(d) to surrender any right, power or privilege reserved to or conferred upon the City by the terms of the Master Indenture, but only if the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the City contained in the Master Indenture;

(e) to create a series of Second Lien Bonds and, in connection with such creation, to specify and determine the matters and things referred to in the Master Indenture and also any other matters and things relative to such Second Lien Bonds which are not contrary to or inconsistent with the Master Indenture as theretofore in effect, or to amend, modify or rescind any such authorization, specification or determination at any time prior to the first issuance of such Second Lien Bonds;

(f) to confirm, as further assurance, the pledge under the Master Indenture, and the subjection of, additional properties, Second Lien Bond Revenues or other collateral to any lien, claim or pledge created or to be created by, the Master Indenture; and

(g) to modify any of the provisions of the Master Indenture in any respect whatever, provided that such modification shall be, and be expressed to be, effective only after all Second Lien Bonds Outstanding at the date of the execution and delivery of such Supplemental Indenture shall cease to be Outstanding.

A Supplemental Indenture may be authorized at any time by an ordinance adopted by the City Council which, upon (i) filing with the Trustee of a copy of such ordinance certified by the City Clerk, (ii) the filing with the Trustee and the City of an instrument in writing made by the Trustee consenting thereto, and (iii) execution and delivery of such Supplemental Indenture, shall be fully effective to: (1) to cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the Master Indenture; (2) to insert such provisions clarifying matters or questions arising under the Master Indenture as are necessary or desirable and are not contrary to or inconsistent with the Master Indenture; or (3) to provide additional duties of the Trustee under the Master Indenture as in effect.

Additionally, the Ninth Supplemental Indenture may, without the consent of, or notice to, any of the Bondholders, be supplemented and amended, in such manner as shall not be inconsistent with the terms and provisions of the Ninth Supplemental Indenture, the Master Indenture or the Ordinance, for any one or more of the following purposes:

- (a) to provide for certificated Bonds; and
- (b) to secure or maintain ratings from any Rating Agency in the highest long-term debt rating category of such Rating Agency which are available for the Bonds, which changes will not restrict, limit or reduce the obligation of the City to pay the principal of, premium, if any, and interest on such Bonds as provided in the Indenture or otherwise adversely affect the Registered Owners of such Bonds under the Indenture.

Supplemental Indenture with Consent of Owners

Any modification or amendment of the Indenture or of any Supplemental Indenture or of the rights and obligations of the City and of the owners of the Second Lien Bonds, other than as described in the immediately preceding caption, may be made by a supplemental indenture authorized at any time by an ordinance of the City Council, with the written consent given as provided in the Indenture:

- (a) of the registered owners of a majority in principal amount of the Second Lien Bonds Outstanding at the time such consent is given;
- (b) in case less than all of the several series of then Outstanding Second Lien Bonds are affected by the modification or amendment, of the owners of a majority in principal amount of the then Outstanding Second Lien Bonds of each series so affected;
- (c) in case any Section 2.08 Obligations are affected by the modification or amendment, of the party to whom Section 2.08 Obligations so affected are payable; and
- (d) in case any swap provider is affected by the modification or amendment, of the swap provider so affected.

No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Second Lien Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or a reduction in the rate of interest thereon, or in terms of purchase or the purchase price thereof, without the consent of the owner of such

Second Lien Bond, or shall reduce the percentages or otherwise affect the classes of Second Lien Bonds the consent of the owners of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of the Trustee or any Paying Agent with respect to the Second Lien Bonds without its written assent thereto.

Defeasance

If the City shall pay or cause to be paid to the owners of all Second Lien Bonds, the principal and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein, in the Master Indenture, the Supplemental Indentures creating such Second Lien Bonds and in the instruments creating Section 2.08 Obligations and Section 2.09 Obligations, then the pledge of Second Lien Bond Revenues provided by the Master Indenture and all other rights granted thereby shall be discharged and satisfied.

Any Second Lien Bonds or interest installments appertaining to such Second Lien Bonds, whether at or prior to the maturity or the prior redemption date thereof shall be deemed to have been paid within the meaning of the preceding paragraph if:

(a) in case any of said Second Lien Bonds are to be redeemed on any date prior to their maturity, the City shall have taken all action necessary to call such Second Lien Bonds for redemption and notice of such redemption shall have been duly given or provision satisfactory to the Trustee shall have been made for the giving of such notice;

(b) there shall have been deposited with the Trustee for such purpose either moneys which are sufficient or Governmental Obligations (consisting of obligations described in clause (a) of the definition of Permitted Investments) maturing and bearing interest at times and in amounts sufficient (without reinvestment of such Governmental Obligations), together with the moneys on deposit with the Trustee for such purpose, to pay when due the principal or Redemption Price, if any, and interest due and to become due on said Second Lien Bonds on and prior to the redemption date or maturity date of such Second Lien Bonds, as the case may be; and

(c) in the event said Second Lien Bonds are not by their terms subject to redemption within the next succeeding 45 days, the City shall have given the Trustee, in form satisfactory to it, irrevocable instructions to mail, as soon as practicable, a notice to the owners of such Second Lien Bonds that the deposit required by clause (b) above has been made with the Trustee and that said Second Lien Bonds are deemed to have been paid as described under this caption “– Defeasance” and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal or Redemption Price, if any, of, and accrued interest on, said Second Lien Bonds.

No defeasance of a Second Lien Bond that is to be paid more than 90 days after the date of the deposit referred to in clause (b) above shall be effective until the Trustee shall have received a verification report signed by an independent certified public accountant that the Governmental Obligations (described in clause (a) of the definition of Permitted Investments) and moneys to be deposited for such purpose are sufficient to pay the principal and Redemption Price of, and interest on, all Second Lien Bonds with respect to which provision for payment is to be made pursuant to the process described under this caption “– Defeasance” by virtue of the deposit of such Governmental Obligations and moneys.

The City has reserved the right to substitute in place of Governmental Obligations and moneys, other Governmental Obligations and moneys sufficient to pay when due the principal and interest or Redemption Price, if any, to become due on all Second Lien Bonds secured by such obligations; provided that prior to such substitution the City files with the Trustee: (i) a verification report signed by an

independent certified public accountant stating that the substitute Governmental Obligations and moneys, as substituted, are sufficient to pay the principal and Redemption Price of, and interest on, all Second Lien Bonds for which provision of payment was made by the deposit of the initial Governmental Obligations and moneys, and (ii) an opinion of nationally recognized bond counsel to the effect that such substitution has been duly authorized in accordance with the Indenture and will not adversely affect the tax-exempt status of any Second Lien Bonds previously authenticated and delivered under the Indenture.

Payment Provisions in the Event of Discontinuation of the Book-Entry System

In the event the Book-Entry System described in this Official Statement under the caption “DESCRIPTION OF THE BONDS — Book-Entry System” is discontinued and certificates representing replacement Bonds are delivered to the Registered Owners, payment of principal of and interest on the Bonds will be made to the Registered Owners by check mailed to each Registered Owner at the address of such Registered Owner as it appears on the Bond Register or, at the option of any Registered Owner of not less than \$1,000,000 principal amount of Bonds, by wire transfer to any address in the United States of America on such Interest Payment Date to such Registered Owner as of such Record Date, if such Registered Owner provides the Trustee with written notice of such wire transfer address not later than the Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless and until changed or revoked by subsequent notice). Principal and premium, if any, on the replacement Bonds are payable only upon presentation and surrender of such replacement Bond or Bonds at the principal corporate trust office of the Trustee.

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APPENDIX C

**CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF
AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013, REQUIRED
SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, STATISTICAL DATA
AND INDEPENDENT AUDITORS' REPORT**

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City of Chicago, Illinois Water Fund

Basic Financial Statements as of and for the
Years Ended December 31, 2014 and 2013,
Additional Supplementary Information,
Statistical Data, and Independent Auditors' Report

CITY OF CHICAGO, ILLINOIS WATER FUND

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INDEPENDENT AUDITORS' REPORT

The Honorable Rahm Emanuel, Mayor
and Members of the City Council
City of Chicago, Illinois

We have audited the accompanying basic financial statements of the Water Fund ("Water Fund"), an enterprise fund of the City of Chicago, Illinois (the "City") as of and for the years ended December 31, 2014 and 2013, and the related notes to the financial statements, which collectively comprise the Water Fund's basic financial statements as listed in the table of contents.

Management's Responsibility for the Basic Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these basic 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 basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic 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 basic financial statements referred to above present fairly, in all material respects, the financial position of the Water Fund as of December 31, 2014 and 2013, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 to the basic financial statements, the basic financial statements referred to above present only the Water Fund, an enterprise fund of the City, and do not purport to, and do not, present the financial position of the City as of December 31, 2014 and 2013, changes in its financial position or its cash flows, in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, as listed in the foregoing table of contents, 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 audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the basic financial statements that collectively comprise the Water Fund's basic financial statements. The additional supplementary information and statistical data, as listed in the foregoing table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The additional supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The statistical data has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Deloitte & Touche LLP

June 30, 2015

CITY OF CHICAGO, ILLINOIS WATER FUND

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the City of Chicago, Illinois (the "City"), Water Fund's ("Water Fund") financial performance provides an introduction and overview of the Water Fund's financial activities for the years ended December 31, 2014 and 2013. Please read this discussion in conjunction with the Water Fund's basic financial statements and the notes to basic financial statements following this section.

FINANCIAL HIGHLIGHTS

2014

- Operating gross revenues for 2014 increased by \$78.1 million compared to 2013 operating revenues. This increase is primarily due to a water rate increase of 15% offset by a decrease in consumption and the conversion in 2014 of approximately 20,000 accounts from non-metered to metered. Decrease in provision for doubtful accounts of about \$2.9 million was a result of an increase in collected amount for over 365 days' receivables.
- Operating expenses before depreciation and amortization for 2014 increased by \$23.5 million compared to 2013 mainly due to increases in overtime pay due to inclement weather resulting in increases in broken mains; Department of Water Management's share of Citywide's central services costs and in tort/non-tort judgment settlement offset by the decrease in costs of chemicals used for water purification.
- The Water Fund's net position at December 31, 2014, was \$1,683.2 million. This is an increase of \$236.2 million over net position at December 31, 2013.
- Utility plant additions in 2014 were \$364.8 million due to the continuing capital improvement program.

2013

- Operating gross revenues for 2013 increased by \$60.8 million compared to 2012 operating revenues. This increase is primarily due to a water rate increase of 15% offset by a decrease in consumption and the conversion in 2013 of approximately 17,000 accounts from non-metered to metered. Increase in provision for doubtful accounts of about \$9.7 million was a result of a decrease in collected amount for over 365 days' receivables.
- Operating expenses before depreciation and amortization for 2013 increased by \$1.4 million compared to 2012 mainly due to increases in provision for doubtful accounts resulting from an increase in accounts receivable; overtime and natural gas and electric charges resulting from an extremely cold winter; offset by an increase in capitalized in-house construction costs and a decrease in fuel consumption.
- The Water Fund's net position at December 31, 2013, was \$1,447 million. This is an increase of \$195.6 million over net position at December 31, 2012.
- Utility plant additions in 2013 were \$377.4 million due to the continuing capital improvement program.

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the Water Fund's basic financial statements. The Water Fund's basic financial statements comprise the financial statements and the notes to basic financial statements. In addition to the basic financial statements, this report also presents additional information after the notes to basic financial statements.

The statements of net position present all of the Water Fund's assets, deferred outflows, liabilities, and deferred inflows using the accrual basis of accounting. The difference between assets, deferred outflows, liabilities, and deferred inflows is reported as net position. The increase or decrease in net position may serve as an indicator, over time, as to whether the Water Fund's financial position is improving or deteriorating.

The statements of revenues, expenses, and changes in net position present all current-year revenues and expenses, regardless of when cash is received or paid, and the ensuing change in net position.

The statements of cash flows report how cash and cash equivalents are provided and used by the Water Fund's operating, capital financing, and investing activities. These statements present the cash received and disbursed, the net increase or decrease in cash and cash equivalents for the year, and the cash and cash equivalents balance at year-end.

The notes to basic financial statements are an integral part of the basic financial statements; accordingly, such disclosures are essential for a full understanding of the information provided in the basic financial statements.

In addition to the basic financial statements, this report includes statistical data. The statistical data section presents unaudited debt service coverage calculation and includes certain unaudited information related to the Water Fund's historical financial and nonfinancial operating results and capital activities.

FINANCIAL ANALYSIS

At December 31, 2014, the Water Fund's financial position continued to be strong with total assets and deferred outflows of \$4,545.2 million, total liabilities of \$2,862.0 million, and net position of \$1,683.2 million. A comparative condensed summary of the Water Fund's net position at December 31, 2014, 2013, and 2012, is as follows:

(In thousands)	Net Position		
	2014	2013	2012
Current assets	\$ 542,748	\$ 423,372	\$ 294,077
Restricted and other assets	390,988	110,593	441,220
Utility plant—net	3,482,199	3,181,856	2,861,340
Deferred outflows	<u>129,229</u>	<u>111,907</u>	<u>162,570</u>
Total assets and deferred outflows	<u>\$ 4,545,164</u>	<u>\$ 3,827,728</u>	<u>\$ 3,759,207</u>
Current liabilities	\$ 305,342	\$ 246,266	\$ 280,964
Long-term liabilities	<u>2,556,616</u>	<u>2,134,485</u>	<u>2,226,869</u>
Total liabilities	<u>\$ 2,861,958</u>	<u>\$ 2,380,751</u>	<u>\$ 2,507,833</u>
Net position:			
Net investment in capital assets	\$ 1,393,968	\$ 1,233,185	\$ 1,062,234
Restricted for capital projects	599	719	1,308
Unrestricted	<u>288,639</u>	<u>213,073</u>	<u>187,832</u>
Total net position	<u>\$ 1,683,206</u>	<u>\$ 1,446,977</u>	<u>\$ 1,251,374</u>

2014

Current assets of \$542.7 million at December 31, 2014, increased by \$119.4 million (28.2%) over 2013 as a result of increases in investments of \$25.4 million, accounts receivable of \$23.2 million resulting from an increase in water rate and in due from other City funds of \$71.8 million. Restricted and other assets increased by \$280.4 million (253.5%) primarily due to the funding of the capital improvement program through the issuance of long-term debt in 2014 and the increase of utility plant—net by \$300.3 million (9.4%). The increase in deferred outflows of \$17.3 million (15.5%) during 2014 is mainly due to a change in the fair value of interest rate swaps.

The increase in current liabilities of \$59.1 million (24.0%) during 2014 is directly related to the timing of payments of accounts payable and an increase in current portion of long-term debt. Long-term liabilities increased by \$422.1 million (19.8 %) mainly due to debt issuances in 2014.

Net position may serve as a useful indicator, over a period of time, of the Water Fund's basic financial position. At December 31, 2014, net position was \$1,683.2 million, an increase of \$236.2 million (20.8%) over 2013.

2013

Current assets of \$423.4 million at December 31, 2013, increased by \$129.3 million (44.0%) over 2012 as a result of increases in investments of \$85.3 million and accounts receivable of \$9.0 million resulting from an increase in water rate. Restricted and other assets decreased by \$330.6 million (74.9%) primarily due to the funding of the capital improvement program. The decrease in deferred outflows of \$50.7 million (31.2%) during 2013 is mainly due to a change in the fair value of interest rate swaps.

The decrease in current liabilities of \$34.7 million (12.3%) during 2013 is directly related to the timing of payments of accounts payable and a decrease in unearned revenue offset by an increase in due to other City funds. Long-term liabilities decreased by \$92.4 million (4.1%) mainly due to principal payments in 2012.

Net position may serve as a useful indicator, over a period of time, of the Water Fund's basic financial position. At December 31, 2013, net position was \$1,447.0 million, an increase of \$195.6 million (15.6%) over 2012.

The primary sources of the Water Fund's operating revenues are water usage fees. These revenues fund all Water Fund operating expenses, fund deposits, capital construction, and debt service requirements. A comparative condensed summary of the Water Fund's revenues, expenses, and changes in net position for the years ended December 31, 2014, 2013, and 2012, is as follows:

(In thousands)	Revenues, Expenses, and Changes in Net Position		
	2014	2013	2012
Revenues:			
Operating revenues:			
Water sales—net	\$ 670,559	\$ 595,098	\$ 546,858
Other operating revenues	<u>22,075</u>	<u>16,616</u>	<u>13,715</u>
Total operating revenues	692,634	611,714	560,573
Nonoperating revenues	<u>(972)</u>	<u>963</u>	<u>1,429</u>
Total revenues	<u>691,662</u>	<u>612,677</u>	<u>562,002</u>
Expenses:			
Operating expenses	298,722	275,192	273,751
Depreciation and amortization	57,949	49,630	48,408
Interest expense	<u>98,762</u>	<u>92,252</u>	<u>81,751</u>
Total expenses	<u>455,433</u>	<u>417,074</u>	<u>403,910</u>
Change in net position	236,229	195,603	158,092
Net position—beginning of year	<u>1,446,977</u>	<u>1,251,374</u>	<u>1,093,282</u>
Net position—end of year	<u>\$ 1,683,206</u>	<u>\$ 1,446,977</u>	<u>\$ 1,251,374</u>

2014

Water sales and other operating revenues comprise the Water Fund's \$692.6 million operating revenues. The increase in 2014 operating revenues of \$80.9 million (13.2%) from 2013 was primarily due to a 15% water rate increase offset by the conversion of 20,256 non-metered accounts to metered.

In 2014, net nonoperating revenue of (\$1.0 million) were composed of net interest income, grants and net revenue that relates to construction done by Department of Water Management for other City departments and private companies totaling \$0.5 million.

2013

Water sales and other operating revenues comprise the Water Fund's \$611.7 million operating revenues. The increase in 2013 operating revenues of \$51.1 million (9.1%) from 2012 was primarily due to a 15% water rate increase offset by the conversion of approximately 17,000 non-metered accounts to metered and a decrease in consumption resulting from a cooler summer in 2013.

In 2013, net nonoperating revenue of \$1.0 million was composed of net interest income, grants and net forced account totaling \$0.5 million.

A comparative summary of the Water Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2014, 2013, and 2012, is as follows:

(In thousands)	Operating Expenses		
	2014	2013	2012
Source of supply	\$ 283	\$ 99	\$ 168
Power and pumping	43,087	43,230	41,728
Purification	58,504	60,836	56,136
Transmission and distribution	43,681	29,496	36,494
Customer accounting and collection	11,888	11,615	10,004
Administrative and general	22,045	21,188	21,861
Central services and General Fund reimbursements	<u>119,234</u>	<u>108,728</u>	<u>107,360</u>
Operating expenses before depreciation and amortization	298,722	275,192	273,751
Depreciation and amortization	<u>57,949</u>	<u>49,630</u>	<u>48,408</u>
Total operating expenses	<u>\$ 356,671</u>	<u>\$ 324,822</u>	<u>\$ 322,159</u>

2014

Operating expenses before depreciation and amortization for the year ended 2014 increased by \$23.5 million (8.6%) from the year ended 2013 due to increases in transmission and distribution of about \$14.2 million (48.1%) and central services of about \$10.5 million (9.7%). This was offset by a decrease in purification of about \$2.3 million resulting from a decrease in chemical costs.

2013

Operating expenses before depreciation and amortization for the year ended 2013 increased by \$1.4 million (0.5%) from the year ended 2012 due to increases in purification of about \$4.7 million (8.4%) due to increases in salaries and overtime. This was offset by a decrease in transmission and distribution of about \$7.0 million (19.2%) resulting from a decrease in fuel consumption costs and an increase in capitalized in-house construction costs.

A comparative summary of the Water Fund's cash flows for the years ended December 31, 2014, 2013, and 2012, is as follows:

(In thousands of dollars)	Cash Flows		
	2014	2013	2012
Cash from activities:			
Operating	\$ 325,346	\$ 310,205	\$ 270,821
Capital and related financing	(27,902)	(520,166)	4,282
Investing	(297,828)	122,961	(209,656)
Net change in cash and cash equivalents	(384)	(87,000)	65,447
Cash and cash equivalents:			
Beginning of year	36,531	123,531	58,084
End of year	<u>\$ 36,147</u>	<u>\$ 36,531</u>	<u>\$ 123,531</u>

2014

As of December 31, 2014, the Water Fund's cash and cash equivalents of \$36.1 million decreased from December 31, 2013, by \$0.4 million mainly due to the cash provided of \$325.3 million from operating activities, cash provided by issuance of bonds and notes of \$462.5 million offset by cash used in acquisition and construction of capital assets of \$333.7 million, and net cash used in investing activities of \$297.8 million. Total cash and cash equivalents at December 31, 2014, are composed of unrestricted and restricted cash and cash equivalents of \$23.6 million and \$12.6 million, respectively.

2013

As of December 31, 2013, the Water Fund's cash and cash equivalents of \$36.5 million decreased from December 31, 2012, by \$87.0 million mainly due to the cash provided of \$310.2 million from operating activities, cash outflow of \$520.2 million, and cash inflow of \$123.0 million. Total cash and cash equivalents at December 31, 2013, are composed of unrestricted and restricted cash and cash equivalents of \$3.6 million and \$32.9 million, respectively.

UTILITY PLANT AND DEBT ADMINISTRATION

2014

At the end of 2014 and 2013, the Water Fund had \$3,482.2 million and \$3,181.9 million, respectively, invested in utility plant, net of accumulated depreciation. During 2014, the Water Fund expended \$364.8 million on capital activities. This included \$16.4 million for structures and improvements, \$62.0 million for distribution plant, \$4.0 million for equipment, and \$282.4 million for construction in progress.

During 2014, net completed projects totaling \$137.6 million were transferred from construction in progress to applicable capital accounts. The major completed projects relate to installation and replacements of water mains (\$109.4 million), and Jardine Water Purification plant's east building filter roof replacement and structural repair (\$26.3 million).

2013

At the end of 2013 and 2012, the Water Fund had \$3,181.9 million and \$2,861.3 million, respectively, invested in utility plant, net of accumulated depreciation. During 2013, the Water Fund expended \$377.4 million on capital activities. This included \$0.4 million for structures and improvements, \$156.5 million for distribution plant, \$7.3 million for equipment, and \$213.1 million for construction in progress.

During 2013, net completed projects totaling \$158.3 million were transferred from construction in progress to applicable capital accounts. The major completed projects relate to installation and replacements of water mains (\$92.0 million), auto meter reading installation project (\$39.6 million), and Lexington pumping station electrical generation and capital improvements (\$14.1 million).

The Water Fund's utility plant at December 31, 2014, 2013, and 2012, is summarized as follows:

(In thousands)	Net Utility Plant at Year-End		
	2014	2013	2012
Utility plant not depreciated:			
Land and land rights	\$ 5,083	\$ 5,083	\$ 5,083
Construction in progress	<u>457,645</u>	<u>317,086</u>	<u>262,280</u>
Total utility plant not depreciated	<u>462,728</u>	<u>322,169</u>	<u>267,363</u>
Utility plant being depreciated:			
Structures and improvements	579,534	535,802	535,710
Distribution plant	2,755,650	2,590,751	2,305,803
Equipment	<u>651,121</u>	<u>647,530</u>	<u>620,775</u>
Total utility plant being depreciated	<u>3,986,305</u>	<u>3,774,083</u>	<u>3,462,288</u>
Less accumulated depreciation:			
Structures and improvements	(205,279)	(197,555)	(190,278)
Distribution plant	(420,433)	(394,281)	(372,090)
Equipment	<u>(341,122)</u>	<u>(322,560)</u>	<u>(305,943)</u>
Total accumulated depreciation	<u>(966,834)</u>	<u>(914,396)</u>	<u>(868,311)</u>
Total utility plant being depreciated—net	<u>3,019,471</u>	<u>2,859,687</u>	<u>2,593,977</u>
Total utility plant—net	<u>\$3,482,199</u>	<u>\$3,181,856</u>	<u>\$2,861,340</u>

The Water Fund's capital activities are funded through Water Fund revenue bonds and Water Fund revenue. Additional information on the Water Fund's capital assets is presented in Note 5 of the notes to basic financial statements.

The Water Fund's long-term liabilities at December 31, 2014, 2013, and 2012, are summarized as follows:

(In thousands)	Long-Term Liabilities at Year-End		
	2014	2013	2012
Revenue bonds and notes payable	\$ 2,381,771	\$ 1,996,858	\$ 2,030,177
Add:			
Accretion of capital appreciation bonds	39,093	43,885	47,658
Bond discount/premium	<u>97,175</u>	<u>66,934</u>	<u>71,041</u>
Total revenue bonds/notes payable—net	2,518,039	2,107,677	2,148,876
Less current portion of accretion	(9,571)	(9,169)	(8,749)
Less current bonds/notes payable	<u>(51,535)</u>	<u>(43,846)</u>	<u>(42,232)</u>
Total long-term revenue bonds/notes payable—net	2,456,933	2,054,662	2,097,895
Derivative instrument liability	98,106	78,246	126,371
Long-term purchase obligations			1,027
Water pipe extension certificates	<u>1,577</u>	<u>1,577</u>	<u>1,576</u>
Total long-term liabilities	<u>\$ 2,556,616</u>	<u>\$ 2,134,485</u>	<u>\$ 2,226,869</u>

Additional information on the Water Fund's long-term debt is presented in Note 4 of the notes to basic financial statements.

The Water Fund's revenue bonds at December 31, 2014, have underlying credit ratings with each of the three major rating agencies as follows:

	Investor Services	Standard & Poor's	Fitch Ratings
Senior Lien Water Revenue Bonds	A2	AA	AA+
Second Lien Water Revenue Bonds	A3	AA-	AA

In March 2014, Moody's Investors Service ("Moody's") downgraded the ratings of the Water Fund senior lien revenue bonds from A1 to A2, and the Water Fund second lien revenue bonds from A2 to A3, each with a negative outlook.

In May 2015, Moody's downgraded the ratings of the Water Fund senior lien revenue bonds from A2 to Baa1 and the Water Fund second lien revenue bonds from A3 to Baa2, each with a negative outlook. Also in May 2015, Standards & Poor's Financial Services downgraded the ratings of the Water Fund senior lien revenue bonds from AA to A and the Water Fund second lien revenue bonds from AA- to A-.

At December 31, 2014, the Water Fund was in compliance with the debt covenants as stated within the bond ordinances. Additional information on certain of the Water Fund's debt covenants is presented in Note 4 of the notes to the basic financial statements.

Requests for Information

This financial report is designed to provide the reader with a general overview of the Water Fund's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to the City of Chicago Department of Finance.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATEMENTS OF NET POSITION AS OF DECEMBER 31, 2014 AND 2013 (In thousands)

	2014	2013		2014	2013
ASSETS AND DEFERRED OUTFLOWS			LIABILITIES		
CURRENT ASSETS:			CURRENT LIABILITIES:		
Cash and cash equivalents (Note 2)	\$ 23,551	\$ 3,616	Accounts payable	\$ 26,168	\$ 20,650
Investments (Note 2)	101,359	129,496	Due to other City funds	20,130	14,147
Accounts receivable—net of allowance for doubtful accounts of approximately \$107,201 in 2014 and \$85,277 in 2013	159,613	136,367	Accrued liabilities	92,312	79,466
Interest receivable	163	77	Unearned revenue	22,411	21,250
Due from other City funds	91,224	19,435	Liabilities payable from restricted assets:		
Inventories	21,192	21,839	Accounts payable	63,827	41,764
Cash and cash equivalents—restricted	12,596	32,915	Interest payable	19,388	15,974
Investments—restricted	132,451	78,908	Current portion of long-term debt (Note 4)	61,106	53,015
Interest receivable—restricted	599	719			
Total current assets	542,748	423,372	Total current liabilities	305,342	246,266
NONCURRENT ASSETS:					
Investments—restricted assets	386,090	105,459	NONCURRENT LIABILITIES:		
			Long-term debt—net of current maturities (Note 4)	2,456,933	2,054,662
Other assets	4,898	5,134	Derivative instrument liability	98,106	78,246
			Water pipe extension certificates	1,577	1,577
Utility plant (Note 5):					
Land and land rights	5,083	5,083	Total noncurrent liabilities	2,556,616	2,134,485
Structures and improvements	579,534	535,802			
Distribution plant	2,755,650	2,590,751	Total liabilities	2,861,958	2,380,751
Equipment	651,121	647,530			
Construction in progress	457,645	317,086	NET POSITION (Note 1):		
			Net investment in capital assets	1,393,968	1,233,185
Total utility plant	4,449,033	4,096,252	Restricted for capital projects	599	719
			Unrestricted	288,639	213,073
Less accumulated depreciation	(966,834)	(914,396)			
			Total net position	1,683,206	1,446,977
Utility plant—net	3,482,199	3,181,856			
Total noncurrent assets	3,873,187	3,292,449			
DEFERRED OUTFLOWS	129,229	111,907			
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$4,545,164	\$3,827,728	TOTAL	\$4,545,164	\$3,827,728

See notes to basic financial statements.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013 (In thousands)

	2014	2013
OPERATING REVENUES:		
Water sales:		
Water sales	\$ 693,096	\$ 620,498
Less: provision for doubtful accounts	(22,537)	(25,400)
Water sales—net	670,559	595,098
Other operating revenues	22,075	16,616
Total operating revenues	692,634	611,714
OPERATING EXPENSES:		
Source of supply	283	99
Power and pumping	43,087	43,230
Purification	58,504	60,836
Transmission and distribution	43,681	29,496
Customer accounting and collection	11,888	11,615
Administrative and general	22,045	21,188
Central services and General Fund reimbursements	119,234	108,728
Total operating expenses before depreciation and amortization	298,722	275,192
OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION	393,912	336,522
DEPRECIATION AND AMORTIZATION	57,949	49,630
OPERATING INCOME	335,963	286,892
NONOPERATING REVENUES (EXPENSES):		
Interest income	(515)	420
Interest expense	(98,762)	(92,252)
Other	(457)	543
Total nonoperating expenses—net	(99,734)	(91,289)
CHANGE IN NET POSITION	236,229	195,603
TOTAL NET POSITION—Beginning of year, as restated	1,446,977	1,251,374
TOTAL NET POSITION—End of year	\$ 1,683,206	\$ 1,446,977

See notes to basic financial statements.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013 (In thousands)

	2014	2013
CASH FLOWS FROM OPERATING ACTIVITIES:		
Received from customers	\$ 670,519	\$ 596,613
Transactions with other City funds	(143,903)	(61,653)
Payments to vendors	(80,663)	(113,227)
Payments to employees	(120,607)	(111,528)
Net cash provided by operating activities	<u>325,346</u>	<u>310,205</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(333,734)	(370,228)
Interest paid	(109,432)	(107,900)
Proceeds from issuance of bonds and IEPA loans	462,500	276
Principal paid on bonds	(43,633)	(42,439)
Payments of bonds issuance costs	(3,146)	(418)
Construction reimbursements	(457)	543
Net cash used in capital and related financing activities	<u>(27,902)</u>	<u>(520,166)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Sales and purchases of investments—net	(306,037)	125,764
Investment interest	8,209	(2,803)
Net cash (used in) provided by investing activities	<u>(297,828)</u>	<u>122,961</u>
NET CHANGE IN CASH AND CASH EQUIVALENTS	(384)	(87,000)
CASH AND CASH EQUIVALENTS—Beginning of year	<u>36,531</u>	<u>123,531</u>
CASH AND CASH EQUIVALENTS—End of year	<u>\$ 36,147</u>	<u>\$ 36,531</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS REPORTED IN THE STATEMENTS OF NET POSITION:		
Unrestricted	\$ 23,551	\$ 3,616
Restricted	<u>12,596</u>	<u>32,915</u>
TOTAL	<u>\$ 36,147</u>	<u>\$ 36,531</u>

(Continued)

CITY OF CHICAGO, ILLINOIS WATER FUND

STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

(In thousands)

	2014	2013
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$ 335,963	\$ 286,892
Adjustments to reconcile:		
Depreciation and amortization	57,949	49,630
Provision for doubtful accounts	22,537	25,400
Changes in assets and liabilities:		
Increase in accounts receivable	(45,813)	(35,005)
Decrease (increase) in inventories	647	(4,483)
(Increase) decrease in due from other City funds	(71,789)	1,172
Increase (decrease) in unrestricted accounts payable	5,518	(9,649)
Increase in due to other City funds	5,257	5,644
Increase (decrease) in accrued liabilities	13,916	(3,900)
Increase (decrease) in unearned revenue	1,161	(5,496)
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 325,346</u>	<u>\$ 310,205</u>

SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS—Property additions in 2014 and 2013 of \$64,553 and \$42,834, respectively, have outstanding accounts payable.

See notes to basic financial statements.

(Concluded)

CITY OF CHICAGO, ILLINOIS WATER FUND

NOTES TO BASIC FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

(In thousands)

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization—The Water Fund (“Water Fund”) purifies and provides Lake Michigan water for the City of Chicago, Illinois (the “City”) and approximately 125 suburbs. The Water Fund is included in the City’s reporting entity as an enterprise fund.

The accompanying basic financial statements present only the Water Fund and are not intended to present the financial position of the City, and the results of its operations and the cash flows of its proprietary-fund types.

Basis of Accounting—The accounting policies of the Water Fund are based upon accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB). The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The accounts of the Water Fund are reported using the flow of economic resources measurement focus.

The Water Fund uses the accrual basis of accounting under which revenues are recognized when earned and expenses are recognized when the liability is incurred.

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

Annual Appropriated Budget—The Water Fund has a legally adopted annual budget, which is not required to be reported.

Management’s Use of Estimates—The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the basic financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash, Cash Equivalents, and Investments—Cash, cash equivalents, and investments generally are held with the City Treasurer as required by the Municipal Code of Chicago (the “Code”). Interest earned on pooled investments is allocated to participating funds based upon their average combined cash and investment balances. Due to contractual agreements or legal restrictions, the cash and investments of certain funds are segregated and earn and receive interest directly.

The Code permits deposits only to City Council-approved depositories, which must be organized state or national banks and federal and state savings and loan associations, located within the City, whose deposits are federally insured.

Investments authorized by the Code include interest-bearing general obligations of the City, State of Illinois (the “State”), and the U.S. government; U.S. Treasury bills and other non-interest-bearing general obligations of the U.S. government purchased in the open market below face value; domestic

money market funds regulated by and in good standing with the Securities and Exchange Commission; and tax anticipation warrants issued by the City. The City is prohibited by ordinance from investing in derivatives, as defined, without City Council approval.

The Water Fund values its investments at fair value or amortized cost as applicable. U.S. government securities purchased at a price other than par with a maturity of less than one year are reported at amortized cost. The fair value of U.S. agency securities, corporate bonds, and municipal bonds are estimated using recently executed transactions, market price quotations (where observable), or bond spreads.

Repurchase agreements can be purchased only from banks and certain other institutions authorized to do business in the State. The City Treasurer requires that securities pledged to secure these agreements have a fair value equal to the cost of the repurchase agreements, plus accrued interest.

Investments generally may not have a maturity in excess of 10 years from the date of purchase. Certain other investment balances are held in accordance with the specific provisions of applicable bond ordinances.

Cash equivalents include certificates of deposit and other investments with maturities of three months or less when purchased.

Accounts Receivable Allowance—Management has provided an allowance for amounts recorded at year-end, which may be uncollectible.

Transactions with the City—The City’s General Fund provides services to all other funds. The amounts allocated to other funds for these services are treated as operating expenses by the Water Fund and consist mainly of employee benefits, self-insured risks, and administrative expenses.

Inventories—Inventories, composed mainly of materials and supplies, are stated at cost, determined principally on the average cost method.

Utility Plant—Utility plant is recorded at cost or, for donated assets, at fair value at the date of acquisition. Utility plant is defined by the Water Fund as assets with an initial cost of more than \$5 thousand and an estimated useful life in excess of two years. Such assets are recorded at historical cost. Depreciation is provided using the straight-line method and begins in the year following the year of acquisition or completion. Estimated useful lives are as follows:

Structures and improvements	50–100 years
Distribution plant	25–100 years
Equipment	6–33 years

Costs of repairs and maintenance that do not significantly extend the useful life of assets are charged to operations.

Deferred Outflows—Deferred outflows represent the fair value of derivative instruments that are deemed to be effective hedges of \$98.1 million and \$78.2 million and unamortized loss on bond refundings of \$31.1 million and \$33.7 million as of December 31, 2014 and 2013, respectively.

Net Position—Net position is composed of net earnings from operating and nonoperating revenues, expenses, and capital grants. Net position is displayed in three components—net investment in capital assets, restricted for capital projects, and unrestricted. Net investment in capital assets consists of all

capital assets, net of accumulated depreciation and reduced by outstanding debt, net of debt service reserve, and unspent bond proceeds. Restricted for capital projects consist of assets for which constraints are placed thereon by external parties (such as lenders and grantors) and laws, regulations, and enabling legislation reduced by liabilities and deferred inflows of resources related to those assets. Unrestricted consists of the net amount of all other assets, deferred outflows, liabilities, and deferred inflows not categorized as either of the above.

Employee Benefits—Employee benefits are granted for vacation and sick leave, workers' compensation, and health care. Unused vacation leave is accrued and may be carried over for one year. Sick leave is accumulated at the rate of one day for each month worked, up to a maximum of 200 days. Severance of employment terminates all rights to receive compensation for any unused sick leave. Sick leave pay is not accrued. Employee benefit claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities.

Employees are eligible to defer a portion of their salaries until future years under the City's deferred compensation plan created in accordance with Internal Revenue Code Section 457. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. The plan is administered by third-party administrators, who maintain the investment portfolio. The plan's assets have been placed in trust accounts with the plan administrators for the exclusive benefit of participants and their beneficiaries, and are not considered assets of the City.

The City is subject to the State Unemployment Compensation Act and has elected the reimbursing employer option for providing unemployment insurance benefits for eligible former employees. Under this option, the City reimburses the State for claims paid by the State.

Bond Issuance Costs, Bond Premiums, Discounts, and Refunding Transactions—Bond issuance costs related to bond insurance, bond premiums, and bond discounts are deferred and amortized over the term of the related debt, except in the case of refunding debt transactions where the amortization period is over the term of the refunding or refunded debt, whichever is shorter.

Derivatives—The Water Fund enters into interest rate swap agreements to hedge interest rates and cash flows on outstanding variable interest rate debt. For existing swaps, the net interest expenditures resulting from these arrangements are recorded as interest expense. The fair value of derivative instruments that are deemed to be effective is accounted for as deferred outflows. Derivative instruments that are deemed not effective are adjusted to fair value with the change in fair value recorded to investment earnings. All interest rate swaps are approved by City Council.

Capitalized Interest—Interest expense, on construction bond proceeds, are capitalized during construction of those capital projects paid for from the bond proceeds and are being amortized over the depreciable life of the related assets on a straight-line basis. Interest capitalized in 2014 and 2013 totaled \$0.6 million and \$17.0 million, respectively.

Revenue Recognition—Revenue from water sales is recognized when the water is consumed by customers. Of the accounts receivable balances, \$73.4 million and \$63.6 million represent revenue recognized on water sales, which had not yet been billed to customers at December 31, 2014 and 2013, respectively. Unearned revenue represents amounts billed to non-metered customers prior to usage.

Revenues and Expenses—The Water Fund distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Water Fund's principal ongoing operations. The principal operating revenues of the Water Fund are charges to customers for sales and services.

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

Adopted Accounting Standards—GASB Statement No. 69, *Government Combinations and Disposals of Government Operations* (“GASB 69”), establishes accounting and financial reporting standards related to government combinations and disposals of government operations. GASB 69 became effective for the Water Fund beginning with its year ended December 31, 2014. GASB 69 requires disclosures to be made about government combinations and disposals of government operations to enable financial statement users to evaluate the nature and financial effects of those transactions. There was no impact to the Water Fund’s financial statements as a result of the implementation of GASB 69.

GASB Statement No. 70, *Accounting and Financial Reporting for Nonexchange Financial Guarantees* (“GASB 70”), establishes accounting and financial reporting standards for financial guarantees that are nonexchange transactions (nonexchange financial guarantees) extended or received by a state or local government. GASB 70 became effective for the Water Fund beginning with its year ended December 31, 2014. GASB 70 requires a government that has issued an obligation guaranteed in a nonexchange transaction to report the obligation until legally released as an obligor. This statement also requires a government that is required to repay a guarantor for making a payment on a guaranteed obligation or legally assuming the guaranteed obligation to continue to recognize a liability until legally released as an obligor. When a government is released as an obligor, the government should recognize revenue as a result of being relieved of the obligation. This statement also provides additional guidance for intra-entity nonexchange financial guarantees involving blended component units. This statement also requires disclosures to be made about government combinations and disposals of government operations to enable financial statement users to evaluate the nature and financial effects of those transactions. There was no impact to the Water Fund’s financial statements as a result of the implementation of GASB 70.

Upcoming Accounting Standards—Other accounting standards that the Water Fund is currently reviewing for applicability and potential impact on the financial statements include:

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* (“GASB 68”), establishes new financial reporting requirements for most governments that provide their employees with pension benefits through these types of plans. GASB 68 will be effective for the City beginning with its year ending December 31, 2015. GASB 68 replaces the requirements of GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*, and GASB Statement No. 50, *Pension Disclosures*, as they relate to governments that provide pensions through pension plans administered as trusts or similar arrangements that meet certain criteria. GASB 68 requires governments providing defined benefit pensions to recognize their net liability for pension benefits, measured as the difference between total pension assets and total pension liability, as a liability in the financial statements that follow accrual basis of accounting for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. The statement also enhances accountability and transparency through revised and new note disclosures and required supplementary information (RSI). As of December 31, 2014, the City reported a net pension obligation of \$8.6 billion on the statement of net position and disclosed a combined unfunded actuarial accrued liability for all four of the pension plans of \$19.7 billion in accordance with GASB Statement No. 27. During 2014, the pension plans implemented GASB Statement No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*, and disclosed a combined net pension liability of \$20.1 billion as of December 31, 2014. The City has not yet determined the impact, if any, GASB 68 will have on the standalone Water Fund’s financial statements.

GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68* (“GASB 71”), relates to amounts associated with contributions, if any, made by a state or local government employer or nonemployer contributing entity to a defined benefit pension plan after the measurement date of the government’s beginning net pension liability. GASB 71 will be effective for the Water Fund beginning with its year ending December 31, 2015. This statement amends paragraph 137 of GASB 68 to require that, at transition, a government recognize a beginning deferred outflow of resources for its pension contributions, if any, made subsequent to the measurement date of the beginning net pension liability and requires that beginning balances for other deferred outflows of resources and deferred inflows of resources related to pensions be reported at transition only if it is practical to determine all such amounts.

GASB Statement No. 72, *Fair Value Measurement and Application* (“GASB 72”), requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. Governments should organize these disclosures by type of asset or liability reported at fair value. It also requires additional disclosures regarding investments in certain entities that calculate net asset value per share (or its equivalent). GASB 72 will be effective for the Water Fund beginning with its year ending December 31, 2015.

Presentation Changes—The December 31, 2013, statement of net position has been changed to present the restricted assets and liabilities within their respective current and noncurrent classification categories. The restricted assets and liabilities were presented in a separate section in the prior year’s basic financial statements. The December 31, 2013 Statement of Revenues, Expenses and Changes in Net Position has been changed to present the provision for doubtful accounts as a contra revenue account. Provision for doubtful accounts were presented as a component of operating expense in the prior year’s basic financial statements. The December 31, 2013, statement of cash flows has been changed to present the transactions with other City funds on a gross basis. The transactions with other City funds were presented on a net basis in the prior year’s basic financial statements.

2. RESTRICTED AND UNRESTRICTED CASH, CASH EQUIVALENTS, AND INVESTMENTS

Cash Equivalents and Investments—The Water Fund’s cash equivalents and investments as of December 31, 2014, are as follows (in thousands):

	Investment Maturities (in Years)				Fair Value
	Less than 1	1–5	6–10	More than 10	
U.S. agencies	\$ 29,909	\$ 356,444	\$ 14,659	\$ -	\$ 401,012
Certificates of deposit and other short-term	16,185				16,185
Commercial paper	78,964				78,964
Corporate bonds	5,809	8,977			14,786
Municipal bonds	6,669	16,184			22,853
Subtotal	<u>\$ 137,536</u>	<u>\$ 381,605</u>	<u>\$ 14,659</u>	<u>\$ -</u>	533,800
Share in City’s pooled funds					<u>116,710</u>
Total					<u>\$ 650,510</u>

Cash Equivalents and Investments—The Water Fund’s cash equivalents and investments as of December 31, 2013, are as follows (in thousands):

	Investment Maturities (in Years)				Fair Value
	Less than 1	1–5	6–10	More than 10	
U.S. agencies	\$ 11,525	\$ 101,600	\$ 118,854	\$ -	\$ 231,979
Certificates of deposit and other short-term	17,701				17,701
Corporate bonds	8,001	4,379			12,380
Municipal bonds		11,496			11,496
Subtotal	<u>\$ 37,227</u>	<u>\$ 117,475</u>	<u>\$ 118,854</u>	<u>\$ -</u>	273,556
Share in City’s pooled funds					<u>75,466</u>
Total					<u>\$ 349,022</u>

U.S. agencies include investments in government-sponsored enterprises, such as Federal National Mortgage Association, Federal Home Loan Banks, and Federal Home Loan Mortgage Corp.

Interest Rate Risk—As a means of limiting its exposure to fair value losses arising from rising interest rates, the City’s investment policy requires that investments generally may not have a maturity date in excess of 10 years from the date of purchase. Certain other investments are held in accordance with the specific provisions of applicable ordinances.

Credit Risk—The Code limits investments in commercial paper to banks whose senior obligations are rated in the top two rating categories by at least two national rating agencies and who are required to maintain such rating during the term of such investment. The Code also limits investments to domestic money market mutual funds regulated by, and in good standing with, the Securities and Exchange Commission. Certificates of deposit are also limited by the Code to national banks, which provide collateral of at least 105% by marketable U.S. government securities marked to market at least monthly; or secured by a corporate surety bond issued by an insurance company licensed to do business in the State and having a claims-paying rating in the top rating category, as rated by a nationally recognized statistical rating organization maintaining such rating during the term of such investment. A schedule summarizing the Water Fund’s exposure to credit risk as of December 31, 2014 and 2013, is as follows (in thousands):

Quality Rating	2014	2013
Aaa/AAA	\$ 23,540	\$ -
Aa/AA	400,950	246,556
A/A	4,300	4,378
P1/A1	82,364	
Not rated	<u>22,646</u>	<u>22,622</u>
Total	<u>\$ 533,800</u>	<u>\$ 273,556</u>

The Water Fund participates in the City’s pooled cash and investments account, which includes amounts from other City funds and is maintained by the City Treasurer. Individual cash or investments are not specifically identifiable to any participant in the pool. The City Treasurer’s pooled fund is included in the City’s financial statements.

Custodial Credit Risk—Cash and Certificates of Deposit—This is the risk that in the event of a bank failure, the City’s deposits may not be returned. The City’s investment policy states that in order to protect the City’s deposits, depository institutions are to maintain collateral pledges on City deposits during the term of the deposit of at least 102% of marketable U.S. government, or approved securities or surety bonds, issued by top-rated insurers. Collateral is required as security whenever deposits exceed the insured limits of the Federal Deposit Insurance Corporation. The bank balance of cash and certificates of deposit with the City’s various municipal depositories was \$318.2 million. Of the bank balance, 98% was either insured or collateralized with securities held by City agents in the City’s name. An amount of \$7.4 million was uncollateralized at December 31, 2014, and thus was subject to custodial credit risk.

Investments reported in the basic financial statements as of December 31, 2014 and 2013, are summarized as follows (in thousands):

	2014	2013
Per Note 2:		
Investments—Water Fund	\$ 533,800	\$ 273,556
Investments—City Treasurer Pooled Fund	<u>116,710</u>	<u>75,466</u>
	<u>\$ 650,510</u>	<u>\$ 349,022</u>
Per financial statements:		
Restricted investments—current	\$ 132,451	\$ 78,908
Restricted investments—noncurrent	386,090	105,459
Unrestricted investments	101,359	129,496
Investments included as cash and cash equivalents on the statements of net position	<u>30,610</u>	<u>35,159</u>
	<u>\$ 650,510</u>	<u>\$ 349,022</u>

3. RESTRICTED ASSETS AND ACCOUNTS

Water sales are pledged to pay outstanding Water Revenue Bonds. The ordinances authorizing the issuance of outstanding Water Revenue Bonds provide for the creation of separate accounts into which net revenues, as defined, or proceeds are to be credited, are as follows:

Water Revenue Bonds, Series 2001, 2000, 1997, and Refunding Bonds Series 1993 (“Senior Lien Revenue Bonds”):

Bond Principal and Interest Account—No later than 10 days prior to each principal or interest payment date, an amount sufficient to pay principal, redemption premium, if any, and interest becoming due, whether upon maturity, redemption, or otherwise.

Bond Debt Service Reserve Account—For each series, an amount equal to the least of (i) the maximum annual debt service requirement; (ii) 10% of the original principal amount less original issue discount; or (iii) 125% of the average annual debt service requirement. The required balance of the Series 2000, 1997, 1995, and 1993 bonds was met by the purchase of surety bonds. The required balance of the Series 2001 Second Lien Revenue Bonds is being met with a deposit of a portion of the proceeds of the Series 2001 Senior Lien Revenue Bonds.

Construction Account—Certain proceeds of the Senior Lien Revenue Bonds were deposited in this account for the purpose of paying construction costs of projects as defined in the ordinance.

Water Revenue Bonds, Series 2000, 2006A, 2008, 2010A, 2010B, 2010C, 2012, 2014, and Refunding Bonds, Series 2004 and 2001 (“Second Lien Revenue Bonds”):

Principal and Interest Account—Deposits are required to be transferred no later than the business day preceding each May 1 and November 1, in an amount sufficient to pay principal and interest as due on outstanding Second Lien Revenue Bonds.

Second Lien Bonds Account—On the date of issuance of any series of Second Lien Revenue Bonds that bear interest at a variable rate paying interest more than semiannually, an amount equal to the interest payable during a six-month period will be transferred to a restricted account. The amount transferred will be calculated based on the maximum rate payable on such bonds.

Construction Account—Certain proceeds of the Second Lien Revenue Bonds were deposited in this account for the purpose of paying construction costs of projects as defined in the ordinance.

Water Rate Stabilization Account—Any net revenues remaining after providing sufficient funds for all required deposits in the Water Revenue Bonds accounts may be transferred to the water rate stabilization account upon the direction of the City to be used for any lawful purpose of the Water Fund.

For accounts established by ordinances with balances, the amounts at December 31, 2014 and 2013, are as follows (in thousands):

	2014	2013
Second Lien Revenue Bonds	\$ 14,810	\$ 17,276
Water rate stabilization	88,397	88,397
Construction	<u>427,930</u>	<u>111,609</u>
Total	<u>\$ 531,137</u>	<u>\$ 217,282</u>

At December 31, 2014 and 2013, management is not aware of any instances of noncompliance with the funding requirements and restrictions on assets as stated in the ordinances.

4. LONG-TERM DEBT

Long-term debt as of December 31, 2014 and 2013, consisted of the following (in thousands):

	2014	2013
\$49,880 Series 1993 Water Revenue Refunding Bonds, issued October 1, 1993, due through 2016; interest at 4.125% to 6.5%	\$ 10,790	\$ 15,810
\$277,911 Series 1997 Water Revenue Bonds, issued September 1, 1997, due through 2019; interest at 3.9% to 5.25%	10,849	14,019
\$100,000 Series 2000 Second Lien Water Revenue Bonds, issued December 22, 1999, due 2030, variable floating interest rate; interest at .05% as of December 31, 2014	100,000	100,000
\$156,819 Series 2000 Senior Lien Water Revenue Bonds, issued May 2, 2000, due 2030; interest at 4.375% to 5.875%	15,857	19,153
\$81,500 Series 2001 Second Lien Water Revenue Refunding Bonds, issued December 13, 2001, due 2030; interest at 3.0% to 5.75%	80,850	80,900
\$2,292 Illinois Environmental Protection Agency Loan Agreement, signed June 30, 2003, due 2025; interest at 2.57%	1,669	1,799
\$3,605 Illinois Environmental Protection Agency Loan Agreement, signed October 16, 2003, due 2022; interest at 2.905%	1,723	1,912
\$500,000 Series 2004 Second Lien Water Revenue Refunding Bonds, issued August 5, 2004, due through 2031, variable floating interest rate; interest at .0399995% as of December 31, 2014	355,575	366,150
\$215,400 Series 2006A Second Lien Water Revenue Bonds, issued July 26, 2006, due through 2036; interest at 4.5% to 5.0%	184,425	188,985
\$549,915 Series 2008 Second Lien Water Revenue Bonds, issued April 2, 2008, due through 2038; interest at 4.0% to 5.25%	470,035	485,745
\$313,580 Series 2010A-C Second Lien Water Revenue Bonds, issued November 10, 2010, due through 2040; interest at 2.0% to 6.742%	300,355	300,355
\$6,000 Illinois Environmental Protection Agency Loan Agreement, signed January 21, 2011, due 2031; interest at 2.57%	5,192	5,465
\$9,077 Illinois Environmental Protection Agency Loan Agreement, issued February 2, 2010, due 2031; noninterest bearing	7,750	8,206
\$399,445 Series 2012 Second Lien Water Revenue Bonds, issued May 17, 2012, due through 2042; interest at 4.0% to 5.0%	399,445	399,445
\$1,527 Illinois Environmental Protection Agency Loan Agreement, issued July 8, 2010, due 2032; interest at 1.25%	1,423	1,493
\$1,502 Illinois Environmental Protection Agency Loan Agreement, issued September 15, 2013, due 2032; interest at 1.25%	1,399	1,468
\$6,092 Illinois Environmental Protection Agency Loan Agreement, issued October 25, 2013, due 2032; interest at 1.25%	5,674	5,953
\$6,542 Illinois Environmental Protection Agency Loan Agreement, signed May 27, 2014, due 2034; interest at 2.2950%	6,413	
\$39,421 Illinois Environmental Protection Agency Loan Agreement, signed August 5, 2013, due 2034; interest at 1.93%	39,422	
\$15,000 Illinois Environmental Protection Agency Loan Agreement, signed September 19, 2013, due 2034; interest at 1.93%	15,000	
\$367,925 Series 2014 Second Lien Water Revenue Bonds, issued September 17, 2014, due 2044; interest at 3.0% to 5.0%	367,925	
Total	2,381,771	1,996,858

Long-term debt changed during the years ended December 31, 2014 and 2013, is as follows (in thousands):

	Balance January 1, 2014	Additions	Reductions	Balance December 31, 2014	Due within One Year
Revenue bonds/notes payable	\$ 1,996,858	\$428,889	\$ (43,976)	\$ 2,381,771	\$ 51,535
Accretion of capital appreciation bonds	43,885	4,377	(9,169)	39,093	9,571
Unamortized bond discount/premium—net	<u>66,934</u>	<u>34,836</u>	<u>(4,595)</u>	<u>97,175</u>	
Total	<u>\$ 2,107,677</u>	<u>\$468,102</u>	<u>\$ (57,740)</u>	<u>\$ 2,518,039</u>	<u>\$ 61,106</u>
	Balance January 1, 2013	Additions	Reductions	Balance December 31, 2013	Due within One Year
Revenue bonds/notes payable	\$ 2,030,177	\$ 9,121	\$ (42,440)	\$ 1,996,858	\$ 43,846
Accretion of capital appreciation bonds	47,658	4,976	(8,749)	43,885	9,169
Unamortized bond discount/premium—net	<u>71,041</u>		<u>(4,107)</u>	<u>66,934</u>	
Total	<u>\$ 2,148,876</u>	<u>\$ 14,097</u>	<u>\$ (55,296)</u>	<u>\$ 2,107,677</u>	<u>\$ 53,015</u>

Interest expense includes amortization of the deferred loss on bond refunding for 2014 and 2013 of \$2.5 million; net of amortization of bond premium of \$4.6 million and \$4.1 million, respectively; and accretion of Series 1997 and Series 2000 capital appreciation bonds of \$9.6 million and \$9.2 million, respectively.

As defined in the bond ordinances, net revenues are pledged for the payment of principal and interest on the bonds. Ordinances include covenants, which require that net revenues available for bonds, as adjusted, at least equal the greater of (i) 120% of the aggregate current annual debt service on the Senior Lien Revenue Bonds or (ii) the sum of the aggregate current annual debt service of the Senior Lien Revenue Bonds, plus 110% of the aggregate current annual Second Lien Revenue Bonds debt service, and that City management maintain all covenant reserve account balances at specified amounts. The above requirements were met in 2014 and 2013.

Rate Increase—Water rates are set by ordinance and established in an amount designed to pay the costs of Water Fund operations and capital improvements, including any related debt service. The water rate effective January 1, 2014, was \$24.80 per 1,000 cubic feet.

Issuance of Debt—Second Lien Water Revenue Bonds, Series 2014 (\$367.9 million) were sold at a premium in September 2014. The bonds have interest rates ranging from 3% to 5% and maturity dates from November 1, 2015, to November 1, 2044. Net proceeds of \$400.0 million will be used to finance certain costs of improvements and extensions to the water system.

On May 27, 2014, a loan agreement was signed with the Illinois Environmental Protection Agency to install water meters at residences throughout the City that are currently non-metered. In 2014, the Water Fund drew \$6.5 million from this loan agreement. The loan has an interest rate of 2.295% with maturity dates from September 21, 2014, to March 21, 2034.

On August 5, 2013, a loan agreement was signed with the Illinois Environmental Protection Agency to replace approximately 10 miles of damaged, undersized, and leaking water mains located throughout the City with new 8-inch diameter water mains. In 2014, the Water Fund drew \$39.4 million from this loan agreement. The loan has an interest rate of 1.93% with maturity dates from January 16, 2015, to July 16, 2034.

On September 19, 2013, a loan agreement was signed with the Illinois Environmental Protection Agency to install water meters at residents throughout the City that are currently non-metered. Installations will be performed by a private contractor. Meters will be equipped with an AMR (Automatic Meter Reading) capabilities. In 2014, the Water Fund drew \$15.0 million from this loan agreement. The loan has an interest rate of 1.93% with maturity dates from April 16, 2015, to October 16, 2034.

A schedule of bond and note debt service requirements to maturity at December 31, 2014, is as follows (in thousands):

Years Ending December 31	Principal	Interest	Total Debt Service
2015	\$ 51,535	\$ 125,420	\$ 176,955
2016	63,168	121,521	184,689
2017	65,344	119,364	184,708
2018	67,686	117,073	184,759
2019	75,687	109,101	184,788
2020–2024	451,708	472,764	924,472
2025–2029	511,006	360,831	871,837
2030–2034	450,632	240,391	691,023
2035–2039	430,475	127,936	558,411
2040–2044	<u>214,530</u>	<u>25,935</u>	<u>240,465</u>
Total	<u>\$2,381,771</u>	<u>\$1,820,336</u>	<u>\$4,202,107</u>

Debt service requirements above exclude commercial paper issues, as the timing of payments is not certain. There was no commercial paper outstanding at December 31, 2014.

The Water Fund's variable-rate bonds may bear interest from time to time at a flexible rate, a daily rate, a weekly rate, an adjustable long rate, or the fixed rate as determined from time to time by the remarketing agent, in consultation with the City. At December 31, 2014, the variable-rate bonds were in the weekly rate interest mode. For the requirements calculated above, interest on variable-rate debt was calculated at the rate in effect at December 31, 2014, or the effective rate of a related swap agreement, if applicable. An irrevocable letter of credit provides for the timely payment of principal and interest on the Series 2000 until October 30, 2017. An irrevocable letter of credit provides for the timely payment of principal and interest on the Series 2004 bonds until November 5, 2018. At December 31, 2014, there were no outstanding letter of credit advances. In the event the bonds are put back to the bank and not successfully remarketed, or if the letter of credit expires without an extension or substitution, the bank bonds will convert to a term loan (see Note 10 for subsequent events related to the effect of the ratings downgrade on the swap and liquidity agreements). There is no principal due on potential term loans within the next fiscal year.

Derivatives—Pay-Fixed, Receive—Variable Interest Rate Swaps—Objective of the Swaps—In order to protect against changes in cash flows, which includes the potential of rising interest rates, the

Water Fund has entered into various separate pay-fixed, receive-variable interest rate swaps at a cost less than what the Water Fund would have paid to issue fixed-rate debt.

	Changes in Fair Value		December 31, 2014		Notional
	Classification	Amount	Classification	Amount	
Cash flow hedges—pay-fixed interest rate swaps	Deferred outflow of resources	<u>\$ 19,860</u>	Deferred outflow of resources	<u>\$ 98,106</u>	<u>\$455,575</u>

Terms, Fair Values, and Credit Risk—The terms, including the fair value and credit ratings of the outstanding swaps as of December 31, 2014, are as follows (in thousands). The notional amounts of the swaps match the principal amounts of the associated debt. The Water Fund’s swap agreements contain scheduled reductions to outstanding notional amounts that are expected to approximately follow scheduled or anticipated reductions in the associated “bonds payable” category. Under the swap, the Water Fund pays the counterparty a fixed payment and receives a variable payment computed according to the London InterBank Offered Rate (LIBOR).

Associated Bond Issue	Notional Amounts	Effective Date	Terms	Fair Values	Maturity Date [Note 10]	Counterparty Credit Rating
Hedging instruments:						
Bonds (Series 2004)	\$173,345	August 5, 2004	Pay 3.8694%; receive 67% of 1-month LIBOR	\$(30,996)	November 1, 2025	A2/A
Bonds (Series 2004)	182,230	August 5, 2004	Pay 3.8669%; receive 67% of 1-month LIBOR	(37,650)	November 1, 2031	Aa3/AA-
Bonds (Series 2000)	<u>100,000</u>	April 16, 2008	Pay 3.8694%; receive 67% of 1-month LIBOR	<u>(29,460)</u>	November 1, 2030	A2/A
Total	<u>\$455,575</u>			<u>\$(98,106)</u>		

Fair Value—As of December 31, 2014 and 2013, the swaps had a negative fair value of \$98.1 million and \$78.2 million, respectively. As per industry convention, the fair values of the Water Fund’s outstanding swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the forward rates implied by the yield curve correctly anticipate future spot rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement of the swap. Because interest rates declined subsequent to the date of execution, the Water Fund’s swaps had negative values.

Credit Risk—The Water Fund is exposed to credit risk (counterparty risk) through the counterparties with which it enters into agreements. If minimum credit rating requirements are not maintained, the counterparty is required to post collateral to a third party. This protects the Water Fund by mitigating the credit risk and, therefore, the ability to pay a termination payment, inherent in a swap. Collateral on all swaps is to be in the form of cash or eligible collateral held by a third-party custodian. Upon credit events, the swaps also allow transfers, credit support, and termination if the counterparty is unable to meet the said credit requirements.

Basis Risk—Basis risk refers to the mismatch between the variable-rate payments received on a swap contract and the interest payment actually owed on the bonds. The two significant components driving this risk are credit and LIBOR ratios. Credit may create basis risk because the Water Fund’s bonds may trade differently from the swap index as a result of a credit change in the Water Fund. LIBOR ratios (or spreads) may create basis risk if LIBOR swaps of the Water Fund’s bonds trade higher than the LIBOR received on the swap. This can occur due to many factors, including, without limitation, changes in marginal tax rates, tax-exempt status of bonds, and supply and demand for variable-rate bonds. The Water Fund is exposed to basis risk on the swaps if the rate paid on the bonds is higher than the rate

received. The Water Fund is liable for the difference. The difference would need to be available on the debt service payment date and would add additional underlying cost to the transaction.

Tax Risk—The swap exposes the Water Fund to tax risk or a permanent mismatch (shortfall) between the floating rate received on the swap and the variable rate paid on the underlying variable-rate bonds due to tax law changes such that the federal or state tax exception of municipal debt is eliminated or its value reduced. There have been no tax law changes since the execution of this swap agreement.

Termination Risk—The swap has the risk that it could be terminated as a result of certain events, including a ratings downgrade for the issuer or swap counterparty, covenant violation, bankruptcy, payment default, or other defined events of default. Termination of a swap may result in a payment made by the issuer or to the issuer depending upon the market at the time of termination.

Rollover Risk—The City may be exposed to rollover risk if the swap terminates early or if the term of the swap is shorter than that of the bonds.

Swap Payments and Associated Debt—Debt service requirements for the Water Fund's outstanding variable-rate debt and net swap payments, assuming current interest rates (December 31, 2014) remain the same for their term, are as follows (in thousands):

Years Ending December 31	Principal	Interest	Swaps—Net	Total
2015	\$ 11,000	\$ 160	\$ 17,463	\$ 28,623
2016	11,450	188	17,010	28,648
2017	11,925	183	16,572	28,680
2018	12,425	178	16,115	28,718
2019	20,975	174	15,640	36,789
2020–2024	181,425	691	61,301	243,417
2025–2029	158,475	339	27,952	186,766
2030–2034	<u>47,900</u>	<u>25</u>	<u>2,101</u>	<u>50,026</u>
Total	<u>\$455,575</u>	<u>\$1,938</u>	<u>\$174,154</u>	<u>\$ 631,667</u>

Defeased Bonds—Defeased bonds are removed from the statements of net position when related assets have been placed in irrevocable trusts that, together with interest earned thereon, provide amounts sufficient for payment of all principal and interest. There were no defeased bonds outstanding at December 31, 2014.

5. UTILITY PLANT

Utility plant changed during the years ended December 31, 2014 and 2013, as follows (in thousands):

	Balance— January 1, 2014	Additions	Disposals and Transfers	Balance— December 31, 2014
Utility plant not depreciated:				
Land and land rights	\$ 5,083	\$ -	\$ -	\$ 5,083
Construction in progress	<u>317,086</u>	<u>282,375</u>	<u>(141,816)</u>	<u>457,645</u>
Total utility plant not depreciated	<u>322,169</u>	<u>282,375</u>	<u>(141,816)</u>	<u>462,728</u>
Utility plant being depreciated:				
Structures and improvements	535,802	16,447	27,285	579,534
Distribution plant	2,590,751	62,000	102,899	2,755,650
Equipment	<u>647,530</u>	<u>4,002</u>	<u>(411)</u>	<u>651,121</u>
Total utility plant being depreciated	<u>3,774,083</u>	<u>82,449</u>	<u>129,773</u>	<u>3,986,305</u>
Less accumulated depreciation:				
Structures and improvements	(197,555)	(7,724)		(205,279)
Distribution plant	(394,281)	(27,757)	1,605	(420,433)
Equipment	<u>(322,560)</u>	<u>(19,321)</u>	<u>759</u>	<u>(341,122)</u>
Total accumulated depreciation	<u>(914,396)</u>	<u>(54,802)</u>	<u>2,364</u>	<u>(966,834)</u>
Utility plant being depreciated—net	<u>2,859,687</u>	<u>27,647</u>	<u>132,137</u>	<u>3,019,471</u>
Utility plant—net	<u>\$ 3,181,856</u>	<u>\$ 310,022</u>	<u>\$ (9,679)</u>	<u>\$ 3,482,199</u>
	Balance— January 1, 2013	Additions	Disposals and Transfers	Balance— December 31, 2013
Utility plant not depreciated:				
Land and land rights	\$ 5,083	\$ -	\$ -	\$ 5,083
Construction in progress	<u>262,280</u>	<u>213,134</u>	<u>(158,328)</u>	<u>317,086</u>
Total utility plant not depreciated	<u>267,363</u>	<u>213,134</u>	<u>(158,328)</u>	<u>322,169</u>
Utility plant being depreciated:				
Structures and improvements	535,710	427	(335)	535,802
Distribution plant	2,305,803	156,514	128,434	2,590,751
Equipment	<u>620,775</u>	<u>7,290</u>	<u>19,465</u>	<u>647,530</u>
Total utility plant being depreciated	<u>3,462,288</u>	<u>164,231</u>	<u>147,564</u>	<u>3,774,083</u>
Less accumulated depreciation:				
Structures and improvements	(190,278)	(7,277)		(197,555)
Distribution plant	(372,090)	(23,750)	1,559	(394,281)
Equipment	<u>(305,943)</u>	<u>(18,185)</u>	<u>1,568</u>	<u>(322,560)</u>
Total accumulated depreciation	<u>(868,311)</u>	<u>(49,212)</u>	<u>3,127</u>	<u>(914,396)</u>
Utility plant being depreciated—net	<u>2,593,977</u>	<u>115,019</u>	<u>150,691</u>	<u>2,859,687</u>
Utility plant—net	<u>\$ 2,861,340</u>	<u>\$ 328,153</u>	<u>\$ (7,637)</u>	<u>\$ 3,181,856</u>

6. PENSION PLANS

Eligible Water Fund employees participate in one of two of the City's single-employer defined benefit pension plans, which are separate units of government established under State law. These plans are the Municipal Employees' and the Laborers' and Retirement Board Employees' Annuity and Benefit Funds ("Plans"). Individual retirement boards represented by elected and appointed officials administer these Plans. Each plan issues publicly available financial statements for each of the pension plans, which may be obtained at the respective fund's office.

The Plans provide retirement, death, and disability benefits as established by State law. Benefits generally vest after 20 years of credited service. Employees who retire at or after age 55 with at least 20 years of credited service qualify to receive a money purchase annuity and those with more than 20 years of credited service qualify to receive a minimum formula annuity. The annuity is computed by multiplying the final average salary by a percentage ranging from 2.0 percent to 2.5 percent per year of credited service. The final average salary is the employee's highest average annual salary for any four consecutive years within the last 10 years of credited service. However, the State passed legislation in 2010 providing less generous benefits for employees who join one of the Plans after January 1, 2011.

Participating employees contribute 8.5% of their salary to the Plans as required by State law. By law, the City's contributions are based on the amounts contributed by the employees. Financing of the City's contribution is through a separate property tax levy and the personal property replacement tax. The Water Fund reimburses the City's General Fund for the estimated pension cost applicable to the covered payroll of Water Fund employees. These reimbursements, recorded as expenses of the Water Fund, were \$13.6 million in 2014 and \$13.0 million in 2013. The annual pension costs are determined using the entry age normal actuarial cost method and the level dollar amortization method.

Historically, State law required City contributions at statutorily, not actuarially, determined rates. The rates are expressed as multiples of employee contributions. These contributions equal employee contributions made in the calendar year two years prior to the year for which the applicable tax is levied, multiplied by the statutory rates. The statutory rates in effect for the City's contributions made during the years ended December 31, 2014 and 2013, were 1% for the Laborers' and Retirement Board Employees' Annuity and Benefit Fund and 1.25% for the Municipal Employees', respectively.

The City has made the required contributions under State law. In recent years, those contributions have been lower than the actuarially required amounts for the Plans, which has served to increase the Plans' unfunded actuarial liabilities. Recurring cash inflows from all sources to the Plans (including City contributions, employee contributions, and investment earnings) have been lower than the cash outlays of the Plans in some recent years. As a result, the Plans have liquidated investments and used assets of the Plans to satisfy their respective current payment obligations in those years. The use of assets by the Plans for these purposes reduces the amount of assets on hand to pay benefits or earn investment returns in the future.

Under the enacted State legislation for the Municipal Employees' and Laborers' Plans known as Public Act 98-641 ("P.A. 98-641"), the City is required to significantly increase contributions to those two Plans beginning in 2016. During the period 2016 through 2020, the City's contributions to the Municipal Employees' and Laborers' Plans increase by statutorily determined amounts which are not based on actuarial calculations. Beginning in 2021, P.A. 98-641 requires the City to contribute in each year to the Municipal Employees' and Laborers' Plans the amount needed for each Plan to achieve a 90% Funded Ratio by the end of 2055. P.A. 98-641 also makes certain modifications to the automatic annual adjustment of benefits for approximately 78,000 members of those Plans (including current retirees and all employees) and requires substantial increases in employee contributions toward the cost of their retirement benefits.

The following table as of December 31, 2014, assists users in assessing each pension fund's progress in accumulating sufficient assets to pay benefits when due. The three-year historical information for each annuity and benefit fund, which includes all City employees within each respective annuity and benefit fund, is as follows (dollars in thousands):

	Annual Pension Cost	Annual Pension Cost Contributed	Annual Required Contribution	Required Contributions Contributed	Net Pension Obligation (Asset)
Municipal employees:					
2012	\$ 687,519	21.65 %	\$ 690,823	21.50 %	\$ 2,008,546
2013	812,463	18.24	820,023	18.10	2,672,812
2014	828,978	18.06	839,038	17.80	3,352,043
Laborers:					
2012	\$ 77,858	15.22 %	\$ 77,566	15.30 %	\$ (63,707)
2013	106,439	10.88	106,199	10.90	31,148
2014	105,901	11.48	106,018	11.50	124,889

The pension benefits information pertaining expressly to Water Fund employees is not available as the obligation is the responsibility of the general government. Accordingly, no amounts have been recorded in the accompanying basic financial statements for the net pension asset or obligation of these Plans. Amounts for the City are recorded within the City's government-wide basic financial statements.

7. OTHER POSTEMPLOYMENT BENEFITS—CITY OBLIGATION

In addition to providing pension benefits, under State law, the City provides certain health benefits to employees who retire from the City based upon their participation in the City's pension plans. Substantially all employees who qualify as Municipal Employees' or Laborers' pension plan participants older than age 55, with at least 20 years of service, may become eligible for postemployment benefits if they eventually become annuitants. Health benefits include basic benefits for annuitants and supplemental benefits for Medicare-eligible annuitants. Currently, the City does not segregate benefit payments to annuitants by fund. The cost of health benefits is recognized as claims are reported and are funded on a pay-as-you-go basis. The total cost to the City for providing health benefits to approximately 24,381 annuitants and their dependents was approximately \$79.3 million in 2014 and 2013.

The annuitants who retired prior to July 1, 2005, received a 55% subsidy from the City and the annuitants who retired on or after July 1, 2005, received a 50%, 45%, 40%, and 0% subsidy from the City based on the annuitant's length of actual employment with the City for the gross cost of retiree health care under a court-approved settlement agreement, known as the "Settlement Plan." The pension

funds contributed \$65 per month for each Medicare-eligible annuitant and \$95 per month for each non-Medicare-eligible annuitant to their gross cost. The annuitants contributed a total of \$84.8 million and \$66.6 million in 2014 and 2013, respectively, to the gross cost of their retiree health care pursuant to premium amounts set forth in the below-referenced settlement agreement.

The City's net expense and the annuitants' contribution indicated above are preliminary and subject to the reconciliation per the court-approved settlement agreement described below.

Plan Description Summary—The City of Chicago was party to a written legal settlement agreement outlining the provisions of the retiree health program, The Settlement Health Care Plans (the Plans), through June 30, 2013. Although the agreement did not extend continuation of the Plans after June 30, 2013, a phase out of three years to end the program was announced in 2013, with annual subsidy modifications and a final sunset of subsidies at December 31, 2016, for all but the Korshak class of members. As a result of the extension, the post Settlement Plan-subsidized retiree medical benefits will cease for members as of December 31, 2016, except for the Korshak class who shall have lifetime benefits. Duty-disabled retirees who have statutory pre-63/65 coverage will continue to have fully subsidized coverage under the active health plan.

The City administers a single employer, self-funded defined benefit health care plan (the "Health Plan"), for which the City pays a portion of the costs on a pay-as-you-go method. The City sponsors health benefit plans for employees, former employees, and retired former employees. The provisions of the post settlement benefit program provide in general, that the City pay a percentage of the cost (based upon an employee's service) for hospital and medical coverage to eligible retired employees and their dependents for a specified period, recently revised to end December 31, 2016. The percentage subsidies were revised to reduce by approximately 25% in 2014 and 50% of 2013 subsidy levels in 2015. Additional step-downs in subsidy levels for 2016 have not yet been decided.

In addition, State law authorizes the four respective Pension Funds (Police, Fire, Municipal, and Laborers) to provide a fixed monthly dollar subsidy to each annuitant who has elected coverage under the Health Plan through December 31, 2016. After that date, no supplements are authorized. The liabilities for the monthly dollar supplements paid to annuitants enrolled in the retiree medical plan by their respective Pension Funds are included in the actuarial valuation reports of the respective four Pension Funds.

Funding Policy—The City's retiree Health Plan is a single-employer plan, which operates on a pay-as-you-go funding basis. No assets are accumulated or dedicated to funding the retiree Health Plan benefits.

Annual OPEB Cost and Net OPEB Obligation—The City's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC) of the employer. The ARC represents a level of funding that if paid on an ongoing basis, is projected to cover the normal cost each year and to amortize any unfunded actuarial liabilities over a period of one year (the remaining years of coverage under the settlement agreement).

The following table shows the components of the City's annual OPEB costs for the year for the Plans, the amount actually contributed to the Plans, and changes in the City's net OPEB obligation to the retiree Health Plan. The net OPEB obligation is the amount entered upon the City's statement of net position as of year-end as the net liability for the other postemployment benefits—the retiree Health Plan. The amount of the annual cost for the retiree Health Plan, which is to be recorded in the statement of changes in net position for 2014 in the City CAFR, is the annual OPEB cost (expense).

	Annual OPEB Cost and Contributions Made (In thousands)	
	2014 Health Plan	2013 Health Plan
Contribution rates:		
City	Pay as you go	Pay as you go
Plan members	N/A	N/A
Annual required contribution	\$ 128,625	\$ 134,083
Interest on net OPEB obligation	5,795	8,614
Adjustment to annual required contribution	<u>(21,988)</u>	<u>(25,531)</u>
Annual OPEB cost	112,432	117,166
Contributions made	<u>128,061</u>	<u>139,336</u>
Decrease in net OPEB obligation	(15,629)	(22,170)
Net OPEB obligation—beginning of year	<u>193,191</u>	<u>215,361</u>
Net OPEB obligation—end of year	<u>\$ 177,562</u>	<u>\$ 193,191</u>

The City's annual OPEB cost, the percentage of annual OPEB cost contributed to the Plans, and the net OPEB obligation for fiscal years 2014, 2013, and 2012, are as follows (in thousands):

Fiscal Years Ended	Schedule of Contributions, OPEB Costs, and Net Obligations		
	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
December 31, 2014	\$ 112,432	113.9 %	\$ 177,562
December 31, 2013	117,166	118.9	193,191
December 31, 2012	76,977	150.6	215,361

Funded Status and Funding Progress—As of December 31, 2013, the most recent actuarial valuation date, the actuarial accrued liability for benefits was \$964.6 million, all of which was unfunded. The covered payroll (annual payroll of active employees covered by the Plans) was approximately \$2,425.0 million and the ratio of the unfunded actuarial accrued liability to the covered payroll was 39.8%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the health care cost trend. Amounts determined regarding the funded status of the Plans and the annual required contributions of the employer are subject to continual revisions as the results are compared with past expectations and new estimates are made about the future.

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll
December 31, 2013	\$ -	\$ 964,626	\$ 964,626	- %	\$ 2,425,000
December 31, 2012		997,281	997,281		2,385,198

Actuarial Method and Assumptions—Projections of benefits for financial reporting purposes are based on the substantive plan (the plan understood by the employer and plan members) and included 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 method and assumptions used include techniques that are designed to reduce the effects of short-term volatility in AALs and the actuarial value of assets, consistent with the long-term perspective of the calculations.

For the Settlement Plan benefits (not provided by the Pension Funds) in the actuarial valuation for the fiscal year ended December 31, 2014, the entry age normal actuarial cost method was used. The actuarial assumptions included an annual health care cost trend rate of 8% initially, reduced by decrements to an ultimate rate of 5% in 2026. The range of rates included a 2.5% inflation assumption. The plan has not accumulated assets and does not hold assets in a segregated trust. However, the funds expected to be used to pay benefits are assumed to be invested for durations, which will yield an annual return rate of 3%. The UAAL is amortized as a level dollar amount over 10 years. The benefits include an extension of the Settlement Plan sunset so as to completely phase out in December 2016. The Korshak category is entitled to lifetime benefits.

Summary of Assumptions and Methods		
Item	Health Plan	
	2014	2013
Actuarial valuation date	December 31, 2013	December 31, 2012
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level dollar, open	Level dollar, open
Remaining amortization period	10 years	10 years
Asset valuation method	Market value	Market value
Actuarial assumptions:		
Investment rate of return	3.00%	3.00%
Projected salary increases	2.50%	3.00%
Healthcare inflation rate	8% initial to 5.0% in 2026	9.5% initial to 5.0% ultimate

The OPEB benefit information pertaining expressly to the Water Fund employees is not available as the obligation is the responsibility of the general government. Accordingly, no obligation has been recorded in the accompanying basic financial statements. Amounts for the City are recorded within the City's government-wide basic financial statements.

8. RELATED-PARTY TRANSACTIONS

Included in operating expenses are reimbursements to the General Fund of the City for services provided by other City departments, employee fringe benefits, and certain payments made on behalf of the Water Fund. Such reimbursements amounted to \$77.4 million and \$68.5 million in 2014 and 2013, respectively.

9. COMMITMENTS AND CONTINGENCIES

The Water Fund has certain contingent liabilities resulting from litigation, claims, or commitments incident to the ordinary course of business. Management expects that final resolution of these contingencies will not have a material adverse effect on the financial position or results of operations of the Water Fund.

The Water Fund provides workers' compensation benefits and employee health benefits under self-insurance programs administered by the City. Such claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities in the basic financial statements.

Uninsured claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. Changes in the claims liability amounts for the years ended December 31, 2014 and 2013, are as follows (in thousands):

	2014	2013
Balance—January 1	\$ 35,093	\$ 33,211
Claims incurred on current and prior-year events	36,156	33,572
Claims paid on current and prior-year events	<u>(34,542)</u>	<u>(31,690)</u>
Balance—December 31	<u>\$ 36,707</u>	<u>\$ 35,093</u>

The City purchases annuity contracts from commercial insurers to satisfy certain liabilities, accordingly, no liability is reported for those claims. Property and casualty risks for the Water Fund are transferred to commercial insurers. Claims have not exceeded the purchased insurance coverage in the past three years.

At December 31, 2014 and 2013, the Water Fund entered into contracts with outstanding commitments of approximately \$137.6 million and \$831.7 million, respectively, for construction projects.

10. SUBSEQUENT EVENTS

Ratings

In May 2015, Moody's Investors Service downgraded the ratings of the Water Fund senior lien revenue bonds from A2 to Baa1, and the Water Fund second lien revenue bonds from A3 to Baa2, each with a negative outlook. The downgrades triggered (with respect to the City's Water second lien revenue bonds) defaults under certain letters of credit and lines of credit and termination events under interest rate swap agreements to which the City is a party. In response to the triggering of these defaults, the City amended and/or transferred the interest rate swap agreements for its Water second lien revenue bonds to remove such termination event from the swap agreements prior to any demand being made for

a termination payment by the counterparties and obtained a waiver of the event of default from the provider of a liquidity agreement relating to its Water second lien revenue bonds.

In May 2015, subsequent to the Moody's downgrade, Standard and Poor's (S&P) downgraded the Water senior lien revenue bonds from AA to A, and the Water second lien revenue bonds from AA- to A-, each with a negative watch.

Swaps

In May and June 2015, the City transferred and modified certain thresholds with respect to additional termination events (ATE) for its Water swaps. The City transferred the swaps with UBS related to its Water Second Lien Revenue Bonds, Series 2000 (\$100 million notional amount), and Series 2004 (\$173.3 million notional amount) to Barclays. At the same time, the ATE rating threshold was reduced from below Baa1 by Moody's or BBB+ by S&P to below Baa3 or BBB- by Moody's and S&P, respectively. In addition, the swap with Royal Bank of Canada relating to the City's Water Second Lien Revenue Bonds, Series 2004 (\$182.2 million notional amount) was modified to reduce the ATE rating threshold from below Baa1 by Moody's or BBB+ by S&P to below BBB+ by S&P or Fitch.

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CITY OF CHICAGO, ILLINOIS WATER FUND

ADDITIONAL SUPPLEMENTARY INFORMATION SCHEDULE OF UTILITY PLANT FOR THE YEAR ENDED DECEMBER 31, 2014 (In thousands)

	Assets				Accumulated Depreciation					Net Balance— December 31, 2014
	Balance— January 1, 2014	Additions	Adjustments/ Disposals	Transfers	Balance— December 31, 2014	Balance— January 1, 2014	Provision	Adjustments/ Disposals	Balance— December 31, 2014	
LAND AND LAND RIGHTS:										
Power and pumping	\$ 2,367	\$ -	\$ -	\$ -	\$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ 2,367
Distribution reservoir	300				300					300
Purification	1,739				1,739					1,739
General and maintenance	677				677					677
Total land and land rights	5,083	-	-	-	5,083	-	-	-	-	5,083
STRUCTURES AND IMPROVEMENTS:										
Cribs	17,337				17,337	5,195	164		5,359	11,978
Lake and land tunnels	118,377				118,377	38,796	1,174		39,970	78,407
Intake structures	9,531				9,531	4,565	95		4,660	4,871
Power and pumping structures	127,959	4,154		1,086	133,199	34,160	1,605		35,765	97,434
Purification buildings	206,073	11,877		26,328	244,278	101,632	3,696		105,328	138,950
Distribution reservoirs	16,979				16,979	5,456	226		5,682	11,297
Offices, maintenance, and general	39,417				39,417	7,751	764		8,515	30,902
Contract retainage	129	416	(129)		416					416
Total structures and improvements	535,802	16,447	(129)	27,414	579,534	197,555	7,724	-	205,279	374,255
DISTRIBUTION PLANT:										
Mains and accessories	2,479,696	54,652	(1,378)	109,355	2,642,325	350,541	24,797	(1,363)	373,975	2,268,350
Meters and installations	89,215				89,215	33,280	2,700		35,980	53,235
Hydrants and valves	17,004		(242)		16,762	10,460	260	(242)	10,478	6,284
Contract retainage	4,836	7,348	(4,836)		7,348					7,348
Total distribution plant	2,590,751	62,000	(6,456)	109,355	2,755,650	394,281	27,757	(1,605)	420,433	2,335,217
EQUIPMENT:										
Power production	61,671	396			62,067	45,770	1,235		47,005	15,062
Pumping	219,409	781			220,190	91,835	6,781		98,616	121,574
Purification	315,560	2,015		835	318,410	151,281	8,498		159,779	158,631
Heavy machinery	25,445	80	(517)		25,008	14,550	1,766	(465)	15,851	9,157
Transportation	8,032	552	(326)		8,258	5,179	534	(294)	5,419	2,839
Miscellaneous	17,010				17,010	13,945	507		14,452	2,558
Contract retainage	403	178	(403)		178					178
Total equipment	647,530	4,002	(1,246)	835	651,121	322,560	19,321	(759)	341,122	309,999
Total structures and improvements, distribution plant, and equipment	3,774,083	82,449	(7,831)	137,604	3,986,305	914,396	54,802	(2,364)	966,834	3,019,471
CONSTRUCTION IN PROGRESS:										
Filtration plants	40,667	7,395		(27,163)	20,899					20,899
Pumping stations	58,544	9,131		(1,086)	66,589					66,589
Water mains	213,663	256,386		(109,355)	360,694					360,694
Contract retainage	4,212	9,463	(4,212)		9,463					9,463
Total construction in progress	317,086	282,375	(4,212)	(137,604)	457,645	-	-	-	-	457,645
TOTAL UTILITY PLANT	\$4,096,252	\$364,824	\$(12,043)	\$ -	\$4,449,033	\$914,396	\$54,802	\$(2,364)	\$966,834	\$3,482,199

STATISTICAL DATA

The statistical data section includes selected financial and operating information, generally presented on a multiyear basis. Statistical section information is presented in five categories—financial trends, revenue capacity, debt capacity, operating, and demographic and economic information. Schedules in the statistical section are the following:

Financial Trends Information—These schedules contain trend information to help the reader understand how the Water Fund’s basic financial performance and well-being have changed over time.

Revenue Capacity Information—These schedules contain information to help the reader assess the Water Fund’s most significant local revenue source and water sales charge.

Debt Capacity Information—These schedules present information to help the reader assess the affordability of the Water Fund’s current levels of outstanding debt and the Water Fund’s ability to issue additional debt in the future.

Operating Information—These schedules contain service and infrastructure data to help the reader understand how the information in the Water Fund’s financial report relates to the services the Department of Water Management and the Water Fund and how it provides the activities it performs.

Demographic and Economic Information—These schedules offer demographic and economic indicators to help the reader understand where the environment within which the City’s financial activities take place.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

CHANGES IN NET POSITION (UNAUDITED)

THREE YEARS ENDED DECEMBER 31, 2012–2014

(In millions)

	2012 (As Restated)	2013	2014
OPERATING REVENUES:			
Water sales	\$ 562.6	\$ 620.5	\$ 693.1
Provision for doubtful accounts	(16)	(25)	(23)
Other operating revenues	<u>13.7</u>	<u>16.6</u>	<u>22.1</u>
Total operating revenues	<u>560.6</u>	<u>611.7</u>	<u>692.7</u>
OPERATING EXPENSES:			
Source of supply	0.2	0.1	0.3
Power and pumping	41.7	43.2	43.1
Purification	56.1	60.9	58.5
Transmission and distribution	36.5	29.5	43.7
Customer accounting and collection	10.0	11.6	11.9
Administrative and general	21.9	21.2	22.0
Central services and General Fund reimbursements	<u>107.4</u>	<u>108.7</u>	<u>119.2</u>
Total operating expenses	<u>273.8</u>	<u>275.2</u>	<u>298.7</u>
OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION	286.8	336.5	394.0
DEPRECIATION AND AMORTIZATION	<u>48.4</u>	<u>49.6</u>	<u>58.0</u>
OPERATING INCOME	<u>238.4</u>	<u>286.9</u>	<u>336.0</u>
NONOPERATING REVENUES (EXPENSES):			
Interest income	0.3	0.4	(0.5)
Interest expenses	(81.7)	(92.2)	(98.8)
Other operating revenues	<u>1.1</u>	<u>0.5</u>	<u>(0.5)</u>
Total nonoperating expenses—net	<u>(80.3)</u>	<u>(91.3)</u>	<u>(99.8)</u>
CHANGE IN NET POSITION	158.1	195.6	236.2
TOTAL NET POSITION—Beginning of year, as restated	<u>1,093.3</u>	<u>1,251.4</u>	<u>1,447.0</u>
TOTAL NET POSITION—End of year	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

NET POSITION BY COMPONENTS (UNAUDITED)

FIVE YEARS ENDED DECEMBER 31, 2010—2014

(In millions)

	2010 (As Restated)	2011 (As Restated)	2012 (As Restated)	2013	2014
NET POSITION:					
Net investment in capital assets	\$ 964.9	\$ 1,046.1	\$ 1,062.3	\$ 1,233.2	\$ 1,394.0
Restricted net assets for capital projects	0.4	0.2	1.3	0.7	0.6
Unrestricted net assets	<u>85.4</u>	<u>47.0</u>	<u>187.8</u>	<u>213.1</u>	<u>288.6</u>
TOTAL NET POSITION	<u>\$ 1,050.7</u>	<u>\$ 1,093.3</u>	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>

Water Fund intends to provide ten year information as it becomes available.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

HISTORICAL FINANCIAL OPERATIONS (UNAUDITED)

TEN YEARS ENDED DECEMBER 31, 2005–2014

(In millions)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
OPERATING REVENUES:										
Water sales	\$ 333.7	\$ 317.2	\$ 323.6	\$ 358.0	\$ 396.9	\$ 445.5	\$ 441.8	\$ 562.6	\$ 620.5	\$ 693.1
Other operating revenues	<u>10.6</u>	<u>13.2</u>	<u>10.8</u>	<u>12.2</u>	<u>13.3</u>	<u>12.9</u>	<u>12.4</u>	<u>13.7</u>	<u>16.6</u>	<u>22.1</u>
Total operating revenues	<u>344.3</u>	<u>330.4</u>	<u>334.4</u>	<u>370.2</u>	<u>410.2</u>	<u>458.4</u>	<u>454.2</u>	<u>576.3</u>	<u>637.1</u>	<u>715.2</u>
OPERATING EXPENSES:										
Source of supply	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.3
Power and pumping	50.6	49.8	52.2	54.7	47.5	42.9	38.2	41.7	43.2	43.1
Purification	43.3	41.9	44.2	48.4	49.4	49.7	66.5	56.1	60.9	58.5
Transmission and distribution	39.4	41.6	47.0	47.1	40.9	38.7	39.0	36.5	29.5	43.7
Provision for doubtful accounts	2.7	3.6	3.7	8.3	10.4	15.9	14.0	15.7	25.4	22.5
Customer accounting and collection	16.3	16.9	14.8	12.8	11.2	10.3	10.6	10.0	11.6	11.9
Administrative and general	13.2	15.1	14.9	18.1	16.1	18.5	17.1	21.9	21.2	22.0
Central services and General Fund reimbursements	<u>80.2</u>	<u>74.0</u>	<u>83.7</u>	<u>87.2</u>	<u>98.5</u>	<u>103.0</u>	<u>96.6</u>	<u>107.4</u>	<u>108.7</u>	<u>119.3</u>
Total operating expenses	<u>245.9</u>	<u>243.1</u>	<u>260.8</u>	<u>276.8</u>	<u>274.1</u>	<u>279.1</u>	<u>282.2</u>	<u>289.5</u>	<u>300.6</u>	<u>321.3</u>
INTEREST INCOME (OTHER THAN FROM CONSTRUCTIONAL ACCOUNT)	<u>2.6</u>	<u>3.8</u>	<u>4.9</u>	<u>3.7</u>	<u>1.0</u>	<u>(0.3)</u>	<u>2.0</u>	<u>0.3</u>	<u>0.4</u>	<u>(0.5)</u>
NET REVENUES—As defined (Note 4)	<u>\$ 101.0</u>	<u>\$ 91.1</u>	<u>\$ 78.5</u>	<u>\$ 97.1</u>	<u>\$ 137.1</u>	<u>\$ 179.0</u>	<u>\$ 174.0</u>	<u>\$ 287.1</u>	<u>\$ 336.9</u>	<u>\$ 393.4</u>

Source: City of Chicago Comptroller's Office.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

WATER SYSTEM ACCOUNTS (UNAUDITED)

TEN YEARS ENDED DECEMBER 31, 2005–2014

Years Ended December 31	Nonmetered	Metered	Total
2005	323,740	169,664	493,404
2006	322,193	171,861	494,054
2007	320,579	175,256	495,835
2008	319,205	178,457	497,662
2009	318,088	179,649	497,737
2010	314,002	183,618	497,620
2011	304,519	192,304	496,823
2012	290,863	205,097	495,960
2013	273,426	220,759	494,185
2014	250,304	241,304	491,608

Source: City of Chicago Department of Water Management.

CITY OF CHICAGO, ILLINOIS WATER FUND

**STATISTICAL DATA
TEN LARGEST SUBURBAN CUSTOMERS (UNAUDITED)
FOR THE YEAR ENDED DECEMBER 31, 2014
(In thousands)**

Customer	Amount of Sales
Dupage Water Commission	\$ 90,238
Oak Lawn, Illinois	35,011
Northwest Suburban Municipal Joint Action Water Agency	34,920
Bedford Park, Illinois	25,692
Harvey, Illinois	11,603
Melrose Park, Illinois	10,001
Cicero, Illinois	8,483
City of Des Plaines	8,453
Alsip, Illinois	6,505
McCook, Illinois	<u>6,335</u>
Total	<u>\$ 237,241</u>

Source: City of Chicago Department of Water Management.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

REVENUE BOND COVERAGE (UNAUDITED)

TEN YEARS ENDED DECEMBER 31, 2005–2014

(In millions)

PRIOR BONDS COVERAGE CALCULATION

COMBINED PRIOR BONDS, SENIOR LIEN, AND SECOND LIEN DEBT SERVICE CALCULATION

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
REVENUES AVAILABLE FOR BONDS:										
Net revenues—as defined (Note 4)	\$ 101.0	\$ 91.1	\$ 78.5	\$ 97.1	\$ 137.1	\$ 179.0	\$ 174.0	\$ 287.1	\$ 336.9	\$ 393.5
Transfer from (to) Water Rate Stabilization account & PAYGO Fund		(7.0)	7.9			(10.0)		(13.5)	(13.5)	
NET REVENUES AVAILABLE FOR BONDS	<u>\$ 101.0</u>	<u>\$ 84.1</u>	<u>\$ 86.4</u>	<u>\$ 97.1</u>	<u>\$ 137.1</u>	<u>\$ 169.0</u>	<u>\$ 174.0</u>	<u>\$ 273.6</u>	<u>\$ 323.4</u>	<u>\$ 393.5</u>
DEBT SERVICE REQUIREMENTS:										
Senior debt service requirements	<u>\$ 30.1</u>	<u>\$ 29.7</u>	<u>\$ 38.0</u>	<u>\$ 27.5</u>	<u>\$ 33.8</u>	<u>\$ 29.1</u>	<u>\$ 14.1</u>	<u>\$ 13.9</u>	<u>\$ 21.5</u>	<u>\$ 21.5</u>
Senior debt service coverage ratio	<u>3.4</u>	<u>2.8</u>	<u>2.3</u>	<u>3.5</u>	<u>4.1</u>	<u>5.8</u>	<u>12.3</u>	<u>19.7</u>	<u>15.0</u>	<u>18.3</u>
Second lien debt service requirements	<u>\$ 27.3</u>	<u>\$ 30.5</u>	<u>\$ 43.2</u>	<u>\$ 62.5</u>	<u>\$ 75.7</u>	<u>\$ 82.1</u>	<u>\$ 106.6</u>	<u>\$ 116.5</u>	<u>\$ 125.6</u>	<u>\$ 126.0</u>
Subordinate lien debt service requirements	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>1.2</u>	<u>1.3</u>	<u>1.9</u>
Total second and subordinate lien debt service requirements	<u>\$ 27.5</u>	<u>\$ 30.8</u>	<u>\$ 43.6</u>	<u>\$ 62.9</u>	<u>\$ 76.1</u>	<u>\$ 82.5</u>	<u>\$ 107.0</u>	<u>\$ 117.7</u>	<u>\$ 126.9</u>	<u>\$ 127.9</u>
TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS	<u>\$ 57.6</u>	<u>\$ 60.5</u>	<u>\$ 81.6</u>	<u>\$ 90.4</u>	<u>\$ 109.9</u>	<u>\$ 111.6</u>	<u>\$ 121.1</u>	<u>\$ 131.6</u>	<u>\$ 148.4</u>	<u>\$ 149.4</u>
TOTAL COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE RATIO	<u>1.8</u>	<u>1.4</u>	<u>1.1</u>	<u>1.1</u>	<u>1.2</u>	<u>1.5</u>	<u>1.4</u>	<u>2.1</u>	<u>2.2</u>	<u>2.6</u>
WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE	<u>\$ 52.3</u>	<u>\$ 59.3</u>	<u>\$ 51.4</u>	<u>\$ 51.4</u>	<u>\$ 51.4</u>	<u>\$ 61.4</u>	<u>\$ 61.4</u>	<u>\$ 74.9</u>	<u>\$ 88.4</u>	<u>\$ 88.4</u>

Source: City of Chicago Comptroller's Office.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

LONG-TERM DEBT (UNAUDITED)

FIVE YEARS ENDED DECEMBER 31, 2010–2014

(In millions)

	2010	2011	2012	2013	2014
Senior lien bonds	\$ 83.4	\$ 68.9	\$ 60.7	\$ 49.0	\$ 37.5
Second lien bonds	1,614.3	1,586.9	1,951.1	1,921.6	2,258.6
Commercial paper	51.5	46.5			
Subordinate lien—IEPA loan	<u>4.6</u>	<u>18.9</u>	<u>18.4</u>	<u>26.3</u>	<u>85.7</u>
Total long-term debt	<u>\$ 1,753.8</u>	<u>\$ 1,721.2</u>	<u>\$ 2,030.2</u>	<u>\$ 1,996.9</u>	<u>\$ 2,381.8</u>

Water Fund intends to provide ten-year information as it becomes available.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

CAPITAL IMPROVEMENT PROGRAM (UNAUDITED)

2015–2019

(In thousands)

Years	Amount
2015	\$ 358,347
2016	373,648
2017	451,122
2018	435,394
2019	<u>450,479</u>
Total	<u>\$2,068,990</u>

Note: The information presented in the table above reflects the Water Fund's expected allocation of resources to various projects, but does not necessarily represent an expectation of actual cash expenditures for these projects.

Source: City of Chicago Department of Water Management.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

WATER SYSTEM PUMPAGE AND CAPACITY (UNAUDITED)

TEN YEARS ENDED DECEMBER 31, 2005–2014

Years	Total Pumpage (MGD)	Average Daily Pumpage (MGD)	Maximum Daily Pumpage (MGD)	System's Rated Pumpage Capacity (MGD)	Maximum Daily Pumpage as % of Capacity
2005	337,682	925	1,377	2,160	64
2006	310,527	851	1,373	2,160	64
2007	315,916	866	1,200	2,160	56
2008	301,912	827	1,136	2,160	53
2009	295,121	809	1,112	2,160	51
2010	282,368	773	1,012	2,160	47
2011	281,506	771	1,317	2,160	61
2012	289,545	793	1,248	2,160	58
2013	276,039	756	1,095	2,160	51
2014	274,552	752	1,023	2,160	47

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

CITY OF CHICAGO, ILLINOIS WATER FUND

MISCELLANEOUS STATISTICAL DATA (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

	2014	2013
AREA SERVED (IN SQUARE MILES):		
Chicago	228	228
125 suburbs	<u>578</u>	<u>578</u>
TOTAL AREA SERVED	<u>806</u>	<u>806</u>
WATER WORKS FACILITIES:		
Filtration plants	2	2
Continuous service capacity:		
South Water Filtration Plant (MGD)	720	720
Jardine Water Purification Plant (MGD)	1,440	1,440
Pumping stations—steam	4	4
Pumping stations—electric	8	8
Installed pumping capacity (MGD)	3,661	3,661
Crib intakes in service	2	2
Shore intakes (filtration plants)	2	2
Water supply tunnels (6 to 20 feet in diameter)—miles	64	64
DISTRIBUTION SYSTEM:		
Water mains (miles)	4,322	4,321
Fire hydrants	48,593	48,614
Valves	49,175	49,447

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

CITY OF CHICAGO, ILLINOIS WATER FUND

**STATISTICAL DATA
OPERATING INFORMATION BY FUNCTION (UNAUDITED)
FIVE YEARS ENDED DECEMBER 31, 2010–2014
(Number of employees)**

Function	2010	2011	2012	2013	2014
Administration	65	63	62	61	62
Agency management	37	39	37	37	34
Safety and security	19	17	16	16	26
Capital design and construction services	10	10	8	8	9
Engineering services	4	4	4	4	4
Inspection services	32	32	30	29	29
Water quality	48	48	48	47	47
Water pumping	233	231	234	222	220
Water treatment	324	326	323	336	334
Systems installation	39	39	34	75	76
Systems maintenance	582	581	583	542	527
Billings and customer service	65	66	50	50	48
Water meter installation and repair	<u>76</u>	<u>78</u>	<u>82</u>	<u>84</u>	<u>88</u>
Total	<u>1,534</u>	<u>1,534</u>	<u>1,511</u>	<u>1,511</u>	<u>1,504</u>

Water Fund intends to provide ten year information as it becomes available.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA POPULATION OF SERVICE AREA (UNAUDITED) LAST FIVE CENSUS PERIODS

Years	Chicago		Suburban Customers		Total	Number of Suburbs Served
1970	3,369,357	(1)	1,127,446	(1)	4,496,803	72
1980	3,005,072	(1)	1,152,614	(1)	4,157,686	75
1990	2,783,726	(1)	1,589,557	(2)	4,373,283	95
2000	2,896,016	(1)	2,410,021		5,306,037	125
2010	2,695,598	(1)	2,600,496		5,296,094	125

(1) U.S. Department of Commerce—Census Bureau.

(2) 23 suburban customers not included (under the DWC contract; fully served May 1, 1992) with a population of 610,478, which increases total population to 4,983,761.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

PRINCIPAL EMPLOYERS (NONGOVERNMENT) (UNAUDITED)

FOR THE YEAR ENDED DECEMBER 31, 2014, AND NINE YEARS AGO

Employer	2014 (1)			2005 (1)		
	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
Advocate Health Care	18,556	1	1.47 %			
University of Chicago	16,025	2	1.27			
JP Morgan Chase & Co. (2)	15,015	3	1.19	9,200	1	0.87 %
Northwestern Memorial Healthcare	14,550	4	1.15			
United Continental Holdings Inc.	14,000	5	1.11	5,995	2	0.56
Walgreen Co	13,797	6	1.09			
AT&T (3)	13,000	7	1.03	4,311	5	0.41
Presence Health	11,279	8	0.89			
University of Illinois at Chicago	10,100	9	0.80			
Abbott Laboratories	10,000	10	0.79			
Accenture LLP				4,341	4	0.41
Northern Trust Corporation				4,574	3	0.43
Ford Motor Company				2,992	7	0.28
Bank of America NT & SA				2,811	9	0.26
American Airlines				4,054	6	0.38
UPS				2,464	10	0.23
ABN Amro				2,876	8	0.27

(1) Source: Reprinted with permission, Crain's Chicago Business (January 19, 2015), Crain Communications, Inc.

(2) J.P. Morgan Chase formerly known as Banc One.

(3) AT&T Inc. formerly known as SBC Ameritech. 2014 number of employees is a state wide number.

(4) Source: City of Chicago, Department of Revenue, Employer's Expense Tax Returns.

CITY OF CHICAGO, ILLINOIS WATER FUND

STATISTICAL DATA

POPULATION AND INCOME STATISTICS (UNAUDITED)

TEN YEARS ENDED DECEMBER 31, 2005–2014

Year	Population (1)	Median Age (2)	Number of Households (2)	City Employment	Unemployment Rate (3)	Per Capita Income (4)	Total Income (6)
2005	2,896,016	33.0	1,045,282	1,198,929	7.0	38,439	\$ 111,319,959,024
2006	2,896,016	33.5	1,040,000	1,228,075	5.2	41,887	121,305,422,192
2007	2,896,016	33.7	1,033,328	1,249,238	5.7	43,714	126,596,443,424
2008	2,896,016	34.1	1,032,746	1,237,856	6.4	45,328	131,270,613,248
2009	2,896,016	34.5	1,037,069	1,171,841	10.0	43,727	126,634,091,632
2010	2,695,598	34.8	1,045,666	1,116,830	10.1	45,957	123,881,597,286
2011	2,695,598	33.2	1,048,222	1,120,402	9.3	45,977	123,935,509,246
2012	2,695,598	33.0	1,030,746	1,144,896	8.9	48,305	130,210,861,390
2013	2,695,598	33.5	1,062,029	1,153,725	8.3	49,071	132,275,689,458
2014	2,695,598	N/A	N/A	1,264,234	* 5.7	N/A (5)	N/A (5)

Notes:

(1) Source: U.S. Census Bureau.

(2) Source: World Business Chicago Website and Environmental System Research Institute data estimates.

(3) Source: Bureau of Labor Statistics 2013, Unemployment rate for Chicago-Naperville-Illinois Metropolitan Area.

(4) Source: U.S. Department of Commerce, Bureau of Economic Analysis, Per Capita Personal Income for Chicago-Naperville-Illinois Metropolitan Area (in 2014 dollars).

(5) N/A means not available at time of publication.

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APPENDIX D

RETIREMENT FUNDS

RETIREMENT FUNDS

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PAYMENT FOR PENSION BENEFITS

General

Pursuant to the Illinois Pension Code, as revised from time to time (the “Pension Code”), the City contributes to four retirement funds (collectively, the “Retirement Funds”), which provide benefits upon retirement, death or disability to members of the Retirement Funds and their beneficiaries. The Retirement Funds are, in order from largest to smallest membership: (i) the Municipal Employees’ Annuity and Benefit Fund of Chicago (“MEABF”); (ii) the Policemen’s Annuity and Benefit Fund of Chicago (“PABF”); (iii) the Firemen’s Annuity and Benefit Fund of Chicago (“FABF”); and (iv) the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago (“LABF”). The Retirement Funds’ membership consists primarily of current and former employees of the City and their beneficiaries.

The Retirement Funds are established, administered and financed under the Pension Code, as separate bodies politic and corporate and for the benefit of the members of the Retirement Funds and their beneficiaries. The City’s contributions to the Retirement Funds, and benefits for members of the Retirement Funds and their beneficiaries, are governed by the provisions of the Pension Code. See “—Determination of City’s Contributions” below. This Appendix describes, among other things, the current provisions of the Pension Code applicable to the City’s funding of the Retirement Funds. No assurance can be made that the Pension Code will not be amended in the future.

The Retirement Funds’ funding sources are the City’s contributions, the employees’ contributions and investment income on the Retirement Funds’ assets. The City’s and employees’ contribution levels are determined pursuant to the Pension Code.

The Retirement Funds have been actuarially determined to be significantly underfunded. See “—Funded Status of the Retirement Funds” and “—Projection of Funded Status” below. The funded status of the Retirement Funds has adversely impacted, and may further adversely impact, the City and its taxpayers in several ways, certain of which are described in this paragraph and throughout this Appendix. First, the City’s bond ratings have declined based, according to the reports of the rating agencies issued with respect to such downgrades, in part on the size of the Retirement Funds’ unfunded liabilities and the projected impact of future City contributions to the Retirement Funds on the City. See “Impact of Retirement Funds’ Unfunded Liabilities on the City’s Bond Ratings” below. In addition, as described in the following paragraphs, the magnitude of the Retirement Funds’ underfunding has prompted the Illinois General Assembly to pass legislation which increases the City’s contributions to the Retirement Funds. As a result, the City increased its property tax levy in October 2015 to generate the revenues necessary to make certain additional contributions to the Retirement Funds under such legislation, and the City may be required to further increase its revenues, to reduce its expenditures, or both, to provide the funds necessary to pay increased contributions in the future. Further, the governmental units with which the tax base of the City overlaps, which include, but are not limited to, the Board of Education of the City of Chicago (the “Board of Education”), the Chicago Park District (“CPD”), the County of Cook (the “County”) and the State of Illinois (the “State”) (collectively, all such other units being referred to herein as the “Governmental Units”), also have significantly underfunded pension liabilities which, in combination with the current financial position of the Retirement Funds, may substantially burden the City’s taxpayers if such Governmental Units are required to make increased contributions to their respective retirement funds (referred to collectively herein as the “Other Retirement Funds”) in the future as a result of such underfunding. See “—Background Information Regarding the Retirement Funds—Overlapping Tax Bodies” below.

As noted above, in an effort to improve the funded status of the Retirement Funds, the Illinois General Assembly passed two statutes designed to improve the funding levels of the Retirement Funds: Public Act, 096-1495 (“P.A. 96-1495”), which modified provisions of the Pension Code with respect to PABF and FABF, and Public Act 098-641 (“P.A. 98-641”) which, modified provisions of the Pension Code related to MEABF and LABF. P.A. 98-641 was recently ruled to be unconstitutional by the Illinois Supreme Court.

P.A. 96-1495 is expected to reduce the unfunded liabilities of PABF and FABF through increases in future City contributions to PABF and FABF. See “— Determination of City’s Contributions—*City’s Contributions to PABF and FABF Beginning in 2016*” below. Unless modified by SB 777 (as defined and described herein) or similar legislation, P.A. 96-1495 increases City’s contributions to PABF and FABF from approximately \$290 million in 2015 to approximately \$839 million in 2016, with an increase of approximately three percent each year thereafter. In addition, as a result of certain changes to PABF’s actuarial assumptions beginning with the 2014 Actuarial Valuation (as defined and described herein), the City’s contributions to PABF are expected to increase by approximately \$62 million for the 2017 Contribution (as defined below). See TABLE 15—“PROJECTION OF FUTURE FUNDING STATUS—FABF” and TABLE 16—“PROJECTION OF FUTURE FUNDING STATUS—PABF” below. Increases in the City’s contributions to PABF and FABF mandated by P.A. 96-1495 caused the City to significantly increase its property tax levy beginning in levy year 2015 (to be collected in 2016) and to draw approximately \$220 million under the City’s general obligation line of credit. See “— Determination of City’s Contributions—*City’s Contributions to the Retirement Funds for Fiscal Years 2016 and 2017*” below. Should the City’s required contributions increase in the future, through the implementation of P.A. 96-1495 without modification by SB 777 or similar legislation, or otherwise, the City may be required to further raise its revenues, reduce its expenditures, or some combination thereof, to provide for such contributions.

P.A. 98-641 would have required, among other things, the City to contribute annually to MEABF and LABF the actuarially determined amount necessary to achieve a 90% Funded Ratio (as defined and described herein) in both such Retirement Funds by 2055; however, P.A. 98-641 was determined to be unconstitutional by the Illinois Supreme Court on March 24, 2016. As a result of the Illinois Supreme Court’s decision, the provisions of the Pension Code governing the City’s contributions to MEABF and LABF reverted to the provisions in effect prior to the enactment of P.A. 98-641. These Pension Code provisions require the City to contribute to such Retirement Funds an amount determined by multiplying the amount of the contributions of the employees who are members of such Retirement Funds made two years prior to the year for which such calculation is made by a multiplier (each, a “Multiplier”) established pursuant to the Pension Code (such method of funding being referred to herein as “Multiplier Funding”). The respective actuaries for MEABF and LABF project that the contributions determined pursuant to the Multiplier Funding system will not provide sufficient funding for such Retirement Funds such that MEABF and LABF will not have assets on hand to make payments to beneficiaries beginning in 2025 and 2029, respectively. The City cannot predict the impact of the insolvency of MEABF or LABF on the amount of the City’s contributions to these Retirement Funds. However, should the City be required to contribute the amounts necessary to fund directly such payments to beneficiaries on a pay-as-you-go basis upon the insolvency of such Retirement Funds, the amount of the City’s contributions to MEABF and LABF would substantially increase. See “—Projection of Funded Status” herein.

Certain statements made in this Appendix are based on projections, are forward-looking in nature and are developed using assumptions and information currently available. Such statements are subject to certain risks and uncertainties. The projections set forth in this Appendix rely on information produced by the Retirement Funds’ independent actuaries (except where specifically noted otherwise) and were not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information. This information is not

fact and should not be relied upon as being necessarily indicative of future results. Readers of this Appendix are cautioned not to place undue reliance on the prospective financial information. Neither the City, the City's independent auditors, nor any other independent accountants have compiled, examined, or performed any procedures with respect to the prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the prospective financial information.

Source Information

The information contained in this Appendix relies in part on information produced by the Retirement Funds, their independent accountants and their independent actuaries (the "Source Information"). Neither the City nor the City's independent auditors have independently verified the Source Information and make no representations nor express any opinion as to the accuracy of the Source Information.

Furthermore, where the tables in this Appendix present aggregate information regarding the Retirement Funds, such combined information results solely from the application of arithmetic to the data presented in the Source Information and may not conform to the requirements for the presentation of such information by the Governmental Accounting Standards Board ("GASB") or the Pension Code.

Certain of the comprehensive annual financial reports of the Retirement Funds (each a "CAFR" and together the "CAFRs") and certain of the actuarial valuations of the Retirement Funds (each, an "Actuarial Valuation" and together, the "Actuarial Valuations") may be obtained by contacting the Retirement Funds. Certain of these reports may also be available on the Retirement Funds' websites (www.meabf.org; www.chipabf.org; www.labfchicago.org; and www.fabf.org); provided, however, that the contents of these reports and of the Retirement Funds' websites are not incorporated herein by such reference.

The Retirement Funds typically release their Actuarial Valuations in the April or May following the close of their respective fiscal years on December 31. All of the Retirement Funds have released their Actuarial Valuations for the fiscal year ended December 31, 2014. The Retirement Funds have not released their Actuarial Valuations for the fiscal year ended December 31, 2015.

Background Information Regarding the Retirement Funds

General

Each of the Retirement Funds is a single-employer, defined-benefit public employee retirement system. "Single-employer" refers to the fact that there is a single plan sponsor, in this case, the City. "Defined-benefit" refers to the fact that the Retirement Funds pay a periodic benefit to employees upon retirement and survivors in a fixed amount determined at the time of retirement. The amount of the periodic benefit is generally determined on the basis of service credits and salary. Eligible employees receive the defined benefit on a periodic basis for life, along with certain benefits to spouses and children that survive the death of the employee.

To fund the benefits to be paid by a defined-benefit pension plan, both employees and employers make contributions to the plan. Generally in a defined-benefit pension plan, employees contribute a fixed percentage of their annual salary and employers contribute the additional amounts required (which amounts may be determined pursuant to statute, as in the case of the City), when combined with the investment earnings on plan assets, to pay the benefits under the pension plan. See "TABLE 1 –

MEMBERSHIP,” “—Determination of Employee Contributions” and “—Determination of City’s Contributions” below.

The benefits available under the Retirement Funds accrue throughout the time an employee is employed by the City. Although the benefits accrue during employment, certain age and service requirements must be achieved by an employee to generate a retirement or survivor’s periodic defined benefit payment upon retirement or termination from the City. The Retirement Funds also provide certain disability benefits and, until the later of the date on which the City no longer provides a health care plan for the annuitants or December 31, 2016, retiree healthcare benefits to eligible members. See “PAYMENT FOR OTHER POST-EMPLOYMENT BENEFITS” below.

Section 5 of Article XIII of the Illinois Constitution (the “Pension Clause”) provides as follows:

“Membership in any pension retirement system of the State, any unit of local government or school district, or any agency or instrumentality thereof, shall be an enforceable contractual relationship, the benefits of which shall not be diminished or impaired.”

References in this Appendix to “member” are references to the active, inactive and retired employees of the City and their beneficiaries, the active, inactive and retired employees of the Retirement Funds participating in the Retirement Funds and their beneficiaries, and with regard to MEABF, certain employees of the Board of Education who are members of MEABF as described below, and their beneficiaries.

The Retirement Funds

Municipal Employees’ Annuity and Benefit Fund of Chicago. MEABF is established by and administered under Article 8 of the Pension Code. MEABF provides age and service retirement benefits, survivor benefits and disability benefits to all eligible members. MEABF is administered under the direction of a five-member board of trustees (the “MEABF Board”), whose members are responsible for managing and administering MEABF for the benefit of its members. In addition to City and Retirement Fund employees, former employees and survivors, MEABF’s membership includes non-instructional employees of the Board of Education (“CBOE Employees”). With respect to MEABF, the terms “employee” and “member” include the CBOE Employees. The CBOE Employees account for almost half of MEABF’s membership. The Mayor of the City, the City Clerk, the City Treasurer, and members of the City Council may participate in MEABF if such persons file, while in office, written application to the MEABF Board.

Policemen’s Annuity and Benefit Fund of Chicago. PABF is established by and administered under Article 5 of the Pension Code. PABF provides retirement and disability benefits to the police officers of the City, their surviving spouses and their children. PABF is administered by an eight-member board of trustees (the “PABF Board”). Members of the PABF Board are charged with administering the PABF under the Pension Code for the benefit of its members.

Firemen’s Annuity and Benefit Fund of Chicago. FABF is established by and administered under Article 6 of the Pension Code. FABF provides retirement and disability benefits to fire service employees and their survivors. FABF is governed by an eight-member board of trustees (the “FABF Board”). Members of the FABF Board are statutorily mandated to discharge their duties solely in the interest of FABF’s members.

Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago. LABF is established by and administered under Article 11 of the Pension Code. LABF provides retirement and

disability benefits for employees of the City and the Board of Education who are employed in a title recognized by the City as labor service and for the survivors of such employees. LABF is governed by an eight-member board of trustees (the “LABF Board” and, together with the MEABF Board, the PABF Board and the FABF Board, the “Retirement Fund Boards”). Members of the LABF Board are statutorily mandated to discharge their duties solely in the interest of LABF’s members.

The membership of the Retirement Funds as of December 31, 2014, was as follows:

TABLE 1 – MEMBERSHIP

Retirement Fund	Active Members	Inactive/ Entitled to Benefits	Retirees and Beneficiaries	Totals
MEABF	30,160	15,495	24,855	70,510
PABF	12,020	630	13,230	25,880
FABF	4,809	65	4,703	9,577
LABF	<u>2,837</u>	<u>1,449</u>	<u>3,902</u>	<u>8,188</u>
Total	49,826	17,639	46,690	114,155

Source: Actuarial Valuations of the Retirement Systems as of December 31, 2014.

Overlapping Taxing Bodies

The City’s tax base overlaps with the Governmental Units, which includes, but is not limited to, the Board of Education, the CPD, the County and the State. Certain of the Governmental Units maintain the Other Retirement Funds, many of which are also significantly underfunded. The unfunded liabilities of the Other Retirement Funds may impose an additional burden on the City’s taxpayers if the Governmental Units need additional revenue to fund contributions to the Other Retirement Funds.

State Pension Reform Act and Litigation. On May 8, 2015, the Illinois Supreme Court affirmed the decision of the Sangamon County Circuit Court that Public Act 098-0599 (the “State Pension Reform Act”) is unconstitutional. The State Pension Reform Act would have provided for certain cost-saving and other reforms to the State’s four largest pension plans, including, but not limited to, changes to the employee and employer contribution formula, cost of living adjustments, retirement ages and employee contributions. The State Pension Reform Act was challenged on behalf of various classes of annuitants, current and former workers, and labor organizations, alleging, among other things, that the legislation violates the Pension Clause.

Chicago Park District Pension Reform. On January 7, 2014, then Governor Pat Quinn signed Public Act 098-0622 into law (the “CPD Pension Reform Act”). The CPD Pension Reform Act provides for certain cost-saving and other reforms to CPD’s pension plan, including, but not limited to, changes to the employee and employer contribution formula, cost of living adjustments, retirement ages and employee contributions. Such changes became effective on June 1, 2014. On October 8, 2015, participants in CPD’s pension plan filed a lawsuit challenging the legality of the CPD Pension Reform Act by alleging, among other things, that the legislation violates the Pension Clause.

For more information on these Other Retirement Funds, please refer to the State’s Commission on Government Forecasting and Accountability (“COGFA”) website at <http://cgfa.ilga.gov/home.aspx>; provided, however, that the contents of the COGFA website are not incorporated herein by such reference.

Certain Duties

Each Retirement Fund Board is a fiduciary of its respective Retirement Fund and is authorized to perform all functions necessary for operation of such Retirement Fund. The Pension Code authorizes each Retirement Fund Board to make certain decisions, including decisions regarding the investment of funds, the management of assets, the disbursement of benefits, and the hiring of staff, financial advisors and asset managers.

Each Retirement Fund Board is authorized to promulgate rules and procedures regarding the administration of benefits and other matters in accordance with the Illinois Administrative Procedure Act, and decisions awarding, limiting, or denying benefits are subject to the Illinois Administrative Procedure Act. Certain aspects of the Retirement Funds, however, including the defined benefits and the employer and employee contribution levels, are established in the Pension Code and may be amended only by an amendment to the Pension Code.

The Pension Code provides that the expenses incurred in connection with the administration of the Retirement Funds are not construed to be debt imposed upon the City. Such expenses are the obligation of the Retirement Funds exclusively, as separate bodies politic and corporate.

The Illinois Attorney General and annuitants may bring a civil action to obtain relief for violations of a fiduciary duty to the Retirement Funds or any act or practice which violates any provision of the Pension Code.

Investments

Each Retirement Fund Board manages the investments of its respective Retirement Fund. State law regulates the types of investments in which the Retirement Funds' assets may be invested. Furthermore, the Retirement Fund Boards invest the Retirement Funds' assets in accordance with the prudent person rule, which requires members of the Retirement Fund Boards, who are fiduciaries of the Retirement Funds, to discharge their duties with the care, prudence and diligence that a prudent person acting in a like capacity and familiar with such matters would use in a similar situation.

In carrying out their investment duty, the Retirement Fund Boards may appoint and review investment managers as fiduciaries to manage the investment assets of the Retirement Funds. Such investment managers are granted discretionary authority to manage the Retirement Funds' assets. Additional information regarding the Retirement Funds' investments and investment management may be found on the Retirement Funds' websites; provided, however, that the contents of such websites are not incorporated into this Appendix by such reference.

Table 2 provides information on the investment returns experienced by each of the Retirement Funds.

TABLE 2 – INVESTMENT RATES OF RETURN, 2005-2014

Fiscal Year	MEABF	FABF	LABF	PABF
2005	6.6%	9.5%	7.8%	7.3%
2006	12.7	14.0	11.2	12.1
2007	7.3	11.0	8.0	8.8
2008	(28.7)	(33.8)	(29.2)	(27.8)
2009	19.6	23.7	21.5	21.5
2010	14.2	17.7	15.5	12.7
2011	0.1	(2.0)	(0.3)	0.8
2012	12.8	16.2	14.6	12.4
2013	16.1	19.5	15.8	13.7
2014	4.7	2.9	3.8	5.9
Assumed Rate ⁽¹⁾	7.5	8.0	7.5	7.5

Source: For FABF, the audited financial statements of FABF for fiscal years 2005-2012 and the Actuarial Valuations of FABF for fiscal years 2013 and 2014. For MEABF, the Actuarial Valuation of MEABF as of December 31, 2014. For LABF and PABF, the respective CAFRs of such Retirement Funds for the fiscal years 2005-2012 and the respective Actuarial Valuations of such Retirement Funds for fiscal years 2013 and 2014.

(1) Reflects the assumed rate of return in the respective Actuarial Valuations of the Retirement Funds measured as of December 31, 2014, as discussed in further detail under “Actuarial Assumptions—Assumed Investment Rate of Return” below.

Determination of Employee Contributions

Employees are required to contribute to their respective Retirement Fund as set forth in the Pension Code.

MEABF employees contribute 8.5 percent of their salary to MEABF (consisting of a 6.5 percent contribution for employee benefits, a 1.5 percent contribution for spouse benefits, and a 0.5 percent contribution for an annuity increase benefit).

PABF employees contribute 9.0 percent of their salary to PABF (consisting of a 7.0 percent contribution for employee benefits, a 1.5 percent contribution for spouse benefits and a 0.5 percent contribution for an annuity increase benefit).

FABF employees contribute 9.125 percent of their salary to FABF (consisting of a 7.125 percent contribution for employee benefits, a 1.5 percent contribution for spouse benefits, a 0.375 percent contribution for an annuity increase benefit and a 0.125% contribution for disability benefits).

LABF employees contribute 8.5 percent of their salary to LABF (consisting of a 6.5 percent contribution for employee benefits, a 1.5 percent contribution for spouse benefits, and a 0.5 percent contribution for an annuity increase benefit).

For each Retirement Fund, if an employee leaves without qualifying for an annuity, accumulated employee contributions are refunded.

Determination of City's Contributions

The City contributes to the Retirement Funds pursuant to the provisions of the Pension Code. Prior to the contribution for 2016, the City contributed to all four Retirement Funds an amount determined by the Multiplier Funding formula, which required the City to contribute a statutory multiple of the amount contributed to a Retirement Fund by the employees who are members in that Retirement Fund two years prior to the year in which the property tax used to generate the contribution was levied. With respect to the City's 2015 contribution, the Multiplier for each Retirement Fund was as follows: 1.25 for MEABF; 2.00 for PABF; 2.26 for FABF; and 1.00 for LABF. The contribution amounts derived from this formula do not relate to, and in recent years have been substantially less than, the contribution amounts that would typically result from an actuarial determination of the contribution. As a result of the Illinois Supreme Court's determination that P.A. 98-641 is unconstitutional, the City will continue to contribute to MEABF and LABF pursuant to this statutory Multiplier Funding formula pursuant to the Pension Code. Beginning in 2016, the City's contributions to PABF and FABF are determined pursuant to the P.A. 96-1495 Funding Plan (as hereinafter defined) rather than the Multiplier Funding system. See "*City's Contributions to PABF and FABF Beginning in 2016*" below.

The Pension Code provides that each Retirement Fund Board must annually certify to the City Council a determination of the required City contribution to such Retirement Fund. In making its request for the City's annual contribution, each Retirement Fund, acting through its Retirement Fund Board, annually approves and then submits a resolution to the City Council requesting that the City Council levy for a particular contribution amount. The City has generally paid the amounts so requested.*

The City's contributions to the Retirement Funds have historically been made primarily from the proceeds of an annual levy of property taxes for each of the Retirement Funds (collectively, the "Pension Levy") by the City solely for such purpose, as provided by the Pension Code. However, the Pension Code allows the City to use any other legally available funds (collectively, the "Other Available Funds," as described below) in lieu of the Pension Levy to make its contributions to the Retirement Funds. The amount of the Pension Levy, like any City property tax levy, must be approved by the City Council. The Pension Levy is exclusive of and in addition to the amount of property taxes which the City levies for other purposes.

If Other Available Funds are being utilized to pay a portion of the City's contributions, such funds are to be deposited with the City Treasurer to be used for the same purpose as the Pension Levy. The City's practice historically has been to use a portion of the City's Personal Property Replacement Tax revenue ("PPRT") to pay a portion of the City's contributions. PPRT revenue is paid by the State to the City from the Personal Property Replacement Tax Fund of the State pursuant to Section 12 of the Revenue Sharing Act of the State. Since 2003, the amount of PPRT contributed by the City to the Retirement Funds in the aggregate has averaged approximately \$78,387,000 annually. In 2013, 2014 and 2015, the amounts of PPRT contributed to the Retirement Funds in the aggregate were approximately \$126,639,000, \$127,239,000 and \$126,053,000 respectively. For those same years, the City's total distributive shares of PPRT were \$159,559,000, \$154,991,000 and \$167,741,000, respectively.

The City's contributions to the Retirement Funds in accordance with the Pension Code have not been sufficient, when combined with employee contributions and investment returns, to offset increases in the Retirement Funds' liabilities, which has contributed to the significant underfunding of the Retirement Funds. Moreover, the contributions to the Retirement Funds in accordance with the Pension

* In past years, FABF has requested a contribution from the City which the City determined exceeded the amount required by the Pension Code. The City has indicated that it will not contribute amounts in excess of the amount the City has determined to be the statutory contribution requirement for the City to FABF in such prior years or in future years.

Code have had the effect of deferring the funding of the Retirement Funds' liabilities, which increases the costs of such liabilities and the associated financial risks, including the risk that each Retirement Fund will not be able to pay its obligations as they become due. Furthermore, increases in the City's contributions to the Retirement Funds (such as those scheduled to occur under P.A. 96-1495) may require the City to increase its revenues, reduce its expenditures, or some combination thereof, which may impact the services provided by the City or limit the City's ability to generate additional revenues in the future. The City's contributions to FABF and PABF will increase in fiscal year 2016, when compared to fiscal year 2015, by approximately \$134 million and \$404 million, respectively, pursuant to the provisions of P.A. 96-1495, though such contributions would be reduced if SB 777 is enacted into law as described in the next section.

City's Contributions to PABF and FABF Beginning in 2016

P.A. 96-1495 was signed into law on December 30, 2010. Among other things, P.A. 96-1495 created a new method of determining the contributions to be made by the City to PABF and FABF. P.A. 96-1495 requires that, beginning in 2016, the City's contributions each year for PABF and FABF (the "P.A. 96-1495 Contribution") will be equal to the amount necessary to achieve a Funded Ratio of 90 percent in PABF and FABF by the end of fiscal year 2040 (the "P.A. 96-1495 Funding Plan").

Pursuant to the P.A. 96-1495 Funding Plan, the P.A. 96-1495 Contribution for PABF and FABF will be calculated as the level percentage of payroll necessary to reach the 90 percent Funded Ratio target by 2040. In Cook and DuPage Counties (in which the City is located), property taxes levied in one year become payable during the following year in two installments. As described in further detail under "*City's Contributions to the Retirement Funds for 2016 and 2017*" herein, the City increased its property tax levy for the purpose of making increased pension payments during calendar years 2016 and 2017.

Unless amended by the Illinois General Assembly, the P.A. 96-1495 Funding Plan will significantly increase the City's required contributions to PABF and FABF beginning in 2016. See "*City's Contributions to the Retirement Funds for 2016 and 2017*" herein. Senate Bill 777 ("SB 777") passed both houses of the Illinois General Assembly as of May 31, 2015 and was sent to the Governor on March 31, 2016. SB 777 would extend the period by which the unfunded liabilities of PABF and FABF are amortized to a 90 percent Funded Ratio from 2040 to 2055 (the "Revised Amortization Period") and institute a phase-in period during 2016-2020 to reduce the City's required payment in the initial years to allow for a more gradual phase-in of the requirements of P.A. 96-1495 (the "Phase-in Period"). The Revised Amortization Period would reduce the annual funding obligation required to reach a 90 percent Funded Ratio, but extend the number of years over which such payments would need to be made. In addition to, or in lieu of, a Revised Amortization Period or a Phase-in Period, the Illinois General Assembly may consider other legislation that could affect the City payment obligations for PABF and FABF and/or funding sources for those obligations. The City makes no representation as to whether or when SB 777 or any such other legislation would be enacted into law.

Any change to the P.A. 96-1495 Funding Plan which would reduce the contributions required of the City, such as a Revised Amortization Period or a Phase-in Period, would have the effect of increasing the unfunded liabilities and decreasing the Funded Ratios of PABF and FABF when compared to the projected unfunded liabilities and Funded Ratios of such Retirement Funds set forth in Tables 15 and 16 below.

City's Contributions to the Retirement Funds for 2016 and 2017

On October 28, 2015, the City Council approved its supplemental fiscal year 2015 budget (the "Supplemental Budget") and its fiscal year 2016 budget (the "FY 2016 Budget"). The Supplemental

Budget increased the budgeted contribution, payable to the Retirement Funds in 2016, to PABF and FABF by \$328 million which increased the total contribution to the Retirement Funds to \$886 million for 2016 (the “2016 Contribution”). The FY 2016 Budget includes an additional increase in the contribution to PABF and FABF which results in a total contribution, payable to the Retirement Funds in 2017, of \$978 million (the “2017 Contribution”). The 2016 Contribution and the 2017 Contribution each assume the effectiveness of P.A. 98-641 and the enactment of SB 777.

The City’s budget for fiscal year 2015, as amended by the Supplemental Budget (together the “Amended FY 2015 Budget”), provides that the increase in contributions to PABF and FABF for 2016 be primarily generated through an increase in the City’s property tax levy. Such property tax increase has been adopted by the City Council. However, the 2016 Contribution and the 2017 Contribution assume the enactment of SB 777, which would reduce the contribution currently required by the Pension Code under P.A. 96-1495. Specifically, with respect to 2016, SB 777 would reduce the City’s contribution to PABF and FABF from \$839 million to \$619 million. Because the Amended FY 2015 Budget assumes the enactment of SB 777, the 2016 Contribution included in the Amended FY 2015 Budget would be insufficient to fund in full the contribution required by the Pension Code in 2016 should SB 777 not be enacted. Pursuant to the Pension Code, the City has deposited Other Available Funds (derived from a draw on the City’s general obligation line of credit) as of March 1, 2016, with the City Treasurer in the approximate amount of \$220 million (the “Deposit”) which would be available to pay such excess contributions to PABF and FABF in 2016 should SB 777 or similar legislation not be enacted. If SB 777 or similar legislation is enacted during 2016, the City expects that the Deposit would not be used to pay such excess contributions.

The City can give no assurance as to whether SB 777 or similar legislation will be adopted by the Illinois General Assembly. If SB 777 or similar legislation is not enacted and the City must contribute to PABF and FABF pursuant to the current provisions of the Pension Code, the City expects that it would fund such additional contributions for years following 2016 through an increase in revenues, a decrease in expenditures or a combination thereof.

P.A. 98-641, which would have modified the formula for calculating the City’s required contributions to MEABF and LABF, was determined to be unconstitutional by the Illinois Supreme Court. With respect to the 2016 Contribution and the 2017 Contribution specifically, P.A. 98-641 would have increased the Multiplier to be used to determine the amount of such contributions. As a result of P.A. 98-641 being invalidated, however, the Multiplier with respect to the 2016 Contribution and the 2017 Contribution will revert to the Multiplier under the Pension Code provisions in effect prior to the enactment of P.A. 98-641 (the “Prior Law Multiplier”). Therefore, because the Amended FY 2015 Budget and the FY 2016 Budget assume the effectiveness of P.A. 98-641, the 2016 Contribution and the 2017 Contribution include contributions to LABF and MEABF in excess of the contributions currently required by the Pension Code calculated pursuant to the Prior Law Multiplier.

The Actuarial Valuation

General

The Pension Code requires that the Retirement Funds annually submit to the City Council a report containing a detailed statement of the affairs of such Retirement Fund, its income and expenditures, and assets and liabilities, which consists of the Actuarial Valuation. With respect to the Retirement Funds, the Actuarial Valuation measures the financial position of a Retirement Fund, determines the amount to be contributed by the City to such Retirement Fund pursuant to the statutory requirements described above, and produces certain information mandated by the financial reporting standards issued by the GASB, as described below.

In producing the Actuarial Valuations, the Retirement Funds' actuaries use demographic data (including employee age, salary and service credits), economic assumptions (including estimated future salary and interest rates), and decrement assumptions (including employee turnover, mortality and retirement rates) to produce the information required by the Prior GASB Standards or the New GASB Standards, each as hereinafter defined. The Retirement Funds' Actuarial Valuations are publicly available and may be obtained from the Retirement Funds. See "—Source Information" above. A description of the statistics generated by the Retirement Funds' actuaries in the Actuarial Valuations follows in the next few paragraphs. This information was derived from the Source Information.

GASB, which is part of a private non-profit corporation known as the Financial Accounting Foundation, promulgates standards regarding accounting and financial reporting for governmental entities. These principles have no legal effect and do not impose any legal liability on the City. The references to GASB principles in this Appendix do not suggest and should not be construed to suggest otherwise.

Prior GASB Standards

For the fiscal years discussed in this Appendix prior to and including December 31, 2013, the applicable GASB financial reporting standards were GASB Statement No. 25 ("GASB 25") and GASB Statement No. 27 ("GASB 27" and, together with GASB 25, the Prior GASB Standards"). The Prior GASB Standards required the determination of the Actuarially Required Contribution (as described herein) and the calculation of pension funding statistics such as the UAAL (as defined and described herein) and the Funded Ratio in the Actuarial Valuation. In addition, the Prior GASB Standards allowed pension plans to prepare financial reports pursuant to a variety of approved actuarial methods, certain of which are described in "—Actuarial Methods" below.

GASB 25 required disclosure of an "Actuarially Required Contribution," which was such pronouncement's method for calculating the annual amounts needed to fully fund the Retirement Funds, though the Actuarially Required Contribution was a financial reporting requirement and not a funding requirement. The Prior GASB Standards referred to the Actuarially Required Contribution as the "Annual Required Contribution," however, this Appendix refers to the concept as the "Actuarially Required Contribution" to denote the fact that the Actuarially Required Contribution is the amount an actuary would calculate pursuant to the Prior GASB Standards to be contributed in a given year, to differentiate it from the amount the City will be required to contribute under the Pension Code.

As defined in GASB 25, the Actuarially Required Contribution consisted of two components: (1) that portion of the present value of pension plan benefits which is allocated to the valuation year by the actuarial cost method (as described in "—Actuarial Methods—*Actuarial Accrued Liability*" below), termed the "Normal Cost"; and (2) an amortized portion of any UAAL.

The "Actuarial Accrued Liability" was an estimate of the present value of the benefits each Retirement Fund must pay to members as a result of past employment and participation in such Retirement Fund. The Actuarial Accrued Liability was calculated by use of a variety of demographic and other data (such as employee age, salary and service credits) and various assumptions (such as estimated salary increases, interest rates, employee turnover, retirement date and age and mortality and disability rates). The "Actuarial Value of Assets" reflected the value of the investments and other assets held by each Retirement Fund. Various methods existed under the Prior GASB Standards for calculating the Actuarial Value of Assets and the Actuarial Accrued Liability. For a discussion of the methods and assumptions used to calculate the Retirement Funds' Actuarial Accrued Liability and Actuarial Value of Assets under GASB 25, see "—Actuarial Methods" and "—Actuarial Assumptions" below.

Any shortfall between the Actuarial Value of Assets and the Actuarial Accrued Liability was referred to as the “Unfunded Actuarial Accrued Liability” or “UAAL.” The UAAL represented the present value of benefits attributed to past service that are in excess of plan assets. In addition, the actuary computed the “Funded Ratio,” which was the Actuarial Value of Assets divided by the Actuarial Accrued Liability, expressed as a percentage. The Funded Ratio and the UAAL provide one way of measuring the financial health of a pension plan.

New GASB Standards

Beginning with the fiscal year ended December 31, 2014, GASB 25 was replaced with GASB Statement No. 67 (“GASB 67”), and GASB 27 will be replaced with GASB Statement No. 68 beginning with the fiscal year ending December 31, 2015 (“GASB 68” and, together with GASB 67, the “New GASB Standards”). Unlike the Prior GASB Standards, the New GASB Standards do not establish approaches to funding pension plans. Instead, the New GASB Standards provide standards solely for financial reporting and accounting related to pension plans. The New GASB Standards require calculation and disclosure of a “Net Pension Liability,” which is the difference between the actuarial present value of projected benefit payments that are attributed to past periods of employee service calculated pursuant to the methods and assumptions set forth in the New GASB Standards (referred to in such statements as the “Total Pension Liability”) and the fair market value of the pension plan’s assets (referred to as the “Fiduciary Net Position”). This concept is similar to the UAAL, which was calculated under the Prior GASB Standards, but most likely will differ from the UAAL on any calculation date because the Fiduciary Net Position is calculated at fair market value and because of the differences in the manner of calculating the Total Pension Liability as compared to the Actuarial Accrued Liability under the Prior GASB Standards.

Furthermore, the New GASB Standards employ a rate, referred to in such statements as the “Discount Rate,” which is used to discount projected benefit payments to their actuarial present values. The Discount Rate may be a blended rate comprised of (1) a long-term expected rate of return on a Retirement Fund’s investments (to the extent that such assets are projected to be sufficient to pay benefits), and (2) a tax-exempt municipal bond rate meeting certain specifications set forth in the New GASB Standards. Therefore, in certain cases in which the assets of a Retirement Fund are not expected to be sufficient to pay the projected benefits of such Retirement Fund, the Discount Rate calculated pursuant to the New GASB Standards may differ from the assumed investment rate of return used in reporting pursuant to the Prior GASB Standards.

Finally, the New GASB Standards require that the Net Pension Liability be disclosed in the notes to the financial statements of the pension system and that a proportionate share of the Net Pension Liability be recognized on the balance sheets of the obligor. In addition, the New GASB Standards require an expense (the “Pension Expense”) to be recognized on the income statement of the City. The recognition of the Net Pension Liability and the Pension Expense do not measure the manner in which a Retirement Fund is funded and therefore do not conflict with the various manners of funding the Retirement Funds described in this Appendix.

As stated above, GASB 67 was first applied with respect to the Actuarial Valuation for the fiscal year ended December 31, 2014. The City expects that the New GASB Standards may significantly alter the financial statements produced by the City. For example, the Retirement Funds disclosed a combined Net Pension Liability of \$20.1 billion as of December 31, 2014, which will impact the City’s balance sheet in future years. However, because the City contributes to the Retirement Funds pursuant to the methods established in the Pension Code, the New GASB Statements will not materially impact the contributions made by the City without legislative action.

City's Contributions Not Related to GASB Standards

The City's contributions to the Retirement Funds are not based on the contribution calculations promulgated by GASB for reporting purposes. Instead, the City's contributions are calculated pursuant to the formulas established in the Pension Code. See "— Determination of City's Contributions" above.

The methods for contributing to the Retirement Funds set forth in the Pension Code do not conform to the manner of funding established by the Prior GASB Standards, which was based on the Actuarially Required Contribution. The difference between the City's actual contributions and the Actuarially Required Contribution (as calculated by the Retirement Funds' actuaries) for fiscal years 2005-2014 is shown in TABLE 4—"INFORMATION REGARDING CITY'S CONTRIBUTIONS—AGGREGATED" below. Each Retirement Fund's Actuarially Required Contribution is equal to its Normal Cost plus an amortization of the Retirement Funds' UAAL over a 30-year period. MEABF, LABF and FABF amortize the UAAL on a level dollar basis, whereas PABF amortizes the UAAL on a level percent of payroll basis. Both methods of calculating the Actuarially Required Contribution were acceptable under the Prior GASB Standards.

Furthermore, beginning in 2016 with respect to PABF and FABF under the P.A. 96-1495 Funding Plan, the City will contribute an actuarially determined amount, as opposed to the current, non-actuarial, Multiplier-based approach, as set forth in the Pension Code. The P.A. 96-1495 Funding Plan differs from the manner of calculation required by the Prior GASB Standards for financial reporting purposes, primarily because the goal of such funding plan is to reach a Funded Ratio in the respective Retirement Funds of 90 percent whereas the Prior GASB Standards required the Retirement Funds to amortize the UAAL towards attainment of a 100 percent Funded Ratio.

The New GASB Standards do not require calculation of an Actuarially Required Contribution.

Actuarial Methods

The Retirement Funds' actuaries employ a variety of actuarial methods to arrive at the pension statistics required by the Prior GASB Standards and the New GASB Standards. Certain of these methods are discussed in the following sections.

Actuarial Value of Assets

Under the Prior GASB Standards, the Retirement Funds calculate their respective Actuarial Value of Assets by smoothing investment gains and losses over a period of five years, a method of valuation referred to as the "Asset Smoothing Method." Under the Asset Smoothing Method, the Retirement Funds recognize in the current year 20 percent of the investment gain or loss realized in that year and each of the previous four years. The Asset Smoothing Method was an allowable method of calculating the Actuarial Value of Assets under the Prior GASB Standards.

The Asset Smoothing Method lessens the immediate impact of market fluctuations on the Actuarial Value of Assets, which is used to calculate the UAAL and the Funded Ratio, that may otherwise occur as a result of market volatility. However, asset smoothing delays recognition of gains and losses, thereby providing an Actuarial Value of Assets that differs from the market value of pension plan assets at the time of measurement. As a result, presenting the Actuarial Value of Assets as determined under the Asset Smoothing Method might provide a more or less favorable presentation of the current financial position of a pension plan than would a method that recognizes investment gains and losses annually.

As described above, under the New GASB Standards, the Fiduciary Net Position is equal to the fair market value of a pension plan's assets as of the date of determination. As such, the Asset Smoothing Method does not apply to the determination of the Fiduciary Net Position under the New GASB Standards.

Table 3 provides a comparison of the assets of the Retirement Funds (as aggregated) on a fair value basis and after application of the Asset Smoothing Method.

TABLE 3 – ACTUARIAL VALUE OF ASSETS VS. FAIR VALUE OF NET ASSETS – AGGREGATED⁽¹⁾

Fiscal Year	Actuarial Value of Assets⁽²⁾	Fair Value of Net Assets	Actuarial Value as a Percentage of Fair Value
2005	\$13,086,060	\$13,245,445	98.80%
2006	13,435,692	14,164,347	94.86
2007	14,254,816	14,595,514	97.67
2008	13,797,344	9,844,339	140.16
2009	13,051,349	10,876,846	119.99
2010	12,449,863	11,408,555	109.13
2011	11,521,138	10,536,135	109.35
2012	10,531,447	10,799,603	97.52
2013	10,513,564	11,261,254	93.36
2014	10,339,208	10,665,597	96.94

Source: 2005 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and from the Retirement Fund CAFRs for the fiscal year ended December 31, 2010. Data from 2011 through 2014 is from the Actuarial Valuations of the Retirement Funds for the fiscal years 2011 through 2014.

(1) In thousands of dollars. Data is presented in the aggregate for the Retirement Funds.

(2) The Actuarial Value of Assets is calculated through use of the Asset Smoothing Method.

Actuarial Accrued Liability

As the final step in the calculation of actuarial liabilities, the actuary applies a cost method to allocate the total value of benefits to past, present and future periods of employee service. This allocation is accomplished by the development of the Actuarial Accrued Liability and the Normal Cost under the Prior GASB Standards and the Pension Code and the Total Pension Liability under the New GASB Standards. Currently, all of the Retirement Funds use the entry age normal actuarial cost method (the "EAN Method") with costs allocated on the basis of earnings. The EAN Method was an approved actuarial cost method under the Prior GASB Standards and is the only allowable actuarial cost method under the New GASB Standards.

Under the EAN Method, the present value of each employee's projected pension is assumed to be funded by annual installments equal to a level percentage of the employee's earnings for each year between entry age and assumed exit age. Each employee's Normal Cost, as calculated pursuant to the Prior GASB Standards, for the current year is equal to the portion of the value so determined, assigned to the current year. Therefore, the Normal Cost for the plan for the year is the sum of the Normal Costs of all employees.

P.A. 96-1495 requires that, beginning in 2016, PABF and FABF calculate the Actuarial Accrued Liability pursuant to the projected unit credit actuarial cost method (the "PUC Method"). Under the PUC

Method, Normal Cost represents the actuarial present value of that portion of an employee's projected benefit that is attributable to service in the current year, based on future compensation projected to retirement. Under this method, the Actuarial Accrued Liability equals the actuarial present value of that portion of a member's projected benefit that is attributable to service to date, again, on the basis of future compensation projected to retirement.

Under either cost method, the Actuarial Accrued Liability is the portion of the present value of benefits assigned by the cost method to years of service up to the valuation date, i.e., for past service. This value changes as the employee's salary changes and years of service increase, and as some employees leave and new employees are hired. Future Normal Cost is the portion of the present value of benefits assigned to future years of service and is assumed to be funded annually.

As compared to the EAN Method, the PUC Method will produce a more back-loaded growth in liabilities because the PUC Method allocates a higher portion of retirement costs closer to the time of retirement. Therefore, the PUC Method results in a slower accumulation of assets, which in turn requires smaller initial, and larger future, contributions (assuming funding is actuarially based, as under the P.A. 96-1495 Funding Plan). Deferring contributions in this manner increases the cost of the liabilities and the associated financial risks for PABF and FABF.

Actuarial Assumptions

The Actuarial Valuations of the Retirement Funds use a variety of assumptions in order to calculate the statistics required by the Prior GASB Standards and the New GASB Standards. Although several of the assumptions are the same across all of the Retirement Funds, each Retirement Fund determines, within actuarial standards, the assumptions to be used in its Actuarial Valuation unless a specific assumption is fixed by the Pension Code. No assurance can be given that any of the assumptions underlying the Actuarial Valuations will reflect the actual results experienced by the Retirement Funds. Variances between the assumptions and actual results may cause increases or decreases in the statistics calculated pursuant to the Prior GASB Standards or the New GASB Standards. Additional information on each Retirement Fund's actuarial assumptions is available in the respective 2014 Actuarial Valuations of the Retirement Funds. See "—Source Information" above.

The actuarial assumptions used by the Retirement Funds are determined by the individual Retirement Fund Boards upon the advice of the actuary for each Retirement Fund Board. The Retirement Funds periodically perform experience studies to evaluate the actuarial assumptions in use. The purpose of an experience study is to validate that the actuarial assumptions used in the Actuarial Valuation continue to reasonably estimate the actual experience of the pension plan or, if necessary, to develop recommendations for modifications to the actuarial assumptions to ensure their continuing appropriateness.

Assumed Investment Rate of Return

The Actuarial Valuations assume an investment rate of return on the assets in each Retirement Fund. The average long-term investment rates of return currently assumed by the Retirement Funds are described in Table 2 above. Due to the volatility of the marketplace, however, the actual rate of return earned by the Retirement Funds on their assets in any year may be higher or lower than the assumed rate. Changes in the Retirement Funds' assets as a result of market performance will lead to an increase or decrease in the UAAL and the Funded Ratio. As a result of the Retirement Funds' use of the Asset Smoothing Method, however, only a portion of these increases or decreases will be recognized in the current year, with the remaining gain or loss spread over the remaining four years. See "—Actuarial Methods—*Actuarial Value of Assets*" above.

The assumed investment rate of return is used by each Retirement Fund's actuary as the discount rate to determine the present value of future payments to such Retirement Fund's members. Such a determination is part of the actuary's process to develop the Actuarial Accrued Liability under the Prior GASB Standards. Reducing the assumed investment rate of return will, taken independently of other changes, produce a larger Actuarial Accrued Liability for each Retirement Fund. Furthermore, as discussed above, an increase in the Actuarial Accrued Liability will, taken independently, increase the UAAL, decrease the Funded Ratio and increase the Actuarially Required Contribution.

Under the New GASB Standards, each Retirement Fund's actuary will calculate the Discount Rate, as described under "—Actuarial Valuation" above, a reduction in which will, taken independently of other factors, produce a larger Total Pension Liability for each Retirement Fund. Information regarding the Discount Rate and the sensitivity of the Total Pension Liability to changes in the Discount Rate is provided below in Table 12.

Beginning with calendar year 2012, the Retirement Fund Boards of MEABF, LABF and PABF reduced the assumed investment rate of return to be used by their respective actuaries in preparing future actuarial valuations. For MEABF and LABF, the assumed investment rate of return has been decreased to 7.50 percent beginning with calendar year 2012. For PABF, the assumed investment rate of return was decreased to 7.75 percent for calendar year 2012 and to 7.50 percent for calendar year 2014. FABF continues to assume an investment rate of return of 8.0 percent.

These changes to the assumed investment rate of return will not impact contributions by the City to Retirement Funds when such contributions are determined pursuant to the Multiplier Funding system. However, beginning in 2016, when the City must contribute to PABF and FABF on an actuarial basis, such change in the assumed investment rate of return of PABF will, taken independently of other facts, increase the City's required contributions to PABF because the UAAL of PABF will increase as described above and the P.A. 96-1495 Funding Plan requires an amortization of the UAAL to reach a 90 percent funding target by 2040 (unless modified by SB 777 or similar legislation).

Funded Status of the Retirement Funds

In recent years, the City has contributed to the Retirement Funds the full amount of Multiplier Funding and certain other amounts determined by the City to be required by the Pension Code through a combination of property tax revenues (through the Pension Levy), PPRT funds and a draw on the City's general obligation line of credit.* However, these amounts have not been sufficient, when combined with employee contributions and investment returns, to offset increases in the liabilities of the Retirement Funds. Moreover, expenses related to the Health Plan (as defined below) are paid from the City's contributions, which has the effect of reducing the Actuarial Value of Assets and decreasing the Funded Ratio.

Furthermore, the income from all sources (including employee contributions, City contributions and investment earnings) to the Retirement Funds has been lower than the cash outlays of the Retirement Funds in some recent years. As a result, the Retirement Funds have liquidated investments and used assets of the Retirement Funds to satisfy these cash outlays. The use of investment earnings or assets of the Retirement Funds for these purposes reduces the amount of assets on hand to pay benefits in the future and prevents the Retirement Funds from recognizing the full benefits of compounding investment returns.

* As discussed under "—Determination of City's Contributions" above, the City and FABF have disagreed over whether certain amounts are required under the Pension Code. In addition, pursuant to the Pension Code, the City did not make any contributions to LABF in fiscal years 2001 through 2006 because LABF had funds on hand in excess of its liabilities. The Pension Code provides that the City will cease to make contributions to LABF in such a situation. The City continued to make contributions to the other Retirement Funds during those years.

Table 4 provides information on the Actuarially Required Contribution, the City's actual contributions in accordance with the Pension Code and the percentage of the Actuarially Required Contribution made in each year.

TABLE 4 – INFORMATION REGARDING CITY'S CONTRIBUTIONS⁽¹⁾ – AGGREGATED

Fiscal Year	Actuarially Required Contribution	Actual Employer Contribution⁽²⁾	Percentage of Actuarially Required Contribution Contributed⁽³⁾
2005	\$ 698,185	\$ 423,515	60.7%
2006 ⁽⁴⁾	785,111	394,899	50.3
2007 ⁽⁴⁾	865,776	395,483	45.7
2008 ⁽⁴⁾	886,215	416,130	47.0
2009 ⁽⁴⁾	990,381	423,929	42.8
2010 ⁽⁴⁾	1,112,626	425,552	38.2
2011 ⁽⁴⁾	1,321,823	416,693	31.5
2012 ⁽⁴⁾	1,470,905	440,120	29.9
2013 ⁽⁴⁾	1,695,278	442,970	26.1
2014 ⁽⁴⁾	1,740,973	447,400	25.7

Sources: Actuarial Valuations of the Retirement Funds as of December 31, 2010, December 31, 2011, December 31, 2012, December 31, 2013, and December 31, 2014, the Fund CAFRs for the fiscal year ended December 31, 2010, and the City CAFRs for the fiscal years ended December 31, 2011, December 31, 2012 and December 31, 2013.

- (1) In thousands of dollars. Data is presented in the aggregate for the Retirement Funds and uses assumptions and methods employed by each of the Retirement Funds. For the data presented as of December 31, 2005 and December 31, 2006, contribution information includes amounts related to other post-employment benefits. Beginning in 2007, as a result of a change in GASB standards, contribution information is presented exclusive of amounts related to other post-employment benefits.
- (2) Includes the portion of the PPRT contributed to the Retirement Funds in each year.
- (3) The estimated multipliers that would have been necessary for FABF, LABF and PABF to make the full Actuarially Required Contribution in 2014 were as follows: 7.98 for FABF; 4.87 for LABF; and 7.94 for PABF. The estimated multiplier that would have been necessary for MEABF to make the full Actuarially Required Contribution in 2014 has not been publicly disclosed; however the necessary contribution multiplier for 2013 was 4.52. Beginning in 2016, the City's contributions to PABF and FABF will not be calculated in accordance with the Multiplier Funding system. See "—Determination of City's Contributions" above.
- (4) Beginning in 2006, as a result of a change in GASB standards, the information in this Table 4 does not include other post-employment benefits, which the City's Comprehensive Annual Financial Report presents separately.

PABF changed certain actuarial assumptions beginning with the fiscal year ended December 31, 2014. Specifically, PABF reduced its assumed investment rate of return from 7.75 percent to 7.50 percent and changed the mortality table used by its actuary to RP-2014, which projects longer lives for PABF members. Considered independently of other factors, these changes increased the Actuarial Accrued Liability, and, as a result, increased the UAAL and Actuarially Required Contribution for such Retirement Fund. With respect to the City's 2017 contribution to PABF, these changes are expected to result in an additional contribution of \$62 million.

The continued decline in the percentage of the Actuarially Required Contribution contributed by the City, as shown in Table 4 above, results, in part, from the fact that the actuarial liability continues to grow due to the delayed recognition of gains and losses resulting from the Retirement Funds' use of the Asset Smoothing Method for financial reporting purposes under the Prior GASB Standards. See "—Actuarial Methods— *Actuarial Value of Assets*" above.

The following tables summarize the financial condition and the funding trends of the Retirement Funds.

TABLE 5 – FINANCIAL CONDITION OF THE MEABF
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Beginning Net Position (Fair Value)	\$ 6,242,741	\$ 6,356,888	\$ 6,841,127	\$ 7,009,523	\$ 4,739,614	\$ 5,166,225	\$ 5,435,593	\$ 5,053,248	\$ 5,182,669	\$ 5,421,677
Income										
- Employee Contributions	122,542	129,466	132,442	137,749	130,981	133,300	132,596	130,266	131,532	129,972
- City Contributions	155,067	148,332	148,137	155,833	157,698	164,302	156,525	158,381	157,705	158,798
- Investment Income ⁽¹⁾	402,311	778,726	485,926	(1,947,576)	778,562	638,569	31,583	589,198	735,272	283,282
- Miscellaneous Income	-	-	-	-	-	24	-	-	-	-
Total	\$ 679,920	\$ 1,056,524	\$ 766,505	\$ (1,653,994)	\$ 1,067,241	\$ 936,195	\$ 320,705	\$ 877,845	\$ 1,024,509	\$ 572,052
Expenditures										
- Benefits and Refunds ⁽²⁾	560,228	565,887	590,577	608,166	632,864	660,081	695,674	741,583	779,003	807,674
- Administration	5,545	6,398	7,532	7,749	7,766	6,745	7,375	6,841	6,499	6,568
Total	\$ 565,773	\$ 572,285	\$ 598,109	\$ 615,915	\$ 640,630	\$ 666,826	\$ 703,050	\$ 748,425	\$ 785,502	\$ 814,242
Ending Net Position (Fair Value)	\$ 6,356,888	\$ 6,841,127	\$ 7,009,523	\$ 4,739,614	\$ 5,166,225	\$ 5,435,593	\$ 5,053,248	\$ 5,182,669	\$ 5,421,677	\$ 5,179,486
Actuarial Value of Assets ⁽³⁾	\$ 6,332,379	\$ 6,509,146	\$ 6,890,463	\$ 6,669,502	\$ 6,295,788	\$ 6,003,390	\$ 5,552,291	\$ 5,073,320	\$ 5,114,208	\$ 5,039,297
Actuarial Accrued Liabilities ⁽⁴⁾	9,250,212	9,476,118	9,968,747	10,383,158	10,830,119	11,828,666	12,292,930	13,475,376	13,828,920	12,307,094
UAAL (Fair Value) ⁽⁵⁾	2,893,324	2,634,991	2,959,224	5,643,544	5,663,894	6,393,073	7,239,681	8,292,706	8,407,244	7,127,608
UAAL (Actuarial Value) ⁽³⁾	2,917,833	2,966,972	3,078,284	3,713,656	4,534,331	5,825,276	6,740,639	8,402,057	8,714,712	7,267,797
Funded Ratio (Fair Value) ⁽⁵⁾	68.7%	72.2%	70.3%	45.7%	47.7%	46.0%	41.1%	38.5%	39.2%	42.1%
Funded Ratio (Actuarial Value) ⁽³⁾	68.5%	68.7%	69.1%	64.2%	58.1%	50.8%	45.2%	37.6%	37.0%	40.9%

Source: 2005 through 2010 data is from the Actuarial Valuation of MEABF as of December 31, 2010, and the CAFR of MEABF for the fiscal year ended December 31, 2010. 2011 through 2014 data is from the Actuarial Valuations of MEABF for the fiscal years 2011 through 2014. Table may not add due to rounding.

- (1) Investment income is shown net of fees and expenses.
- (2) Beginning in fiscal year 2007, includes expenses related to other post-employment benefits. See “Payment for Other Post-Employment Benefits” below.
- (3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—*Actuarial Value of Assets*” above.
- (4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (5) Calculated using net assets.

TABLE 6 – FINANCIAL CONDITION OF THE PABF
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Beginning Net Position (Fair Value)	\$ 3,865,809	\$ 3,954,837	\$ 4,192,076	\$ 4,333,234	\$ 3,000,998	\$ 3,326,050	\$ 3,439,669	\$ 3,175,509	\$ 3,213,433	\$3,265,199
Income										
- Employee Contributions	89,110	91,965	93,300	93,207	95,614	108,402	98,222	95,892	93,329	95,676
- City Contributions	177,911	157,689	178,678	181,526	180,511	183,835	183,522	207,228	188,889	187,075
- Investment Income ⁽¹⁾	261,389	447,275	349,914	(1,104,909)	567,315	369,558	33,656	353,176	415,294	181,901
- Miscellaneous Income	368	1,070	28	160	799	20	104	423	479	740
Total	\$ 528,778	\$ 697,999	\$ 621,920	\$ (830,016)	\$ 844,239	\$ 661,815	\$ 315,504	\$ 656,719	\$ 697,991	\$ 465,392
Expenditures										
- Benefits and Refunds ⁽²⁾	437,089	458,060	477,685	497,721	514,883	544,272	575,305	613,907	641,926	664,338
- Administration	2,661	2,700	3,077	4,499	4,304	3,925	4,359	4,888	4,298	4,241
Total	\$ 439,750	\$ 460,760	\$ 480,762	\$ 502,220	\$ 519,187	\$ 548,197	\$ 579,664	\$ 618,795	\$ 646,224	\$ 668,579
Ending Net Position (Fair Value)	\$ 3,954,837	\$ 4,192,076	\$ 4,333,234	\$ 3,000,998	\$ 3,326,050	\$ 3,439,669	\$ 3,175,509	\$ 3,213,433	\$ 3,265,199	\$3,062,013
Actuarial Value of Assets ⁽³⁾	\$ 3,914,432	\$ 3,997,991	\$ 4,231,682	\$ 4,093,720	\$ 3,884,978	\$ 3,718,955	\$ 3,444,690	\$ 3,148,930	\$ 3,053,882	\$ 2,954,319
Actuarial Accrued Liabilities ⁽⁴⁾	7,722,737	7,939,561	8,220,353	8,482,574	8,736,102	9,210,056	9,522,395	10,051,827	10,282,339	11,334,799
UAAL (Fair Value) ⁽⁵⁾	3,767,900	3,747,485	3,887,119	5,481,576	5,410,052	5,770,387	6,346,886	6,839,394	7,017,139	8,272,786
UAAL (Actuarial Value) ⁽³⁾	3,808,305	3,941,570	3,988,671	4,388,854	4,851,124	5,491,101	6,077,705	6,902,898	7,228,457	8,380,480
Funded Ratio (Fair Value) ⁽⁵⁾	51.2%	52.8%	52.7%	35.4%	38.1%	37.3%	33.4%	32.0%	31.8%	27.0%
Funded Ratio (Actuarial Value) ⁽³⁾	50.7%	50.4%	51.5%	48.3%	44.5%	40.4%	36.2%	31.3%	29.7%	26.1%

Source: 2005 through 2010 data is from the Actuarial Valuation of PABF as of December 31, 2010, and the CAFR of PABF for the fiscal year ended December 31, 2010. Data from 2011 through 2014 is from the Actuarial Valuations of PABF for the fiscal years 2011 through 2014. Table may not add due to rounding.

(1) Investment income is shown net of fees and expenses.

(2) Beginning in fiscal year 2008, includes expenses related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.

(3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—*Actuarial Value of Assets*” above.

(4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.

(5) Calculated using net assets.

TABLE 7 – FINANCIAL CONDITION OF THE FABF
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Beginning Net Position (Fair Value)	\$ 1,206,177	\$ 1,274,659	\$ 1,391,484	\$ 1,469,455	\$ 914,193	\$ 1,051,643	\$ 1,106,078	\$ 993,774	\$ 1,032,423	\$1,116,705
Income										
- Employee Contributions	35,697	44,222	41,120	40,480	41,605	41,730	51,918	56,718	42,520	48,056
- City Contributions	90,129	78,971	74,271	83,744	91,857	83,592	85,498	84,144	106,220	109,805
- Investment Income ⁽¹⁾	112,017	174,406	148,806	(484,093)	208,537	150,835	(22,434)	135,203	190,536	30,868
- Miscellaneous Income	456	87	162	107	36	30	17	8	(60)	7
Total	\$ 238,299	\$ 297,686	\$ 264,359	\$ (359,762)	\$ 342,035	\$ 276,187	\$ 114,999	\$ 276,073	\$ 339,216	188,736
Expenditures										
- Benefits and Refunds ⁽²⁾	167,527	178,214	183,304	192,644	201,146	217,565	223,580	233,840	251,819	266,365
- Administration	2,290	2,647	3,084	2,856	3,439	4,187	3,723	3,584	3,115	3,069
Total	\$ 169,817	\$ 180,861	\$ 186,388	\$ 195,500	\$ 204,585	\$ 221,752	\$ 227,303	\$ 237,424	\$ 254,934	269,434
Ending Net Position (Fair Value)	\$ 1,274,659	\$ 1,391,484	\$ 1,469,455	\$ 914,193	\$ 1,051,643	\$ 1,106,079	\$ 993,774	\$ 1,032,423	\$ 1,116,705	\$1,036,006
Actuarial Value of Assets ⁽³⁾	\$ 1,203,654	\$ 1,264,497	\$ 1,374,960	\$ 1,335,695	\$ 1,269,231	\$ 1,198,114	\$ 1,101,742	\$ 993,284	\$ 991,213	\$ 988,141
Actuarial Accrued Liabilities ⁽⁴⁾	2,882,936	3,088,124	3,215,874	3,311,269	3,428,838	3,655,026	3,851,919	4,020,138	4,128,735	4,338,593
UAAL (Fair Value) ⁽⁵⁾	1,608,277	1,696,640	1,746,419	2,397,076	2,377,195	2,548,947	2,858,145	2,987,715	3,012,030	3,302,587
UAAL (Actuarial Value) ⁽³⁾	1,679,282	1,823,627	1,840,914	1,975,574	2,159,607	2,456,912	2,750,177	3,026,854	3,137,522	3,350,452
Funded Ratio (Fair Value) ⁽⁵⁾	44.2%	45.1%	45.7%	27.6%	30.7%	30.3%	25.8%	25.7%	27.0%	23.9%
Funded Ratio (Actuarial Value) ⁽³⁾	41.8%	40.9%	42.8%	40.3%	37.0%	32.8%	28.6%	24.7%	24.0%	22.8%

Source: 2005 through 2010 data is from the Actuarial Valuation of FABF as of December 31, 2010, and the CAFR of FABF for the fiscal year ended December 31, 2010. Data from 2011 through 2014 is from the Actuarial Valuations of FABF for the fiscal years 2011 through 2014. Table may not add due to rounding.

- (1) Investment income is shown net of fees and expenses.
- (2) Beginning in fiscal year 2001, includes expenses related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—*Actuarial Value of Assets*” above.
- (4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (5) Calculated using net assets.

TABLE 8 – FINANCIAL CONDITION OF THE LABF
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Beginning Net Position (Fair Value)	\$ 1,637,369	\$ 1,659,061	\$ 1,739,660	\$ 1,782,818	\$ 1,188,581	\$ 1,332,928	\$ 1,427,214	\$ 1,313,604	\$ 1,371,077	\$1,457,673
Income										
- Employee Contributions	16,257	18,791	18,413	19,419	17,538	16,320	16,069	16,559	16,393	16,359
- City Contributions	40	106	15,459	17,580	17,190	17,939	15,359	14,415	14,101	14,520
- Investment Income ⁽¹⁾	117,785	174,536	125,205	(510,463)	237,102	193,187	(4,511)	173,460	207,344	53,393
- Miscellaneous Income	-	-	-	-	-	-	-	-	-	0
Total	\$ 134,082	\$ 193,433	\$ 159,077	\$ (473,464)	\$ 271,830	\$ 227,446	\$ 26,917	\$ 204,434	\$ 237,838	\$84,272
Expenditures										
- Benefits and Refunds ⁽²⁾	109,405	110,003	112,567	117,147	123,817	129,297	136,533	142,215	147,108	150,018
- Administration	2,985	2,831	3,352	3,626	3,665	3,864	3,994	4,746	4,134	3,835
Total	\$ 112,390	\$ 112,834	\$ 115,919	\$ 120,773	\$ 127,482	\$ 133,161	\$ 140,527	\$ 146,961	\$ 151,242	\$153,853
Ending Net Position (Fair Value)	<u>\$ 1,659,061</u>	<u>\$ 1,739,660</u>	<u>\$ 1,782,818</u>	<u>\$ 1,188,581</u>	<u>\$ 1,332,928</u>	<u>\$ 1,427,214</u>	<u>\$ 1,313,604</u>	<u>\$ 1,371,077</u>	<u>\$ 1,457,673</u>	<u>\$1,388,092</u>
Actuarial Value of Assets ⁽³⁾	\$ 1,635,595	\$ 1,664,058	\$ 1,757,711	\$ 1,698,427	\$ 1,601,352	\$ 1,529,404	\$ 1,422,414	\$ 1,315,914	\$ 1,354,261	\$1,357,451
Actuarial Accrued Liabilities ⁽⁴⁾	1,742,300	1,767,682	1,808,295	1,915,324	1,975,749	2,030,025	2,152,854	2,336,189	2,383,499	2,107,110
UAAL (Fair Value) ⁽⁵⁾	83,239	28,022	25,477	726,743	642,821	602,811	839,250	965,112	925,826	719,018
UAAL (Actuarial Value) ⁽³⁾	106,705	103,624	50,584	216,897	374,397	500,621	730,440	1,020,276	1,029,238	749,659
Funded Ratio (Fair Value) ⁽⁵⁾	95.2%	98.4%	98.6%	62.1%	67.5%	70.3%	61.0%	58.7%	61.2%	65.9%
Funded Ratio (Actuarial Value) ⁽³⁾	93.9%	94.1%	97.2%	88.7%	81.1%	75.3%	66.1%	56.3%	56.8%	64.4%

Source: 2005 through 2010 data is from the Actuarial Valuation of LABF as of December 31, 2010, and the CAFR of LABF for the fiscal year ended December 31, 2010. Data from 2011 through 2014 is from the Actuarial Valuations of LABF for the fiscal years 2011 through 2014. Table may not add due to rounding.

- (1) Investment income is shown net of fees and expenses.
- (2) Beginning in fiscal year 2008, includes expenses related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—*Actuarial Value of Assets*” above.
- (4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (5) Calculated using net assets.

TABLE 9 – FINANCIAL CONDITION OF THE RETIREMENT FUNDS COMBINED
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Beginning Net Position (Fair Value)	\$ 12,952,096	\$ 13,245,445	\$ 14,164,347	\$ 14,595,030	\$ 9,843,386	\$ 10,876,846	\$ 11,408,555	\$ 10,536,135	\$ 10,799,603	\$11,261,255
Income										
- Employee Contributions	263,606	284,444	285,275	290,855	285,738	299,752	298,805	299,435	283,774	290,063
- City Contributions	423,147	385,098	416,545	438,683	447,256	449,668	440,904	464,168	466,915	470,198
- Investment Income ⁽¹⁾	893,502	1,574,943	1,109,851	(4,047,041)	1,791,516	1,352,149	38,295	1,251,037	1,548,446	549,444
- Miscellaneous Income	824	1,157	190	267	835	74	121	431	419	747
Total	\$ 1,581,079	\$ 2,245,642	\$ 1,811,861	\$ (3,317,236)	\$ 2,525,345	\$ 2,101,643	\$ 778,125	\$ 2,015,071	\$ 2,299,554	\$ 1,310,452
Expenditures										
- Benefits and Refunds ⁽²⁾	1,274,249	1,312,164	1,364,133	1,415,678	1,472,710	1,551,215	1,631,093	1,731,545	1,819,856	1,888,395
- Administration	13,481	14,576	17,045	18,730	19,174	18,721	19,452	20,059	18,046	17,713
Total	\$ 1,287,730	\$ 1,326,740	\$ 1,381,178	\$ 1,434,408	\$ 1,491,884	\$ 1,569,936	\$ 1,650,544	\$ 1,751,604	\$ 1,837,902	\$ 1,906,108
Ending Net Position (Fair Value)	\$ 13,245,445	\$ 14,164,347	\$ 14,595,030	\$ 9,843,386	\$ 10,876,846	\$ 11,408,555	\$ 10,536,135	\$ 10,799,603	\$ 11,261,254	\$ 10,665,597
Actuarial Value of Assets ⁽³⁾	\$ 13,086,060	\$ 13,435,692	\$ 14,254,816	\$ 13,797,344	\$ 13,051,349	\$ 12,449,863	\$ 11,521,138	\$ 10,531,448	\$ 10,513,564	\$10,339,208
Actuarial Accrued Liabilities ⁽⁴⁾	21,598,185	22,271,485	23,213,269	24,092,325	24,970,808	26,723,773	27,820,098	29,883,532	30,623,493	30,087,596
UAAL (Fair Value) ⁽⁵⁾	8,352,740	8,107,138	8,618,239	14,248,939	14,093,962	15,315,218	17,283,963	19,083,929	19,362,239	19,421,999
UAAL (Actuarial Value) ⁽³⁾	8,512,125	8,835,793	8,958,453	10,294,981	11,919,459	14,273,910	16,298,960	19,352,084	20,109,929	19,748,388
Funded Ratio (Fair Value) ⁽⁵⁾	61.3%	63.6%	62.9%	40.9%	43.6%	42.7%	37.9%	36.1%	36.8%	35.5%
Funded Ratio (Actuarial Value) ⁽³⁾	60.6%	60.3%	61.4%	57.3%	52.3%	46.6%	41.4%	35.2%	34.3%	34.4%

Source: 2005 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and the CAFRs of the Retirement Funds for the fiscal year ended December 31, 2010. Data from 2011 through 2014 is from the Actuarial Valuations of the Retirement Funds for the fiscal years 2011 through 2014. Table may not add due to rounding.

- (1) Investment income is shown net of fees and expenses.
- (2) Includes expenses related to other post-employment benefits beginning in each of the fiscal years as shown in Footnote (2) in Tables 6-9 herein for each respective Retirement Fund. See “—Payment for Other Post-Employment Benefits” below.
- (3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—Actuarial Value of Assets” above.
- (4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (5) Calculated using net assets.

**TABLE 10 – SCHEDULE OF FUNDING PROGRESS – COMBINED FOR THE RETIREMENT FUNDS
FISCAL YEARS 2005-2014
(\$ IN THOUSANDS)**

Fiscal Year	Actuarial Accrued Liability⁽¹⁾	Actuarial Value of Assets⁽²⁾	Fair Value of Net Assets	UAAL (Actuarial)⁽³⁾	UAAL (Fair Value)⁽⁴⁾	Funded Ratio (Actuarial)⁽³⁾	Funded Ratio (Fair Value)⁽⁴⁾	Payroll	UAAL to Payroll (Actuarial)⁽³⁾	UAAL to Payroll (Fair Value)⁽⁴⁾
2005	\$ 21,598,185	\$ 13,086,060	\$13,245,445	\$ 8,512,125	\$8,352,740	60.6%	61.3%	\$2,880,358	295.5%	290.0%
2006	22,271,485	13,435,692	14,164,347	8,835,793	8,107,138	60.3	63.6	3,069,479	287.9	264.1
2007	23,213,269	14,254,816	14,595,030	8,958,453	8,618,239	61.4	62.9	3,185,388	281.2	270.6
2008	24,092,325	13,797,344	9,843,386	10,294,981	14,248,939	57.3	40.9	3,180,484	323.7	448.0
2009	24,970,808	13,051,349	10,876,846	11,919,459	14,093,962	52.3	43.6	3,172,716	375.7	444.2
2010	26,723,773	12,449,863	11,408,555	14,273,910	15,315,218	46.6	42.7	3,189,739	447.5	480.1
2011	27,820,098	11,521,138	10,536,135	16,298,960	16,696,869	41.4	37.9	3,261,021	499.8	512.0
2012	29,883,532	10,531,448	10,799,603	19,352,084	19,083,929	35.2	36.1	3,223,720	600.3	592.0
2013	30,623,493	10,513,564	11,261,254	20,109,929	19,362,239	34.3	36.8	3,212,558	626.0	602.7
2014	30,087,596	10,339,208	10,665,597	19,748,388	19,421,999	34.4	35.5	3,340,174	591.2	581.5

Source: 2005 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and the CAFRs of the Retirement Funds for the fiscal year ended December 31, 2010. 2011 through 2014 data is from the Actuarial Valuations of the Retirement Funds for the fiscal years 2011 through 2014. Table may not add due to rounding.

- (1) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See “—Payment for Other Post-Employment Benefits” below.
- (2) The actuarial value is determined by application of the Asset Smoothing Method as discussed in “—Actuarial Methods—*Actuarial Value of Assets*” above.
- (3) For purposes of this column, “Actuarial” refers to the fact that the calculation was made using the Actuarial Value of Assets.
- (4) For purposes of this column, “Fair Value” refers to the fact that the calculation was made using the fair value of Net Assets.

A variety of factors impact the Retirement Funds' UAAL and Funded Ratio. A lower return on investment than that assumed by the Retirement Funds, and insufficient contributions when compared to the Normal Cost plus interest will all cause an increase in the UAAL and a decrease in the Funded Ratio. Conversely, higher returns on investment than assumed, and contributions in excess of Normal Cost plus interest will decrease the UAAL and increase the Funded Ratio. In addition, legislative amendments, changes in actuarial assumptions and certain other factors (including, but not limited to, higher or lower incidences of retirement, disability, in-service mortality, retiree mortality or terminations than assumed) will have an impact on the UAAL and the Funded Ratio.

Net Pension Liability and Discount Rate

As described in “— The Actuarial Valuation—New GASB Standards” above, the New GASB Standards require the calculation of the Net Pension Liability, which is the difference between the Total Pension Liability and the Fiduciary Net Position. Furthermore, the Discount Rate is the blended rate at which the actuaries of the Retirement Funds discount projected benefit payments to their actuarial present values. The following tables present information on the Net Pension Liability and the components thereof and the Discount Rate and the sensitivity of the Net Pension Liability to changes in the Discount Rate. As described in this Appendix, the fiscal year ended December 31, 2014 is the first fiscal year for which GASB 67 is effective and, as such, comparative historical information is not yet available with respect to the information provided in these tables.

**Table 11– Net Pension Liability
(\$ IN THOUSANDS)**

	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a Percentage of Total Pension Liability
MEABF	\$12,307,094	\$5,179,486	\$7,127,608	42.09%
LABF	2,162,906	1,388,093	774,813	64.18
PABF	11,773,431	3,062,014	8,711,417	26.01
FABF	4,512,760	1,036,008	3,476,752	22.96
Total	\$30,756,191	\$10,665,601	\$20,090,590	34.68%

Source: The Actuarial Valuations of the Retirement Funds for the fiscal year ended December 31, 2014.

TABLE 12 – SENSITIVITY OF NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE⁽¹⁾

	1% Decrease	Current	1% Increase
MEABF			
Discount Rate	6.50%	7.50%	8.50%
Net Pension Liability	\$8,511,386	\$7,127,608	\$5,955,121
LABF			
Discount Rate	6.24%	7.24%	8.24%
Net Pension Liability	\$1,013,951	\$774,813	\$572,792
PABF			
Discount Rate	6.15%	7.15%	8.15%
Net Pension Liability	\$10,123,094	\$8,711,417	\$7,524,224
FABF			
Discount Rate	6.60%	7.60%	8.60%
Net Pension Liability	\$3,963,803	\$3,476,752	\$3,060,757

Source: The Actuarial Valuations of the Retirement Funds for the fiscal year ended December 31, 2014.

(1) In thousands.

Projection of Funded Status

The Retirement Funds’ funding level has decreased in recent years due to a combination of factors, including: adverse market conditions and investment returns as a result of the financial downturns experienced in 2001 and in 2008 and beyond; and contributions that are lower than the Actuarially Required Contribution. With respect to MEABF and LABF, the funding level increased for fiscal year 2014 as a result of the implementation of P.A. 98-641. The manner of funding MEABF and LABF reverted to the law in effect prior to the implementation of P.A. 98-641 after the Circuit Court of Cook County, Illinois (the “Circuit Court”) determined P.A. 98-641 to be unconstitutional, which ruling has since been affirmed by the Illinois Supreme Court.

The following projections (collectively, the “Projections”) are based upon numerous variables that are subject to change. The Projections are forward-looking statements regarding future events based on the Retirement Funds’ actuarial assumptions and assumptions made regarding such future events, including that there are no changes to the current legislative structure and that all projected contributions to the Retirement Funds are made as required. No assurance can be given that these assumptions will be realized or that actual events will not cause material changes to the data presented in this subsection.

The Projections are based on data as of December 31, 2014, and are provided to indicate expected trends in the funded status of the Retirement Funds under the applicable law. The Projections reflect the implementation of P.A. 96-1495, but do not consider the potential impact of SB 777 or any similar legislation impacting the P.A. 96-1495 Funding Plan.

TABLE 13 – PROJECTION OF FUTURE FUNDING STATUS – MEABF⁽¹⁾

Fiscal Year	Actuarial Accrued Liability (\$) (a)	Market Assets (\$) (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (\$) (a-b)	Market Funded Ratio (%) (b/a)	Employer Contribution⁽²⁾ (\$)
2017	15,593,718	4,375,063	11,218,655	28.1	177,257
2018	16,034,993	4,018,642	12,016,351	25.1	182,850
2019	16,471,366	3,603,398	12,867,968	21.9	188,684
2020	16,900,159	3,122,791	13,777,368	18.5	194,550
2021	17,317,915	2,569,675	14,748,240	14.8	200,532
2022	17,721,858	1,937,433	15,784,425	10.9	206,595
2023	18,111,170	1,220,664	16,890,506	6.7	212,710
2024	18,483,037	411,616	18,071,421	2.2	218,807
2025	18,833,721	0	18,833,721	0.0	712,078
2026	19,161,561	0	19,161,561	0.0	1,167,995
2027	19,464,660	0	19,464,660	0.0	1,212,146
2028	19,741,941	0	19,741,941	0.0	1,255,195
2029	19,992,818	0	19,992,818	0.0	1,296,707
2030	20,216,064	0	20,216,064	0.0	1,337,120
2031	20,410,240	0	20,410,240	0.0	1,376,392
2032	20,577,517	0	20,577,517	0.0	1,411,237
2033	20,715,908	0	20,715,908	0.0	1,446,030
2034	20,828,270	0	20,828,270	0.0	1,475,750
2035	20,934,377	0	20,934,377	0.0	1,484,449
2036	21,021,672	0	21,021,672	0.0	1,504,854
2037	21,093,205	0	21,093,205	0.0	1,521,182
2038	21,146,342	0	21,146,342	0.0	1,539,117
2039	21,186,423	0	21,186,423	0.0	1,550,530
2040	21,217,442	0	21,217,442	0.0	1,557,311

Source: Segal Consulting, the actuary for MEABF, based on data as of December 31, 2014.

(1) In thousands of dollars. Projections calculated on a cash basis.

(2) Represents contributions expected to be made by the City during the fiscal year pursuant to the Pension Code plus, beginning in 2025, additional contributions necessary to make all required benefit payments to beneficiaries.

TABLE 14 – PROJECTION OF FUTURE FUNDING STATUS – LABF⁽¹⁾

Fiscal Year	Actuarial Accrued Liability (\$) (a)	Market Assets (\$) (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (\$) (a-b)	Market Funded Ratio (%) (b/a)	Employer Contribution⁽²⁾ (\$)
2017	2,596,299	1,277,342	1,318,957	49.2	14,418
2018	2,649,227	1,225,082	1,424,145	46.2	15,565
2019	2,699,895	1,163,186	1,536,709	43.1	15,901
2020	2,747,737	1,090,673	1,657,064	39.7	16,348
2021	2,792,610	1,006,895	1,785,715	36.1	16,846
2022	2,834,316	911,048	1,923,268	32.1	17,377
2023	2,872,457	802,093	2,070,364	27.9	17,942
2024	2,906,423	678,789	2,227,634	23.4	18,535
2025	2,936,947	541,141	2,395,806	18.4	19,174
2026	2,962,986	387,332	2,575,654	13.1	19,842
2027	2,984,240	216,217	2,768,023	7.2	20,520
2028	3,000,520	26,705	2,973,815	0.9	21,236
2029	3,011,697	0	3,011,697	0.0	197,829
2030	3,017,794	0	3,017,794	0.0	230,964
2031	3,019,382	0	3,019,382	0.0	235,552
2032	3,016,981	0	3,016,981	0.0	239,363
2033	3,011,147	0	3,011,147	0.0	242,385
2034	3,002,808	0	3,002,808	0.0	244,288
2035	2,992,634	0	2,992,634	0.0	245,398
2036	2,981,152	0	2,981,152	0.0	245,885
2037	2,969,111	0	2,969,111	0.0	245,587
2038	2,956,892	0	2,956,892	0.0	244,918
2039	2,944,982	0	2,944,982	0.0	243,767
2040	2,934,248	0	2,934,248	0.0	241,847

Source: GRS, the actuary for LABF, based on data as of December 31, 2014.

(1) In thousands of dollars. Projections calculated on a cash basis.

(2) Represents contributions expected to be made by the City during the fiscal year pursuant to the Pension Code plus, beginning in 2029, additional contributions necessary to make all required benefit payments to beneficiaries.

TABLE 15 — PROJECTION OF FUTURE FUNDING STATUS – FABF⁽¹⁾

Fiscal Year	Actuarial Accrued Liability (\$) (a)	Market Assets (\$) (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (\$) (a-b)	Market Funded Ratio (%) (b/a)	Employer Contribution⁽²⁾ (\$)
2017	4,722,294	1,331,697	3,390,597	28.2	284,086
2018	4,866,705	1,451,676	3,415,029	29.8	292,439
2019	5,009,665	1,577,203	3,432,462	31.5	301,752
2020	5,150,374	1,708,420	3,441,954	33.2	311,205
2021	5,288,603	1,845,600	3,443,003	34.9	320,955
2022	5,423,461	1,989,064	3,434,397	36.7	330,536
2023	5,555,176	2,141,193	3,413,983	38.5	340,547
2024	5,682,352	2,301,929	3,380,423	40.5	351,861
2025	5,804,282	2,471,585	3,332,697	42.6	363,224
2026	5,920,962	2,650,813	3,270,149	44.8	374,623
2027	6,033,745	2,840,666	3,193,079	47.1	385,647
2028	6,144,159	3,043,394	3,100,765	49.5	395,621
2029	6,253,408	3,259,857	2,993,551	52.1	405,505
2030	6,362,319	3,491,000	2,871,319	54.9	414,140
2031	6,469,132	3,734,518	2,734,614	57.7	421,833
2032	6,573,937	3,990,843	2,583,094	60.7	427,568
2033	6,676,785	4,261,086	2,415,699	63.8	432,905
2034	6,777,422	4,545,008	2,232,414	67.1	438,176
2035	6,877,220	4,844,498	2,032,722	70.4	442,417
2036	6,976,596	5,160,943	1,815,653	74.0	446,354
2037	7,077,715	5,497,989	1,579,726	77.7	450,005
2038	7,181,432	5,858,397	1,323,035	81.6	454,185
2039	7,288,756	6,244,911	1,043,845	85.7	458,737
2040	7,401,532	6,661,361	740,171	90.0	463,527

Source: The Actuarial Valuation of FABF as of December 31, 2014.

- (1) In thousands of dollars. Projections are calculated by GRS on an accrual basis. However, with respect to the Employer Contribution column, the City has presented the data based on the year the employer contribution is actually made, rather than the preceding budget year.
- (2) Represents contributions expected to be made by the City during the fiscal year.

TABLE 16 – PROJECTION OF FUTURE FUNDING STATUS – PABF⁽¹⁾

Fiscal Year	Actuarial Accrued Liability (\$) (a)	Market Assets (\$) (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (\$) (a-b)	Market Funded Ratio (%) (b/a)	Employer Contribution⁽²⁾ (\$)
2017	12,163,551	3,889,364	8,274,187	32.0	675,826
2018	12,548,773	4,219,011	8,329,762	33.6	695,124
2019	12,933,725	4,560,317	8,373,408	35.3	713,810
2020	13,316,644	4,914,566	8,402,078	36.9	732,200
2021	13,696,272	5,281,951	8,414,321	38.6	752,090
2022	14,071,381	5,663,586	8,407,795	40.2	772,004
2023	14,439,986	6,059,763	8,380,223	42.0	792,595
2024	14,799,878	6,470,260	8,329,618	43.7	813,531
2025	15,148,088	6,895,984	8,252,104	45.5	834,435
2026	15,481,802	7,337,188	8,144,614	47.4	856,465
2027	15,799,359	7,795,756	8,003,603	49.3	878,925
2028	16,100,434	8,273,986	7,826,448	51.4	902,286
2029	16,385,906	8,777,064	7,608,842	53.6	925,836
2030	16,656,508	9,311,291	7,345,217	55.9	951,072
2031	16,913,448	9,882,460	7,030,988	58.4	978,674
2032	17,157,541	10,492,841	6,664,700	61.2	1,007,732
2033	17,389,628	11,140,748	6,248,880	64.1	1,034,971
2034	17,611,490	11,825,203	5,786,287	67.1	1,056,933
2035	17,826,154	12,551,460	5,274,694	70.4	1,073,628
2036	18,036,195	13,323,888	4,712,307	73.9	1,089,551
2037	18,244,281	14,148,326	4,095,955	77.5	1,104,206
2038	18,452,509	15,030,205	3,422,304	81.5	1,118,732
2039	18,662,552	15,974,830	2,687,722	85.6	1,132,916
2040	18,875,443	16,987,488	1,887,955	90.0	1,146,889

Source: The Actuarial Valuation of PABF as of December 31, 2014.

- (1) In thousands of dollars. Projections are calculated by GRS on an accrual basis. However, with respect to the Employer Contribution column, the City has presented the data based on the year the employer contribution is actually made, rather than the preceding budget year.
- (2) Represents contributions expected to be made by the City during the fiscal year.

TABLE 17 – PROJECTION OF FUTURE FUNDING STATUS – AGGREGATE⁽¹⁾⁽²⁾

Fiscal Year	Actuarial Accrued Liability	Market Assets	Market Unfunded Accrued Actuarial Liabilities (UAAL)	Market Funded Ratio	Employer Contribution⁽³⁾
	(\$) (a)	(\$) (b)	(\$) (a-b)	(%) (b/a)	(\$)
2017	35,075,862	10,873,466	24,202,396	31.0	1,051,587
2018	36,099,698	10,914,411	25,185,287	30.2	1,185,978
2019	37,114,651	10,904,104	26,210,547	29.4	1,220,147
2020	38,114,914	10,836,450	27,278,464	28.4	1,254,303
2021	39,095,400	10,704,121	28,391,279	27.4	1,290,423
2022	40,051,016	10,501,131	29,549,885	26.2	1,326,512
2023	40,978,789	10,223,713	30,755,076	24.9	1,363,794
2024	41,871,690	9,862,594	32,009,096	23.6	1,402,734
2025	42,723,038	9,908,710	32,814,328	23.2	1,928,911
2026	43,527,311	10,375,333	33,151,978	23.8	2,418,925
2027	44,282,004	10,852,639	33,429,365	24.5	2,497,238
2028	44,987,054	11,344,085	33,642,969	25.2	2,574,338
2029	45,643,829	12,036,921	33,606,908	26.4	2,825,877
2030	46,252,685	12,802,291	33,450,394	27.7	2,933,296
2031	46,812,202	13,616,978	33,195,224	29.1	3,012,451
2032	47,325,976	14,483,684	32,842,292	30.6	3,085,900
2033	47,793,468	15,401,834	32,391,634	32.2	3,156,291
2034	48,219,990	16,370,211	31,849,779	33.9	3,215,147
2035	48,630,385	17,395,958	31,234,427	35.8	3,245,892
2036	49,015,615	18,484,831	30,530,784	37.7	3,286,644
2037	49,384,312	19,646,315	29,737,997	39.8	3,320,980
2038	49,737,175	20,888,602	28,848,573	42.0	3,356,952
2039	50,082,713	22,219,741	27,862,972	44.4	3,385,950
2040	50,428,665	23,648,849	26,779,816	46.9	3,409,574

Source: The aggregated information presented in this table is derived from the projections presented in Tables 13-16. Please refer to Tables 13-16 for source information.

- (1) In thousands of dollars. Projections for MEABF and LABF are calculated on a cash basis. Projections for PABF and FABF are calculated on an accrual basis, however, with respect to the Employer Contribution column, the City has presented the data based on the year the employer contribution is actually made, rather than the preceding budget year.
- (2) Aggregate data presented in this table includes data for all four Retirement Funds.
- (3) Represents contributions expected to be made by the City during the fiscal year, pursuant to the Pension Code plus, beginning in 2025 with respect to MEABF and beginning in 2029 with respect to LABF, additional contributions necessary to make all required benefit payments to beneficiaries of MEABF and LABF.

The projections in Tables 15 and 16 show that the assets of both FABF and PABF will, under current law, begin to increase in 2016. This increase assumes the implementation of the P.A. 96-1495 Funding Plan. These projections do not consider the impact of any bill delaying the impact of P.A. 96-1495, such as SB777. See “—Determination of City’s Contributions—*City’s Required Contributions to PABF and FABF Beginning in 2016*” herein. The City projects that, should such a delay bill be enacted, the purpose of such bill would be to extend the period over which the City implements such increases in the contributions currently projected to occur pursuant to P.A. 96-1495, which would most likely have the effect of delaying the increases in the Funded Ratio with respect to such Retirement Funds during the period in which the contributions established pursuant to such delay bill are lower than those under P.A. 96-1495. See “—Determination of City’s Contributions—*City’s Contributions to PABF and FABF Beginning in 2016*” herein.

As described in this Appendix, the Illinois Supreme Court determined that P.A. 98-641 is unconstitutional on March 24, 2016. As a result of this decision, the law in effect at the time of the enactment of P.A. 98-641 is once again effective, as reflected in the projections set forth in Tables 13 and 14 above. Tables 13 and 14 present projections by the actuaries for MEABF and LABF that such Retirement Funds will not have assets on hand to make payments to beneficiaries beginning in 2025 and 2029, respectively, which would not have occurred pursuant to the provisions of P.A. 98-641.

In the event of an insolvency of MEABF or LABF, funds in excess of the contributions currently required by the Pension Code to be made to such Retirement Funds by the City and the employees who are members of such Retirement Funds will be necessary to fund payments to beneficiaries. However, the Pension Code currently provides only that the City must contribute the amount calculated pursuant to the Multiplier Funding formula to such Retirement Funds and does not consider the source of additional contributions in the event of an insolvency. In its opinion finding P.A. 98-641 unconstitutional, the Illinois Supreme Court indicated that the Pension Clause may create an obligation to provide adequate funding to the Retirement Funds upon imminent insolvency. Specifically, the Illinois Supreme Court stated that: “the [Pension Clause] was intended to force the funding of the pensions indirectly, by putting the state and municipal governments on notice that they are responsible for those benefits.” The Illinois Supreme Court further stated that “...the [Pension Clause] created a legal obligation to pay pension benefits to the employees where previously there had been none,” and “... the General Assembly and the City have been on notice since the ratification of the 1970 Constitution that the benefits of membership must be paid in full, and that they must be paid without diminishing or impairing them.” However, though the Illinois Supreme Court may have identified an obligation to fund the benefits owed by the Retirement Funds, the Illinois Supreme Court did not specifically indicate the authority for or source of such payments.

The employer contributions reflected in Tables 13 and 14 provide, in the years following the insolvency of MEABF and LABF, the projected amounts that the City would contribute to such Retirement Funds if it had to pay directly, on a pay-as-you-go basis, the benefits owed to beneficiaries by the Retirement Funds. If the City is required to make such payments, the large increases in the City’s contributions would likely have a material adverse impact on the City’s financial condition; however, the City makes no prediction as to what sources of funds would be available for making such additional contributions in the event of an insolvency of MEABF or LABF.

Additionally, the City cannot predict if or when changes to the Pension Code or judicial decisions relevant to its contributions will be enacted or decided, respectively, and the impact any such legislation or judicial decisions would have on the manner in which it contributes to the Retirement Funds. Contributing pursuant to Multiplier Funding or pay-as-you-go funding, as discussed in this subsection, represent two possible outcomes; however, the City can make no representation that some other method of determining contributions, including payments that are possibly even larger than pay-as-you-go funding, would not be required.

Legislative Changes

Pension Reform Act

On April 14, 2010, then Governor Quinn signed Public Act 096-0889 (the “Pension Reform Act”) into law. The Pension Reform Act establishes a “two-tier” benefit system with less generous benefits for employees who become members of MEABF and LABF on or after January 1, 2011 (“Tier II Members”) as compared to those provided to employees prior to such date (“Tier I Members”). The Pension Reform Act does not impact persons who first became employees prior to its effective date of January 1, 2011.

Among other changes, the Pension Reform Act: (i) increases the minimum age at which an employee may retire with unreduced benefits to age 67 from age 60 or younger based on a formula combining the age of the employee and the number of years of service; (ii) increases the minimum age at which an active employee may retire with reduced benefits to age 62 from age 50; (iii) provides that final average salary is based on 96 consecutive months within the last 120 months of employment (instead of 48 months of the last 120 months); (iv) reduces the annual cost of living adjustment to the lower of 3 percent or 50 percent of the change in the consumer price index for all urban consumers, whichever is lower, and eliminates compounding for employees hired after January 1, 2011, compared with a cost of living adjustment of 3 percent, compounded, under prior law; and (v) caps the salary on which a pension may be calculated at \$106,800 (subject to certain adjustments for inflation).

The Pension Reform Act as described in this subsection, taken independently of any other legislative or market effects, is expected to reduce benefits afforded new hires and therefore reduce over time the growth in the Total Pension Liability and the Net Pension Liability for MEABF and LABF. In calculating the Total Pension Liability, the actuaries make assumptions about future benefit levels. As the value of future benefits decreases over time, and as a greater percentage of the City's workforce is covered by the Pension Reform Act, the Total Pension Liability is expected to decrease compared to what it would have been under previous law. Consequently, the Net Pension Liability is expected to grow more slowly. However, no assurance can be given that these expectations will be the actual experience going forward.

P.A. 96-1495

P.A. 96-1495 makes changes to the Pension Code with respect to PABF and FABF. See “—Determination of City's Contributions—*City's Contributions to PABF and FABF Beginning in 2016*” for additional information regarding the impact of the changes imposed by P.A. 96-1495. The P.A. 96-1495 Funding Plan will significantly increase the City's contributions to PABF and FABF because, among other things, such contributions will no longer be determined pursuant to the Multiplier Funding system and because the P.A. 96-1495 Funding Plan is designed to require larger contributions by the City.

In addition, P.A. 96-1495 makes changes to benefits for police officers and firefighters first participating in PABF and FABF on or after January 1, 2011. Among other changes, P.A. 96-1495: (i) increases the minimum eligibility age for unreduced retirement benefits from 50 (with ten years of service) to 55 (with ten years of service); (ii) provides for retirement at age 50 (with ten years of service) with the annuity reduced by 0.5 percent per month; (iii) provides that final average salary is based on 96 consecutive months within the last 120 months of employment (instead of 48 months of the last 120 months); (iv) reduces the cost of living adjustment to the lower of 3 percent or 50 percent of the change in the consumer price index for all urban consumers, whichever is lower, commencing at age 60; (v) provides that widow benefits are 66-2/3 percent of the employee's annuity at the date of death; and (vi) caps the salary on which a pension may be calculated at \$106,800 (subject to certain adjustments for inflation).

See —“Projection of Funded Status” herein for a projection of future contributions, the UAAL and the Funded Ratio of PABF and FABF following the implementation of P.A. 96-1495.

Diversion of Grant Money to the Retirement Funds Under P.A. 96-1495

P.A. 96-1495 allows the State Comptroller to divert State grant money intended for the City to PABF and FABF to satisfy contribution shortfalls by the City (the “Recapture Provisions”). If the City fails to contribute to PABF and FABF as required by the Pension Code, the City will be subject to a reallocation of grants of State funds to the City if: (i) the City fails to make the required payment as set forth in the respective statute, (ii) the subject Retirement Fund gives notice of the failure to the City, and

(iii) such Retirement Fund certifies to the State Comptroller that such payment has not been made. Upon the occurrence of these events, the State Comptroller will withhold grants of State funds from the City in an amount not in excess of the delinquent payment amount. Should the Recapture Provisions of P.A. 96-1495 be invoked as a result of the City's failure to contribute all or a portion of its required contribution, a reduction in State grant money may have a significant adverse impact on the City's finances.

Future Legislation

The City continues to believe that additional legislative changes may be necessary to properly fund the Retirement Funds. With respect to PABF and FABF, the City believes that legislation, such as SB 777, is necessary to allow the City and its taxpayers to absorb the impact of substantially increased pension payments over a longer period of time. Furthermore, as a result of the determination by the Illinois Supreme Court that P.A. 98-641 is unconstitutional, additional legislation may be necessary to address the funding of MEABF and LABF. Such legislation may include provisions for contributions by the State, increased employee contributions and/or increased contributions by the City in future years, which may require the City to increase revenues, reduce expenditures or some combination thereof. The City is currently considering the available options with respect to the unfunded liabilities of MEABF and LABF. The City gives no assurance as to whether any such legislation with respect to any of the Retirement Funds will be enacted, and no assurance can be given that such legislation, if adopted, will be upheld upon a legal challenge.

Special Revenue and Enterprise Fund Allocation of Retirement Fund Costs

The City allocates to its special revenue and enterprise funds their share of the City's annual contribution to the Retirement Funds based upon the amount of services provided by City employees to the functions or enterprises related to or paid out of those funds. The special revenue and enterprise funds account for their allocable share of the City's contributions to the Retirement Funds as operating and maintenance expenses. In addition, beginning in 2015, the financial statements of the enterprise funds will include an allocation of the applicable Net Pension Liability to such funds as required by the New GASB Standards. The amounts allocable to the respective enterprise funds, which are not available as of the date hereof, may be significant and may have a material effect on such financial statements. The City has budgeted for the special revenue and enterprise funds to reimburse the City approximately \$74 million during 2016 for their allocable share of the City's pension contribution.

The allocations described in this subsection are not required by statute but represent the City's current method of allocating its pension costs. The City may alter the manner in which it allocates its pension costs to these funds at any time.

Impact of Retirement Funds' Unfunded Liability on the City's Bond Ratings

The financial health of the Retirement Funds and the projected impact of the Retirement Funds' underfunding on future contributions to be made by the City have impacted the rating agencies' determination of the City's creditworthiness.

On May 12, 2015, Moody's Investors Service ("Moody's") issued a ratings action report (the "Rating Report") downgrading the ratings of the City's general obligation bonds and sales tax revenue bonds from "Baa2" to "Ba1," the City's water senior lien revenue bonds from "A2" to "Baa1," the City's wastewater senior lien revenue bonds from "A3" to "Baa2," the City's water second lien revenue bonds from "A3" to "Baa2," the City's wastewater second lien revenue bonds from "Baa1" to "Baa3," and placed all such ratings on negative outlook. This followed previous downgrades of the City's ratings by Moody's on February 27, 2015, March 4, 2014, and July 17, 2013. Moody's indicated in the Rating Report that the May 12, 2015 downgrades reflected the expected continued growth in the unfunded

liabilities of the Retirement Funds and the narrowing of the City's options for curbing such growth as a result of the Illinois Supreme Court's decision finding the State Pension Reform Act unconstitutional. Moody's indicated that further downgrades could follow if, among other things, (i) P.A. 98-641 was found to be unconstitutional, or (ii) the Retirement Funds' UAAL continues to grow. The City makes no prediction as to whether the Moody's rating action described above will result in additional downgrades, or the impact that the financial condition of the Retirement Funds will have on Moody's or any other rating agency's judgment of the City's creditworthiness or on the City's future financing costs. The Rating Report can be obtained from Moody's; provided, however, that the report is not incorporated herein by such reference.

On March 28, 2016, Fitch Ratings, Inc. ("Fitch") downgraded the City's general obligation bond and sales tax bond ratings from "BBB+" to "BBB-" and placed each rating on negative outlook. In announcing these ratings downgrades, Fitch cited, among other things, the impact of the decision by the Illinois Supreme Court that P.A. 98-641 is unconstitutional.

On July 8, 2015, Standard & Poor's Ratings Group ("S&P") downgraded the City's general obligation bond rating from "A-" to "BBB+" with a negative outlook and removed the rating from negative watch. In downgrading the City's general obligation bond rating, S&P cited, among other things, the City's pension liabilities, the impact on the City's budget of scheduled future increases in pension contributions, and "the City's lack of progress in unveiling a sustainable funding mechanism" for PABF and FABF. S&P reaffirmed this rating and the related outlook on January 11, 2016.

On April 1, 2016, Kroll Bond Rating Agency ("Kroll") downgraded its rating on the City's general obligation bonds from "A-" to "BBB+" with a negative outlook. In downgrading the City's bond rating, Kroll cited the Illinois Supreme Court's decision with respect to P.A. 98-641 which Kroll believes limits the options available to the City to address the unfunded liabilities of MEABF and LABF.

In addition, other rating agencies may have established, or may establish in the future, methods for evaluating the financial health of the Retirement Funds and their impact on the City's creditworthiness that are different from the information provided in this Appendix. Further downgrades of the City's bond ratings may have a material adverse impact on the City's finances. See "INVESTMENT CONSIDERATIONS—Credit Rating Downgrades" for additional information.

PAYMENT FOR OTHER POST-EMPLOYMENT BENEFITS

General

The City and the Retirement Funds share the cost of post-employment healthcare benefits available to City employees participating in the Retirement Funds through a single-employer, defined benefit healthcare plan (the "Health Plan"), which is administered by the City. Prior to June 30, 2013, the costs of the Health Plan were shared pursuant to a settlement agreement (as amended, the "Settlement") entered into between the City and the Retirement Funds regarding the responsibility for payment of these health benefits as described below under "—The Settlement."

MEABF and LABF participants older than 55 with at least 10 years of service and PABF and FABF participants older than 50 with at least 10 years of service may become eligible for the Health Plan

if they eventually become an annuitant.* The Health Plan provides basic health benefits to non-Medicare eligible annuitants and provides supplemental health benefits to Medicare-eligible annuitants.

The City contributes a percentage toward the cost of the Health Plan for each eligible annuitant. The annuitants are responsible for contributing the difference between the cost of their health benefits and the sum of the subsidies provided by the City and the related Retirement Fund. Until June 30, 2013, annuitants who retired prior to July 1, 2005 received a 55 percent subsidy from the City, whereas annuitants retiring on or after such date received a subsidy equal to 50 percent, 45 percent, 40 percent or zero percent based on the annuitant's length of actual employment with the City pursuant to the Settlement. The Retirement Funds contributed a fixed dollar amount monthly (\$65 for each Medicare-eligible annuitant and \$95 for each non-Medicare eligible annuitant) for each of their annuitants. For a description of benefits after the expiration of the Settlement, see “—Status of Healthcare Benefits After the Settlement Period” herein.

The Retirement Funds' subsidies are paid from the City contribution, as provided in the Pension Code and described in “PAYMENT FOR PENSION BENEFITS—*Determination of City's Contributions*” above. These payments therefore reduce the amounts available in the Retirement Funds to make payments on pension liabilities. See Tables 5-9 in “PAYMENT FOR PENSION BENEFITS—*Funded Status of the Retirement Funds*” above for Retirement Funds' statement of net assets, which incorporates the expense related to the Health Plan as part of the “Administration” line item.

The Settlement

In 1987, the City sued the Retirement Funds asserting, among other things, that the City was not obligated to provide healthcare benefits to certain retired City employees. Certain retired employees intervened as a class in the litigation, and the Retirement Funds countersued the City. To avoid the risk and expense of protracted litigation, the City and the other parties entered into the Settlement, the terms of which have been renegotiated over time. The City contributed to the Health Plan as a result of the obligation established by the Settlement during the term of the Settlement (the “Settlement Period”). The Settlement expired on June 30, 2013. For the status of the Health Plan after the Settlement Period, see “—Status of Healthcare Benefits After the Settlement Period” below.

City Financing of the Health Plan

The City funds its share of the Health Plan's costs on a pay-as-you-go basis. Pay-as-you-go funding refers to the fact that assets are not accumulated or dedicated to funding the Health Plan. Instead, the City contributes the amount necessary to fund its share of the current year costs of the Health Plan. See Table 24 below for a schedule of historical contributions made by the City to the Health Plan.

Actuarial Considerations

City Obligation

The City has an Actuarial Valuation completed for its contributions to the Health Plan annually. The purpose and process behind an Actuarial Valuation is described above in “PAYMENT FOR PENSION BENEFITS—The Actuarial Valuation.” In addition, the Retirement Funds produce an

* Under their respective collective bargaining agreements, which were renegotiated in 2012, certain retired PABF and FABF participants are eligible to enroll themselves and their dependents in the City's healthcare plan for active members until they reach the age of Medicare eligibility (“Special CBA Benefit”). These members do not contribute towards the cost of coverage for this plan. PABF contributes \$95 per month for these members; FABF does not contribute for these members. The Special CBA Benefit expires in 2016, at which time the City expects it will be phased out permanently.

Actuarial Valuation for the liability of such Retirement Fund to its retirees for the benefits provided under the Health Plan.

Although these Actuarial Valuations all refer to the liability owed for the same benefits, the results of the Retirement Funds' Actuarial Valuations differ significantly from the City's Actuarial Valuation for two reasons. First, the City's Actuarial Valuation only reflects the portion of liabilities the City owes under the Settlement. Second, the Actuarial Valuations of the City and the Retirement Funds differ because the actuarial methods and assumptions used for each purpose vary.

This Appendix addresses the funded status of the City's obligation to make payments for the Health Plan. For additional information on the amounts owed to members of the Retirement Funds for retiree healthcare benefits, see the Actuarial Valuations of the Retirement Funds, which are available as described in "PAYMENT FOR PENSION BENEFITS — Source Information" above, and Note 12 to the City's Basic Audited Financial Statements, which are available on the City's website at http://www.cityofchicago.org/city/en/depts/fin/supp_info/comprehensive_annualfinancialstatements.html; provided, however, that the contents of the City's website are not incorporated herein by such reference.

Actuarial Methods and Assumptions

The Actuarial Valuation for the City's obligation to the Health Plan utilizes various actuarial methods and assumptions similar to those described in "PAYMENT FOR PENSION BENEFITS" above with respect to the Retirement Funds. The City does not use an Actuarial Method to calculate the Actuarial Value of Assets of the Health Plan because no assets are accumulated therein for payment of future benefits. As such, the Actuarial Value of Assets for the Health Plan is always zero.

The City's 2012 Actuarial Valuation ("2012 Actuarial Valuation") amortizes the City's retiree healthcare UAAL over a closed 1-year period, in order to reflect the remainder of the Settlement Period and the Special CBA Benefit that was set to expire in 2012 under collective bargaining agreements that were in place at that time. The use of a closed, 1-year period has the effect of increasing the Actuarially Required Contribution as compared to the typical 30-year open amortization period because (i) the period of time over which the UAAL will be amortized is shorter, and (ii) the amortization period is one year as opposed to repeating 30-year periods. The 2012 Actuarial Valuation employed the PUC Method to allocate the City's retiree healthcare obligations. For more information on the PUC Method, see "PAYMENT FOR PENSION BENEFITS—Actuarial Methods" above.

The City's 2013 Actuarial Valuation ("2013 Actuarial Valuation") and 2014 Actuarial Valuation (the "2014 Actuarial Valuation") amortize the City's retiree healthcare UAAL over a closed 10-year period, in order to reflect (i) the City's extension of healthcare coverage for members that had participated in the Settlement (with such coverage varying based on retirement date), and (ii) the provision of the Special CBA Benefit. For details on the Health Plan after the Settlement Period, see "— Status of Healthcare Benefits After the Settlement Period" below. The use of a closed, 10-year period rather than a closed, 1-year period has the effect of decreasing the Actuarially Required Contribution because the period of time over which the UAAL will be amortized is longer. In addition, the 2013 Actuarial Valuation and the 2014 Actuarial Valuation employed the EAN Method, rather than the PUC Method, to allocate the City's retiree healthcare obligations. For more information on the EAN Method and the PUC Method, see "PAYMENT FOR PENSION BENEFITS—Actuarial Methods" above.

Funded Status

The following tables provide information on the financial health of the Health Plan. The Health Plan is funded on a pay-as-you-go basis, which means no assets are accumulated to pay for the liabilities of the Health Plan. As such, the Funded Ratio with respect to the Health Plan is perpetually zero.

Table 23 summarizes the current financial condition and the funding progress of the Health Plan.

TABLE 23– SCHEDULE OF FUNDING PROGRESS⁽¹⁾⁽²⁾

Actuarial Valuation Date (Dec. 31)	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a Percentage of Payroll
2007	\$0	\$1,062,864	\$1,062,864	0%	\$2,562,007	41.5%
2008	0	787,395	787,395	0	2,475,107	31.8
2009	0	533,387	533,387	0	2,546,961	20.9
2010	0	390,611	390,611	0	2,475,000	15.8
2011	0	470,952	470,952	0	2,518,735	18.7
2012	0	997,281	997,281	0	2,385,198	41.8
2013	0	964,626	964,626	0	2,425,000	39.8

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending December 31, 2010-2014.

⁽¹⁾ In thousands of dollars.

⁽²⁾ The City, as required, adopted GASB Statement No. 45 in fiscal year 2007. The information provided in this table was produced in 2007 or later.

Table 24 shows the net expense to the City for providing benefits under the Health Plan.

TABLE 24 – HISTORY OF CITY’S CONTRIBUTIONS⁽¹⁾

	Actual City Contribution
2008	\$98,065
2009	98,000
2010	107,431
2011	99,091
2012	97,531
2013	97,500
2014	79,300

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending 2008-2014.

⁽¹⁾ In thousands of dollars. 2013 and 2014 contribution amounts are approximate.

Retiree Health Benefits Commission

The Settlement provided for the creation of the Retiree Health Benefits Commission (the “RHBC”), which was tasked with, among other things, making recommendations concerning retiree health benefits after June 30, 2013. The Settlement required that the RHBC be composed of experts who will be objective and fair-minded as to the interest of both retirees and taxpayers, and include a representative of the City and a representative of the Retirement Funds.

On January 11, 2013, the RHBC released its “Report to the Mayor’s Office on the State of Retiree Healthcare” (the “RHBC Report”). The RHBC Report can be found on the City’s website at http://www.cityofchicago.org/city/en/depts/fin/provdrs/ben/alerts/2013/jan/retiree_healthcarebenefitscommissionreporttothemayor.html; provided, however, that the contents of the RHBC Report and of the City’s website are not incorporated herein by such reference.

The RHBC Report concluded that maintaining the funding arrangement then in place for the Health Plan was untenable, would prevent the City from continuing to provide the current level of benefits to retirees in the future, and could result in other financial consequences, such as changes to the City’s bond rating and its creditworthiness. The RHBC Report presented several options for the Mayor to consider which would reduce the level of spending with respect to the Health Plan from approximately \$108 million annually to between \$90 million and \$12.5 million annually depending on the option.

Status of Healthcare Benefits After the Settlement Period

On May 15, 2013, the City announced plans to, among other things: (i) provide a lifetime healthcare plan to employees who retired before August 23, 1989 with a contribution from the City of up to 55 percent of the cost of that plan; and (ii) beginning January 1, 2014, provide employees who retired on or after August 23, 1989 with healthcare benefits but with significant changes to the terms provided by the Health Plan, including increases in premiums and deductibles, reduced benefits and the phase-out of the entire Health Plan for such employees by the beginning of 2017. If the City prevails in the Lawsuit (defined below), it expects a reduction in expenses of approximately \$90 to \$95 million annually beginning in 2017 as a result of the phase-out of the Health Plan.

On May 30, 2013, the Illinois General Assembly passed Senate Bill 1584, which was signed into law by the Governor on June 28, 2013. Senate Bill 1584 extends the Retirement Funds’ subsidies for retiree healthcare costs until such time as the City no longer provides a health care plan for annuitants or December 31, 2016, whichever comes first.

After the June 30, 2013 expiration of the Settlement, on July 5, 2013, certain participants in the Health Plan filed a motion to “re-activate” the 1987 litigation covered by the Settlement. On July 17, 2013, the Circuit Court denied that motion. On July 23, 2013, certain of the participants filed a new lawsuit, *Underwood v. Chicago* (the “Lawsuit”), in the Circuit Court against the City and the Trustees of each of the four Retirement Fund Boards, seeking to bring a class action on behalf of former and current City employees who previously contributed or now contribute to one of the four Retirement Funds.

The complaint advanced State law claims, including alleged violation of the Pension Clause, and federal law claims. The City removed the case to federal court based on the federal law claims. The federal district court dismissed the case in its entirety. As to plaintiffs’ claim that the planned changes violate the Pension Clause, the district court predicted that the Illinois Supreme Court would rule in a separate case, *Kanerva v. Weems* (“Kanerva”), then pending before the Illinois Supreme Court that healthcare benefits are not protected by the Pension Clause. However, on July 3, 2014, the Illinois Supreme Court issued an opinion in *Kanerva* determining that retiree healthcare benefits provided to State retirees are protected under the Pension Clause. The City argued on appeal to the federal appellate court that it should affirm the district court dismissal, including the State law claims, on an alternative ground. On February 25, 2015, the federal appellate court affirmed the dismissal of the federal law claims and declined to rule on the State law claims on the ground that the State law claims involved a question of State law, which it ordered returned to the State court for decision. On June 22, 2015, the City and certain of the defendants each filed a motion to dismiss the remaining State law claims in the Circuit Court. On December 13, 2015, the Circuit Court issued its ruling dismissing certain of the State law claims but gave the plaintiffs leave to amend the complaint with respect to such claims. With respect to the remaining

State law claim, which sought a declaration that a reduction in the benefits provided by the Health Plan would violate the Pension Clause, the Circuit Court determined that such a declaration could be made only with respect to those employees hired prior to August 23, 1989. The Circuit Court subsequently clarified that the Retirement Funds, and not the City, were obligated to subsidize or provide healthcare to eligible annuitants. The City's obligation, according to the Circuit Court, is to contribute, through the Pension Levy, moneys to be used by the Retirement Funds for this purpose. The City has been defending and will continue to defend this matter vigorously. The City can give no assurance as to the ultimate outcome of the Lawsuit.

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APPENDIX E

FORM OF OPINIONS TO BE DELIVERED BY CO-BOND COUNSEL

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APPENDIX E

FORM OF OPINIONS TO BE DELIVERED BY CO-BOND COUNSEL

[Dated the Closing Date]

City of Chicago

The Bank of New York Mellon Trust Company,
N.A., as Trustee

Re: City of Chicago
Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt)
Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable)

Ladies and Gentlemen:

We have acted as co-bond counsel in connection with the issuance by the City of Chicago, Illinois (the “City”) of its \$59,595,000 aggregate principal amount Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt) (the “Series 2016A-1 Bonds”) and its \$22,120,000 aggregate principal amount Second Lien Water Revenue Bonds, Series 2016A-2 (Taxable) (the “Series 2016A-2 Bonds” and, together with the Series 2016A-1 Bonds, “Series 2016A Bonds”). The Series 2016A Bonds are limited obligations of the City issued pursuant to the authority of Article VII, Section 6(a) of the Illinois Constitution of 1970 and an ordinance adopted by the City Council of the City on March 16, 2016, authorizing the Series 2016 Bonds (the “Bond Ordinance”). The Series 2016A Bonds are being executed and delivered under a Master Indenture of Trust Securing Second Lien Water Revenue Bonds, dated as of December 15, 1999, as heretofore supplemented and amended by Amendment No. 1 To Master Indenture, dated as of August 1, 2004 (collectively, the “Master Indenture”), and as further supplemented by a Ninth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Series 2016A, dated as of May 1, 2016 (the “Ninth Supplemental Indenture” and, together with the Master Indenture, the “Indenture”), from the City to The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”). The Series 2016A Bonds are being issued as Second Lien Bonds under the Indenture. Capitalized terms used herein without definition shall have the meanings assigned to such terms in the Indenture or the Bond Ordinance.

The Series 2016A-1 Bonds are authorized by the City for the purpose of providing funds to pay Project Costs.

The Series 2016A-1 Bonds are issuable only as fully registered bonds without coupons in Authorized Denominations. The Series 2016A-1 Bonds are dated the date hereof and are due on November 1 of each of the years and in the amounts and bear interest payable on May 1 and November 1 of each year, commencing November 1, 2016, at the rates per annum, as follows:

<u>Maturity</u> <u>(November 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Rate Per</u> <u>Annum</u>	<u>Maturity</u> <u>(November 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Rate per</u> <u>Annum</u>
2023	\$5,435,000	5.00%	2028	\$6,870,000	5.00%
2024	5,710,000	5.00%	2029	7,215,000	5.00%
2025	5,995,000	5.00%	2030	7,575,000	5.00%
2026	6,295,000	4.00%	2031	7,955,000	5.00%
2027	6,545,000	5.00%			

The Series 2016A-2 Bonds are issuable only as fully registered bonds without coupons in Authorized Denominations. The Series 2016A-2 Bonds are dated the date hereof and are due on November 1 of each of the years and in the amounts and bear interest payable on May 1 and November 1 of each year, commencing November 1, 2016, at the rates per annum, as follows:

<u>Maturity</u> <u>(November 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Rate Per</u> <u>Annum</u>
2016	\$5,725,000	2.00%
2017	16,395,000	1.68%

The Series 2016A-1 Bonds are subject to optional redemption at the times, in the manner and upon the terms specified in the Ninth Supplemental Indenture. The Series 2016A-2 Bonds are not subject to redemption prior to maturity. In connection with the issuance of the Series 2016A Bonds we have examined the following:

- (a) a certified copy of the Bond Ordinance;
- (b) an executed or counterpart of the Ninth Supplemental Indenture;
- (c) a certified copy of the Master Indenture, as supplemented and amended to the date hereof; and
- (d) such other documents and related matters of law as we have deemed necessary in order to render this opinion.

Based upon our examination of the foregoing, we are of the opinion that:

1. The City is a municipal corporation duly existing under the laws of the State of Illinois and is a home rule unit of local government within the meaning of Section 6(a) of Article VII of the 1970 Illinois Constitution. The City has all requisite power and authority under the Constitution and the laws of the State of Illinois to adopt the Bond Ordinance, and under the Master Indenture and the Bond Ordinance to enter into the Ninth Supplemental Indenture with the Trustee and to issue the Series 2016A Bonds thereunder.

2. The Bond Ordinance is in full force and effect and is valid and binding upon the City in accordance with its terms. The Master Indenture and the Ninth Supplemental Indenture have been duly authorized, executed and delivered by the City, constitute valid and binding obligations of the City and are legally enforceable in accordance with their respective terms.

3. The Series 2016A Bonds have been duly authorized and issued, are the legal, valid and binding limited obligations of the City, have received all required approvals for their issuance, are entitled to the benefits and security of the Indenture, and are enforceable in accordance with their terms.

4. The Series 2016A Bonds are payable solely from the Second Lien Revenues deposited in the Second Lien Bonds Account maintained by the Trustee under the Bond Ordinance, except for any monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued, and from certain other amounts as provided in the Master Indenture and the Ninth Supplemental Indenture, including amounts on deposit in the 2016 Bond Proceeds Account established pursuant to the Bond Ordinance and all other moneys and securities from time to time held by the Trustee under the terms of the Ninth Supplemental Indenture. The Series 2016A Bonds and the interest thereon are limited obligations of the City

and do not constitute an indebtedness of the City within the meaning of any state constitutional or statutory provision or limitation as to indebtedness. The Series 2016A Bonds do not have a claim for payment from any taxes of the City. Neither the faith and credit nor the taxing power of the State of Illinois, the City or any political subdivision of the State of Illinois is pledged to the payment of the principal of, premium, if any, or interest on the Series 2016A Bonds.

5. The Bond Ordinance, the Master Indenture and the Ninth Supplemental Indenture create the valid and binding assignments and pledges which they purport to create of the amounts assigned and pledged to the Trustee under the Indenture, subject to the application thereof to the purposes and on the conditions permitted by the Indenture.

6. Subject to the condition that the City comply with certain covenants made to satisfy pertinent requirements of the Internal Revenue Code of 1986, as amended (the "Code"), under present law, interest on the Series 2016A-1 Bonds is excluded from gross income of the owners thereof for federal income tax purposes and is not included as an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, but is taken into account in computing an adjustment used in determining the federal alternative minimum tax for certain corporations. Failure to comply with certain of such covenants could cause interest on the Series 2016A-1 Bonds to be included in gross income retroactively to the date of issuance of the Series 2016A-1 Bonds. Ownership of the Series 2016A-1 Bonds may result in other federal tax consequences to certain taxpayers. We express no opinion regarding any such collateral consequences arising with respect to the Series 2016A-1 Bonds. In providing the foregoing opinion, we are relying, without independent investigation, on the certificates of Swap Financial Group LLC and the validity of the estimates contained therein as to the economic changes resulting from certain amendments to each of the two interest rate swaps related to the City's Second Lien Water Revenue Refunding Bonds, Series 2004.

7. Interest on the Series 2016A-1 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2016A-1 Bonds may result in other state and local tax consequences to certain taxpayers, and we express no opinion regarding any such collateral consequences arising with respect to the Series 2016A-1 Bonds.

8. Interest on the Series 2016A-2 Bonds is not excludable from gross income of the owners thereof for federal income tax purposes.

9. Interest on the Series 2016A-2 Bonds is not exempt from present Illinois income taxes.

In rendering this opinion, we advise you that the enforceability (but not the validity or binding effect) of the Series 2016A Bonds, the Bond Ordinance, the Master Indenture and the Ninth Supplemental Indenture (i) may be limited by any applicable bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting the rights or remedies of creditors now or hereafter in effect and (ii) is subject to principles of equity in the event that equitable remedies are sought, either in an action at law or in equity.

We express no opinion with respect to the Series 2016A Bonds or other matters related to the Series 2016A Bonds other than those specifically rendered herein. Our opinion represents our professional judgment regarding the legal issues expressly addressed herein and is not a guarantee of result. This opinion is given as of the date hereof and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

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