

# City of Chicago

## Office of the City Clerk

# **Document Tracking Sheet**



F2014-80

Meeting Date:

Sponsor(s):

Type:

Title:

10/8/2014

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Dept./Agency

Communication

Second Lien Bond Determination Certificate with respect to Second Lien Water Revenue Project Bonds, Series 2014

Committee(s) Assignment:



# DEPARTMENT OF FINANCE

CITY OF CHICAGO

September **[7**, 2014

Susana Mendoza City Clerk 121 North LaSalle Street Room 107 Chicago, Illinois 60602

RE: City of Chicago, Illinois (the "City") Second Lien Water Revenue Bonds, Project Series 2014 \$400,000,000

Dear Ms. Mendoza:

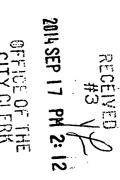
Attached is the Second Lien Bond Determination Certificate with respect to the Second Lien Water Revenue Project Bonds, Series 2014, issued by the City on this date, addressed to the City Council as provided in Section 2.04(g) of Part C of the Water Revenue Project and Refunding Bonds, Series 2014 Ordinance authorizing the issuance of Water Revenue Project and Refunding Bonds, Series 2014, which was passed by the City Council on April 30, 2014.

Please direct this filing to the City Council.

Very Truly Yours,

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Lois A. Scott **Chief Financial Officer** 



#### **ACKNOWLEDGMENT OF FILING**

The foregoing Second Lien Bonds Determination Certificate of the Chief Financial Officer of the City of Chicago (the "*City*") executed and delivered in connection with the issuance by the City of its \$367,925,000 Second Lien Water Revenue Bonds, Project Series 2014 and directed to the City Council, has been filed in the office of the City Clerk of the City and is part of the official files and records of said office.

IN WITNESS WHEREOF, I have hereunto affixed my signature and caused to be affixed hereto the corporate seal of the City of Chicago, Illinois, this  $17^{44}$  day of September, 2014.

Susana A. Mendoza City Clerk Įį.

ACKNOWLEDGMENT OF FILING

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The foregoing Second Lien Bonds Determination Certificate of the Chief Financial Officer of the City of Chicago (the "*City*") executed and delivered in connection with the issuance by the City of its \$367,925,000 Second Lien Water Revenue Bonds, Project Series 2014 and directed to the City Council, has been filed in the office of the City Clerk of the City and is part of the official files and records of said office.

IN WITNESS WHEREOF, I have hereunto affixed my signature and caused to be affixed hereto the corporate seal of the City of Chicago, Illinois, this  $17^{14}$  day of September, 2014.

\_\_\_wma Mendozo Susana Á. Mendoz City Clerk

#### ACKNOWLEDGMENT OF FILING

#### \$367,925,000

City of Chicago Second Lien Water Revenue Bonds Project Series 2014 (the "Series 2014 Bonds")

City Council of the City of Chicago City Hall Chicago, Illinois 60602

Pursuant to an Ordinance adopted by the City Council (the "City Council") of the City of Chicago (the "City") on April 30, 2014 (the "Bond Ordinance"), the issuance of Second Lien Project and Refunding Bonds for the Water System of the City was authorized in (a) the total principal amount of any Project Bonds not exceed \$475,000,000 and (b) the total principal amount of any original issue discount (not to exceed 10 percent of the aggregate principal amount of such series of Bonds) used in the marketing of such Second Lien Project and Refunding Bonds for the purpose of, among other things, (i) paying costs of acquiring, constructing and equipping certain improvements and extensions to the Water System of the City, (ii) funding capitalized interest on the Bonds and (iii) paying costs of issuance of the Bonds. The Bond Ordinance authorizes the Chief Financial Officer of the City to determine various provisions of the City a contract of purchase for the Bonds, to enter into a supplemental indenture for the Bonds and to take such other actions as are necessary to cause the Bonds to be issued and delivered.

The Bond Ordinance provides for the Chief Financial Officer to execute a Second Lien Bond Determination Certificate (the "*Determination Certificate*") setting forth these various determinations made by him and to file the Determination Certificate in the Office of the City Clerk of the City, directed to the City Council.

I am the duly qualified and serving Chief Financial Officer of the City. I am hereby executing and filing this Determination Certificate in accordance with the Bond Ordinance. All capitalized terms used in this Determination Certificate and not otherwise defined in this Determination Certificate shall have the meanings ascribed to them in the Bond Ordinance or the Eighth Supplemental Indenture (as hereinafter defined). As authorized by the Ordinance, the City has heretofore issued its \$367,925,000 aggregate principal amount of Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds").

I have determined as follows with respect to the Series 2014 Bonds authorized by the Bond Ordinance, in each case within the authority granted me by the Bond Ordinance:

#### Section 1. Findings. On behalf of the City, I find and determine as follows:

(a) Pursuant to the authorization contained in the Bond Ordinance, a contract for the purchase of the Series 2014 Bonds was awarded by me as the Chief Financial Officer of the City, with the concurrence of the Chairman of the Committee on Finance of the City Council, to the purchasers thereof named in the Contract of Purchase, dated September 10, 2014 (the "*Contract of Purchase*"). The underwriters identified in the Contract of Purchase are PNC Capital Markets LLC. as Representative; BMO Capital Markets; Siebert Brandford Shank & Co., L.L.C.; Academy Securities, Inc.; Blaylock Beal Van, LLC; Cabrera Capital Markets, LLC; CastleOak Securities, L.P.; Jefferies; J.J.B Hilliard, W.L. Lyons, LLC; Melvin & Company, LLC; RBC Capital Markets; Stern Brothers & Co., and U. S. Bancorp (collectively, the "Underwriters"). The Contract of Purchase, attached to this Determination Certificate as EXHIBIT A, is consistent with the Bond Ordinance.

(b) The Series 2014 Bonds constitute Second Lien Bonds under the Bond Ordinance.

(c) The Series 2014 Bonds are the first obligations to be issued under the Bond Ordinance. They are to be issued pursuant to the Ordinance and the Master Indenture dated as of December 15, 1999 as heretofore supplemented and as amended by Amendment No. 1 to Master Indenture, dated as of August 1, 2004 (collectively, the "*Master Indenture*") such Master Indenture as supplemented and amended by the Eighth Supplemental Indenture, as defined below.

(d) The terms of the Series 2014 Bonds as specified in this Determination Certificate provide, among other things, (i) an aggregate principal amount not greater than that allowed by the Bond Ordinance; (ii) a purchase price not less than that allowed by the Bond Ordinance; and (iii) a maturity date within the limitations of the Bond Ordinance.

(e) The interest rates for the Series 2014 Bonds set forth in this Determination Certificate are in my judgment the best rates at which the Series 2014 Bonds could be sold on the market on their date of sale and are within the limitations contained in the Bond Ordinance.

(f) This Determination Certificate is consistent with the terms of sale of the Series 2014 Bonds as set forth in the Contract of Purchase.

#### Section 2. General Terms of Series 2014 Bonds.

(a) The Series 2014 Bonds are not being issued and sold as Taxable Bonds or Federal Compliant Obligations.

(b) The Series 2014 Bonds are not being issued as Capital Appreciation Bonds.

(c) The Series 2014 Bonds will be lettered and numbered as provided in the Eighth Supplemental Indenture.

(d) There is no Debt Service Reserve Requirement for the Series 2014 Bonds or any prior Series of Second Lien Bonds.

(e) The Series 2014 Bonds are issued in book entry form.

#### Section 3. Principal Amounts and Maturities.

(a) The aggregate principal amount of the Series 2014 Bonds shall be \$367,925,000, which is an amount necessary for the respective purposes set forth in the Bond Ordinance.

(b) The Series 2014 Bonds shall mature on November 1 in each of the years and in the principal amounts and shall bear interest at the respective rates per annum set forth in the table below:

Maturity (November 1)	Principal Amount (\$)	Rate Per Annum	Maturity (November 1)	Principal Amount (\$)	Rate Per Annum
2015	4,020,000	3.00%	2026	9,510,000	5.00%
2016	6,295,000	3.00%	2027	9,985,000	5.00%
2017	6,485,000	4.00%	2028	10,485,000	5.00%
2018	6,745,000	4.00%	2029	11,010,000	5.00%
2019	7,015,000	3.00%	2030	11,560,000	5.00%
2020	7,225,000	5.00%	2031	12,135,000	5.00%
2021	7,585,000	5.00%	2032	12,745,000	4.00%
2022	7,965,000	5.00%	2033	13,255,000	5.00%
2023	8,365,000	5.00%	2034	13,915,000	5.00%
2024	8,780,000	3.15%	2039	80,740,000	5.00%
2025	9,055,000	5.00%	2044	103,050,000	5.00%

All Series 2014 Bonds are issued as serial Bonds except for those Series 2014 Bonds maturing on the years 2039 and 2044 which are issued as term Bonds.

#### Section 4. Redemption of Series 2014 Bonds:

(a) Optional Redemption. The Series 2014 Bonds maturing on or after November 1, 2025 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, 2024, 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 principal amount of such Series 2014 Bonds, together with accrued interest to the date fixed for redemption.

(b) Mandatory Sinking Fund Redemption of Series 2014 Bonds. The Series 2014 Bonds maturing on November 1, 2039 and November 1, 2044 are

subject to mandatory sinking fund redemption prior to maturity, at a redemption price of 100 percent of the principal amount of such Series 2014 Bonds to be so redeemed, on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

e November	1,2039	due	November 1, 204
Year	Principal Amount (\$)	Year	Principal Amount (\$
2035	14,610,000	2039	18,650,000
2036	15,345,000	2040	19,580,000
2037	16,110,000	2042	20,560,000
2038	16,915,000	2043	21,590,000
2039*	17,760,000	2044*	22,670,000

(c) The terms and conditions pursuant to which the Series 2014 Bonds are subject to optional and mandatory sinking fund redemption prior to maturity are set forth in the Eighth Supplemental Indenture.

#### Section 5. Sale of Series 2014 Bonds.

(a) The total price at which the Series 2014 Bonds are to be sold to the Underwriters shall be \$400,871,091.92. This equals the aggregate principal amount of \$367,925,000 plus net premium of \$34,835,570.10 (representing original issue premium of \$34,917,393 less original issue discount of \$81,822.90) and less an Underwriter's discount of \$1,889,418.18. The purchase price is greater than 97 percent of the aggregate principal amount of the Series 2014 Bonds less any original issue discount and within the limitations set forth in the Bond Ordinance.

(b) The preparation and delivery of the Preliminary Official Statement, dated September 2, 2014, delivered to and used by the Underwriters in connection with the public offering, sale and distribution of the Series 2014 Bonds, attached to this Determination Certificate as EXHIBIT B, is ratified and approved by me as Chief Financial Officer.

(c) The preparation and delivery of the Official Statement, dated September 10, 2014, attached to this Determination Certificate as EXHIBIT C, is ratified and approved by me as Chief Financial Officer, has been executed by me on behalf of the City and has been delivered to the Representative of the Underwriters

(d) The CUSIP numbers of the Series 2014 Bonds are as set forth in EXHIBIT D attached to this Determination Certificate.

#### Section 6. The Trustee and the Eighth Supplemental Indenture.

(a) The Bank of New York Mellon Trust Company, N.A. is designated as the Trustee for the Series 2014 Bonds.

(b) The Eighth Supplemental Indenture, dated as of September 1, 2014, from the City to the Trustee, in the form attached as EXHIBIT E to this Determination Certificate (the *"Eighth Supplemental Indenture")*, which supplements the Master Indenture between the City and the Trustee, has been approved and executed by me on behalf of the City and has been delivered to the Trustee.

#### Section 7. Application of Proceeds.

The proceeds of sale of the Series 2014 Bonds shall be applied to the purposes and in the amounts set forth in Section 4.03(a) of the Eighth Supplemental Indenture.

Respectfully submitted this 17h day of September 2014.

Lois A. Scott Chief Financial Officer City of Chicago

## EXHIBIT A

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### **CONTRACT OF PURCHASE**

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#### \$367,925,000 CITY OF CHICAGO

#### Second Lien Water Revenue Bonds, Project Series 2014

#### CONTRACT OF PURCHASE

September 10, 2014

City of Chicago Office of the Chief Financial Officer 121 North LaSalle Street, 7th Floor Chicago, Illinois 60602

Ladies and Gentlemen:

The undersigned, PNC Capital Markets LLC (the *"Representative"*), acting on behalf of itself and with the other underwriters named in the list attached hereto as *Schedule I*, on whose behalf the Representative is duly authorized to act (hereinafter, with the Representative, referred to as the *"Underwriters"*), offers to enter into the following agreement with the City of Chicago, a municipal corporation and a home rule unit of local government duly organized and existing under the laws of the State of Illinois (the *"City"*), which, upon the City's acceptance of this offer, will be binding upon the City and the Underwriters. This offer is made subject to the City's acceptance of this Contract of Purchase on or before 8:00 p.m., Chicago time, on September 10, 2014. Except as otherwise defined herein, capitalized terms used herein shall have the same meanings as defined in the Official Statement (as defined below).

1. Upon the terms and conditions and in reliance upon the representations, warranties and covenants set forth herein, the Underwriters, jointly and severally, hereby agree to purchase from the City, and the City hereby agrees to sell to the Underwriters, all (but not less than all) of its \$367,925,000 aggregate principal amount of Second Lien Water Revenue Bonds, Project Series 2014 (the "Bonds").

The Bonds shall: (a) be dated the date of their issuance and delivery, (b) have the maturities and bear interest at the rates per annum set forth in Exhibit A hereto and in the Official Statement (hereinafter defined) and (c) have the redemption features and further terms set forth in Exhibit A hereto and the Official Statement of the City, dated September 10, 2014, relating to the Bonds (such Official Statement, including the cover page and all appendices included therein, is hereinafter called the *"Official Statement,"* except that if the Official Statement shall have been amended with the approval of the Representative between the date thereof and the date upon which the Bonds are delivered for the Underwriters' account to The Depository Trust Company, New York, New York (*"DTC"*), the term *"Official Statement"* shall refer to the Official Statement as so amended).

The Underwriters agree to purchase all of the Bonds if the conditions of Closing (as defined in Section 7 hereof) are satisfied. The aggregate purchase price for the Bonds shall be \$400,871,091.92 which represents the aggregate principal amount of the Bonds, less an underwriters' discount of \$1,889,478.18 plus a net premium of \$34,835,570.10 (the *"Purchase Price"*). The Underwriters agree to make a bona fide public offering of all of the Bonds at the initial offering prices (or yields) set forth in Exhibit A hereto. The Underwriters hereby certify that at the time of the execution of this Contract of Purchase (the *"Sale Date"*), based upon prevailing market conditions, they do not have any reason to believe that the Bonds will be first sold to the public (excluding such bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers) at prices greater than or yields lower than the prices or yields set forth in Exhibit A hereto (the *"Initial Offering Prices"*).

1

The Underwriters reserve the right to change the Initial Offering Prices of the Bonds after the bona fide initial public offering on the Sale Date as the Representative, acting as Senior Manager, shall deem necessary in connection with the marketing of the Bonds and to offer and sell the Bonds to certain dealers (including dealers depositing the Bonds into investment trusts) at concessions to be determined by the Representative acting as Senior Manager. The Underwriters also reserve the right to over allot or effect transactions that stabilize or maintain the market prices of the Bonds at levels above that which might otherwise prevail in the open market and to discontinue such stabilizing, if commenced, at any time.

The Representative will provide the City and Co-Bond Counsel (as defined herein) with a closing certificate confirming the reoffering yields and prices of the Bonds, and the Underwriters acknowledge that the City and Co-Bond Counsel will rely on said certificate to establish the yield on the Bonds, and that such reliance is material to the City in entering into this Contract of Purchase in connection with the delivery of the Bonds.

The City acknowledges and agrees that: (i) the transaction contemplated by this Contract of Purchase is an arm's-length, commercial transaction between the City and the Underwriters in which the Underwriters are acting solely as a principal and not acting as a municipal advisor, financial advisor or fiduciary to the City; (ii) the Underwriters have not assumed any advisory or fiduciary responsibility to the City with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto; and (iii) the City has consulted its own legal, accounting, tax, financial and other advisors, as applicable, to the extent it has deemed appropriate.

2. The Preliminary Official Statement dated September 2, 2014, relating to the Bonds (the "*Preliminary Official Statement*") has been prepared by the City for use by the Underwriters in connection with the public offering, sale and distribution of the Bonds. The City hereby confirms that the Preliminary Official Statement was "deemed final" (except for permitted omissions) as of its date by the City for purposes of Rule 15c2-12 ("*Rule 15c2-12*") promulgated by the Securities and Exchange Commission (the "*Commission*"). The City hereby ratifies and consents to the use by the Underwriters, prior to the date hereof, of the Preliminary Official Statement in connection with the public offering, sale and distribution of the Bonds.

3. The City shall provide, or cause to be provided, at its expense, to the Underwriters within seven (7) business days after the City's acceptance of this Contract of Purchase, but not later than the date of Closing (as hereinafter defined) and in sufficient time to accompany any confirmation that requests payment from any customer, copies of the Official Statement in a quantity which, in the Representative's opinion, is sufficient to comply with the rules of the Commission and the Municipal Securities Rulemaking Board ("*MSRB*") with respect to the distribution of the Official Statement. The City authorizes the Underwriters to use and distribute the Official Statement in connection with the public offering and sale of the Bonds. At or prior to the Closing (hereinafter defined), the Representative shall file, or cause to be filed, the Official Statement with the MSRB through its Electronic Municipal Market Access system for municipal securities disclosure or through any other electronic format or system then prescribed by the MSRB or the Commission. The Representative shall notify the City when the Underwriters are no longer obligated to deliver to potential customers the Official Statement.

4. The Bonds will be as described in, and will be issued and secured pursuant to the provisions of an ordinance adopted by the City Council of the City (the "City Council") on April 30, 2014, (the "Ordinance"), the related written determination of the Chief Financial Officer of the City (the "Determination Certificate") and a Master Trust Indenture Securing City of Chicago Second Lien Water Revenue Bonds, dated as of December 15, 1999, from the City to The Bank of New York Mellon Trust Company, N.A., as trustee (as successor to J.P. Morgan Trust Company, National Association) (the "Trustee"), as heretofore supplemented and as amended by Amendment No. 1 to Master Indenture, dated as of August 1, 2004 (collectively, the "Master Indenture") and as further supplemented by the Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014 dated as of September 1, 2014 (the "Eighth Supplemental Indenture," and collectively with the Master Indenture, the "Indenture").

5. The City represents and warrants to the Underwriters as of the date hereof that:(a) The City is a municipal corporation and home rule unit of local government, existing under the Constitution and laws of the State of Illinois.

(b) The City Council has: (i) duly adopted the Ordinance, which remains in full force and effect; (ii) duly authorized delivery and distribution of the Preliminary Official Statement and the execution, delivery and distribution of the Official Statement in connection with the public offering and sale of the Bonds; (iii) duly authorized and approved the execution and delivery of the Bonds, the Determination Certificate, the Indenture, this Contract of Purchase and the Continuing Disclosure Undertaking of the City with respect to the Bonds (the "Undertaking").

(c) The City has full legal right, power and authority to: (i) adopt the Ordinance; (ii) execute and deliver the Indenture, this Contract of Purchase and the Undertaking; (iii) issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance and the Indenture and as provided in this Contract of Purchase; and (iv) pay the Bonds from the sources pledged under the Ordinance and the Indenture for their payment.

(d) The adoption of the Ordinance and approval of the Indenture and compliance with the respective provisions thereof do not, and the execution and delivery of this Contract of Purchase, the Undertaking, the Indenture and the Bonds will not, in any material

manner, violate any applicable law or administrative regulation of the State of Illinois or any department, division, agency or instrumentality thereof or of the United States of America or of any department, division, agency or instrumentality thereof, or any applicable judgment or decree to which the City is subject, or conflict with, in a material manner, or constitute a material breach of or a material default under, any ordinance, agreement or other instrument to which the City is a party or is otherwise bound. The City is not in breach of or default under the Ordinance or the Indenture or to the best of its knowledge, any applicable law or administrative regulation of the State of Illinois or the United States or any department, division, agency or instrumentality of either or any applicable judgment or decree to which the City is subject, or any loan agreement, bond, note, resolution, ordinance, agreement or other instrument to which the City is a party or is otherwise subject, which breach or default would in any way materially adversely affect the Bonds, the operation of the Water System, or the City's authority to impose or collect charges that constitute Water Revenues or the authorization or issuance of the Bonds, and to the best of its knowledge, no event has occurred and is continuing which, with the passage of time or the giving of notice or both, would constitute such a breach or default. Neither the adoption of the Ordinance and compliance with the provisions thereof nor the execution and delivery by the City of the Indenture, the Bonds, the Undertaking, or this Contract of Purchase nor the performance by the City of its obligations under the Indenture, the Bonds, the Undertaking, or this Contract of Purchase violates any applicable law or administrative regulation of the State of Illinois or the United States or any department, division, agency or instrumentality of either or any applicable judgment or decree to which the City is subject, or conflicts in a material manner with, or constitutes a material breach of or a material default under any loan agreement, bond, note, resolution, ordinance, indenture, agreement or other instrument to which the City is a party or is otherwise subject. The City has not received any judicial or administrative notice which in any way questions the federal tax-exempt status of interest on the Bonds.

(e) Except as disclosed in the Official Statement, no litigation or other proceeding before or by any court or agency or other administrative body is pending against the City or, to the knowledge of the City, threatened against it, in any way restraining or enjoining, or threatening or seeking to restrain or enjoin, the issuance, sale or delivery of the Bonds or in any way questioning or materially adversely affecting: (i) the proceedings under which the Bonds are to be issued; (ii) the validity or enforceability of any provision of the Bonds, the Indenture, the Ordinance, the Undertaking, or this Contract of Purchase; (iii) the accuracy or completeness of the Official Statement; (iv) the legal existence of the City or its right to conduct its operations as conducted; or (v) the title of its Mayor. City Comptroller, Chief Financial Officer, or City Clerk to their respective offices in such manner as to adversely affect the ability of the City to authorize the issuance, sale or delivery of the Bonds.

(f) All approvals, consents and orders of, and filings (except, if any, under applicable state "blue sky" laws) with, any governmental authority, board, agency or commission having jurisdiction which would constitute a condition precedent to the performance by the City of its obligations under the Indenture, the Ordinance, this Contract of Purchase, the Undertaking and the Bonds have been obtained or made.

(g) The financial statements of the City's Water System contained in the Official Statement fairly present the financial position and results of operations of the City's Water System as of the dates and for the periods therein set forth and the City has no reason to believe that such financial statements have not been prepared in accordance with generally accepted accounting principles as applied to governmental units, consistently applied except as otherwise noted therein.

(h) The Official Statement (excluding any descriptions of DTC, information under the captions "DESCRIPTION OF THE SERIES 2014 BONDS- Book-Entry System," "UNDERWRITING," "TAX MATTERS," Appendix D thereto and any information furnished by the Underwriters for use in the Official Statement) does not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading in any material respect.

(i) This Contract of Purchase, the Undertaking and the Indenture when duly executed and delivered by the parties thereto, as appropriate, will constitute and the Ordinance does constitute legal, valid and binding obligations of the City enforceable against the City in accordance with their respective terms (except to the extent that enforceability may be limited by bankruptcy, insolvency and other laws affecting creditors' rights or remedies and the availability of equitable remedies generally).

(j) When delivered to the Representative and paid for by the Underwriters at the Closing in accordance with the provisions of this Contract of Purchase, the Bonds will be duly authorized, executed and delivered and will constitute legal, valid and binding obligations of the City enforceable in accordance with their terms (except to the extent that enforceability may be limited by bankruptcy, insolvency and other laws affecting creditors' rights or remedies and the availability of equitable remedies generally).

(k) Except as disclosed in the Official Statement, there is no action, suit or proceeding, at law or in equity or before or by a court, public board or body, pending or, to the City's knowledge, threatened, against the City wherein an unfavorable decision, ruling or finding would materially adversely (i) affect the validity or enforceability of the Bonds, the Ordinance, the Indenture, this Contract of Purchase, or the Undertaking or (ii) the excludability from federal income taxation of the interest on the Bonds under the Internal Revenue Code of 1986, as amended (the "*Code*").

(I) The City has not taken, or omitted taking, and will not take or omit to take, any action, which action or omission would adversely affect the excludability from federal income taxation of the interest on the Bonds under the Code.

(m) Any certificate signed by any official of the City and delivered to the Representative at Closing in connection with the issuance or sale of the Bonds shall be deemed to be a representation and warranty by the City to the Underwriters as to the statements made therein as of the date so delivered.

(n) To the knowledge of the City and based on the representation of the Underwriters, no person holding office of the City, either by election or appointment, is in any manner interested, either directly or indirectly, in any contract being entered into or the performance of any work to be carried out in connection with the issuance and sale of the Bonds and upon which said officer may be called upon to act or vote; provided, however, that nothing in this Section 5(m) shall give rise to a cause of action by the Underwriters against the City.

(o) Except as disclosed in the Official Statement, the City has not failed during the previous five years to comply in all material respects with any previous disclosure undertakings that it has entered into in accordance with Rule 15c2-12.

#### 6. The City hereby covenants that:

(a) The City will make available such information, execute such instruments and take such other action in cooperation with the Underwriters as the Representative may reasonably request to qualify the Bonds for offer and sale under the "blue sky" or other securities laws and regulations of such states and other jurisdictions of the United States as the Underwriters may designate in writing; provided, however, that nothing in this Section 6(a) shall require the City to consent to general service of process in any state or jurisdiction other than the State of Illinois.

If on or prior to the Closing or within 25 days after the "end of the (b) underwriting period" (as hereinafter defined) any event known to the City or relating to or affecting the City, the Ordinance or the Bonds, shall occur which would cause any statement of a material fact contained in the Official Statement to be materially incorrect or materially incomplete, the City will promptly notify the Representative in writing of the circumstances and details of such event. If, as a result of such event, it is necessary, in the joint opinion of the City and the Representative to amend or supplement the Official Statement by stating or restating any material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, the City will forthwith, prepare and furnish to the Underwriters a reasonable number of copies of an amendment of or a supplement to such Official Statement in form and substance satisfactory to the City and the Representative, at the City's sole cost and expense, which will so amend or supplement such Official Statement so that, as amended or supplemented, the Official Statement will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. For the purposes of this Contract of Purchase, the term "end of the underwriting period" shall mean the later of the date of Closing or the date on which any Underwriter no longer retains any unsold balance of the Bonds for sale to the public. The Underwriters agree that the date on which the end of the underwriting period shall occur shall be the date of the Closing, unless the Underwriters otherwise notify the City in writing prior to 25 days after the date of the Closing that, to the best of their knowledge. the Underwriters retain for sale to the public an unsold balance of the Bonds, in which case the end of the underwriting period shall be extended for additional periods of 30 days each upon receipt of an additional written notification from the Underwriters that, to the best of their knowledge, there exists an unsold balance of the Bonds but in any event no longer than 60 days after the date of the Closing.

(c) The City shall apply the proceeds of the Bonds in accordance with the Ordinance and the Indenture.

(d) The City will enter into the Undertaking pursuant to Rule 15c2-12, which Undertaking shall be substantially in the form described in the Official Statement, with such changes as may be reasonably approved by the Representative and the City.

7. The payment for the Bonds (the "*Closing*") shall take place on September 17, 2014, at the offices of Pugh Jones & Johnson, P.C., 180 N. LaSalle Street, Suite 3400, Chicago, Illinois 60601 or on such other date or at such other place as shall have been mutually agreed upon by the City and the Representative as the date on or place at which the Closing shall occur. At 9:00 A.M., Chicago time on the date of Closing, the City shall cause the Bonds in definitive form, duly executed and authenticated, to be delivered to DTC. Upon such delivery and provided that all conditions to the obligations of

6

the Underwriters set forth in Section 8 hereof have been satisfied and all documents and instruments required to be delivered pursuant to Section 8 hereof are in form and substance satisfactory to the Representative, the Underwriters shall cause the Purchase Price of the Bonds as described in Section 1 hereof to be paid in federal or immediately available funds to or for the account of the City. The Bonds, bearing the assigned CUSIP numbers, shall be in the definitive form of one fully registered Bond per maturity in the name of which DTC requests that the Bonds be registered, and shall be made available for inspection and checking by the Representative not later than 10:00 A.M. on the business day prior to the Closing.

8. The Representative has entered into this Contract of Purchase on behalf of itself and the other Underwriters in reliance upon the representations, warranties and covenants of the City contained herein and to be contained in the documents and instruments to be delivered at the Closing and upon the performance by the City of its obligations hereunder and under the aforesaid documents and instruments at or prior to the date of the Closing. Accordingly, the Underwriters' obligations under this Contract of Purchase to purchase, to accept delivery of and to pay for the Bonds are subject to the performance by the City of its obligations to be performed hereunder and under such aforesaid documents and instruments at or prior to the Closing, and are also subject to the following conditions:

(a) The representations and warranties of the City contained herein and in the Ordinance, the Undertaking, the Determination Certificate and the Indenture will be true, complete and correct on the date hereof and on and as of the date of the Closing with the same effect as if made on the date of the Closing.

(b) At the time of the Closing: (i) the Ordinance and the Indenture will be in full force and effect, and will not have been amended, modified or supplemented since the date hereof, unless agreed to in writing by the Representative as provided herein, and the Official Statement will not have been amended, modified or supplemented, except as described in the Official Statement or as may have been agreed to by the Representative as provided herein; and (ii) all necessary action on the part of the City relating to the issuance of the Bonds will have been taken (other than filing of 8038-G Determination Certificate) and will be in full force and effect and will not have been amended, modified or supplemented, except with the written consent of the Representative.

(c) Between the date of the Official Statement and the Closing, neither the City nor the City's Water System shall have suffered any material adverse change in its condition, financial or otherwise.

(d) The Representative has the right to terminate the Underwriters' obligations under this Contract of Purchase to purchase, to accept delivery of and to pay for the Bonds by notifying the City of its election to do so if, after the execution hereof and prior to the Closing:

(i) any legislation, ordinance, rule or regulation shall be enacted by any governmental body, department or agency of the City or the State of Illinois, or a decision by any court of competent jurisdiction within the State of Illinois shall be rendered which, in the Representative's reasonable opinion, materially adversely affects the market price of the Bonds or makes it, in the reasonable opinion of the Representative, impracticable or inadvisable to proceed with delivery of the Bonds on the terms and in the manner contemplated by the Official Statement; or

(ii) a stop order, ruling, regulation or official statement by, or on

behalf of the Commission or any other governmental agency having jurisdiction over the subject matter shall be issued or made to the effect that the issuance, offering or sale of obligations of the general character of the Bonds, or the issuance, offering or sale of the Bonds, including all underlying obligations as contemplated hereby or by the Official Statement is in violation or would be in violation of any provision of the Securities Act of 1933, as amended (the "Securities Act"), or the Securities Exchange Act of 1934, as amended (the "Exchange Act") or any other federal securities laws, as amended, or that the Ordinance or the Indenture needs to be qualified under the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"); or

(iii) legislation shall be introduced in or enacted by the Congress of the United States or adopted by either House thereof or shall have been introduced and favorably reported for passage to 'either House by any committee of such House to which such legislation had been referred for consideration, or a decision shall have been rendered by or adopted by either House or a decision by a court of the United States or the United States Tax Court or an order, ruling or regulation shall have been issued or proposed by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with respect to federal income taxation upon interest received on obligations of the general character of the Bonds which, in the Representative's reasonable opinion, does materially adversely affect the market price or marketability of the Bonds; or

(iv) legislation shall be enacted by the Congress of the United States, or a decision by a court of the United States shall be rendered, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act or the Exchange Act, or that the Ordinance or the Indenture is not exempt from qualification under or other requirements of the Trust Indenture Act; or

(v) there shall have occurred any event which in the Representative's reasonable opinion, after consultation with its legal counsel, makes the Official Statement either (A) contain an untrue statement of a material fact or (B) omit to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading in any material respect, and the City fails to prepare or furnish or fails to cause to be prepared or furnished to the Underwriters an amendment or supplement to the Official Statement pursuant to Section 6 hereof, which will amend or supplement the Official Statement so that as amended or supplemented the Official Statement will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading in a material respect; or

(vi) additional material restrictions not in force as of the date hereof shall have been imposed upon trading in securities generally by any governmental authority or by any national securities exchange; or

(vii) a general banking moratorium shall have been established by federal, Illinois or New York authorities; or

(viii) a war involving the United States, an outbreak or escalation of or adverse development in hostilities or terrorist activities or other national or international calamity or crisis shall have occurred which, in the reasonable opinion of the Representative, materially adversely affects the market price or marketability of the Bonds; or

(ix) there shall be any proceeding or threatened proceeding by the Commission against the City and such proceeding or threatened proceeding, in the reasonable opinion of the Representative, materially adversely affects the market price or marketability of the Bonds; or

(x) the ratings of the City's water revenue bonds shall be downgraded or suspended, or placed on Credit Watch by Standard & Poor's Ratings Group ("S&P") or placed on Fitch Alert by Fitch Ratings ("Fitch") or placed on Ratings Under Review by Moody's Investors Service, Inc. ("Moody's") or placed on Watch Status by Kroll Bond Rating Agency, Inc. ("Kroll"), which in the Representative's reasonable opinion, materially adversely affects the market price or the marketability of the Bonds.

(e) At or prior to the Closing, the Representative has received each of the following documents:

(i) three copies of the Official Statement of the City, manually executed by the Chief Financial Officer of the City;

(ii) a copy duly certified by the City Clerk of the City, of the Ordinance as adopted by the City Council and a copy of the Determination Certificate manually executed by the Chief Financial Officer of the City;

(iii) the approving opinions of Pugh, Jones & Johnson, P.C., Chicago, Illinois, and Cotillas and Associates (collectively, "*Co-Bond Counsel*") to the City dated the date of the Closing and addressed to the City, in substantially the form included in the Official Statement;

(iv) an opinion or opinions, dated the date of the Closing and addressed to the Representative and the City of Co-Bond Counsel to the City, in substantially the form attached hereto as *Exhibit B*;

(v) [Intentionally Omitted];

an opinion, dated the date of the Closing and addressed to the (vi) Representative on behalf of the Underwriters, of the Corporation Counsel of the City to the effect that: (A) the City is a home rule unit of local government duly organized and existing under the Constitution and laws of the State of Illinois; (B) the City has duly authorized, approved and executed the Official Statement; (C) the City Council has (i) duly passed the Ordinance and the same has not been amended, modified, supplemented or repealed and is in full force and effect, and (ii) duly authorized and approved the execution and delivery of the Indenture, the Bonds, the Contract of Purchase, and the Undertaking and assuming due execution and delivery by the other parties thereto, as appropriate, such instruments constitute legal and valid obligations of the City in each case enforceable in accordance with their terms (but such opinion as to enforceability may be qualified with respect to bankruptcy, insolvency and other laws affecting creditors' rights or remedies and the availability of equitable remedies generally); (D) the City has full legal right, power and authority to enter into and to execute the Indenture, the Contract of Purchase, the Determination Certificate, and the Undertaking and to issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance and the Indenture; (E) to such counsel's knowledge, passage of the Ordinance and compliance with its provisions does not violate any applicable law, administrative regulation, court order or consent decree of the State of Illinois or any department, division, agency or instrumentality thereof or of the United States or any applicable judgment or decree to which the City is subject and does not conflict in a material manner with, or constitute a material breach of or material default under any ordinance, agreement or other instrument to which the City is a party or is otherwise subject; (F) to such counsel's knowledge, the City has obtained all approvals, consents and orders (except, if any, with respect to state "blue sky" laws) with, any governmental authority, board, agency or commission having jurisdiction which would constitute a condition precedent to the performance by the City of its obligations under the Ordinance, the Indenture, the Bonds, the Determination Certificate, this Contract of Purchase, and the Undertaking, which the City could reasonably obtain as of the date hereof; (G) there is no litigation pending, or to counsel's knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of the Bonds, contesting the validity or enforceability of the Bonds, the Ordinance, the Indenture, the Determination Certificate, this Contract of Purchase, and the Undertaking or questioning or affecting the rights or powers of the City with respect to the collection of fees, charges or other amounts constituting Gross Revenues (as defined in the Ordinance) pledged to pay principal of and interest on the Bonds or the pledge thereof under the Ordinance and the Indenture; and (H) such counsel has no reason to believe that the Official Statement contains an untrue statement of a material fact or omit to state a material fact necessary to make the statements made under said caption, in light of the circumstances under which they were made, not misleading (provided that such counsel need not express any opinion or belief regarding any description of DTC, information under the captions "DESCRIPTION OF THE SERIES 2014 BONDS- Book Entry System," "TAX MATTERS," "UNDERWRITING," Appendix D, information sourced under the captions "THE WATER SYSTEM," "THE WATER SYSTEM SERVICE AREA," and "FINANCIAL OPERATIONS" to sources other than the City or departments thereof, any information furnished by the Underwriters for use in the Official Statement, the financial statements in Appendix C and all other financial and statistical data contained in the Official Statement, including the Appendices thereto);

(vii) an opinion or opinions, dated the date of the Closing and addressed to the City of Burke Burns & Pinelli, Ltd. and Greene and Letts, Co-Disclosure Counsel to the City to the effect that (A) no registration is required under the Securities Act of 1933, as amended, with respect to the issuance of the Bonds, and no ordinance or indenture in respect of the Bonds is required to be qualified under the Trust Indenture Act of 1939, as amended; (B) the Undertaking complies with the requirements of Rule 15c2-12 as in effect as of the date of the Closing; (C) the statements contained in the Official Statement under the captions "UNDERWRITING" (provided that no opinion or view is expressed as to any information included under the subcaption "Certain of the Underwriters have provided the following information for inclusion in this Official Statement") and "SECONDARY MARKET DISCLOSURE" (provided that no opinion or view is expressed as to any information included under the subcaption "Corrective Action Related to Certain Bond Disclosure Requirements") insofar as such statements purport to summarize or describe certain provisions of this Contract of Purchase or the Undertaking, as the case may be, constitute a fair and accurate summary of such provisions; and (D) nothing has come to their attention which would lead such counsel to believe that the Official Statement and the Appendices thereto contain any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact or omits to state a material fact necessary to make the statements therein, at the time and in the light of the circumstances under which they are made, not false or misleading; provided that such counsel need not express any view as to any financial or statistical information included in the Official Statement or the Appendices thereto (including any statements regarding the use of funds on deposit in the accounts of the Water

Fund, other than statements as to their permitted use, subsequent to the period of time covered by the financial statements of the City's Water System contained in Appendix C to the Official Statement), any information included in Appendix C, Appendix D or Appendix E thereto, and the description of DTC in the Official Statement and the information included in the Official Statement under the caption "DESCRIPTION OF THE BONDS-Book-Entry System";

(viii) an opinion, dated the date of the Closing and addressed to the Representative on behalf of the Underwriters, of Burke, Warren, MacKay & Serritella, P.C., counsel for the Underwriters (herein "Underwriter's Counsel"), to the effect that (A) no registration is required under the Securities Act of 1933, as amended, with respect to the issuance of the Bonds, and no ordinance or indenture in respect of the Bonds is required to be gualified under the Trust Indenture Act of 1939, as amended; (B) the Undertaking complies with the requirements of paragraph (b)(S) of Regulation Rule 15c2-12 as in effect as of the date of the Closing; (C) the statements contained in the Official Statement under the caption "UNDERWRITING" insofar as such statements purport to summarize or describe certain provisions of this Contract of Purchase constitute a fair and accurate summary of such provisions; and (D) nothing has come to its attention which would lead such counsel to believe that the Official Statement and the Appendices thereto contain any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact or omits to state a material fact necessary to make the statements therein, at the time and in the light of the circumstances under which they are made, not false or misleading; provided that such counsel need not express any view as to any financial or statistical information included in the Official Statement or the Appendices thereto, any information included in Appendix C, Appendix D or Appendix E thereto, and the description of DTC in the Official Statement and the information included in the Official Statement under the caption "DESCRIPTION OF THE BONDS-Book-Entry System;"

(ix) an opinion, dated the date of the Closing and addressed to the City, of Chapman and Cutler LLP, Special Disclosure Counsel to the City, in substantially the form attached hereto as Exhibit D — "RETIREMENT FUNDS" to the effect that (A) the statements contained in the Official Statement in "APPENDIX E" insofar as such statements purport to summarize or describe the Pension Code and the City's Retirement Funds constitute a fair and accurate summary of the Pension Code and the City's Retirement Funds; and (B) nothing has come to its attention which would lead such counsel to believe that the Official Statement and the Appendices thereto contain any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact or omits to state a material fact necessary to make the statements therein, at the time and in the light of the circumstances under which they are made, not false or misleading; provided that such counsel need not express any view as to any financial or statistical information included in the Official Statement or the Appendices thereto, any information included in Appendix C or Appendix D thereto, and the description of DTC in the Official Statement and the information included in the Official Statement under the caption "DESCRIPTION OF THE BONDS-Book-Entry System";

(x) a certificate, dated the date of Closing, signed by the Chief Financial Officer of the City to the effect that: (A) the representations and warranties of the City contained herein are correct in all material respects as of the date of the Closing; and (B) there has been no adverse change in the financial condition of the City's Water System since December 31, 2013, as reflected in Appendix C to the Official Statement;

(xi) a certified copy of the Master Indenture and an executed copy of the Eighth Supplemental Indenture;

(xii) an executed copy of the Undertaking;

(xiii) evidence satisfactory to the Representative that the Bonds have received the following ratings from Moody's, S&P, Kroll and Fitch:

Moody'sS&PFitchKroll"A3" (negative outlook)"AA-" (stable outlook)"AA" (stable outlook)

(xiv) a copy of an agreement between the City and DTC relating to the safekeeping and book-entry form of the Bonds;

(xv) a certificate or certificates acceptable to the City and the Representative dated the date of Closing, to the effect that The Bank of New York Mellon Trust Company, N.A. Chicago, Illinois has full legal right, power, and authority to act as Trustee (with respect to the Bonds) and as Bond Registrar, Paying Agent and Authenticating Agent with respect to the Bonds; and

(xvi) receipt of the Trustee and Bond Registrar for the Bonds.

All of the opinions, letters, certificates, instruments and other documents mentioned above or elsewhere in this Contract of Purchase will be deemed to be in compliance with the provisions hereof if, but only if, they are in substance satisfactory to the Representative, in its reasonable judgment. Payment for the Bonds and acceptance of the Bonds by the Underwriters shall constitute acknowledgment by the Underwriters of the City's full performance hereunder.

9. If the City is unable to satisfy the conditions to the obligations of the Underwriters to purchase, to accept delivery of and to pay for the Bonds contained in this Contract of Purchase, or if the obligations of the Underwriters to purchase, to accept delivery of and to pay for the Bonds are terminated for any reason permitted by this Contract of Purchase, this Contract of Purchase will terminate and neither the Underwriters nor the City will be under further obligation or have any further liability hereunder, except as to the obligation set forth in paragraph 10 hereof.

10. The Underwriters shall be under no obligation to pay, and the City shall pay any and all expenses incident to the performance of the obligations of the City hereunder, including but not limited to: (i) the cost of the preparation and reproduction and mailing or delivery of the Ordinance, the Indenture, the Preliminary Official Statement and the Official Statement (including any amendments or supplements thereto); (ii) the cost of the preparation and printing, if any, of the Bonds; (iii) the fees and disbursements of Co-Bond Counsel, Co-Disclosure Counsel and Special Disclosure Counsel to the City; (iv) the fees and disbursements of the accountants and advisors of the City and of any consultants retained by the City; (v) the fees for bond ratings; (vi) the fees of DTC, if any; and (vii) any other expenses incurred in connection with the issuance of the Bonds and not specifically assumed

by the Underwriters hereunder. The City shall be under no obligation to pay, and the Underwriters shall pay: (i) the cost of preparation and reproduction of the Agreement Among Underwriters and this Contract of Purchase; (ii) the costs of preparation and reproduction of the Blue Sky Memorandum; (iii) all advertising expenses in connection with the public offering of the Bonds; (iv) an amount, if any, required to be paid to the MSRB as its special assessment; (v) all other expenses incurred by them or any of them in connection with their public offering and distribution of the Bonds; and (vi) the fees and disbursements of Underwriter's Counsel.

11. The Underwriters represent and warrant that:

They have heretofore authorized the Representative to execute any (a) document on behalf of or exercise any authority of and otherwise to act for, the Underwriters in all matters under or pertaining to this Contract of Purchase. Each Underwriter has warranted and confirmed to the Representative, and the Representative warrants and confirms to the City that: (i) it is duly registered under the Securities Exchange Act of 1934, as amended (the "1934 Act"), as a broker/dealer or municipal securities dealer and has duly paid the fee prescribed by MSRB Rule A-12 or is exempt from such requirements, (ii) it is (a) a member in good standing of the Financial Industry Regulatory Authority ("FINRA") or (b) otherwise eligible under FINRA rules to receive underwriting discounts and concessions available to such members with respect to underwriters of municipal securities, and (iii) it has complied with the dealer registration requirements, if any, of the various jurisdictions in which it offers Bonds for sale. The Underwriters represent, warrant and covenant that they are and will be in compliance with all applicable laws, rules and regulations in connection with the offering, issuance and sale of the Bonds.

(b) Each Underwriter severally represents that to its knowledge, no person holding office of the City, either by election or appointment, is in any manner financially interested, either directly in the officer's own name or indirectly in the name of any other person, association, trust or corporation, in any contract being entered into or the performance of any work to be carried out in connection with the issuance and sale of the Bonds upon which said officer may be called upon to act or vote.

(c) Each Underwriter severally represents to the City that neither the Underwriter, nor any Affiliate thereof is listed on any of the following lists maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the Bureau of Industry and Security of the U.S. Department of Commerce, the U.S. Department of State or their successors, or on any other list of persons or entities with which the City may not do business under any applicable law, rule, regulation, order or judgment: the Specially Designated Nationals List, the Denied Persons List, the Unverified List, the Entity List, the List of Statutorily Debarred Parties and the Excluded Parties List. Such representation shall be provided to the City in the form attached hereto as Exhibit C.

For purposes of this representation, "Affiliate," when used to indicate a relationship with a specified person or entity, means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such specified person or entity, and a person or entity shall be deemed to be controlled by another person or entity, if controlled in any manner whatsoever that results in control in fact by that other person or entity (or that other person or entity and any persons or entities with whom that other person or entity is acting jointly or in concert), whether

#### directly or indirectly and whether through share ownership, a trust, a contract or otherwise.

12. The Underwriters may enter into distribution agreements with certain financial institutions for the retail distribution of municipal securities, including the Bonds, at the public offering price. In accordance with such arrangements, the Underwriters may share a portion of its underwriting compensation.

13. Each Underwriter understands and agrees that it is required to and will comply with the provisions of Chapter 2-56 of the Municipal Code of Chicago (*"Municipal Code"*). Pursuant to Section 2-56-090 of the Municipal Code, it shall be the duty of each Underwriter to cooperate with the City's Inspector General in any investigation or hearing undertaken pursuant to Chapter 2-56. Every Underwriter shall report, directly and without undue delay, to the City's Inspector General any and all information concerning conduct by any person which such Underwriter knows to involve corrupt activity, pursuant to Section 2-156-018(b) of the Municipal Code of Chicago. An Underwriter's knowing failure to report corrupt activity as required in subsection (b) of Section 2-156-018 of the Municipal Code of Chicago, shall constitute an event of default under this Contract of Purchase. For purposes of subsection (b) of Section 2-156-018 of the Municipal Code of Chicago, "corrupt activity" shall mean any conduct set forth in subparagraph (a)(1), (2) or (3) of Section 1-23-020 of the Municipal Code of Chicago:

(1) bribery or attempted bribery, or its equivalent under any local, state or federal law, of any public officer or employee of the City of Chicago or of any sister agency; or

(2) theft, fraud, forgery, perjury, dishonesty or deceit, or attempted theft, fraud, forgery, perjury, dishonesty or deceit, or its equivalent under any local, state or federal law, against the City of Chicago or of any sister agency; or

(3) conspiring to engage in any of the acts set forth in items (1) or (2) of this subsection (a).

The Underwriters agree and covenant that no payment, gratuity or offer of employment shall be made in connection with this Contract of Purchase, by or on behalf of a subcontractor to the Underwriters or any higher-tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order related to this Contract of Purchase.

14. Any notice or other communication to be given to the City under this Contract of Purchase must be given by delivering the same in writing at the address of the City set forth above, Attention: Chief Financial Officer, 121 North LaSalle Street, 7<sup>th</sup> Floor, Chicago Illinois 60602 and any notice or other communication to be given to the Underwriters under this Contract of Purchase must be given by delivering the same in writing to: PNC Capital Markets LLC, One North Franklin, 29<sup>th</sup> Floor, Chicago, Illinois 60606 or such other address as the Representative shall specify in writing.

15. This Contract of Purchase is made solely for the benefit of the City and the Underwriters (including the successors or assigns of any Underwriter), and no other person including any purchaser of the Bonds may acquire or have any right hereunder or by virtue hereof. All of the representations, warranties and covenants of the City contained in this

Contact of Purchase shall remain operative and in full force and effect regardless of (i) any investigations made by or on behalf of any of the Underwriters or (ii) delivery of any payment for the Bonds pursuant to this Contract of Purchase.

16. Time is of the essence in consummation of the transactions contemplated by this Contract of Purchase.

17. This Contract of Purchase shall be governed by and construed in accordance with the laws of the State of Illinois, including, without limitation, those laws applicable to contracts made and to be performed in the State of Illinois, without however giving effect to the conflict of laws provisions thereof. This Contract of Purchase shall not be assigned by the City or the Underwriters.

18. This Contract of Purchase may be executed in several counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

19. This Contract of Purchase shall become effective upon the execution and the acceptance hereof by the appropriate officers of the City and will be valid and enforceable as of the time of such acceptance.

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20. If any provision of this Contract of Purchase shall be held or deemed to be or shall, in fact, be invalid, inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions, or in all jurisdictions, because it conflicts with any provisions of any constitution, statute, rule or public policy, or for any other reason, such circumstances shall not have the effect of rendering the provision in question invalid, inoperative or unenforceable in any other case or circumstances, or of rendering any other provision or provisions of this Contract of Purchase Invalid, inoperative or unenforceable to any extent whatsoever.

> Very truly yours, PNC Capital Markets LLC

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As Representative Its: Managing Director

Accepted by the City:

CITY OF CHICAGO By: ois Scott

Chief Financial Officer

Concurred By: "

Edward Burke Chairman, Committee on Finance City Council

#### SCHEDULE I

PNC Capital Markets LLC

**BMO Capital Markets** 

Siebert Brandford Shank & Co., L.L.C.

Academy Securities, Inc.

Blaylock Beal Van, LLC

Cabrera Capital Markets, LLC

CastleOak Securities, L.P.

Jefferies

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

Melvin & Company, LLC

**RBC Capital Markets** 

Stern Brothers & Co.

US Bancorp

#### EXHIBIT A

#### \$367,925,000

#### Second Lien Water Revenue Bonds, Project Series 2014

Maturity	Principal	Interest			
November 1	Amount	Rate	Price	Yield	CUSIP (1)
2015	\$ 4,020,000	3.000%	103.022%	0.300%	167736 A23
2016	6,295,000	3.000	105.053	0.600	167736 A31
2017	6,485,000	4.000	109.489	0.910	167736 A49
2018	6,745,000	4.000	110.716	1.320	167736 A56
2019	7,015,000	3.000	106.148	1.740	167736 A64
2020	7,225,000	5.000	116.576	2.100	167736 A72
2021	7,585,000	5.000	116.427	2.470	167736 A80
2022	7,965,000	5.000	116.354	2.740	167736 A98
2023	8,365,000	5.000	116.287	2.950	167736 B22
2024	8,780,000	3.150	100.000	3.150	167736 B30
2025	9,055,000	5.000	115.268	3.220*	167736 B48
2026	9,510,000	5.000	114.339	3.320*	167736 B55
2027	9,985,000	5.000	113.327	3.430*	167736 B63
2028	10,485,000	5.000	112.961	3.470*	167736 B71
2029	11,010,000	5.000	112.235	3.550*	167736 B89
2030	11,560,000	5.000	111.694	3.610*	167736 B97
2031	12,135,000	5.000	110.888	3.700*	167736 C21
2032	12,745,000	4.000	99.358	4.050	167736 C39
2033	13,255,000	5.000	110.089	3.790*	167736 C47
2034	13,915,000	5.000	109.913	3.810*	167736 C54

\$80,740,000 5.000% due November 1 2039, Price 108.686%, Yield 3.950%\*, CUSIP 167736 C62

\$103,050,000 5.000% due November 1 2044, Price 108.165%, Yield 4.010%\*, CUSIP 167736 C70

\*Yield to call date

#### Redemption

Optional Redemption of Series 2014 Bonds. The Series 2014 Bonds maturing on or after November 1, 2025, 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, 2024, 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 principal amount of such Series 2014 Bonds, together with accrued interest to the date fixed for redemption.

\*Copyright 2014, American Bankers Association. CUSIP data 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 bondholders only at the time of issuance of the Bonds and the City does not 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 change 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.

*Mandatory Sinking Fund Redemption.* The Series 2014 Bonds due November 1, 2039 (the "2039 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Bonds due November 1, 2039		
Year	Principal Amount	
2035	14,610,000	
2036	15,345,000	
2037	16,110,000	
2038	16,915,000	
2039	17,760,000†	

**†Stated Maturity** 

The Series 2014 Bonds due November 1, 2044 (the "2044 Term Bonds" and, together with the 2039 Term Bonds, the "Series 2014 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Bonds due November 1, 2044		
Year	Principal Amount	
2040	18,650,000	
2041	19,580,000	
2042	20,560,000	
2043	21,590,000	
2044	22,670,000†	

**†Stated Maturity** 

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#### EXHIBIT B

#### Co-Bond Counsel Opinion

September \_\_\_, 2014

PNC Capital Markets LLC, as representative (the "Representative") of the underwriters (the "Underwriters") named in that certain Contract of Purchase dated September \_\_\_\_, 2014 (the "Contract of Purchase") between the City of Chicago and the Representative

Ladies and Gentlemen:

We have acted as co-bond counsel to the City of Chicago (the "City"), and have delivered our approving legal opinion of even date herewith (the "Bond Opinion"), in connection with the issuance on the date hereof by the City of its \$367,925,000 aggregate principal amount Second Lien Water Revenue Bonds, Project Series 2014 (the "Bonds"). This opinion is being delivered to you in accordance with Section 8(e)(iv) of the Contract of Purchase. All terms used in this letter and not defined in this letter shall have the meanings given to them in the Contract of Purchase.

In connection with the issuance of the Bonds we have examined the following: (a) the Constitution of the State of Illinois, certified copies or executed counterparts of the Ordinance and the Indenture and such laws as we deemed pertinent to this opinion; (b) executed counterparts of the Contract of Purchase and the Undertaking; (c) the Official Statement; 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 Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Indenture is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended; and

2. (i) when read together, the statements contained in the Official Statement under the captions "INTRODUCTION — Security for the Series 2014 Bonds," "INTRODUCTION — Rate Covenant" (other than the last clause of the second sentence of the second paragraph thereof), "DESCRIPTION OF THE SERIES 2014 BONDS" (other than statements contained under the subcaption "— Book-Entry System"), "SECURITY FOR THE SERIES 2014 BONDS" (other than statements contained in the last two sentences of the last paragraph of the sub-caption "— Pledge of Second Lien Bond Revenues," the second sentence of the first paragraph and the first sentence of the second paragraph of the sub-caption "— Flow of Funds," the chart (and all footnotes thereto) entitled "Ordinance Flow of Funds" and the paragraph preceding such chart, the second and third

sentences under the sub-caption "- Cash and Investments," the sub-caption "- Bankruptcy," and in APPENDIX A -- "DEFINITIONS" and APPENDIX B - "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE," insofar as those statements purport to summarize certain provisions of the Bonds, the Ordinance and the Indenture, present a fair and accurate summary of those provisions; and (ii) the statements contained under the caption "TAX MATTERS" and in APPENDIX D - "FORM OF OPINIONS OF CO-BOND COUNSEL" insofar as such statements constitute conclusions of law or summarize or depict our legal opinion as co-bond counsel, present a fair and accurate summary or depiction of such conclusions or opinion.

In our capacity of co-bond counsel, we have participated in the preparation of the Official Statement, and have participated in teleconferences with representatives of the City, codisclosure counsel and special counsel of the City, your representatives, your counsel and others, in which the Official Statement was discussed.

The purpose of our professional engagement was not to establish or confirm factual matters set forth in the Official Statement, and we have not undertaken any obligation to verify or investigate independently any of the factual matters set forth in the Official Statement. Moreover, many of the determinations required to be made in the preparation of the Official Statement involve matters of a non-legal nature.

Subject to the foregoing, we confirm to you as a matter of our factual knowledge and not as an opinion that, in the course of performing the services referred to above, nothing came to the attention of the attorneys in our firm rendering legal services as co-bond counsel that caused us to believe that the Official Statement as of its date or as of the date hereof contained or contains an untrue statement of a material fact or omitted or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that we do not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Official Statement and we express no view with respect to (i) the financial statements or other financial, forecast, technical, operating and statistical statements and data contained or incorporated by reference in the Official Statement or omitted therefrom; (ii) information pertaining to CUSIP numbers, to DTC and the book-entry only system; (iii) information contained under or omitted from the captions "LITIGATION, "INDEPENDENT AUDITORS," "FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR," "UNDERWRITING," "SECONDARY MARKET DISCLOSURE -Corrective Action Related to Certain Bond Disclosure Requirements," or (iv) the information contained in or omitted from the Appendices C, or E to the Official Statement.

The legal opinions expressed herein and the negative observation expressed in the immediately preceding paragraph (the "Negative Observation") represents, respectively, our professional judgment regarding the legal issues expressly addressed by such opinions and our factual knowledge as limited by the Negative Observation, and is not a guarantee of a result. The opinions and Negative Observation expressed herein are given as of the date hereof, and we assume no obligation to revise or supplement them to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

This letter is issued subject to the following conditions, which by your acceptance you recognize and acknowledge: (1) that the Negative Observation is not a legal opinion but is rather a negative observation based on our activities as co-bond counsel in connection with the issuance of the Bonds; and (2) that the scope of activities on which the Negative Observation is based was inherently limited and does not purport to encompass all activities necessary for compliance with applicable securities laws. Consequently, we make no representation that our

procedures undertaken in making the Negative Observation have been adequate for your purposes.

This letter is furnished by us as co-bond counsel. No attorney-client relationship has existed at any time between our firm and the Underwriters in connection with the issuance of the Bonds or by virtue of this letter and we have not engaged to act, nor have we acted as your counsel for any purpose in connection with the issuance of the Bonds.

This letter is hereby furnished only to you in your capacity as Representative and is solely for the benefit of the Underwriters. This letter is not intended to be relied upon and is not to be used, quoted, circulated, relied upon or otherwise referenced to by any other person or entity (including any person or entity purchasing any of the Bonds from any Underwriter) or any other owner of the Bonds or by any other party to whom it is not specifically addressed. This letter may be disclosed to your counsel and copies of this letter may be included in the compilation of closing documents.

Respectfully submitted,

#### EXHIBIT C

#### **REPRESENTATION LETTER**

City of Chicago Department of Finance

121 North LaSalle Street, 7th Floor Chicago, Illinois 60602 Attn.: Deputy Comptroller of Financial Policy PNC Capital Markets LLC, as Representative of the Underwriters named in the Contract of Purchase, dated September 10, 2014 between such Underwriters and the City of Chicago

Pursuant to the Contract of Purchase dated September 10, 2014 (the "Purchase Agreement") among the City of Chicago (the "City") and PNC Capital Markets LLC as representative (the "Representative") of the underwriters named therein (each an "Underwriters") relating to the City's \$367,925,000 Second Lien Water Revenue Bonds, Project Series 2014 (the "Bonds"), each of the undersigned Underwriters severally represents to the City that to the best of its knowledge:

(1) Neither the Underwriter, nor any Affiliate thereof is listed on any of the following lists maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the Bureau of Industry and Security of the U.S. Department of Commerce, the U.S. Department of State or their successors, or on any other list of persons or entities with which the City may not do business under any applicable law, rule, regulation, order or judgment: the Specially Designated Nationals list, the Denied Persons List, the Unverified List, the Entity List, the List of Statutorily Debarred Parties and the Excluded Parties List.

For purposes of this representation, "Affiliate," when used to indicate a relationship with a specified person or entity, means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such specified person or entity, and a person or entity shall be deemed to be controlled by another person or entity, if controlled in any manner whatsoever that results in control in fact by that other person or entity (or that other person or entity and any persons or entities with whom that other person or entity is acting jointly or in concert), whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise.

(2) The undersigned Underwriters agree that in the event that any Underwriter or any of its Affiliates appears on any of the lists described in paragraph (1) above, at any time prior to the Closing (as defined in the Purchase Agreement) with respect to the Bonds, that Underwriter shall be deemed to have submitted to the Representative its withdrawal from the Agreement Among Underwriters.

IN WITNESS WHEREOF, the parties hereto have caused this Representation Letter in connection with the Bonds to be executed by their duly authorized representatives as of the date written below.

Dated: September 10, 2014

**PNC Capital Markets LLC** 

By: \_\_\_\_\_\_ Its: Managing Director

**BMO Capital Markets** 

By: \_\_\_\_\_\_ Its: Managing Director

Siebert Brandford Shank & Co., L.L.C.

By:\_\_\_\_\_ Its: Managing Director

Academy Securities, Inc.

By:\_\_\_\_\_\_ Its: Managing Director

Blaylock Beal Van, LLC

By:\_\_\_\_\_\_ Its: Managing Director

Cabrera Capital Markets, LLC

By:\_\_\_\_\_ Its: Managing Director

CastleOak Securities, L.P.

By:

Its: Managing Director

Jefferies LLC

By:\_\_\_\_\_\_ Its: Senior Vice President

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

By:\_\_\_\_\_\_ Its: Managing Director

Melvin & Company, LLC

By:\_\_\_\_\_ Its: Managing Director

**RBC Capital Markets** 

By:\_\_\_\_\_ Its: Managing Director

Stern Brothers & Co.

By:\_\_\_\_\_\_ Its: Managing Director

US Bancorp Investments, Inc.

By:\_\_\_\_\_ Its: Director

#### EXHIBIT D

September 17, 2014

City of Chicago 121 North LaSalle Street, 7th Floor Chicago, Illinois 60602

Re:

#### \$367,925,000 City of Chicago Second Lien Water Revenue Bonds, Project Series 2014 (the *"Bonds"*)

Ladies and Gentlemen:

We have acted as special disclosure counsel to you, the City of Chicago (the "City"), solely in connection with the information contained in Appendix E — "RETIREMENT FUNDS" (the "Pension Section") of the Preliminary Official Statement dated September 2, 2014 (the "Preliminary Official Statement") and the Official Statement dated September 10, 2014 (the "Official Statement"), each relating to the Bonds issued by the City on this date.

In accordance with our understanding with the City, we have reviewed the Pension Section, certificates of officers of the City and other appropriate persons, and such other records, reports, opinions and documents, and we have made such investigations of law, as we have deemed appropriate as a basis for the conclusion hereinafter expressed. As to facts material to the views expressed herein, we have, with your consent, relied upon oral or written statements or representations of officers or other representatives or agents of or consultants to the City and of or to the Municipal Employees' Annuity and Benefit Fund of Chicago, the Policemen's Annuity and Benefit Fund of Chicago, and the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (collectively, the *"Retirement Funds"*), including the representations and warranties of the City in the Contract of Purchase dated September 10, 2014, between the City and PNC Capital Markets LLC, on behalf of itself and the other underwriters named therein (collectively, the *"Underwriters"*). We have not independently verified such matters. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Official Statement.

In arriving at the conclusion hereinafter expressed, we are not expressing any opinion or view on, and with your permission are assuming and relying on, the validity, accuracy and sufficiency of the records, reports, documents, certificates and opinions referred to above (including the accuracy of all factual matters represented and legal conclusions contained therein, including, without limitation, any representations and legal conclusions regarding the due authorization, issuance, delivery, validity and enforceability of the Bonds, the tax treatment of interest on the Bonds for federal income tax purposes, and the application of Bond proceeds in accordance with

the authorization therefor). We have assumed that all records, reports, documents, certificates and opinions that we have reviewed, and the signatures thereto, are genuine.

We are not passing upon, and do not assume any responsibility for, the accuracy, completeness or fairness of any of the statements contained in the Pension Section and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as special disclosure counsel to the City, to assist you in discharging your responsibility with respect to the Pension Section, we participated in conferences and correspondence with representatives of the City, the City's attorneys, Co-Disclosure Counsel to the City, the Underwriters, counsel to the Underwriters, and other persons involved in the preparation of information for the Pension Section, during which the contents of the Pension Section and related matters were discussed and revised. The purpose of our professional engagement was not to establish or confirm factual matters set forth in the Pension Section, and we have not undertaken any obligation to verify independently any of the factual matters set forth therein. Moreover, many of the determinations required to be made in the preparation of the Pension Section involve matters of a non-legal nature. Based on our participation in the abovementioned conferences and correspondence, and in reliance thereon and on our limited review of the records, reports, documents, certificates, statements, representations, warranties, opinions and matters mentioned above, without independent verification, we advise you as a matter of fact and not opinion that, during our engagement as special disclosure counsel to the City in connection with the Pension Section, no facts came to the attention of the attorneys in our firm rendering legal services in connection with such limited role which caused us to believe that the Pension Section (apart from the financial statements or other financial, operating, numerical, accounting or statistical data or forecasts, estimates, projections, assumptions or expressions of opinion, or matters of litigation contained or incorporated therein, as to which we do not express any conclusion or belief) contained as of its date or contains as of the date hereof any untrue statement of a material fact or omitted or omits to state a material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. No responsibility is undertaken or statement rendered herein with respect to any other portions of the Preliminary Official Statement or the Official Statement or any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

By acceptance of this letter you recognize and acknowledge that: (i) the preceding paragraph is not a legal opinion but is rather in the nature of negative observations based on certain limited activities performed by specific lawyers in our firm during our engagement to the City as special disclosure counsel in connection with the Pension Section; (ii) the scope of those activities performed by us for purposes of delivering this letter was inherently limited and does not purport to encompass all activities necessary for compliance with applicable securities laws; and (iii) those activities performed by us rely on third party representations, warranties, certifications, statements and opinions, including and primarily, representations, warranties and certifications made by the City, and are otherwise subject to the conditions set forth herein.

We express herein no opinion or belief with respect to the validity of the Bonds or the taxation thereof or of the interest thereon, and our expression of belief with respect to the Pension Section assumes the validity of the Bonds and the tax treatment of the interest payable thereon for federal income tax purposes, all as set forth in the opinions of Co-Bond Counsel.

This letter is furnished by us in our limited capacity as special disclosure counsel to the City in connection with the Pension Section. This letter may not be used, quoted, relied upon or otherwise referred to for any other purpose or by any other person (including any person purchasing any of the Bonds from the Underwriters) without our prior written consent, except that such letter may be referenced in the Preliminary Official Statement, the Official Statement and the Bond Purchase Agreement with respect to the Bonds and included in the transcript of proceedings for the Bonds. This letter is given as of the date hereof and we assume no obligation to revise or supplement this letter to reflect any facts or circumstances that may hereafter come to our attention.

Respectfully submitted,

LEWhite:bha

# EXHIBIT B

PRELIMINARY OFFICIAL STATEMENT

#### **PRELIMINARY OFFICIAL STATEMENT DATED SEPTEMBER 2, 2014**

#### **NEW ISSUE - BOOK ENTRY**

#### **RATINGS: See "RATINGS" herein.**

Subject to compliance by the City of Chicago (the "City") with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Series 2014 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 2014 Bonds will, however, be taken into account in computing the corporate alternative minimum tax for certain corporations. Interest on the Series 2014 Bonds is not exempt from present State of Illinois income taxes. See "TAX MATTERS" herein for a more complete discussion.



# \$372,205,000\* CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

Dated: Date of Delivery

Due: As shown on the inside front cover

The Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds") will be issued in fully registered form through a global book-entry system operated by The Depository Trust Company, New York, New York ("DTC"). No physical delivery of the Series 2014 Bonds will be made to purchasers. The Bank of New York Mellon Trust Company, N.A. will act as trustee (the "Trustee") with respect to the Series 2014 Bonds. Principal of and interest on the Series 2014 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 Series 2014 Bonds. The Series 2014 Bonds will be issued in denominations of \$5,000 or any integral multiple thereof. Interest on the Series 2014 Bonds is payable on each May 1 and November 1, with the first interest payment date being May 1, 2015. Principal of each Series 2014 Bond is payable at maturity or upon earlier redemption.

#### For maturity schedules, interest rates, prices, yields, and CUSIP numbers, see the inside front cover.

As more fully described herein, the Series 2014 Bonds are subject to optional and mandatory redemption prior to maturity.

The Series 2014 Bonds are being issued to (i) pay costs of the Series 2014 Expected Projects (as defined herein) and (ii) pay costs of issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program."

The Series 2014 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 Series 2014 Bonds have a claim for payment from such Second Lien Bond Revenues on an equal and ratable basis with the City's Outstanding Second Lien Water Revenue 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 SERIES 2014 BONDS. THE SERIES 2014 BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AS TO INDEBTEDNESS. THE SERIES 2014 BONDS DO NOT HAVE A CLAIM FOR PAYMENT FROM ANY TAXES OF THE CITY. THE SERIES 2014 BONDS ARE NOT SECURED BY A LIEN ON OR SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE WATER SYSTEM, INCLUDING THOSE FINANCED WITH PROCEEDS OF THE SERIES 2014 BONDS.

The Series 2014 Bonds are being offered when, as and if issued, and subject to the delivery of an approving legal opinion by 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, Burke Burns & Pinelli, Ltd., Chicago, Illinois, and Greene and Letts, 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 Burke, Warren, MacKay & Serritella, P.C., Chicago, Illinois, Underwriters' Counsel. It is expected that the Series 2014 Bonds will be available for delivery through the facilities of DTC on or about September \_\_, 2014.

# **PNC Capital Markets LLC**

<b>BMO Capital Markets</b>	Siebert Brandford Shank & Co., L.L.C.			
Academy Securities, Inc.	Blaylock Beal Van, LLC	Cabrera Capital Markets, LLC		
CastleOak Securities, L.P.	Jefferies	J.J.B Hilliard, W.L. Lyons, LLC		
Melvin & Company, LLC		<b>RBC Capital Markets</b>		
Stern Brothers & Co.		US Bancorp		
Dated: September 2014				

\* Preliminary; subject to change

. . . ..

# MATURITIES, AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIPS<sup>1</sup>\*

# \$372,205,000 CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

Maturity November 1	Principal <u>Amount</u>	Interest <u>Rate</u>	Price	<u>Yield</u>	CUSIP <sup>(1)</sup>
2015	\$ 3,940,000				
2016	6,225,000				
2017	6,410,000				
2018	6,670,000				
2019	6,935,000				
2020	7,210,000				
2021	7,570,000				
2022	7,950,000				
2023	8,350,000				
2024	8,765,000				
2025	9,205,000				
2026	9,665,000				
2027	10,150,000				
2028	10,655,000				
2029	11,190,000				
2030	11,745,000	-			
2031	12,335,000				
2032	12,830,000				
2033	13,470,000				
2034	14,145,000				
\$82,060,00	0% due Noveml	per 1 2039, Price	%, Yield	%, CUSIP	
\$104,730,00	00% due Novem	ber 1 2044, Price	%, Yield	%, CUSIP	

Preliminary; subject to change

1

Copyright 2014; 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 only at the time of issuance of the Series 2014 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 Series 2014 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 Series 2014 Bonds.

# **CITY OF CHICAGO**

# MAYOR Rahm Emanuel

CITY TREASURER Stephanie D. Neely

**CITY CLERK** Susana A. Mendoza

# CITY COUNCIL COMMITTEE ON FINANCE Edward M. Burke, Chairman

CHIEF FINANCIAL OFFICER Lois A. Scott

> CITY COMPTROLLER Daniel J. Widawsky

BUDGET DIRECTOR Alexandra Holt

CORPORATION COUNSEL Stephen R. Patton, Esq.

**DEPARTMENT OF WATER MANAGEMENT** Thomas H. Powers, P.E., Commissioner

# **CO-BOND COUNSEL**

Pugh Jones & Johnson, P.C. Chicago, Illinois

Cotillas and Associates Chicago, Illinois

# FINANCIAL ADVISOR

Acacia Financial Group, Inc. Chicago, Illinois 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, 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 Series 2014 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 Series 2014 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 SERIES 2014 BONDS, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE SERIES 2014 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 SERIES 2014 BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE SERIES 2014 BONDS ARE RELEASED FOR SALE, AND THE SERIES 2014 BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE SERIES 2014 BONDS INTO INVESTMENT ACCOUNTS.

# **OFFICIAL STATEMENT SUMMARY**

This Summary does not constitute a part of the Official Statement for the issuance and sale by the City of Chicago of its Series 2014 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 the Official Statement. Capitalized terms used in this Summary are defined in the Official Statement.

Issuer	City of Chicago.
The Series 2014 Bonds	\$372,205,000 <sup>*</sup> Second Lien Water Revenue Bonds, Project Series 2014.
Payment of Interest	Interest on the Series 2014 Bonds will be payable on each May 1 and November 1, commencing May 1, 2015. The Series 2014 Bonds will bear interest at the rates per year shown on the inside cover of the Official Statement and will be computed on the basis of a 360-day year consisting of twelve 30-day months. The Series 2014 Bonds will bear interest from and including the date of issuance, until payment of the principal or redemption price of such Series 2014 Bonds will have been made or provided for, whether at the maturity date of such Series 2014 Bonds or otherwise. See "DESCRIPTION OF THE SERIES 2014 BONDS – General" in the Official Statement.
Redemption	The Series 2014 Bonds are subject to optional redemption prior to maturity at a redemption price determined as described in the Official Statement. The Series 2014 Bonds maturing on November 1 of the years 2039* and 2044*, are subject to mandatory sinking fund redemption as described in the Official Statement. See "DESCRIPTION OF THE SERIES 2014 BONDS – Redemption" in the Official Statement.
Ratings	The Series 2014 Bonds have received ratings of "A3" (negative outlook) from Moody's, "AA-" (stable outlook) from S&P, "AA" (stable outlook) from Fitch and "AA" (stable outlook) from Kroll. See "RATINGS" in the Official Statement.
Security for the Series 2014 Bonds	The Series 2014 Bonds, 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 (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. The Series 2014 Bonds are further secured by amounts on deposit from time to time in the 2014 Construction Account. See "SECURITY FOR THE SERIES 2014 BONDS" in the 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 collected 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 is used 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 in the Ordinance (and described under the caption "SECURITY FOR THE SERIES 2014 BONDS – Flow of Funds" in the Official Statement) and all other

\* Preliminary; subject to change

i

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 are only expended for lawful purposes of the Water System. See "SECURITY FOR THE SERIES 2014 BONDS – Flow of Funds," and"– Cash and Investments" in the Official Statement.

# Rate Covenant The City has covenanted in the Ordinance and the Indenture 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 "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 herein. 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 "INTRODUCTION – Rate Covenant," "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" in the Official Statement.

Limited Obligation	The Series 2014 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 (as defined in the Eighth Supplemental Indenture) 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 Series 2014 Bonds. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including those financed with proceeds of the Series 2014 Bonds. See "SECURITY FOR THE SERIES 2014 BONDS" in the Official Statement.
Authority for Issuance	The Series 2014 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 April 30, 2014 and 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 August 1, 2004, and as further supplemented by the Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014 dated as of September 1, 2014. See "INTRODUCTION" in the 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. See "THE WATER SYSTEM," "THE WATER SYSTEM SERVICE AREA" and "FINANCIAL OPERATIONS" in the 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. The 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, the Water System rates set for that year represented a 25% increase over the rates for the previous year; Water System rates in 2013 represented a 15% increase over the previous year; and Water System rates set for 2014 represented a 15% increase over the previous year. Water System rates for the year beginning January 1, 2015 have been set by the City Council at a rate representing a 15% increase over rates for 2014. 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. See "FINANCIAL OPERATIONS" in the Official Statement.
Use of Proceeds	Proceeds of the Series 2014 Bonds will be used to (i) pay costs of the Series 2014 Expected Projects and (ii) pay the Costs of Issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program" in the Official Statement.
Trustee	The Bank of New York Mellon Trust Company, N.A., Chicago, Illinois, will serve as Trustee and Paying Agent.
Tax Matters	Subject to compliance by the City with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Series 2014 Bonds is excluded from the gross

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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 2014 Bonds will, however, be taken into account in computing the corporate alternative minimum tax for certain corporations. Interest on the Series 2014 Bonds is not exempt from present State of Illinois income taxes. See "TAX MATTERS" in the Official Statement.

Delivery andThe Series 2014 Bonds are expected to be available for delivery through DTC on or aboutClearanceSeptember \_\_\_, 2014.

Legal Matters Certain legal matters will be passed upon for the parties to the financing as set forth on the cover page to the Official Statement.

Retirement Funds City employees who work for the Department of Water Management participate in one of two defined-benefit retirement plans of the City. The City's retirement plans have been actuarially determined to be significantly underfunded. Under current law, the City's retirement costs (and the Water Fund's share thereof), is expected to increase beginning in 2016 (budgeted in 2015). For additional information, see "FINANCIAL OPERATIONS – Pension and Other Post-Employment Benefit Costs" and APPENDIX E – "RETIREMENT FUNDS." Increased Water System operating revenues from scheduled water rate increases are expected to more than offset increases in retirement costs allocable to the Water Fund. See "FINANCIAL OPERATIONS – Historical and Projected Financial Operations."

The City and the retirement plans share the cost of post-employment healthcare benefits available for certain retired City employees ("Health Plan"). The City contributed to the Health Plan pursuant to a settlement agreement between the City and the retirement plans. The settlement agreement expired on June 30, 2013, and the City intends to phase out health benefits for most participants by 2017. 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 E – "RETIREMENT FUNDS – Payment for Other Post-Employment Benefits."

# TABLE OF CONTENTS

	Page
OFFICIAL STATEMENT SUMMARY	
INTRODUCTION	
Purpose	
Authorization	
Security for the Series 2014 Bonds	
Rate Covenant	
The City of Chicago Water System	
Water System Rates	
USE OF PROCEEDS	
Series 2014 Expected Projects	
Estimated Sources and Uses of Funds	
DESCRIPTION OF THE SERIES 2014 BONDS	4
General	
Redemption	
Book-Entry System	
General Provisions of the Series 2014 Bonds When Not in Book-Entry System	
SECURITY FOR THE SERIES 2014 BONDS	10
General	10
Pledge of Second Lien Bond Revenues	11
Flow of Funds	11
Cash and Investments	16
Investment of Funds	16
Senior Lien Parity Bonds	16
Second Lien Parity Bonds	17
Subordinate Lien Obligations	17
Bankruptcy	
OUTSTANDING DEBT AND ANNUAL DEBT SERVICE	17
Outstanding Obligations	17
Swaps	18
Liquidity and Letter of Credit Providers	
Annual Debt Service	21
THE DEPARTMENT OF WATER MANAGEMENT	22
THE WATER SYSTEM	22
Billing for Water and Sewer Services	22
Description of Facilities	23
Capital Improvement Program	23
THE WATER SYSTEM SERVICE AREA	
Service Area	24
Population Served	25
Water Accounts	
Suburban Customers, State of Illinois as Customer	
Water Pumpage	
Lake Michigan Allocations	
Quality of Water Supplied	
FINANCIAL OPERATIONS	
Rates, Fees and Users	

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Water System Rates	33
Water Rate Comparisons	33
Distribution of Revenues by Type of Account	34
Annual Budget Review and Implementation of Annual Budget	
Historical and Projected Financial Operations	35
Collections and Delinquencies	
Pension and Other Post-Employment Benefit Costs	41
LITIGATION	42
CERTAIN LEGAL MATTERS	42
INDEPENDENT AUDITORS	
FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR	
UNDERWRITING	43
TAX MATTERS	44
Federal Tax Exemption	44
Original Issue Discount	
Market Discount	46
Bond Premium	46
No State Tax Exemption	
SECONDARY MARKET DISCLOSURE	
Annual Financial Information Disclosure	
Reportable Events Disclosure	
Consequences of Failure of the City to Provide Information	48
Amendment; Waiver	
ЕММА	49
Termination of Undertaking	
Additional Information	
Corrective Action Related to Certain Bond Disclosure Requirements	49
RATINGS	
MISCELLANEOUS	52

# APPENDICES

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- A CERTAIN DEFINITIONS
- B SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE
- C CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION AND INDEPENDENT AUDITORS' REPORT
- D FORM OF OPINIONS OF CO-BOND COUNSEL
- E RETIREMENT FUNDS

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# \$372,205,000<sup>\*</sup> CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

# INTRODUCTION

This Official Statement, including the cover page hereof and the Appendices hereto, sets forth certain information in connection with the sale of  $372,205,000^{\circ}$  aggregate principal amount of Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 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 of the Series 2014 Bonds will be used to (i) pay costs of the Series 2014 Expected Projects (as defined herein) and (ii) pay the Costs of Issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program."

#### Authorization

The Series 2014 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 April 30, 2014 (the "Ordinance") and 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 August 1, 2004 ("Amendment No. 1"), and as further supplemented by the Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014 dated as of September 1, 2014 (the "Eighth Supplemental Indenture," and collectively with Amendment No. 1 and the Master Indenture, the "Indenture").

#### Security for the Series 2014 Bonds

The Series 2014 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 (including those amounts on deposit in the 2014 Second Lien Project Bonds Subaccount established under the Ordinance, 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), the sources pledged under the Indenture and amounts on deposit in the Construction Account: 2014 Second Lien Project Water Revenue Bonds (the "2014 Construction Account") 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 (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 any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other Series of Second Lien Bond Revenues (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) is granted to the Registered Owners of the Second Lien Bonds Outstanding from time to time, and a lien on amounts in the 2014 Construction Account is granted to the Registered Owners of the Series 2014 Bonds Outstanding from time to time,

Preliminary; subject to change

subject to amounts in those Accounts being deposited, credited and expended as provided in the Ordinance and the Indenture. The claim of the Series 2014 Bonds to payment from amounts in the Water Fund is subordinate to the claim of Senior Lien Bonds. See "SECURITY FOR THE SERIES 2014 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 Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including the Series 2014 Expected Projects. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds do not have a claim for payment from any taxes of the City. See "SECURITY FOR THE SERIES 2014 BONDS – General."

# Rate Covenant

The City has covenanted in the Ordinance and the Indenture 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 "Rate Covenant").

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. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – 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."

# The 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 customers. See APPENDIX A – "CERTAIN DEFINITIONS" for the definition of the term "Water System" as such term is defined in the Indenture. The Water System currently serves a population of 5.37 million. The Water System's water is allocated from Lake Michigan pursuant to regulations of the Illinois Department of Natural Resources. See "THE WATER SYSTEM SERVICE AREA— Lake Michigan Allocations."

As of December 31, 2013, 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 2013, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 46.5 percent 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. The 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, the Water System rates set for that year represented a 25% increase over the rates for the previous year; Water System rates in 2013 represented a 15% increase over the previous year; and Water System rates set for 2014 represented a 15% increase over the previous year; and Water System rates set for 2014 represented a 15% increase over the previous year. Water System rates for the year beginning January 1, 2015 have been set by the City Council at a rate representing a 15% increase over rates for 2014. 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. The City Council may take action at any time to alter the then-current schedule of water rates. See "FINANCIAL OPERATIONS."

#### **USE OF PROCEEDS**

#### Series 2014 Expected Projects

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Proceeds of the Series 2014 Bonds are expected to be used to (i) finance capital improvements to and upgrades of the Water System, including improvements to the City's two purification plants,

upgrading various pumping stations, installing new and replacing old grid mains and replacing and installing new meters (collectively, the "Series 2014 Expected Projects"), and (ii) pay the Costs of Issuance of the Series 2014 Bonds. The City reserves the right to change any of the foregoing expected uses of proceeds and use proceeds of the Series 2014 Bonds to finance any of the other capital improvements in the Capital Improvement Program described in this Official Statement. See "THE WATER SYSTEM – Capital Improvement Program."

#### **Estimated Sources and Uses of Funds**

The following table sets forth the estimated sources and uses of funds in connection with the issuance of the Series 2014 Bonds.

## **SOURCES OF FUNDS:**

Principal Amount of the Series 2014 Bonds Net Bond Premium/Discount

# **Total Sources of Funds**

#### **USES OF FUNDS:**

Costs of the Series 2014 Expected Projects Costs of Issuance (including the underwriters' discount)

## **Total Uses of Funds**

# **DESCRIPTION OF THE SERIES 2014 BONDS**

# General

The Series 2014 Bonds will be issued as fully registered bonds without coupons in the bookentry-only system described below under "– Book-Entry System," in denominations of \$5,000 and any integral multiple of \$5,000. The Series 2014 Bonds will be dated the date of issuance, and will mature on November 1 in each of the years and in the principal amounts and shall bear interest at the respective rates per year set forth on the inside cover page of this Official Statement.

Interest on the Series 2014 Bonds will be payable on each May 1 and November 1, commencing May 1, 2015 (each, an "Interest Payment Date"), computed upon the basis of a 360-day year consisting of twelve 30-day months. The Series 2014 Bonds will bear interest from and including the date of issuance, until payment of the principal or redemption price of such Series 2014 Bonds will have been made or provided for in accordance with the provisions of the Eighth Supplemental Indenture, whether at the maturity date of such Series 2014 Bonds or otherwise. No interest shall accrue on any Series 2014 Bond after the maturity date thereof (provided, the payment at maturity is paid or provided for in accordance with the provisions of the Indenture). Each Series 2014 Bond will bear interest on overdue principal and, to the extent permitted by law, on overdue premium, if any, and interest at the rate borne by such Series 2014 Bond on the date on which such principal, premium or interest came due and payable.

#### Redemption

Optional Redemption of Series 2014 Bonds. The Series 2014 Bonds maturing on or after November 1, 20\_, 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, 20\_\_, 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 principal amount of such Series 2014 Bonds, together with accrued interest to the date fixed for redemption.

*Mandatory Sinking Fund Redemption.* The Series 2014 Bonds due November 1, 2039<sup>\*</sup> (the "2039 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Bonds due November 1, 2039\* Year Principal Amount

†Stated Maturity

The Series 2014 Bonds due November 1, 2044\* (the "2044 Term Bonds" and, together with the 2039 Term Bonds, the "Series 2014 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Bonds due November 1, 2044\* Year Principal Amount

**†Stated Maturity** 

In lieu of redeeming the Series 2014 Term Bonds pursuant to the mandatory sinking fund redemption provisions described above, on or before the 60th day next preceding any mandatory sinking fund redemption date for such Series 2014 Term Bonds, the Trustee may, at the written direction of the

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Preliminary; subject to change

Authorized Officer, use such funds available under the Indenture to purchase Series 2014 Term Bonds in the open market at a price not exceeding par plus accrued interest.

Reduction of Mandatory Redemption Amounts. On or before the 60th day next preceding any mandatory sinking fund redemption date for the Series 2014 Term Bonds (or such shorter period as may be acceptable to the Trustee), the City may, at its option, (i) deliver to the Trustee for cancellation, Series 2014 Term Bonds or portions thereof in Authorized Denominations subject to mandatory sinking fund redemption or (ii) receive a credit in respect of its mandatory sinking fund redemption obligation for Series 2014 Term Bonds or portions thereof in Authorized Denominations which prior to said date have been redeemed (otherwise than through the operation of such mandatory sinking fund redemption) and canceled by the Trustee and not theretofore applied as a credit against any mandatory sinking fund redemption obligation. Each Series 2014 Term Bond or portion thereof subject to mandatory sinking fund redemption obligations on Series 2014 Term Bonds in such order as the City designates, or if no such designation is made, in chronological order, the principal amount of such Series 2014 Term Bonds to be redeemed by operation of such mandatory redemption to be accordingly reduced.

Notice of Redemption. Unless waived by any owner of Series 2014 Bonds to be redeemed, notice of the call for any optional or mandatory redemption shall be given by the Trustee on behalf of the City. by mailing the redemption notice by first class mail at least thirty days and not more than forty-five days prior to the date fixed for redemption to the registered owner of the Series 2014 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 2014 Bond shall not affect the validity of the proceedings for the redemption of any other Series 2014 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 2014 Bonds or any portion thereof to be redeemed will specify, at a minimum, (i) the series name and designation and certificate numbers of Series 2014 Bonds being redeemed, (ii) the CUSIP numbers of the Series 2014 Bonds being redeemed, (iii) the principal amount of Series 2014 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 2014 Bonds being redeemed, (vii) the interest rate and maturity date of the Series 2014 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 2014 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 2014 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 2014 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 2014 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 2014 Bonds of a series, the City will deposit with the Trustee an amount of money sufficient to pay the redemption price of all such Series 2014 Bonds or portions thereof which are to be redeemed on that date.

Notice of redemption having been given as described above, the Series 2014 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 2014 Bonds, or portions thereof, shall cease to bear interest. Upon surrender of such Series 2014 Bonds for redemption in accordance with said notice, such Series 2014 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 2014 Bond, there will be prepared for the registered owner a new Series 2014 Bond or Series 2014 Bonds of the same interest rate and maturity in the amount of the unpaid principal. If any Series 2014 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 2014 Bond, or portion thereof, so called for redemption.

# Selection of Series 2014 Bonds for Redemption.

In the event of the redemption of fewer than all the Series 2014 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 2014 Bond of such maturity and interest rate a distinctive number for each minimum Authorized Denomination of such Series 2014 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 2014 Bonds to be redeemed. The Series 2014 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 2014 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 2014 Bonds of a single maturity and interest rate, the particular Series 2014 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 2014 Bonds, if fewer than all of the Series 2014 Bonds of any maturity and interest rate are called for redemption, the particular Series 2014 Bonds or portions of Series 2014 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 Series 2014 Bonds. The Series 2014 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 the Series 2014 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 bookentry 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 Series 2014 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2014 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2014 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 Series 2014 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 Series 2014 Bonds, except in the event that use of the Book Entry System for the Series 2014 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2014 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 Series 2014 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 Series 2014 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2014 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 Series 2014 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 Series 2014 Bonds may wish to ascertain that the nominee holding the Series 2014 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 Series 2014 Bonds of a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Series 2014 Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2014 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

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Direct Participants to whose accounts the Series 2014 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and interest payments on the Series 2014 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 Series 2014 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 Series 2014 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 Series 2014 Bonds will be printed and delivered to DTC.

## Additional Information

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For every transfer and exchange of the Series 2014 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 SERIES 2014 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 SERIES 2014 BONDS, OR ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN WITH RESPECT TO THE SERIES 2014 BONDS, INCLUDING ANY NOTICE OF REDEMPTION THE SELECTION OF SPECIFIC SERIES 2014 BONDS FOR REDEMPTION OR ANY OTHER ACTION TAKEN, BY DTC AS REGISTERED OWNER OF THE SERIES 2014 BONDS.

In reading this Official Statement it should be understood that while the Series 2014 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 Series 2014 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 Series 2014 Bonds When Not in Book-Entry System

During any period in which the Series 2014 Bonds are not registered in the name of DTC or its nominee, the principal of all Series 2014 Bonds and the Redemption Price, if any, of all Series 2014 Bonds (and the interest payable on any date of redemption other than on an Interest Payment Date) shall be payable at the principal office of the Trustee, which is the paying agent for the Series 2014 Bonds. Interest on the Series 2014 Bonds payable on any Interest Payment Date shall be payable by check mailed by the Trustee to the registered owners of the Series 2014 Bonds at their addresses as shown on the registration books of the City maintained by the Trustee. The interest payable on the Series 2014 Bonds on each Interest Payment Date will be paid to the persons in whose names the Series 2014 Bonds are registered as of the applicable Record Date. Upon request of a Registered Owner of at least \$1,000,000 outstanding principal amount of the Series 2014 Bonds, all payments of interest on all Series 2014 Bonds shall be paid by wire transfer in federal funds to an account in the continental United States designated by such Registered Owner. The principal and Redemption Price of each Series 2014 Bond shall be payable in clearinghouse funds upon surrender of such Series 2014 Bond at the principal office of the Trustee. The Series 2014 Bonds may be transferred or exchanged for the same total principal amount of Series 2014 Bonds of the same maturity in Authorized Denominations upon surrender at the principal office of the Trustee, together with an assignment executed by the Registered Owner or by the Registered Owner's duly authorized agent. Payment of any tax, fee or other governmental charge, other than one imposed by the City, arising from any transfer or exchange of Series 2014 Bonds may be required to be paid by the Registered Owner as a condition for exercising that privilege. Neither the City nor the Trustee will be required to transfer any Series 2014 Bond during the 15 days next preceding an Interest Payment Date or, in the case of a proposed redemption of the Series 2014 Bonds, after the selection by the Trustee of such Series 2014 Bonds for redemption. In the event any Series 2014 Bond is mutilated, lost, stolen or destroyed, the City shall execute and the Trustee shall authenticate a new Series 2014 Bond upon satisfaction of the provisions of the Indenture.

#### **SECURITY FOR THE SERIES 2014 BONDS**

## General

The Series 2014 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 (as defined in the Eighth Supplemental Indenture) 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 Series 2014 Bonds. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds do not have a claim for payment from any taxes of the City. The Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including those financed with proceeds of the Series 2014 Bonds.

As described herein, the Series 2014 Bonds, 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 Series 2014 Bonds are further secured by amounts on deposit from time to time in the 2014 Construction Account. 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**

The Ordinance authorizes the issuance of up to \$475,000,000 principal amount of water revenue obligations for the purpose of financing improvements and extensions of the Water System and up to \$100,000,000 principal amount of water revenue obligations for the purpose of refunding water revenue obligations issued for such purposes. Such water revenue obligations include the Series 2014 Bonds, which will be issued as Second Lien Bonds pursuant to the Ordinance and the Indenture. Under the Ordinance and the Indenture, the Series 2014 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, including those on deposit in the 2014 Second Lien Project Bonds Subaccount held under the Ordinance (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), amounts on deposit in the 2014 Construction Account held under the Ordinance, and amounts held by the Trustee under the terms of the Eighth Supplemental 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 Series 2014 Bonds) without priority or distinction of one 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**

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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 collected 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). The Water Fund is used 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, 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 Series 2014 Bonds and any other Second Lien Parity 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 Parity 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 Parity Bonds in order to satisfy the debt service and other payment obligations under the Indenture and any ordinance or indenture authorizing such Second Lien Parity Bonds. Moneys on deposit in the Second Lien Bonds Account shall be applied without priority as to any particular series of Second Lien Parity 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 such Water System Line of Credit Notes.

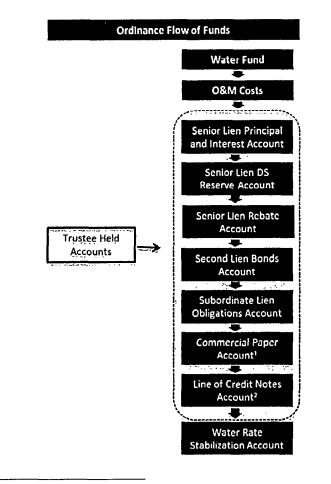
8. The *Water Rate Stabilization Account* is used at the City's discretion, in any year, to pay any expenses of or obligations of the Water System, including, without limitation, Operation and Maintenance Costs, deposits in the Senior Lien Principal and Interest Account, deposits in the Senior Lien Debt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

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- <sup>1</sup> As of the date of this Official Statement, there are no Commercial Paper Notes outstanding, nor are there any current plans for the issuance of Commercial Paper Notes.
- <sup>2</sup> As of the date of this Official Statement, there are no Water System Line of Credit Notes outstanding, nor are there any current plans for the issuance of Water System Line of Credit Notes.

To provide for debt service on the Series 2014 Bonds, the City, on each May 1 and November 1 (each a "Deposit Date"), commencing May 1, 2015, is required to deposit into the 2014 Second Lien Project Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, from amounts on deposit in the Second Lien Bonds Account, 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 the Business Day next preceding each such Deposit Date):

(a) for deposit into the Principal and Interest Account of the 2014 Second Lien Project Bond Subaccount, an amount equal to the Principal and Interest Account Requirement; and

(b) for deposit into the Program Fee Account of the 2014 Second Lien Project Bond 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 Series 2014 Bonds on such Deposit Date. Moneys on deposit in the Principal and Interest Account will be held by the Trustee for the sole and exclusive benefit of the Series 2014 Bonds and used for the purpose of paying the principal of and interest on such Bonds when due. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – Application of Series 2014 Bond Proceeds – Deposits into 2014 Second Lien Bond Project Subaccount and Accounts Therein."

#### **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, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION 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 and the Capitalized 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 Series 2014 Bonds, or (B) six months from the date of investment for amounts representing interest payable on the Series 2014 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, 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."

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

The Ordinance does not restrict the City's ability to issue obligations payable on a basis subordinate to the Series 2014 Bonds.

## Bankruptcy

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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.

# OUTSTANDING DEBT AND ANNUAL DEBT SERVICE

#### **Outstanding Obligations**

Before giving effect to the issuance of the Series 2014 Bonds, the outstanding indebtedness of the Water System was \$48,982,274 aggregate principal amount of Senior Lien Bonds and \$1,921,580,000 aggregate principal amount of Second Lien Bonds.

The City has also entered into seven loan agreements with the Illinois Environmental Protection Agency ("IEPA") as shown in the following table. The claim of the loans for payment from moneys in the Water Fund is subordinated to the claim of the Series 2014 Bonds.

IEPA Water	Fund	Loans	Outstanding
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Loan <u>Nos.</u>	Maturity <u>Dates</u>	Interest <u>Rate</u>	Amount of Loan Outstanding <sup>(1)</sup> (\$000)
L17-1247	11/01/22	2.905%	1,912
L17-2054	05/01/25	2.570	1,799
L17-3770	02/12/32	0.000	8,206
L17-3769	08/01/32	1.250	1,493
L17-4564	02/03/32	1.250	5,953
L17-4686	08/01/32	1.250	1,468
L17-4687	02/03/33	1.250	5,465
Total Outsta			
Principal Ba	alance (2)		<u>26,296</u>

Source: City of Chicago, Department of Water Management, Water Fund Comprehensive Financial Report for the Years Ended December 31, 2013 and 2012.

<sup>(1)</sup> The outstanding principal amounts are as of December 31, 2013.

(2) This total does not include five IEPA loans in the aggregate maximum amount of \$161.5 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.

The Series 2004 Second Lien Bond Ordinance authorizes the issuance from time to time of Commercial Paper Notes and Water System 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. There are no Commercial Paper Notes or Water System Line of Credit Notes currently Outstanding. 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 Series 2014 Bonds.

#### Swaps

The City entered into the interest rate swaps set forth below as a means of limiting, reducing or managing the City's interest cost with respect to certain Outstanding Second Lien Bonds, limiting the interest rate risk inherent in variable rate debt. However, the interest rate swaps may expose the City to certain market and credit risks. The City may terminate interest rate swaps at any time at market value or upon the occurrence of certain events. In addition, the City or the counterparties may terminate the related interest rate swaps if the other party fails to perform under the terms of such swaps. If the interest rate swaps are terminated, the related bonds would continue to bear interest at a variable rate (unless converted by the City to a fixed interest rate), and the City could be liable for a termination payment if the swaps have a negative market value. The estimated mid-mark-to-market valuation for all of the interest rate swaps listed in the table below is negative \$91.6 million. This estimate is based on the information provided by each counterparty and has not been independently verified by the City.

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The City has entered into three outstanding interest-rate swaps constituting Section 2.09 Obligations in connection with certain Second Lien Bonds, as described in the table on the following page.

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Issue	Current Notional Amount <u>(\$000)</u>	Counter- party	City ATE Level <sup>(1)</sup>	<u>Type</u>	City Pays <u>(%)</u>	City <u>Receives</u>	Effective <u>Date</u>	Termination Date	Mark to Market <sup>(2)</sup> (\$)
2nd Lien Series 2000	100,000	UBS	Baal / BBB+	Floating -to- Fixed	3.8694	67% of LIBOR	4/16/08	11/1/30	(25,091,959)
2nd Lien	179,690	UBS	Baal / BBB+	Floating -to- Fixed	3.8694	67% of LIBOR	8/5/04	11/1/25	(30,531,734)
Series 2004	186,460	RBC	Baal / BBB+	Floating -to- Fixed	3.8669	67% of LIBOR	8/5/04	11/1/31	(36,019,537)

## Swaps Related to Outstanding Water Revenue Bonds

Source: City of Chicago, Department of Finance.

(1) A counterparty may terminate its related interest rate swap if the rating for the Second Lien Water Revenue Bond credit falls below the rating listed in the column "City ATE Level" by Moody's or S&P.

<sup>(2)</sup> Valuations provided at mid-market by the Swap counterparty and are as of June 30, 2014.

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# Liquidity and Letter of Credit Providers

The City has entered into four letter of credit and/or liquidity facilities constituting Section 2.08 Obligations to provide for the payment of debt service on or tender prices for certain Second Lien Bonds that were issued in variable rate modes. The City intends to extend or substitute all of the letter of credit and/or liquidity facilities prior to their respective expiration dates. The following table describes these facilities.

Outstanding						
•						
Amount	Facility	Bond				
(\$000)	<b>Expiration</b>	<u>Maturity</u>	Provider	<u>Ratir</u>	ngs Thresho	$ds^{(1)}$
				<u>Fitch</u>	Moody's	<u>S&amp;P</u>
100,000	12/01/14	11/01/30	JPMorgan	BBB-	Baa3	BBB-
162,250	11/15/14	11/01/31	CalPers	BBB-	Baa3	BBB-
162,250	11/15/14	11/01/31	CalPers	BBB-	Baa3	BBB-
41,650	11/15/14	11/01/31	State Street	BBB-	Baa3	BBB-
	Principal Amount (\$000) 100,000 162,250 162,250	Principal Amount Facility (\$000) Expiration 100,000 12/01/14 162,250 11/15/14 162,250 11/15/14	Principal Amount Facility Bond (\$000) Expiration Maturity 100,000 12/01/14 11/01/30 162,250 11/15/14 11/01/31 162,250 11/15/14 11/01/31	Principal       Facility       Bond         Amount       Facility       Bond         (\$000)       Expiration       Maturity       Provider         100,000       12/01/14       11/01/30       JPMorgan         162,250       11/15/14       11/01/31       CalPers         162,250       11/15/14       11/01/31       CalPers	Principal         Principal           Amount         Facility         Bond           (\$000)         Expiration         Maturity         Provider         Ratin           [\$000]         Expiration         Maturity         Provider         Ratin           [\$100,000]         12/01/14         11/01/30         JPMorgan         BBB-           162,250         11/15/14         11/01/31         CalPers         BBB-           162,250         11/15/14         11/01/31         CalPers         BBB-	PrincipalAmountFacilityBond(\$000)ExpirationMaturityProviderRatings Thresho[\$00,000]ExpirationMaturityProviderFitchMoody's100,00012/01/1411/01/30JPMorganBBB-Baa3162,25011/15/1411/01/31CalPersBBB-Baa3162,25011/15/1411/01/31CalPersBBB-Baa3

Source: City of Chicago, Department of Finance.

<sup>(1)</sup> A Second Lien Water Revenue Bond debt rating below what is shown in the chart in the "Ratings Thresholds" column would constitute an event of default under the agreements with the related banks.

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# **Annual Debt Service**

The debt service of the Water System as of August 1, 2014, before giving effect to the issuance of the Series 2014 Bonds and assuming no refundings of Senior Lien or Second Lien Bonds prior to their maturities, is shown below (columns may not total due to rounding).

Calendar <u>Y</u> ear	Outstanding Scnior Lien Bonds Principal and Interest	Outstanding Second Lien Bonds Principal and Interest <sup>(1) (2)</sup>	Series 2014 Bonds Principal and Interest	Total Senior and Second Lien Bonds <sup>(3)</sup> Principal and <u>Interest</u>
2014	\$ 21,070,953	\$ 80,486,505		
2015	21,484,831	126,223,678		
2016	21,485,206	133,956,529		
2017	15,590,000	139,869,707		
2018	15,595,000	139,915,400	Y.	
2019	7,550,000	147,989,389		
2020	7,555,000	148,130,992		
2021		155,530,044		
2022		155,623,761		
2023		155,703,428		
2024		156,174,774		
2025		153,455,022		
2026		139,755,834		
2027		139,081,959		
2028		147,814,207		
2029		147,410,309		
2030		143,684,283		
2031		109,721,451		
2032		99,437,432		
2033		98,991,720		
2034		98,535,961		
2035		98,051,746		
2036		97,546,690		
2037		87,457,847		
2038		86,807,338		
2039		69,540,626		
2040		68,648,397		
2041		26,404,750		
2042		26,402,250		
2043				
2044				
TOTAL	<u>\$110,330,991</u>	\$3,378,352,025		

Source: City of Chicago, Department of Finance.

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(1) The City has entered into interest rate hedge agreements for its Series 2000 Second Lien Bonds and Series 2004 Second Lien Bonds and debt service is calculated based on the swap rate. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE – Swaps" above..

(2) 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.

<sup>(3)</sup> Does not include the Subordinate Lien Obligations. See "- Outstanding Obligations" above.

#### THE DEPARTMENT OF WATER MANAGEMENT

The Department of Water Management 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 of Water Management as of December 31, 2013 for Water Fund employees was 1,511 and Sewer Revenue Fund 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 of Water Management 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 of Water Management's employees are covered by collective bargaining agreements that expire in 2017. The Department of Water Management 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 of Water Management 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 of Water Management 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 of Water Management participates in monthly 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 of Water Management is also committed to increasing its use of mapping and technology, for example, by utilizing geographic information systems. The Department of Water Management believes cost savings from these efforts were \$4.8 million in 2011, \$6.0 million in 2012 and \$7.6 million in 2013. Cost savings realized allow for increased expenditures in the Capital Improvement Program.

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

- 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

#### THE WATER SYSTEM

## **Billing for Water and Sewer Services**

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 both water usage and sewer service charges are established by ordinance of the City. The sewer service charge is established in an amount designed to pay the costs of Sewer System operations and capital improvements, including any related debt service.

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Currently, the sewer service charge is set at 96% percent of the water usage charge within the City. Any delinquencies for sewer service charges are carried on the books of the Sewer Revenue Fund. Billings and collections for both funds are handled by the Water Division of the City of Chicago Department of Finance. See "FINANCIAL OPERATIONS – Collections and Delinquencies."

#### **Description of Facilities**

*Treatment Plants.* The Department of Water Management operates two of the world's largest water treatment facilities, the South Water Purification Plant and the James W. Jardine Water Purification Plant, aggregating a continuous service capacity of 2,177 million gallons per day ("MGD"). The South Water Purification Plant has a rated capacity of 720 MGD and serves the City south of 39<sup>th</sup> 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 1,457 MGD. It has been in operation since 1964 serving the City north of 39<sup>th</sup> 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 (one of which is on standby service), and two of which are shore intakes (one at each plant).

*Pumping Stations, Water Supply Tunnels.* Of the Water System's 12 pumping stations, four are steam-powered and eight are electric-powered. Included is the electric-powered Lexington pumping station completed by DWC in 1992 which was acquired by the City through a credit for a portion of the charges for water purchased by DWC. 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 approximately 4,369 miles of water mains ranging in size from four to 60 inches in diameter.

*Water Distribution.* The water distribution system consists of approximately 4,321 miles of water mains, approximately 48,614 fire hydrants and approximately 49,447 valves.

#### **Capital Improvement Program**

The City, through the Department of Water Management, is continually improving and rehabilitating the Water System. To provide for future additions to the Water System, replacement of facilities and rehabilitation of existing facilities, in 2012 the Department of Water Management put in place a ten-year capital improvement plan (the "Capital Improvement Program"). The Capital Improvement Program constitutes a series of annual benchmarks that the Department of Water Management intends to achieve in order to implement the entire Program. In the midst of the third year of the ten-year Capital Improvement Program, the Department of Water Management has generally remained on track with its goals. For example, the Department of Water Management achieved its 2013 goal of replacing 75 miles of water main by September 2013 and exceeded its 2013 goal of installing 10,000 meters by 37%.

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 of Water Management addresses funding and expenditure in five-year increments. The information presented in the table below reflects the Department of Water Management's proposed expenditures for capital improvements under the Capital Improvement Program.

Year	Estimated Amount of Capital Improvements (in Thousands)
2014	\$ 446,531
2015	378,011
2016	439,801
2017	451,502
2018	465,249
Total	<u>\$2,181,094</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 40 percent of the projects will be funded from net revenues of the Water System with the remainder funded from the sale of indebtedness of the Water System.

The Capital Improvement Program addresses the renewal and replacement of the Water System's infrastructure, and focuses on four major areas: water main replacement, meter installation, electrification of pumping stations, and rehabilitation and upgrading of the Water System's two purification plants. The Department of Water Management replaced 70 miles of water main in 2012, 75 miles of water main in 2013 and is on track to replace 85 miles of water main in 2014 and 90 miles of water main in 2015. Over the ten-year period from 2012 through 2021, the Department of Water Management plans to replace an average of 88 miles of water mains annually, install 204,000 meters, design the electrification of four existing pumping stations, and convert three pumping stations from steam to electricity. The ongoing projects of the Department of Water Management 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.

The Series 2014 Expected Projects expected to be funded from proceeds of the Series 2014 Bonds relate to the ongoing implementation of the Capital Improvement Program. Two of the larger single projects among those expected to be funded from Series 2014 Bond proceeds are the conversion of the Springfield Pumping Station from steam to electric power and the replacement of a roof at the James W. Jardine Water Purification Plant. Contracts have already been let for these projects and completion of both is anticipated within a twelve-month period.

In the opinion of the Department of Water Management, the current Capital Improvement Program is adequate to maintain the Water System and reduce costs through improvements to the Water System where such improvements are feasible.

#### THE WATER SYSTEM SERVICE AREA

#### Service Area

The Water System supplied water to a service area of approximately 806 square miles as of December 31, 2013. The City accounted for approximately 228 square miles of this service area and the suburban customers supplied in 2013 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 of Water Management 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**

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The following table shows the population for the City and the suburban customers of the Water System:

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	Pop	oulation of Service Ar	ea	
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 <sup>(2)</sup>	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.

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.

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
Bloomingdale	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 <sup>(1)</sup>	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	

#### Suburban Customers Served by the Water System

Source: City of Chicago, Department of Water Management.

#### Water Accounts

As of December 31, 2013, the Water System supplied 494,185 accounts. Of these, 273,426 were non-metered and 220,759 were metered. The number of non-metered accounts exceeds the number of metered accounts because all single-family and two-family dwellings within the City were non-metered

<sup>&</sup>lt;sup>(1)</sup> IAWC (Illinois American Water Company, formerly Citizens' Utilities Company of Illinois) serves 11 unincorporated areas in Cook and DuPage Counties, Illinois.

accounts prior to 1984. Water meters are required on all new construction of single-family and twofamily 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:

Year Ended December 31	Non-metered	Metered	Total
2004	324,689	167,545	492,234
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 (1)	258,000	236,000	494,000

#### Water System Accounts

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup> Projected by Department of Water Management

Beginning in 2006, certain previously exempt charitable accounts began paying a portion of their water bill. See "FINANCIAL OPERATIONS – Rates, Fees and Users."

#### Suburban Customers, State of Illinois as Customer

The Department of Water Management'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 of Water Management'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 of Water Management's mains. The Department of Water Management 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 in 2013 with a 40-year term, expiring at the end of calendar year 2042. In 2013, DWC was the Department of Water Management's largest suburban customer, Oak Lawn was the second largest suburban customer and JAWA was the third largest suburban customer, with sales of approximately \$80,944,000, \$32,408,000 and \$30,482,000, 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 2013, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 47 percent of net water sales of the Water System.

Listed below are the Department of Water Management's 10 largest suburban customers in 2013. Several of these customers supply one or more other suburban customers. In 2013, the Department of Water Management's 10 largest customers, supplying a total of 58 suburban customers, accounted for approximately 34.5 percent of net water sales.

Customer	Amount of Sales (in Thousands)
DuPage Water Commission	\$ 80,944
Oak Lawn, Illinois	32,408
Northwest Suburban Municipal Joint Action Water Agency	30,482
Bedford Park, Illinois	23,167
Harvey, Illinois	9,251
Melrose Park, Illinois	9,016
Cicero, Illinois	7,442
Alsip, Illinois	6,778
McCook, Illinois	5,443
Des Plaines, Illinois	<u> </u>
Total	\$210,241

#### 10 Largest Suburban Customers of the Water System in 2013

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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. The City of Harvey, Illinois ("Harvey") has been delinquent since November 2008 in paying for water service from the City, having paid slightly less than half the amount owed. The amount currently owed by Harvey to the City, including penalties, is approximately \$25,840,000. Harvey's water account with the City represents approximately 1.5% of 2013 operating revenues for the Water Fund. The City commenced litigation against Harvey in December 2012 to recover monies owed. See "LITIGATION."

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 of Illinois 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 flow through the State of Illinois; all such revenues are paid directly to the City.

#### Water Pumpage

During 2013, the Water System pumped approximately 276 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 of Water Management to account exactly for its total system pumpage. However, the Department of Water Management estimates that in 2013 approximately 8.5 percent of the Water System's total pumpage was unaccounted flow, water lost through system leakage and other unaccounted-for flows. Of the water pumped in 2013, approximately 37 percent was supplied to suburban customers.

				Other Suburban	
Year	City	JAWA	DWC	Customers	<u> </u>
2004	205,404	12,613	31,481	70,571	320,069
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

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

Source: City of Chicago, Department of Water Management.

As the table below indicates, from 2004 through 2013 the Water System's maximum daily pumpage ranged from 47 percent to 64 percent of the Water System's 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
2004	320,069	875	1,134	2,160	53
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

#### Water System Pumpage and Capacity

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 of Water 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:

t	o City and Suburb	s served by City <sup>(1)</sup>	
Year	City	Suburbs	<u> </u>
2000	713.0	334.3	1,047
2010	737.1	362.8	1,100
2020	750.1	391.3	1,141

#### Lake Michigan Allocation under Order LMO 99-3 to City and Suburbs served by City<sup>(1)</sup>

(1) S

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 unaccountedfor 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.

#### **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. Lake Michigan water quality has shown substantial improvement in the last decade due to the pollution control efforts in the region.

#### 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 "FINANCIAL OPERATIONS – Suburban Customers, State of Illinois as Customer."

Water System rates are set by City Council. No regulation by any administrative agency applies to the City Water System rates. The 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. 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 Budget Office (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."

#### Water System Rates

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

Historical Water Rate Increases

	Gross Metere	ed Water Rate	Net Metered			
Date Effective	1,000 Cubic Feet	1,000 Gallons	1,000 Cubic Feet	1,000 Gallons	Percentage Increase Over <u>Prior Rate</u>	
Jan. 1, 2005	9.95	1.326	9.70	1.291	3	
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	

## (1) Reflects two and one-half percent discount for payment within 21 days, which was discontinued beginning

January 1, 2006.

Source: City of Chicago, Department of Water Management.

Future Water System rates have been authorized by the City Council, as summarized in the table below.

## Future Water RatesGross Metered Water RateNet Metered Water Rate<sup>(1)</sup>

Date Effective	1,000 Cubic Feet	1,000 Gallons	1,000 Cubic Feet	1,000 Gallons	Percentage Increase Over Prior Rate
Jan. 1, 2015	28.52	3.812	28.52	3.812	15

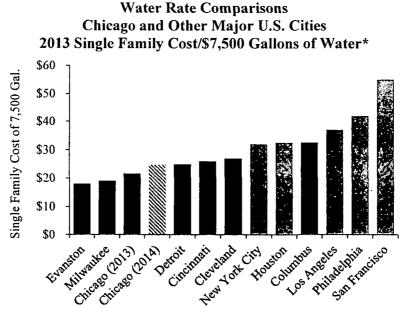
Source: City of Chicago, Department of Water Management.

Under currently applicable ordinances of the City, beginning June 1, 2016, and every year thereafter, annual 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. The City Council may take action at any time to alter the then-current schedule or water rates.

#### 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 the water systems serving other selected

U.S. cities. The chart compares the Water System's 2013 and 2014 rates to the 2013 water rates of the other cities.



\* 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 2004 through 2013:

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		City Servio	ce Area		
		Residential		_	,
Year	Metered	Non-Metered	Total	Industrial and Commercial	Suburban Service Area
2004	14	19	33	24	43
2005	15	18	33	23	44
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	13	48
2012	18	22	40	14	46
2013	20	19	39	14	47

Source: City of Chicago, Department of Water Management

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#### Annual Budget Review and Implementation of Annual Budget

The Department of Water Management'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 of Water Management'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 of Water Management's proposed annual budget. See APPENDIX B — "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE — 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 of Water Management has finalized its proposed annual budget, the Commissioner recommends it to the Budget Director. The Budget Director considers the Department of Water Management'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 2014 budget was approved by the City Council on November 26, 2013.

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, 2009 through December 31, 2013 together with projected financial operations and projected debt service coverage calculations for the years ending December 31, 2014 through December 31, 2016, reflecting the issuance of the Series 2014 Bonds and the application of the proceeds therefrom.

Operating revenues are expected to increase by approximately twelve percent in 2014, twelve percent in 2015, and 0% in 2016 based on already approved rate increases offset by slight decreases in consumption. The Department of Water Management projects that consumption will decrease by two

percent in 2014. Operating expenses for the years 2014 through 2016 are projected to increase at a rate of approximately 0% in 2014, 7% in 2015, and 5% in 2016.

Water usage is assumed to decline slightly during the projection period due to water conservation efforts. 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 ORDINANCE AND THE INDENTURE - 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 \$637.1 million operating revenues. Water sales and other operating revenues for 2013 were \$620.5 million and \$16.6 million, respectively. The increase in 2013 operating revenues of \$60.8 million (10.6%) from 2012 was primarily due to a 15% increase in water rates effective January 1, 2013, offset by the conversion of 17,427 non-metered accounts to metered accounts and a decrease in consumption resulting from a cooler summer in 2013.

Fiscal year 2013 nonoperating revenues of \$1.0 million are comprised mainly of net interest income, grants, and third-party payments totaling \$0.5 million. The increase in interest expense of \$10.5 million (12.9%) is primarily due to the first full year of interest expense for the Series 2012 Second Lien Bonds (\$8.5 million in 2012 and \$18.7 million in 2013).

Operating expenses before depreciation and amortization for the year ended December 31, 2013 increased by \$11.1 million (3.8%) from the year ended December 31, 2012 mainly due to an increase in provision for doubtful accounts of \$9.7 million (62%) resulting from an increase in accounts receivable; an increase in purification of \$4.7 million (8.4%), customer accounts and collection of \$1.6 million (16.1%), power and pumping of \$1.5 million (3.6%), and central services and General Fund reimbursement of \$1.4 million (1.3%) due to overtime and natural gas and electronic charges resulting

from an extremely cold winter; offset by a decrease in transmission and distribution of \$7.0 million (19.2%) due to a decrease in fuel consumption.

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

-	\$ 711.3					10.	12.3	10./ 12.3 23.4	10.7 12.3 23.4	10.7 12.3 23.4 115.3	10.7 12.3 23.4 115.3 11.4	10.7 12.3 23.4 115.3 320.9	10.7 12.3 23.4 115.3 320.9			$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	<del>\$</del>	1.0	60.7	30.4	16.2		12.0	12.0 22.2	12.0	12.0 22.2 112.0	12.0 22.2 112.0 0.0	12.0 22.2 112.0 300.1				
	\$ 637.1	1.0	7.04 8.09	29.5	25.4		11.6	11.6 21.2	11.6 21.2	11.6 21.2 108.7	11.6 21.2 108.7 0.0	11.6 21.2 108.7 300.6	11.6 21.2 21.2 108.7 300.6 0.4	11.6 21.2 108.7 300.6 300.6 \$336.9	11.6 21.2 108.7 300.6 <u>300.6</u> <u>5336.9</u> (13.5)	11.6 21.2 108.7 300.6 <u>300.6</u> <u>8336.9</u> (13.5) <u>\$323.4</u>
	\$ 576.3	4 - 7 7 - 7	41./ 56.1	36.5	15.7	( ,	10.0	10.0 21.9	10.0 21.9	10.0 21.9 107.4	10.0 21.9 107.4 0.0	10.0 21.9 107.4 289.5	10.0 21.9 107.4 289.5 0.0	$ \begin{array}{r} 10.0\\ 21.9\\ 107.4\\ \underline{0.0}\\ 289.5\\ \underline{0.3}\\ \underline{5.287.1}\\ \underline{\$.287.1}\\ \end{array} $	10.0 21.9 107.4 289.5 <u>\$289.5</u> <u>\$287.1</u> (13.5)	10.0 21.9 107.4 289.5 <u>\$287.1</u> (13.5) \$273.6
	\$ 454.2 0 2	7.02	2.0C	39.0	13.9		10./	10.7	17.1	10.7 17.1 96.6	10.7 17.1 96.6	10.7 17.1 96.6 282.2	10.7 17.1 96.6 282.2 282.2	10.7 17.1 96.6 282.2 282.2 <u>282.2</u> <u>5.174.0</u>	10.7 17.1 96.6 282.2 282.2 <u>282.2</u> <u>282.2</u> <u>282.2</u> 0.0	10.7 17.1 282.2 <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.2</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>282.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u> <u>287.7</u>
	\$ 458.4	1.0	40.7	38.7	15.9	10.7	<b>C.</b> 01	10.3 18.6	18.6	10.5 18.6 103.0	18.6 18.6 103.0	10.3 18.6 103.0 279.1	10.5 18.6 103.0 279.1 (0.3)	$10.3 \\ 18.6 \\ 103.0 \\ 279.1 \\ \underline{279.1} \\ \underline{\$179.0} \\ \underline{\$119.0} \\$	$10.3 \\ 18.6 \\ 103.0 \\ 279.1 \\ \underline{279.1} \\ \underline{\$179.0} \\ \underline{\$119.0} \\$	10.3 18.6 103.0 279.1 279.0 <u>\$179.0</u> \$169.0
	\$ 410.2	1.0	494	40.9	10.4	с Г	7.11	11.2	16.1	11.2 16.1 98.5	98.5 0.0	98.5 98.5 274.1	98.5 98.5 274.1 1.0	98.5 98.5 274.1 <u>1.0</u> <u>5137.1</u>	98.5 98.5 274.1 <u>274.1</u> <u>5137.1</u>	98.5 98.5 274.1 <u>274.1</u> <u>5137.1</u> <u>8137.1</u>
	Operating Revenues <sup>(1)</sup> Operating Expenses <sup>(2)</sup> Source of survely	bource of suppry	t ower and pumping Purification	Fransmission and distribution	Provision for doubtful accounts	Accounting and collection		Administrative and general	Administrative and general	Administrative and general Central services and general fund reimbursement	Administrative and general Central services and general fund reimbursement Additional Pension Contribution	Administrative and general Central services and general fund reimbursement Additional Pension Contribution	Administrative and general Central services and general fund reimbursement Additional Pension Contribution	Administrative and general Central services and general fund reimbursement Additional Pension Contribution	Administrative and general Central services and general fund reimbursement Additional Pension Contribution Contribution al operating expenses rest income (other than from construction accounts) Revenues. Revenues. Stabilization Account.	Administrative and general Central services and general fund reimbursement Additional Pension Contribution Total operating expenses Interest income (other than from construction accounts) Net Revenues Transfers from (to) Water Rate Stabilization Account Net Revenues Available for Bonds

Source: Actual: City of Chicago, Water Fund Basic Financial Statements as of and for the Years Ended December 31, 2013 And 2012; Projected: City of Chicago, Department of Water Management.

Projected operating revenues reflect an annual increase of approximately 12% in 2014, 12% in 2015 and 0% in 2016.
 Projected operating expenses reflect an annual increase of approximately 0% in 2014, 7% in 2015, and 5% in 2016.

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

			ACTUAL			P	ROJECTED	
	2009	2010	2011	2012	2013	2014 2015 2016	2015	2016
Net Revenues Available for Bonds	\$ 137.1	\$ 169.0		\$ 273.6	\$ 323.4	\$412.2	\$ 477.5	\$ 466.1
Senior Lien Debt Service	33.8	29.1		13.9	21.5	21.5	21.5	21.5
Senior Lien Debt Service Coverage	4.1x	5.8x		19.7x	15.0x	19.2x	22.2x	21.7x
Second Lien Bonds Debt Service <sup>(1)(2)</sup>	75.7	82.1		116.5	125.6	128.6	. 145.8	156.0
Subordinate Lien Debt Service	0.4	0.4		1.2	1.3		5.1	11.3
Combined Senior, Second and								
Subordinate Lien Debt Service <sup>(3)</sup>	<u>\$ 109.9</u>	<u>\$ 111.6</u>	<u>\$ 121.1</u>	<u>\$ 131.6</u>	<u>\$ 148.4</u>	\$ 152.2	<u>\$ 172.4</u>	<u>\$ 188.8</u>
Combined Senior and Second Lien								
Debt Service Coverage <sup>(3)</sup>	1.2x	1.5x	1.4x	2.1x	2.2x	2.8x	2.7x	2.4x

Source: Actual: City of Chicago, Water Fund Basic Financial Statements as of and for the Years Ended December 31, 2013 And 2012; Projected: City of Chicago, Department of Water Management.

- (1) The City has entered into interest rate hedge agreements for its Series 2000 Second Lien Bonds and Series 2004 Second Lien Bonds. The City pays interest at fixed rate of 3.8694 percent per annum on the Series 2000 Second Lien Bonds. The City pays interest at fixed rate of 3.8694 percent per annum on \$186.5 million of Series 2004 Second Lien Bonds. Second Lien Bonds. The City pays interest at fixed rate of 3.8694 percent per annum on \$186.5 million of Series 2004 Second Lien Bonds. See annum on \$179.7 million and 3.8669 percent per annum on \$186.5 million of Series 2004 Second Lien Bonds. See annum on \$186.5 million of Series 2004 Second Lien Bonds. See annum on \$186.5 million and 3.8669 percent per annum on \$186.5 million of Series 2004 Second Lien Bonds. See annum on \$186.5 million and \$179.7 million and \$186.5 million "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE – Swaps."
- 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 the direct payment subsidies expected by the City to be received from the U.S. Treasury. ම
- See APPENDIX B "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE -Rate Covenant." Ξ

#### **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 22,318 per week in 2013, 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 of Water Management 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.

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 <sup>(1)</sup>	Cash Collected During Year for Current and Prior Years' Sales	Percentage of Sales Collected
2004	\$308,530,361	\$308,167,206	99.9%
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

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup>Net of credits to JAWA and DWC through 2004.

#### Pension and Other Post-Employment Benefit Costs

The Department of Water Management 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 ORDINANCE AND THE INDENTURE – Rate Covenant." The Department of Water Management expects to continue its current practice of treating pension costs as Operation and Maintenance Costs.

Water System employees participate in one of two single-employer defined-benefit pension plans established under State law for City employees: 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 annual contributions to these plans have been funded by a separate property tax levy and a portion of the City's share of the State's personal property replacement tax. The Water System, through the Water Fund, reimburses the City's General Fund for the estimated pension cost applicable to the covered payroll of Water System employees. As discussed above, those reimbursements 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, 2013 AND 2012, REQUIRED SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, STATISTICAL DATA AND INDEPENDENT AUDITORS' REPORT – Notes to Basic Financial Statements – 6. Pension Plans."

Both MEABF and LABF are significantly underfunded. In June 2014, the State enacted legislation, known as P.A. 98-641, that, among other things, significantly increases the City's payments to these plans beginning in 2016 (budgeted in 2015). For 2014, the Department of Water Management budgeted \$13.6 million in the Water Fund to reimburse the City for contributions on behalf of Water System employees enrolled in MEABF and LABF. As a result of P.A. 98-641, the Water System's pension costs, based upon employees allocable to the Water System, are expected to increase to approximately \$25 million in budget year 2015 (paid in 2016) and to slightly more than \$30 million in budget year 2016 (paid in 2017). Thereafter, the Water System's pension costs are expected to increase by an annual average of approximately 25 percent until budget year 2019 (payment year 2020). Beginning in budget year 2020 (payment year 2021), the City's payments to MEABF and LABF (and the Water System's share thereof) will be based upon actuarial funding requirements under P.A. 98-641. Notwithstanding the foregoing, the City reserves the right to change the amount it allocates to the Water Fund in any given year, for employee pension costs allocable to the Water Fund, at any time. For more information on P.A. 98-641, see APPENDIX E - "RETIREMENT FUNDS." Increased Water System operating revenues from scheduled water rate increases are expected to more than offset increases in retirement costs allocable to the Water Fund. See "FINANCIAL OPERATIONS - Historical and Projected Financial Operations."

As described in APPENDIX E - "RETIREMENT FUNDS – Other Post-Employment Benefits," the City and its retirement funds currently share the cost of post-employment healthcare benefits available to City employees participating in the retirement funds (the "Health Plan"). The costs of the Health Plan were previously shared pursuant to a settlement agreement between the City and its retirement funds regarding the responsibility for payment of these healthcare benefits. The settlement agreement expired on June 30, 2013, and the City intends to phase out health benefits for most retirees by 2017. In 2013, the Department of Water Management paid \$5,185,936 from the Water Fund for Health Plan costs allocable to retirees who are former Water System employees. For 2014, the Department of Water Management budgeted \$4,158,052 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 City's plans to phase out the Health

Plan and the settlement agreement, see APPENDIX E – "RETIREMENT FUNDS – Other Post-Employment Benefits."

For additional information on the City's retirement funds, including MEABF and LABF, and the Health Plan, see APPENDIX E – "RETIREMENT FUNDS."

#### **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 Series 2014 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 Series 2014 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 Series 2014 Bonds.

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 has been delinquent in fully paying for water service since November 2008, with the last partial payment having been received by the City in April 2014. The City's complaint further names five other suburbs which purchase water from Harvey and seeks 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 in a fund other than a water fund and from using its water revenues on anything other than water-related expenses. The City intends to vigorously pursue this case.

#### CERTAIN LEGAL MATTERS

Issuance of the Series 2014 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. The proposed form of their opinions is included herein as APPENDIX D – "FORM OF OPINIONS OF 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, Burke Burns & Pinelli, Ltd., Chicago, Illinois, and Greene and Letts, 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 Burke, Warren, MacKay & Serritella, Chicago, P.C., Illinois, Underwriters' Counsel.

#### **INDEPENDENT AUDITORS**

The audited financial statements of the Water Fund as of and for the years ended December 31, 2013 and 2012 included as APPENDIX C to this Official Statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein, which includes an emphasis of a matter as beginning net position was restated due to the Water Fund's adoption of Statement No. 65 of the Governmental Accounting Standards Board ("GASB"), *Items Previously Reported as Assets and Liabilities*.

#### FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR

The City has retained Acacia Financial Group, Inc. to act as financial advisor (the "Financial Advisor") in connection with the issuance and sale of the Series 2014 Bonds. The Financial Advisor is not obligated to undertake, and has 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. The 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 Series 2014 Bonds.

#### UNDERWRITING

The Underwriters have agreed, subject to certain conditions, to purchase from the City (i) the Series 2014 Bonds at a price of \$\_\_\_\_\_\_ (representing the aggregate principal amount of the Series 2014 Bonds, plus original issue premium of \$\_\_\_\_\_\_, less original issue discount of \$\_\_\_\_\_\_).

The Series 2014 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.

Certain of the Underwriters have provided the following information for inclusion in this Official Statement:

"BMO Capital Markets" (one of the Underwriters listed on the cover page of this Official Statement) is the trade name for certain capital markets and investment banking services of the Bank of Montreal and its subsidiaries, including BMO Capital Markets GKST Inc. which is a direct, wholly-owned subsidiary of BMO Financial Corp. which is itself a wholly-owned subsidiary of Bank of Montreal.

"US Bancorp" (one of the Underwriters listed on the cover page of this Official Statement) is the marketing name of U.S. Bancorp and its subsidiaries, including U.S. Bancorp Investments, Inc.

Blaylock Beal Van, LLC ("Blaylock Beal Van" or "BBV," one of the Underwriters listed on the cover page of this Official Statement) has entered into a distribution agreement (the "Agreement") with TD Ameritrade, Inc. ("TD") for the retail distribution of certain municipal securities offerings underwritten by or allocated to Blaylock Beal Van, including the Series 2014 Bonds. Under the Agreement, Blaylock Beal Van will share with TD a portion of the underwriting compensation paid to BBV.

Academy Securities, Inc. (one of the Underwriters listed on the cover page of this Official Statement) intends to enter into distribution agreements (the "Distribution Agreements") with E\*Trade Securities LLC, IFS Securities, TD Ameritrade (agreement with TD Ameritrade is on a deal by deal basis), Ridgeway & Conger Inc., The ISC Group Inc., UBS Financial Services (agreement with UBS is on a deal by deal basis), R Seelaus & Co. Inc, Ladenburg Thalman & Co., World Equity Group Inc., Maxim

Group LLC, Bonwick Capital Partners LLC, Newbridge Independent Services, JHS Capital Advisors, World First Financial Services and National Alliance Services for the retail distribution of certain municipal securities offerings, at the original issue prices. Pursuant to these Distribution Agreements (if applicable for this transaction), Academy Securities Inc. may share a portion of its underwriting compensation with these firms.

Siebert Brandford Shank & Co., L.L.C., (one of the Underwriters listed on the cover page of this Official Statement), has entered into a separate agreement with Credit Suisse Securities USA LLC for retail distribution of certain municipal securities offerings at the original issue prices. Pursuant to said agreement, if applicable to the Series 2014 Bonds, Siebert Brandford Shank & Co., L.L.C. will share a portion of its underwriting compensation with respect to the Series 2014 Bonds, with Credit Suisse Securities USA LLC.

#### **TAX MATTERS**

#### **Federal Tax Exemption**

Federal tax law contains a number of requirements and restrictions which apply to the Series 2014 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 2014 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 2014 Bonds to become includible in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2014 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 2014 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 2014 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 upon certifications of the City with respect to certain material facts within the City's knowledge relating to the facilities to be financed with the Series 2014 Bonds, the application of the proceeds of the Series 2014 Bonds and certain other matters pertinent to the tax exemption of the Series 2014 Bonds. Co-Bond Counsel's opinions represents 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 2014 Bonds.

Ownership of the Series 2014 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 2014 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 in 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 2014 Bonds. If an audit is commenced, under current procedures the Service will treat the City as the taxpayer and the Series 2014 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 2014 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 2014 Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to bonds issued prior to enactment. Prospective purchasers of the Series 2014 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.

#### **Original Issue Discount**

An amount equal to the excess of the stated redemption price at maturity of any Series 2014 Bonds (the "Discount Bonds") over the initial public offering price of such Discount Bonds, assuming that a substantial amount of such maturity is first sold at such price (the "Offering Price"), will be treated as "original issue discount." With respect to a taxpayer who purchases a Discount Bond in the initial public offering at the Offering Price and who holds such Discount Bond to maturity, the full amount of original issue discount will constitute interest which is not includible in the gross income of the owner of such Discount Bond for Federal income tax purposes to the same extent as current interest and will not be treated as taxable capital gain upon payment of such Discount Bond upon maturity.

The original issue discount on each of the Discount Bonds is treated as accruing daily over the term of such Discount Bond on the basis of a constant yield computed at the end of each six month period (or shorter period from the date of original issue). The amount of original issue discount accruing during such period will be added to the owner's tax basis for the Discount Bonds. Such adjusted tax basis will be used to determine taxable gain or loss upon disposition of the Discount Bonds (including sale, redemption or payment at maturity). An owner of a Discount Bond who disposes of it prior to maturity should consult such owner's tax advisor as to the amount of original issue discount accrued over the period held and the amount of taxable gain or loss upon the sale or other disposition of such Discount Bond prior to maturity.

Owners who purchase Discount Bonds in the initial public offering but at a price different from the Offering Price or who do not purchase Discount Bonds in the initial public offering should consult their tax advisors with respect to the tax consequences of the ownership of such Discount Bonds.

Owners of Discount Bonds should consult their own tax advisors with respect to the state and local tax consequences of owning Discount Bonds. It is possible that under the applicable provisions

governing the determination of state or local income taxes, accrued original issue discount on the Discount Bonds may be deemed to be received in the year of accrual even though there will not be a corresponding cash payment until a later year.

#### **Market Discount**

If a Series 2014 Bond is purchased at any time for a price that is less than the Series 2014 Bond's stated redemption price at maturity or, in the case of a Discount Bond, its Offering Price plus accrued original issue discount, the purchaser will be treated as having purchased a Series 2014 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 2014 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 2014 Bond. Purchasers should consult their own tax advisors regarding the potential implications of market discount with respect to the Series 2014 Bonds.

#### **Bond Premium**

An investor may purchase a Series 2014 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 2014 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 2014 Bond.

The rules governing amortization of bond premium are complex. Investors who purchase a Series 2014 Bond at a premium should consult their own tax advisors regarding the amortization of bond premium and its effect on the Series 2014 Bond's basis for purposes of computing gain or loss in connection with the sale, exchange, redemption or early retirement of the Series 2014 Bond.

#### No State Tax Exemption

Interest on the Series 2014 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2014 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 2014 Bonds. Prospective purchasers of the Series 2014 Bonds should consult their tax advisors regarding the applicability of any such state and local taxes.

#### SECONDARY MARKET DISCLOSURE

The City will enter into a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of the beneficial owners of the Series 2014 Bonds to send certain information annually and to provide notice of certain events to the Municipal Securities Rulemaking Board (the "MSRB") pursuant to the requirements of Rule 15c2-12 adopted by the Commission under the Exchange Act (the "Rule"). 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 that 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 Series 2014 Bonds or the Ordinance and beneficial owners of the Series 2014 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 Series 2014 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series 2014 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 its Annual Financial Information and its Audited Financial Statements (as described below) to the MSRB. The City is required to deliver such information so that the MSRB receives the information by the dates specified in the Undertaking.

"Annual Financial Information" means information generally consistent with that contained under the table included under the caption ""THE WATER SYSTEM — Capital Improvement Program," the tables captioned "Population of Service Area," "Water System Accounts" and "Water System Pumpage and Capacity" under the caption "THE 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 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 Series 2014 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 2014 Bonds, or other material events affecting the tax status of the Series 2014 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;

(1) 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 Series 2014 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. A default under the Undertaking shall not be deemed a default under the Series 2014 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 Series 2014 Bonds, as determined by a party unaffiliated with the City (such as the Trustee or cobond counsel), or by approving vote of the owners of the Series 2014 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 Series 2014 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 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.

. . . . . ....

During 1996 through 2007, the City issued multiple series of Collateralized Single Family Mortgage Revenue Bonds (the "Single Family Bonds"). The trustees for the respective series of the Single Family Bonds are responsible for continuing disclosure filings as the City's dissemination agent under the applicable continuing disclosure undertakings. No annual reports were filed in the following years for the following series: 2004 (2002C and 2002D), 2006 (2000C), 2007 (2006K, 2007A and 2007B), and 2008 (2000C). During 2005-2009, annual reports were filed late for one or more years for the following series: 1996A, 1996B, 1997A, 1997B, 1998A1, 1998C, 1999A, 1999C, 2000A, 2000C, 2001A, 2001C, 2002A, 2002B, 2002C, 2006A, 2006B, 2006C, 2006D, 2006E, 2006F, 2006G, 2006H, 20061, 2006J, 2007-2A, 2007-2B, 2007-2G and 2007-2H. A material event notice was not filed with respect to a tender offer occurring on June 29, 2011 with respect to the following series: 2006C, 2006I, 2007A, 2007G, 2007-2A, 2007-2C and 2007-2E. With respect to the City's Residual Revenue Capital Appreciation Bonds, Series 2003 (the "Residual Revenue Bonds"), which were payable solely from residual revenues available under the indentures for the Single Family Bonds, Series 1996 through 1999, after payment in full of such bonds, no annual reports were filed by the trustee as the City's dissemination agent with respect to the Residual Revenue Bonds. Redemption notices for the Residual Revenue Bonds were filed by the trustee for January and February 2010, with the Residual Revenue Bonds being fully redeemed in February 2010.

No annual reports were filed by the City in 2008 with respect to three subseries of its General Obligation Direct Access Bonds. No annual report was filed by the City in 2010 with respect to one subseries of such bonds. A material event notice regarding the downgrade of the rating on the City's general obligation bonds by Fitch on October 12, 2009 was not filed for one subseries of such bonds.

Annual reports were not filed by the City in 2010 with respect to one series of the City's Chicago O'Hare International Airport General Airport Revenue Bonds and one series of its Chicago O'Hare International Airport Passenger Facility Charge Revenue Bonds. Annual reports were not filed by the City in 2011 and 2012 with respect to two series of such bonds.

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 (other than Single Family 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 and 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 during the last seven years.

#### RATINGS

The Series 2014 Bonds have received ratings of "A3" (negative outlook) from Moody's Investors Service ("Moody's"), "AA-" (stable outlook) from Standard and Poor's, a Division of The McGraw-Hill Companies, Inc. ("S&P"), "AA" (stable 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 Series 2014 Bonds may be resold.

#### **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 Series 2014 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

Chief Financial Officer

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#### **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, <u>provided</u> 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 SIFMA Municipal Swap Index (or successor) 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 SIFMA Municipal Swap Index (or successor) 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 Scrvice" 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 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 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.

"Authenticating Agent" means such banking institution as may be appointed by the Chief Financial Officer as authenticating agent for the Series 2014 Bonds, or any successor to it in that capacity appointed by the Chief Financial Officer and any co-authenticating agent separately appointed by the Chief Financial Officer.

"Authorized Denominations" means, with respect to a particular Series 2014 Bond, \$5,000 and any integral multiple of \$5,000.

"Authorized Officer" means each of the persons duly appointed and serving as the City Treasurer, Chief Financial Officer and City Comptroller of 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.

"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, the principal office of any remarketing agent and the office of a Letter of Credit Provider at which drawings under a Letter of Credit are made, 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, payable from the Commercial Paper Account.

"Constitution" means the 1970 Constitution of the State of Illinois.

"Costs of Issuance" means any item of expense payable or reimbursable, directly or indirectly, by the City and related to the authorization, offering, sale, issuance and delivery of Second Lien Bonds, including but not limited to travel and other expenses of any officer or employee of the City in connection with the authorization, offering, sale, issuance and delivery of such Second Lien Bonds, printing costs, costs of preparation and reproduction of documents, filing and recording fees, fees and disbursements of financial advisors, accountants and engineers, initial fees and charges of the Trustee, legal fees and disbursements, fees and disbursements of other consultants and professionals, costs of credit ratings, fees and charges for preparation, execution, transportation and safekeeping of Second Lien Bonds, application fees and premiums on municipal bond insurance, surety bond and credit facility charges and costs.

"Costs of Issuance Account" means the account designated "2014 Second Lien Bonds, Costs of Issuance Account" in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"Debt Service Reserve Account" means any debt service reserve which may be established for a series of Second Lien Bonds.

"Defcasance Obligations" means, to the extent permitted by the Indenture, means (i) cash, (ii) Governmental Obligations, (iii) securities that are described in clause (c) of the definition of Permitted Investments; (iv) securities that are obligations described in clause (f) of the definition of Permitted Investments (A) that have been refunded in advance of their maturity and are, at the time of purchase, rated by at least two Rating Agencies in their highest respective long-term rating categories for comparable types of debt obligations or (B) that have been refunded in advance of their maturity with cash, direct U.S. or U.S. guaranteed obligations, or rated pre-refunded municipals and are, at the time of purchase, rated by a single Rating Agency in its highest long-term rating category for comparable types of debt obligations, (iv) the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form, or (v) obligations issued by the following agencies which are backed by the full faith and credit of the U.S.: Farmers Home Administration (FmHA) (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financing), U.S. Department of Housing and Urban Development (HUD) (Project Notes, Local Authority Bonds, New Communities Debentures — U.S. government guaranteed debentures), and U.S. Public Housing Notes and Bonds --- U.S. government guaranteed public housing notes and bonds.

A-3

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"Depository Agreement" means the Depository Agreement dated as of \_\_\_\_\_\_\_. 2014 between the City and The Bank of New York Mellon Trust Company, N.A., as depository, pursuant to which funds on deposit in the 2014 Construction Account shall be held and disbursed.

"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.

"Federal Compliant Obligation Authorization" means legislation hereafter enacted by the Congress of the United States to provide subsidies, tax credits or other incentives or benefits at various subsidy levels to state and local governments in connection with the issuance of debt-obligations by such governments.

**"Federal Subsidies"** means to the extent hereafter provided in Federal Compliant Obligation Authorization, payments by the Treasury Department to the City resulting from subsidies, tax credits or other incentives or benefits to state and local governments in connection with the issuance of debt obligations by such governments.

"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 (a) amounts credited to customers on their bills, such as for payment of the price of purchasing from them capital assets of the water systems, or (b) Federal Subsidies.

"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 May 1, 2015.

"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 2014 Construction Account or any Second Lien Rebate Accounts established under the Indenture.

"Letter of Credit Provider" means the issuer of a letter of credit with respect to which the reimbursement obligation is a Section 2.08 Obligation.

"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 Series 2014 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 April 30, 2014, authorizing the Series 2014 Bonds, the Eighth Supplemental Indenture and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2014 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, <u>provided</u> 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 Eighth Supplemental Indenture as a paying agent for the Series 2014 Bonds, and any successor or successors appointed by an Authorized Officer or the Trustee under the Eighth 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, <u>provided</u> 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 <u>et seq</u>. or 31 C.F.R. 350.0 <u>et seq</u>. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of the execution and delivery of the Eighth 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 Series 2014 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 Series 2014 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, <u>provided</u> (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

• **A-7** 

least equal to the principal amount invested pursuant to the agreement, <u>provided</u> 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 and Interest Account" means the account designated the "Series 2014 Bonds, Principal and Interest Account" established in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"Principal and Interest Account Requirement" means an amount, calculated as of each Deposit Date, equal to the total Principal Installments and interest due on the Series 2014 Bonds on such Deposit Date.

## "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 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 2014 Bonds, Program Fee Account" established in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"Project Costs" means the costs of acquiring, constructing and equipping the Projects, including without limitation, acquisition of necessary interests in property, engineering fees or costs of the City, restoration costs, legal fees or costs of the City and, except with respect to Subordinate Lien Obligations, Senior Lien Bond Costs of Issuance.

"Projects" means the program of improvements and extensions to the Water System designated by the Commissioner of Water Management including, but not limited to constructing and installing water mains; rehabilitating, upgrading, replacing, repairing, renovating, improving and extending facilities at the water purification plants; improving and extending facilities at any or all of the pumping stations; providing any and all necessary facilities, services and equipment to protect and enhance the safety, integrity and security of the Water System; providing new equipment and technology and rehabilitating existing equipment necessary to continue to provide existing customers with the quality and quantity of water required and to meet future customer demand.

"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 Agency" means any nationally recognized securities rating agency.

"Record Date" means, with respect to the Series 2014 Bonds, each April 15 and October 15 (whether or not a Business Day).

"Redemption Price" means with respect to any Series of Series 2014 Bonds, the redemption prices set forth under the caption "DESCRIPTION OF THE SERIES 2014 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 Series 2014 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 Series 2014 Bonds filed with the Office of the City Clerk or the Deputy City Clerk, addressed to the City Council as provided in the Ordinance subject to the priority for the deposit of Net Revenues Available for Bonds established 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.

"Second Lien Bonds" means the 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 Second Lien 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 on the date of or after the issuance of the Series 2014 Bonds which are payable from Second Lien Bond Revenues on an equal and ratable basis with the Series 2014 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 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 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

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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; (ii) with respect to the 2000 Senior Lien Bonds, as of any date of computation, an amount equal to the least of (A) the highest future Senior Lien Debt Service Requirement of all 2000 Senior Lien 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 the 2000 Senior Lien Bonds (less any original issue discount); or (C) 125 percent of the average annual Senior Lien Debt Service Requirement on the 2000 Senior Lien Bonds; and (iii) 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 Bond Ordinance" means the ordinance passed by the City Council on August 4, 1993, authorizing the issuance of the Series 1993 Bonds, and the Senior Lien Bond Determination Certificate of the City Comptroller in connection with the Series 1993 Bonds.

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

A-12

"Series 1997 Bond Ordinance" means the ordinance passed by the City Council on June 4, 1997, authorizing the issuance of the Series 1997 Bonds, and the Senior Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 1997 Bonds.

"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, collectively, the 2000 Senior Lien Bonds, the 2000 Second Lien Bonds and the 2000 Subordinate Lien Obligations of the City which are Outstanding from time to time.

"Series 2001 Bonds" means the 2001 Second Lien Bonds and the 2001 Subordinate Lien Obligations which are Outstanding from time to time.

"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 Senior 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 Second Lien Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2004 Bonds.

"Series 2004 Second Lien Bonds" means the Second Lien Water Revenue Refunding Bonds, Series 2004, of the City, which are Outstanding from time to time.

"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 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 Bond Ordinance" means the ordinance passed by the City Council on September 27, 2007, authorizing, among other things, the issuance of the Series 2008 Second Lien Bonds, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2008 Second Lien Bonds.

A-13

"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 2010 Second Lien Bond Ordinance" means the ordinance passed by the City Council on September 8, 2010, authorizing, among other things, the issuance of the Series 2010 Second Lien Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2010 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 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 Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2012 Second Lien Bonds.

"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 2014 Second Lien Project Bonds authorized by the Ordinance which are Outstanding from time to time.

"Series 2014 Current Projects" means those improvements to the Water System financed with amounts on deposit in the 2014 Construction Account.

"Series 2014 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 Series 2014 Bond Proceeds — Deposits into 2014 Second Lien Project Bonds Subaccount and Accounts Therein."

"Series 2014 Project Costs" means the Project Costs related to the Series 2014 Current Projects.

"SIFMA Municipal Swap Index" means the "Securities Industry and Financial Markets Association Municipal Swap Index" as of the most recent date for which such index was produced by Municipal Market Data, a division of Thomson Financial Services ("MMD"). The SIFMA Municipal Swap Index is a 7-day high grade market index comprised of tax-exempt variable rate demand obligations from MMD's extensive database. If such index is no longer produced by MMD, then "SIFMA Municipal Swap Index" means such other reasonably comparable index selected by the City.

#### "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 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 Eighth Supplemental Indenture.

**"Tax Regulatory Agreement"** means the Tax Regulatory Agreement of the City relating to the Series 2014 Bonds.

**"Trust Estate"** means the property conveyed to the Trustee pursuant to the granting clauses of the Master Indenture and each Supplemental Indenture.

"2000 Second Lien Bonds" means the Second Lien Water Revenue Bonds, Series 2000, of the City which are Outstanding from time to time.

"2000 Senior Lien Bonds" means the Senior Lien Water Revenue Bonds, Series 2000, 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 Senior Lien Bond Ordinance.

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

"2008 Subordinate Lien Obligations" means the Loans authorized by and defined in the Series 2008 Senior 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.

"2014 Construction Account" means the Construction Account: 2014 Second Lien Project Water Revenue Bonds established pursuant to the Ordinance, as described in the Eighth Supplemental Indenture.

"2014 Second Lien Project Bonds Subaccount" means the 2014 Second Lien Project Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, as described in Eighth Supplemental Indenture. .. .

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"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 the Series 2014 Current Projects and 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.

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# 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 Series 2014 Bonds. The Series 2014 Bonds are issued under the Ordinance and the Indenture as Second Lien Bonds.

The Series 2014 Bonds shall be limited obligations of the City having a claim for payment of principal, redemption premium and interest solely from amounts in the 2014 Second Lien Project Bonds Subaccount of the Second Lien Bonds Account, the sources pledged under the Indenture and from amounts on deposit in the 2014 Construction Account and, together with any Outstanding and Second Lien Parity Bonds, from Second Lien Bond Revenues. The Series 2014 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 2014 Second Lien Project Bonds Subaccount and the 2014 Construction Account is granted to the Registered Owners of the Series 2014 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," "-2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "-2014 Second Lien Project Bonds Subaccount and 2014

### Section 2.08 and Section 2.09 Obligations

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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 Series 2014 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

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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 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 Bonds, as applicable, and (iii) any net payments received by the City from the swap provider pursuant to such Qualified Second Lien Bonds, as applicable, and (iii) any net payments received by the City from the swap provider pursuant to such Qualified 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.

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#### **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 ordinances authorizing the issuance of Senior Lien Bonds, 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 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 with respect to all Second Lien Bonds Outstanding and all Section 2.08 Obligations and Section 2.09 Obligations, plus

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- (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.

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**

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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 Subordinate Lien Obligations (but solely with respect to amounts on deposit in the Second Lien Bonds, Second Lien Bonds (but solely with respect to amounts on deposit in the Second Lien Bonds, Account), Commercial Paper Notes (but solely with respect to amounts on deposit in the Line 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 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).

The Water Fund is used 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 Ordinance (other than the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account and the Line of Credit Notes Account) and in the 2014 Construction 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 Ordinance, and with amounts in various Subaccounts of the

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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 Ordinance 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, Line of Credit Notes Account and 2014 Construction 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 Ordinance.

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, and for the purposes described therein.

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 Ordinance, 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).

All or any part of the Senior Lien Debt Service Reserve Requirement for any series of (3)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 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 Ordinance.

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 Ordinance. 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 ordinances authorizing the various series of Senior Lien Bonds.

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 Series 2014 Bonds a separate and segregated 2014 Second Lien Project 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 Eighth 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 "-2014 Second Lien Project Bonds Subaccount and 2014 Construction Account" below.

<u>Subordinate Lien Obligations Account</u>. 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 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.

<u>Commercial Paper Account</u>. 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.

#### 2014 Second Lien Project Bond Subaccount and 2014 Construction Account

Moneys on deposit in the 2014 Second Lien Project Bond 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 Series 2014 Bonds. In the Eighth Supplemental Indenture, the City creates and establishes with the Trustee separate Accounts within the 2014 Second Lien Project Bond Subaccount as follows:

- (i) the Costs of Issuance Account;
- (ii) the Program Fee Account; and
- (iii) the Principal and Interest Account.

#### **Application of Series 2014 Bond Proceeds**

The aggregate proceeds received by the City from the sale of the Series 2014 Bonds (exclusive of underwriters' discount), shall be applied as follows:

(i) the Trustee shall deposit into the Costs of Issuance Account the amount necessary to pay the Costs of Issuance of the Series 2014 Bonds; and

(ii) the balance of the proceeds of the Series 2014 Bonds shall be deposited in the 2014 Construction Account, which shall be held pursuant to the Depository Agreement. Amounts on deposit in the 2014 Construction Account shall be applied as described under "Use of Moneys in 2014 Construction Account," below.

**Deposits into 2014 Second Lien Bond Project Subaccount and Accounts Therein.** On the date of initial issuance of the Series 2014 Bonds, there shall be deposited in the Principal and Interest Account and the Program Fee Account the amounts required by the Ordinance. On each Deposit Date, there shall be deposited into the 2014 Second Lien Bond Project 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 Authorized 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 2014 Deposit Requirement"):

(a) for deposit into the Principal and Interest Account, an amount equal to the Principal and Interest Account Requirement; and

(b) 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 2014 Deposit Requirement, there shall be deposited into the 2014 Second Lien Bond Project Subaccount any other moneys received by the Trustee under and pursuant to the Indenture, including the Eighth Supplemental Indenture, when accompanied by directions from the person depositing such moneys that such moneys are to be paid into the 2014 Second Lien Bond Project Subaccount or to one or more accounts in that Subaccount.

Upon calculation by the Trustee of each Series 2014 Deposit Requirement, the Trustee shall notify the City of the Series 2014 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 Principal and Interest Account. Moneys in the Principal and Interest Account shall be used solely for the payment of the principal of, premium, if any, and interest on the Series 2014 Bonds, for the redemption of the Series 2014 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 2014 Bonds (including the optional redemption of the Series 2014 Bonds pursuant to the Eighth 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 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.

Use of Moneys in Costs of Issuance Account and Program Fee Account. Moneys deposited into the Costs of Issuance Account shall be used solely for the payment of Costs of Issuance of the Series 2014 Bonds as directed in a certificate of the City filed with the Trustee. If, after the earlier to occur of (i) payment of all Costs of Issuance payable from such Account, as specified in a certificate of the City filed with the Trustee or (ii) \_\_\_\_\_\_, 2014, there shall be any balance remaining in the Costs of Issuance Account, any such balance shall be transferred to the 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 Series 2014 Bonds as set forth in a certificate of the City filed with the Trustee.

Use of Moneys in 2014 Construction Account. Except as otherwise provided in the Ordinance and the Eighth Supplemental Indenture, and subject to the provisions of and limitations contained in the Tax Regulatory Agreement, (i) moneys on deposit in the 2014 Construction Account shall be disbursed and applied to pay, or to reimburse the payment of, Project Costs related to the Series 2014 Current Projects.

#### **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

(1) Net Revenues Available for Bonds for the last completed Fiscal Year prior to (ii) 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): . .1.

(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, Aggregate Second Lien Debt Service or Aggregate Subordinate 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**

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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 Indenture, the Supplemental Indentures creating the Second Lien Bonds of each series and the instruments creating Section 2.08

B-11

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.

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(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. In the Eighth Supplemental Indenture, the City covenants to take any action required by the provisions of the Code and within its power to take in order to preserve the exclusion of interest on the Series 2014 Bonds from gross income for federal income tax purposes, including, but not limited to, the provisions of Section 148 of the Code relating to "arbitrage bonds."

(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, an any manner provided by law the moneys adjudged to be payable.

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 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 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 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 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 Indenture, except that such direction shall not be otherwise than in accordance with law or the provisions of the 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 Indenture, or for the protection or enforcement of any right or remedy under the 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 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 Indenture or for any other remedy under the Indenture or under law.

#### Supplemental Indentures without Consent of Registered 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; or (3) to provide additional duties of the Trustee under the Master Indenture as in effect.

#### Supplemental Indenture with Consent of Registered 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

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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 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 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

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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 SERIES 2014 BONDS — Book-Entry System" is discontinued and certificates representing replacement Series 2014 Bonds are delivered to the Registered Owners, payment of principal of and interest on the Series 2014 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 Series 2014 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 Series 2014 Bonds are payable only upon presentation and surrender of such replacement Series 2014 Bonds at the principal corporate trust office of the Trustee.

## **APPENDIX C**

## CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION 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, 2013 and 2012, Required Supplementary Information, Additional Information, Statistical Data, and Independent Auditors' Report

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# TABLE OF CONTENTS

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	Page
INDEPENDENT AUDITORS' REPORT	1–2
MANAGEMENT'S DISCUSSION AND ANALYSIS	3–10
BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012:	
Statements of Net Position	11
Statements of Revenues, Expenses, and Changes in Net Position	12
Statements of Cash Flows	13–14
Notes to Basic Financial Statements	15–35
ADDITIONAL SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED DECEMBER 31, 2013 — Schedule of Utility Plant	36
STATISTICAL DATA:	37
Changes in Net Position, Three Years Ended December 31, 2011–2013	38
Net Position by Components, Three Years Ended December 31, 2011–2013	39
Historical Financial Operations, Ten Years Ended December 31, 2004–2013	40
Water System Accounts, Ten Years Ended December 31, 2004–2013	41
Ten Largest Suburban Customers, for the Year Ended December 31, 2013	42
Revenue Bond Coverage, Ten Years Ended December 31, 2004–2013	43
Long-Term Debt, Three Years Ended December 31, 2011–2013	44
Capital Improvement Program, 2014–2018	45
Water System Pumpage and Capacity, Ten Years Ended December 31, 2004–2013	46
Miscellaneous Statistical Data, for the Years Ended December 31, 2013 and 2012	47
Operating Information by Function, Three Years Ended December 31, 2011–2013	48
Population of Service Area Last Five Census Periods, 1970–2010	49
Principal Employers (Nongovernment), for the Year Ended December 31, 2013, and Nine Years Ago	50
Population and Income Statistics, Ten Years Ended December 31, 2004–2013	51

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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, 2013 and 2012, 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 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 financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 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, 2013 and 2012, and the changes in its financial position and its cash flows thereof 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, 2013 and 2012, changes in its financial position, or where applicable, 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.

As discussed in Notes 1 and 10 to the basic financial statements, prior year amounts were restated due to the Water Fund's adoption of Statement 65 of the Governmental Accounting Standards Board (GASB), *Items Previously Reported as Assets and Liabilities.* 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.

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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.

Deloite F. Amche LLP

June 30, 2014

#### 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, 2013 and 2012. Please read this discussion in conjunction with the Water Fund's basic financial statements and the notes to basic financial statements following this section. Due to the implementation of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* ("GASB 65") in fiscal year 2013, as described in Note 10 to the basic financial statements, 2012 and 2011 numbers within the management's discussion and analysis have been restated retroactively.

## FINANCIAL HIGHLIGHTS

#### 2013

- Operating 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 17,427 accounts from non-metered to metered.
- Operating expenses before depreciation and amortization for 2013 increased by \$11.1 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.

## 2012

- Operating revenues for 2012 increased by \$122.1 million compared to 2011 operating revenues. This increase is primarily due to a water rate increase of 25% and increase in usage in the drought summer of 2012.
- Operating expenses before depreciation and amortization for 2012 increased by \$7.3 million compared to 2011 mainly due to increase in costs of fringe benefits to employees, Water Fund's share of indirect costs, and diesel and gasoline costs offset by decrease in costs of sediment disposals.
- The Water Fund's restated net position at December 31, 2012, was \$1,251.4 million. This is an increase of \$158.1 million over net position at December 31, 2011.
- Utility plant additions in 2012 were \$318.9 million due to the continuing capital improvement program.

## **OVERVIEW OF THE BASIC FINANCIAL STATEMENTS**

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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, 2013, the Water Fund's financial position continued to be strong with total assets and deferred outflows of \$3,827.7 million, total liabilities of \$2,380.7 million, and net position of \$1447.0 million. A comparative condensed summary of the Water Fund's net position at December 31, 2013, 2012 and 2011, is as follows:

		Net Assets	
(In thousands)	2013	2012	2011
Current assets	\$ 310,830	\$ 294,077	\$ 196,738
Restricted and other assets	223,135	441,220	229,599
Utility plant — net	3,181,856	2,861,340	2,594,391
Deferred outflows	111,907	162,570	167,064
Total assets and deferred outflows	\$3,827,728	\$3,759,207	\$3,187,792
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Current liabilities	\$ 134,443	\$ 147,844	\$ 132,903
Long-term liabilities and payable from restricted assets	2,246,308	2,359,989	1,961,607
Total liabilities	\$2,380,751	\$2,507,833	\$2,094,510
Net position:			
Net investment in capital assets	\$1,233,185	\$1,062,234	\$1,046,104
Restricted for capital projects	719	1,308	209
Unrestricted	213,073	187,832	46,969
Total net position	<u>\$1,446,977</u>	\$1,251,374	<u>\$1,093,282</u>

#### 2013

Current assets of \$310.8 million at December 31, 2013, increased by \$16.7 million (5.7%) 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 offset by a decrease in cash and cash equivalents of \$80.8 million. Restricted and other assets decreased by \$218.1 million (49.4%) primarily due to the funding of the capital improvement program and utility plant — net increased by \$320.5 million (11.2%). 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 \$13.4 million (9.1%) 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 and payable from restricted assets decreased by \$113.7 million (4.8%) 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.

#### 2012

Current assets of \$294.1 million at December 31, 2012, increased by \$97.3 million (49.5%) over 2011 as a result of increases in cash and cash equivalents of \$56.6 million, investments of \$10.2 million, and accounts receivable of \$26.5 million resulting from an increase in water rates. Restricted and other assets increased by \$213.7 million (89.6%) primarily due to the funding of the capital improvement program through the issuance of long-term debt and utility plant — net increased by \$266.9 million (10.3%) due to the ongoing capital improvement.

The increase in current liabilities of \$14.9 million (11.2%) during 2012 is directly related to the timing of payments of accounts payable and increases in accrued liabilities and unearned revenue offset by decrease in due to other city funds. Long-term liabilities and payable from restricted assets increased by \$400.9 million (20.8%) mainly due to debt issuances 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, 2012, net position was \$1,251.4 million, an increase of \$158.1 million (14.5%) over 2011.

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, 2013, 2012, and 2011, is as follows:

	Revenues	, Expenses, and Net Position	Changes in
(In thousands)	2013	2012	2011
Revenues:			
Operating revenues Water sales	\$ 620.498	\$ 562.572	\$ 441,769
Other operating revenues	\$ 620,498 16,616	\$ 562,572 13,715	\$ 441,709 12,452
Total operating revenues	637,114	576,287	454,221
Nonoperating revenues	963	1,429	4,163
Total revenues	638,077	577,716	458,384
Expenses:			
Operating expenses	300,592	289,465	282,164
Depreciation and amortization Interest expense	49,630 92,252	48,408 81,751	47,112 86,522
interest expense	92,232	01,751	00,522
Total expenses	442,474	419,624	415,798
Change in net position	195,603	158,092	42,586
Net position — beginning of year, as restated	1,251,374	1,093,282	1,050,696
Net position — end of year	\$1,446,977	\$1,251,374	<u>\$1,093,282</u>

# 2013

Water sales and other operating revenues comprise the Water Fund's \$637.1 million operating revenues. Water sales and other operating revenues for 2013 were \$620.5 million and \$16.6 million, respectively. The increase in 2013 operating revenues of \$60.8 million (10.6%) from 2012 was primarily due to a 15% water rate increase offset by the conversion of 17,427 non-metered accounts to metered and a decrease in consumption resulting from a cooler summer in 2013.

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

#### 2012

Water sales and other operating revenues comprise the Water Fund's \$576.3 million operating revenues. Water sales and other operating revenues for 2012 were \$562.6 million and \$13.7 million, respectively. The increase in 2012 operating revenues of \$122.1 million (26.9%) from 2011 was primarily due to a 25% increase in water rates and increase in usage resulting from a drought summer in 2012.

In 2012, net nonoperating revenues of \$1.4 million were composed mainly of federal grants received for water mains replacement and net forced account totaling \$1.2 million.

A comparative summary of the Water Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2013, 2012, and 2011, is as follows:

	Operating Expenses		
(In thousands)	2013	2012	2011
Source of supply	\$99	\$ 168	\$ 185
Power and pumping	43,230	41,728	38,182
Purification	60,836	56,136	66,471
Transmission and distribution	29,496	36,494	38,985
Provision for doubtful accounts	25,400	15,714	13,947
Customer accounting and collection	11,615	10,004	10,663
Administrative and general	21,188	21,861	17,143
Central services and General Fund reimbursements	_108,728	107,360	96,588
Operating expenses before depreciation and amortization	300,592	289,465	282,164
Depreciation and amortization	49,630	48,408	47,112
Total operating expenses	\$350,222	<u>\$337,873</u>	<u>\$329,276</u>

#### 2013

Operating expenses before depreciation and amortization for the year ended 2013 increased by \$11.1 million (3.8%) from the year ended 2012 due to increases in provision for doubtful accounts of \$9.7 million (61.6%) and 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.

#### 2012

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Operating expenses before depreciation and amortization for the year ended 2012 increased by \$7.3 million (2.6%) from the year ended 2011 due to an increase in central services and General Fund reimbursements of \$10.8 million (11.2%) primarily due to an increase in fringe benefits to employees of about \$6.3 million, increase in the Water Fund's share of indirect costs of about \$4.7 million, increase in power and pumping of about \$3.5 million (9.3%) and increase in administrative and general of about \$4.7 million (27.5%) this was offset by a decrease in purification of about \$10.3 million (15.5%) resulting from a decrease in costs of sediment disposals of about \$11.7 million.

A comparative summary of the Water Fund's cash flows for the years ended December 31, 2012, 2011, and 2010, is as follows:

	Cash Flows		
(In thousands of dollars)	2013	2012	2011
Cash from activities:			
Operating	\$ 310,205	\$ 270,821	\$ 176,651
Capital and related financing	(520,166)	4,282	(265,251)
Investing	122,961	(209,656)	(33,168)
Net change in cash and cash equivalents	(87,000)	65,447	(121,768)
Cash and cash equivalents:			
Beginning of year	123,531	58,084	179,852
End of year	<u>\$ 36,531</u>	<u>\$ 123,531</u>	<u>\$_58,084</u>

#### 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.

#### 2012

As of December 31, 2012, the Water Fund's cash and cash equivalents of \$123.5 million increased from December 31, 2011, by \$65.4 million mainly due to the cash provided of \$270.8 from operating activities, cash provided by issuance of bonds and notes of \$447.5 million offset by cash used in acquisition and construction of capital assets of \$254.8 million and net cash used in investing activities of \$209.7 million. Total cash and cash equivalents at December 31, 2012, are composed of unrestricted and restricted cash and cash equivalents of \$84.4 million and \$39.1 million, respectively.

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#### UTILITY PLANT AND DEBT ADMINISTRATION

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#### 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).

#### 2012

At the end of 2012 and 2011, the Water Fund had \$2,861.3 million and \$2,594.4 million, respectively, invested in utility plant, net of accumulated depreciation. During 2012, the Water Fund expended \$318.9 million on capital activities. This included \$2.2 million for structures and improvements, \$133.9 million for distribution plant, \$5.8 million for equipment, and \$177.2 million for construction in progress.

During 2012, net completed projects totaling \$63.7 million were transferred from construction in progress to applicable capital accounts. The major completed projects were related to installation and replacements of water mains (\$63.4 million).

The Water Fund's utility plant at December 31, 2013, 2012, and 2011, is summarized as follows:

	Net Utility Plant at Year-End		
(In thousands)	2013	2012	2011
Utility plant not depreciated:			
Land and land rights	\$ 5,083	\$ 5,083	\$ 5,083
Construction in progress	317,086	262,280	148,871
Total utility plant not depreciated	322,169	267,363	153,954
Utility plant being depreciated:			
Structures and improvements	535,802	535,710-	534,472
Distribution plant	2,590,751	2,305,803	2,111,790
Equipment	647,530	620,775	617,159
Total utility plant being depreciated	3,774,083	3,462,288	3,263,421
Less accumulated depreciation:			
Structures and improvements	(197,555)	(190,278)	(182,537)
Distribution plant	(394,281)	(372,090)	(351,343)
Equipment	(322,560)	(305,943)	(289,104)
Total accumulated depreciation	(914,396)	(868,311)	(822,984)
Total utility plant being depreciated — net	2,859,687	2,593,977	2,440,437
Total utility plant — net	\$3,181,856	<u>\$2,861,340</u>	<u>\$2,594,391</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.

	Long-Term Liabilities at Year-End		
(In thousands)	2013	2012	2011
Revenue bonds and notes payable Add:	\$1,996,858	\$2,030,177	\$1,721,188
Accretion of Capital Appreciation Bonds	43,885	47,658	46,946
Bond discount/premium	66,934	71,041	30,498
Total revenue bonds/notes payable — net	2,107,677	2,148,876	1,798,632
Less current portion of accretion	(9,169)	(8,749)	(4,493)
Less current bonds/notes payable	(43,846)	(42,232)	(44,448)
Total long-term revenue bonds/notes payable — net	2,054,662	2,097,895	1,749,691
Derivative instrument liability	78,246	126,371	128,386
Long-term purchase obligations		1,027	3,290
Water pipe extension certificates	1,577	1,576	1,590
Total long-term liabilities	\$2,134,485	\$2,226,869	\$1,882,957

The Water Fund's long-term liabilities at December 31, 2013, 2012, and 2011, are summarize as follows:

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, 2013, have underlying credit ratings with each of the three major rating agencies as follows:

	Moody's Investor Services	Standard & Poor's	Fitch Ratings
Senior Lien Water Revenue Bonds	A1	AA	AA+
Second Lien Water Revenue Bonds	A2	AA-	AA

In March 2014, Moody's Investors Service 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.

At December 31, 2013, 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.

STATEMENTS OF NET POSITION AS OF DECEMBER 31, 2013 AND 2012 (In thousands)					
ASSETS AND DEFERRED OUTFLOWS	2013	2012	LIABILITTES	2013	2012
CURRENT ASSETS: Cash and cash equivalents (Note 2) Investments (Note 2)	\$ 3,616 129,496	\$ 84,429 44,188	CURRENT LIABILITIES. Accounts payable Due to other City funds	\$ 20,650 14,147	\$ 30,299 8,503
Accounts receivable — net of allowance for doubtful accounts of approximately \$85,277 in 2013 and \$64,161 in 2012	136,367	127,390	Accrued liabilities Unearned revenue	78,396 21,250	82,296 26,746
Interest receivable Due from other City funds Inventories	77 19,435 21,839	107 20,607 17,356	Total current liabilities	134,443	147,844
Current unrestricted assets	310,830	294,077	LIABIL/TIES PAYABLE FROM RESTRICTED ASSETS: Accounts payable	41,764	63,094 2,602
Restricted assets (Notes 2 and 3): Cash and cash equivalents	32,915	39,102 206,420	Due to outer City funds Interest payable Current portion of long-term debt (Note 4)	1,0/0 15,974 53,015	2,002 16,352 50,981
Investments Interest receivable	719/719	1,308	Total liabilities payable from restricted assets	111.823	133,120
Total restricted assets NONCURRENT ASSETS	5,134	<u>435,849</u> 5,371	NONCURRENT LIABILITIES: Long-term debt — net of current maturities (Note 4) Derivative instrument liability Long-term purchase obligation (Note 4) Water pipe extension certificates	2,054,662 78,246 1,577	2,097,895 126,371 1,027 1,027
Uttlity plant (Note 5): Land and land rights	5,083	5,083	Total noncurrent liabilities	2,134,485	2,226,869
Structures and improvements Distribution plant	2,590,751	2,305,803	Total labilities	2,380,751	2.507,833
construction in progress	317,086	262,280	NET POSITION (Note 1): Net investment in capital assets	1,233,185	1,062,234
Total utility plant Loss accumulated democration	4,096,252 (914-396)	3,729,651 (868 311)	Restricted for capital projects Unrestricted	719 213,07 <u>3</u>	1,308 187,832
Utility plant — net	3,181,856	2,861,340	Total net position	1,446,977	1,251,374
Total noncurrent assets Total assets	<u>3,186,990</u> 3,715,821	2,866,711 3,596,637			
DEFERRED OUTFLOWS TOTAL ASSETS AND DEFERRED OUTFLOWS	111,907 \$ 3,827,728	162,570 \$ 3,759,207	TOTAL	\$ 3.827.728	\$ 3,759,207
See notes to basic financial statements.					

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**CITY OF CHICAGO, ILLINOIS WATER FUND** 

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# STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

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	2013	2012
OPERATING REVENUES:		
Water sales	\$ 620,498	\$ 562,572
Other operating revenues	16,616	13,715
e aler operaning reconded		
Total operating revenues	637,114	576,287
OPERATING EXPENSES:		
Source of supply	99	168
Power and pumping	43,230	41,728
Purification	60,836	56,136
Transmission and distribution	29,496	36,494
Provision for doubtful accounts	25,400	15,714
Customer accounting and collection	11,615	10,004
Administrative and general	21,188	21,861
Central services and General Fund reimbursements	108,728	107,360
Total operating expenses before depreciation and amortization	300,592	289,465
OPERATING INCOME BEFORE DEPRECIATION AND		
AMORTIZATION	336,522	286,822
AMORTIZATION	550,522	200,022
DEPRECIATION AND AMORTIZATION	49,630	48,408
OPERATING INCOME	286,892	238,414
NONOPERATING REVENUES (EXPENSES):		
Interest income	420	270
Interest expense	(92,252)	(81,751)
Other	543	1,159
		1,102
Total nonoperating expenses — net	(91,289)	(80,322)
CHANGE IN NET POSITION	195,603	158,092
TOTAL NET POSITION — Beginning of year, as restated	1,251,374	1,093,282
TOTAL NET POSITION — End of year	\$1,446,977	\$1,251,374

See notes to basic financial statements.

# STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

	2013	2012
CASH FLOWS FROM OPERATING ACTIVITIES:		
Received from customers	\$ 596,613	\$ 546,056
Transactions with other City funds	(61,653) (113,227)	(80,972) (84,738)
Payments to vendors Payments to employees	(113,227) (111,528)	(109,525)
r ayments to employees	(111,528)	(10),525)
Net cash provided by operating activities	310,205	270,821
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(370,228)	(254,843)
Interest paid	(107,900)	(91,514)
Proceeds from issuance of bonds and IEPA loans	276	447,538
Principal paid on bonds	(42,439)	(59,859)
Payments of refunded bonds	(110)	(35,595)
Payments of bonds issuance costs	(418)	(2,604)
Construction reimbursements	543	1,159
Net cash (used in) provided by capital and related		
financing activities	(520,166)	4,282
CASH FLOWS FROM INVESTING ACTIVITIES:		
Sales and purchases of investments — net	125,764	(212,113)
Investment interest	(2,803)	2,457
Net cash provided by (used in) investing activities	122,961	(209,656)
NET CHANGE IN CASH AND		
CASH EQUIVALENTS	(87,000)	65,447
CASH AND CASH EQUIVALENTS — Beginning of year	123,531	58,084
CASH AND CASH EQUIVALENTS — End of year	<u>\$ 36,531</u>	<u>\$ 123,531</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS REPORTED IN THE STATEMENTS OF NET POSITION:		
Unrestricted	\$ 3,616	\$ 84,429
Restricted	32,915	39,102
TOTAL	\$ 36,531	\$ 123,531
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## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

	2013	2012
RECONCILIATION OF OPERATING INCOME TO NET CASH		
PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$286,892	\$238,414
Adjustments to reconcile:		
Depreciation and amortization	49,630	48,408
Provision for doubtful accounts	25,400	15,714
Changes in assets and liabilities:		·
Increase in accounts receivable	(35,005)	(42,570)
Increase in inventories	(4,483)	(1,011)
Decrease (increase) in due from other City funds	1,172	(3,100)
(Decrease) increase in unrestricted accounts payable	(9,649)	1,160
Increase (decrease) in due to other City funds	5,644	(9,709)
(Decrease) increase in accrued liabilities	(3,900)	11,176
Decrease in water pipe extension certificate		(13)
(Decrease) increase in uncarned revenue	(5,496)	12,352
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$310,205	\$270,821

# SUPPLEMENTAL DISCLOSURE OF NONCASH

ITEMS — Property additions in 2013 and 2012 of \$42,834 and \$65,787, respectively, have outstanding accounts payable.

See notes to basic financial statements.

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(Concluded)

#### NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (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 and unamortized loss on bond refundings.

**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 unforcseeable 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 Discounts, and Refunding Transactions** — Bond issuance costs related to bond insurance 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, net of interest income, on construction bond proceeds is 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 2013 and 2012 totaled \$17.0 million and \$23.0 million, respectively.

**Revenue Recognition** — Revenue from water sales is recognized when the water is consumed by customers. Of the accounts receivable balances, \$63.6 million and \$50.0 million represent revenue recognized on water sales, which had not yet been billed to customers at December 31, 2013 and 2012, respectively. Unearned revenue represents amounts billed to nonmetered 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 — In March 2012, the GASB issued GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* ("GASB 65"). The objective of this statement is to establish accounting and financial reporting standards that reclassify, as deferred outflows of resources or deferred inflows of resources, certain items that were previously reported as assets and liabilities and recognizes, as outflows of resources or inflows of resources, certain items that were previously reported as assets and liabilities. The financial reporting impact resulting from the implementation of GASB 65 is primarily the change in terminology from long term liabilities to deferred outflows for unamortized loss on refundings. Bond issuance costs (excluding costs related to bond insurance) and certain other assets have been written off as of January 1, 2012. GASB 65 is effective for the Water Fund's financial statements for the fiscal year ending December 31, 2013, resulting in a restatement of net position as of January 1, 2012, see Note 10.

In March 2012, the GASB issued GASB Statement No. 66, *Technical Corrections -2012- an amendment* of GASB Statements No. 10 and No. 62 ("GASB 66"). The objective of this statement is to improve accounting and financial reporting for a governmental financial reporting entity by resolving conflicting guidance that resulted from the issuance of two pronouncements, Statements No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions*, and No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.* There was no impact on the Water Fund's financial statements as a result of the implementation of GASB 66.

**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 Water Fund 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 long-term obligation for pension benefits as a liability 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.

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 will be effective for the Water Fund beginning with its year ending 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.

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 will be effective for the Water Fund beginning with its year ending 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. 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.

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.

## 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, 2013, are as follows (in thousands):

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

**Cash Equivalents and Investments** — The Water Fund's cash equivalents and investments as of December 31, 2012, are as follows (in thousands):

	Less than 1	1–5	6–10	More than 10	Fair Value
U.S. agencies Certificates of deposit and	\$11,519	\$ 186,844	\$ 157,329	\$ -	\$ 355,692
other short-term Commercial paper	39,559 1,300				39,559 1,300
Corporate bonds	1,500	12,507	8.0 <b>2</b> 0		12,507
Municipal bonds		19,212	8,029		27,241
Subtotal	\$ 52,378	\$218,563	\$165,358	<u>\$ -</u>	436,299
Share in City's pooled funds					60,431
Total			:		<u>\$ 496,730</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, 2013 and 2012, is as follows (in thousands):

Quality Rating	2013	2012
Aaa/AAA Aa/AA A/A	\$- 246,556 4,378	\$ 8,018 373,085 4,417
P1/A1 Not rated	22,622	1,300 49,479
Total	<u>\$273,556</u>	\$436,299

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 \$490.6 million. Of the bank balance, 99% was either insured or collateralized with securities held by City agents in the City's name. \$4.0 million was uncollateralized at December 31, 2013, and thus was subject to custodial credit risk.

Investments reported in the basic financial statements as of December 31, 2013 and 2012, are summarized as follows (in thousands):

	2013	2012
Per Note 2:		
Investments — Water Fund	\$273,556	\$436,299
Investments — City Treasurer Pooled Fund	75,466	60,431
	\$349,022	\$496,730
Per financial statements:		
Restricted investments	\$ 184,367	\$ 395,439
Unrestricted investments	129,496	44,188
Investments included as cash and cash equivalents on the		
statements of net assets	35,159	57,103
	\$ 349,022	\$496,730

#### 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, 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, 2013 and 2012, are as follows (in thousands):

	2013	2012
Senior lien debt service reserve Second lien revenue bonds Water rate stabilization Construction	\$ - 17,276 88,397 111,609	\$ 3,563 30,472 74,897 325,609
Total	\$217,282	\$434,541

At December 31, 2013 and 2012, 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

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Long-term debt as of December 31, 2013 and 2012, consisted of the following (in thousands):

	2013	2012
\$49,880 Series 1993 Water Revenue Refunding Bonds, issued October 1, 1993, due through 2016; interest at 4.125% to 6.5%	\$ 15,810	\$ 20,635
\$277,911 Series 1997 Water Revenue Bonds, issued September 1, 1997, due through 2019; interest at 3.9% to 5.25%	14,019	17,389
\$100,000 Series 2000 Second Lien Water Revenue Bonds, issued December 22, 1999, due 2030, variable floating interest rate; interest at 3.8694%	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%	19,153	22,664
\$81,500 Series 2001 Second Lien Water Revenue Refunding Bonds, issued December 13, 2001, due 2030; interest at 3.0% to 5.75%	80,900	80,945
\$2,292 Illinois Environmental Protection Agency Loan Agreement, signed June 30, 2003, due 2025; interest at 2.57%	1,799	1,926
\$3,605 Illinois Environmental Protection Agency Loan Agreement, signed October 16, 2003, due 2022; interest at 2.905%	1,912	2,095
\$500,000 Series 2004 Second Lien Water Revenuc Refunding Bonds, issued August 5, 2004, due through 2031, variable floating interest rate;	366,150	376,300
\$215,400 Series 2006A Second Lien Water Revenue Bonds, issued July 26, 2006, due through 2036; interest at 4.5% to 5.0%	188,985	193,330
\$549,915 Series 2008 Second Lien Water Revenue Bonds, issued April 2, 2008, due through 2038; interest at 4.0% to 5.25%	485,745	500,710
\$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%	5,465	5,734
\$9,077 Illinois Environmental Protection Agency Loan Agreement, issued February 2, 2010, due 2031; noninterest bearing	8,206	8,649
\$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%	1,493	
\$1,502 Illinois Environmental Protection Agency Loan Agreement, issued September 15, 2013, due 2032; interest at 1.25%	1,468	
\$6,092 Illinois Environmental Protection Agency Loan Agreement, issued October 25, 2013, due 2032; interest at 1.25%	5,953	
	1,996,858	2,030,177
Add accretion of capital appreciation bonds	43,885	47,658
Less current portion of accretion	(9,169)	(8,749)
Less current portion of long-term debt Add unamortized bond discount/premium — net	(43,846)	(42,232)
	<u>66,934</u>	<u>71,041</u>
Long-term portion — net	\$2,054,662	\$2,097,895

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Long-term debt changed during the years ended December 31, 2013 and 2012, is as follows (in thousands):

	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 9,169
Accretion of capital appreciation bonds Unamortized bond discount/premium — net	47,658 71,041	4,976	(8,749) (4,107)	43,885 <u>66,934</u>	9,109
Total	\$2,148,876	\$ 14,097	<u>\$(55,296)</u>	\$2,107,677	\$ 53,015
	Balance January 1, 2012	Additions	Reductions	Balance December 31, 2012	Due within One Year
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Revenue bonds/notes payable Accretion of capital appreciation bonds Unamortized bond discount/premium — net	\$1,721,188 46,946 30,498	\$399,950 5,205 47,588	\$ (90,961) (4,493) (7,045)	\$ 2,030,177 47,658 71,041	\$ 42,232 8,749

Interest expense includes amortization of the deferred loss on bond refunding for 2013 and 2012 of \$2.5 million; amortization of bond discount of \$4.1 million and \$7.0 million, respectively; and accretion of Series 1997 and Series 2000 capital appreciation bonds of \$9.2 million and \$8.7 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 2013 and 2012.

**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, 2013, was \$21.56 per 1,000 cubic feet.

**Issuance of Debt** — On July 8, 2010, a loan agreement was signed with the Illinois Environment Protection Agency to install water meters. In 2013, the Water Fund initiated a \$1.5 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from November 1, 2013, to November 1, 2032.

On September 15, 2013, a loan agreement was signed with the Illinois Environment Protection Agency to install water meters. In 2013, the Water Fund initiated a \$1.5 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from November 1, 2013, to November 1, 2032.

On October 25, 2013, a loan agreement was signed with the Illinois Environment Protection Agency to install water mains. In 2013, the Water Fund initiated a \$6.0 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from December 27, 2013, to December 27, 2032.

A schedule of bond and note debt service requirements to maturity at December 31, 2013, is as follows (in thousands):

Years Ending December 31	Principal	Interest	Total Debt Service
2014	\$ 43,846	\$ 105,592	\$ 149,438
2015 2016	45,107 54,308	104,344 102,876	149,451 157,184
2018	56,243	102,870	157,202
2018	58,273	98,980	157,253
2019–2023	375,468	411,084	786,552
2024–2028	433,647	309,608	743,255
2029–2033	399,692	204,055	603,747
2034–2038	359,160	109,240	468,400
2039–2043	171,114	19,881	190,995
Total	\$1,996,858	\$1,566,619	\$3,563,477

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, 2013.

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, 2013, 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, 2013, 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 August 18, 2014. An irrevocable letter of credit provides for the timely payment of principal and interest on the Series 2004 bonds until November 15, 2014. At December 31, 2013, 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. 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 F	air Value	Fair Valu December 3		_
	Classification	Amount	Classification	Amount	Notional
Cash flow hedges — pay-fixed					
interest rate swaps	Deferred outflow of resources	<u>\$ (48,125)</u>	Deferred outflow of resources	<u>\$ 78,246</u>	\$476,300

**Terms, Fair Values, and Credit Risk** — The terms, including the fair value and credit ratings of the outstanding swaps as of December 31, 2013, 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

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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	Counterparty Credit Rating
Hedging instruments: Bonds (Series 2004) Bonds (Series 2004) Bonds (Series 2000)	\$185,780 190,520 100,000	August 5, 2004	Pay 3.8694%; receive 67% of 1-month LIBOR Pay 3.8669%; receive 67% of 1-month LIBOR Pay 3.8694%; receive 67% of 1-month LIBOR	\$(28,148) (30,124) (19,974)	November 1, 2025 November 1, 2031 November 1, 2030	Aa3/AA-
Total	\$476,300			<u>\$(78,246</u> )		

**Fair Value** — As of December 31, 2013 and 2012, the swaps had a negative fair value of \$78.2 million and \$126.4 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.

Swap Payments and Associated Debt — Dcbt service requirements for the Water Fund's outstanding variable-rate debt and net swap payments, assuming current interest rates (December 31, 2013) remain the same for their term, are as follows (in thousands):

Years Ending December 31	Principal	Interest	Swaps — Net	Total
2014	\$ 10,575	\$ 506	\$ 17,526	\$ 28,607
2015	11,000	597	17,026	28,623
2016	11,450	587	16,611	28,648
2017	11,925	576	16,179	28,680
2018	12,425	564	15,730	28,719
2019–2023	159,525	2,483	65,680	227,688
2024–2028	161,810	1,634	32,916	196,360
2029–2033	87,440	293	5,217	92,950
Total	<u>\$466,150</u>	<u>\$7,240</u>	<u>\$186,885</u>	<u>\$660,275</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, 2013.

# 5. UTILITY PLANT

Utility plant changed during the years ended December 31, 2013 and 2012, as follows (in thousands):

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	Balance January 1, 2013	Additions	Disposals and Transfers	Balance December 31, 2013
Utility plant not depreciated:				
Land and land rights Construction in progress	\$ 5,083 262,280	\$ 	\$	\$ 5,083 317,086
Total utility plant not depreciated	267,363	213,134	(158,328)	322,169
Utility plant being depreciated: Structures and improvements Distribution plant Equipment	535,710 2,305,803 620,775	427 156,514 7,290	(335) 128,434 19,465	535,802 2,590,751 647,530
Total utility plant being depreciated	3,462,288	164,231	147,564	3,774,083
Less accumulated depreciation: Structures and improvements Distribution plant Equipment	(190,278) (372,090) (305,943)	(7.277) (23,750) (18,185)	1,559 1,568	(197,555) (394,281) (322,560)
Total accumulated depreciation	(868,311)	(49,212)	3,127	(914,396)
Utility plant being depreciated net	2,593,977	115,019	150,691	2,859,687
Utility plant — net	<u>\$2,861,340</u>	\$328,153	<u>\$ (7,637)</u>	<u>\$3,181,856</u>
	Balance — January 1, 2012	Additions	Disposals and Transfers	Balance — December 31, 2012
Utility plant not depreciated:	January 1,	Additions	and	December 31,
Land and land rights	January 1, 2012 \$5,083	<b>\$</b> -	and Transfers \$ -	December 31, 2012 \$ 5,083
	January 1, 2012		and Transfers	December 31, 2012
Land and land rights	January 1, 2012 \$5,083	<b>\$</b> -	and Transfers \$ -	December 31, 2012 \$ 5,083
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated:	January 1, 2012 \$ 5,083 148,871 153,954	\$	and Transfers (63,743) (63,743)	December 31, 2012 \$ 5,083 262,280 267,363
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements	January 1, 2012 \$ 5,083 	\$ <u>177,152</u> <u>177,152</u> 2,165	and Transfers \$ - (63,743) (63,743) (927)	December 31, 2012 \$ 5,083 262,280 267,363 535,710
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated:	January 1, 2012 \$ 5,083 148,871 153,954	\$	and Transfers (63,743) (63,743)	December 31, 2012 \$ 5,083 262,280 267,363
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant	January 1, 2012 \$ 5,083 	\$	and Transfers \$ - (63,743) (63,743) (63,743) (927) 60,142	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment	January 1, 2012 \$ 5,083 	\$ <u>177,152</u> <u>177,152</u> 2,165 133,871 <u>5,759</u>	and Transfers (63,743) (63,743) (63,743) (927) 60,142 (2,143)	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation: Structures and improvements Distribution plant	January 1, 2012 \$ 5,083 148,871 153,954 534,472 2,111,790 617,159 3,263,421 (182,537) (351,343)	\$	and Transfers \$ - (63,743) (63,743) (63,743) (927) 60,142 (2,143) 57,072	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288 (190,278) (372,090)
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation: Structures and improvements Distribution plant Equipment	January 1, 2012 \$ 5,083 148,871 153,954 534,472 2,111,790 617,159 3,263,421 (182,537) (351,343) (289,104)	\$ <u>177,152</u> <u>177,152</u> 2,165 133,871 <u>5,759</u> <u>141,795</u> (7,741) (21,804) (18,730)	and Transfers \$ - (63,743) (63,743) (63,743) (927) 60,142 (2,143) 57,072 1,057 1,891	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288 (190,278) (372,090) (305,943)

#### 6. PENSION PLANS

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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). These Plans are administered by individual retirement boards represented by elected and appointed officials. 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 10 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 minimum of 2.4% 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 \$13.0 million in 2013 and \$12.7 million in 2012. 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, 2013 and 2012, were 1.25% for the Municipal Employees' and 1% for the Laborers' and Retirement Board Employees' Annuity and Benefit Funds, respectively. The City has made the required contributions under State law.

Beginning in 2016, State law requires significantly increased contributions by the City to the Municipal Employees' Annuity and Benefit Fund and the Laborers' and Retirement Board Employees' Annuity and Benefit Fund.

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The following table as of December 31, 2013, 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	Percent of Annual Pension Cost Contributed	Annual Required Contribution	Percent of Required Contributions Contributed	Net Pension Obligation (Asset)
Municipal employees:					
2011	\$609,491	24.12 %	\$611,756	24.00 %	\$ 1,469,886
2012	687,519	21.65	690,823	21.50	2,008,546
2013	812,463	18.24	820,023	18.10	2,672,812
Laborers:					
2011	\$ 57,651	22.17 %	\$ 57,259	22.30 %	\$ (129,712)
2012	77,858	15.22	77,566	15.30	(63,707)
2013	106,439	10.88	106,199	10.90	31,148

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 24,408 annuitants and their dependents was approximately \$97.5 million in 2013 and 2012.

The annuitants who retired prior to July 1, 2005 received a 55 percent subsidy from the City and the annuitants who retired on or after July 1, 2005 received a 50, 45, 40 and zero percent 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 \$66.6 million and \$67.8 million in 2013 and 2012, 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 healthcare 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. Additional step downs in subsidy levels for 2015 and 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-asyou-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 2013 in the City CAFR, is the annual OPEB cost (expense).

Annual ODER Cost and Contributions Made

	Annual OPEB Cost and Contributions Made (In thousands)		
	2013 Health Plan	2012 Health Plan	
Contribution rates:		_	
City Plan members	Pay as you go N/A	Pay as you go N/A	
Annual required contribution	\$134,083	\$ 252,747	
Interest on net OPEB obligation	8,614	3,816	
Adjustment to annual required contribution	(25,531)	(179,586)	
Annual OPEB cost	117,166	76,977	
Contributions made	139,336	115,961	
Decrease in net OPEB obligation	(22,170)	(38,984)	
Net OPEB obligation — beginning of year	215,361	254,345	
Net OPEB obligation — end of year	<u>\$193,191</u>	<u>\$ 215,361</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 2013, 2012, and 2011 are as follows (in thousands):

		Schedule of Contributions, OPEB Costs, and Net Obligations		
Fiscal Years Ended	Annual	Percentage of	Net	
	OPEB	Annual OPEB	OPEB	
	Cost	Cost Contributed	Obligation	
December 31, 2013	\$ 117,166	118.9 %	\$ 193,191	
December 31, 2012	76,977	150.6	215,361	
December 31, 2011	48,954	202.4	254,345	

**Funded Status and Funding Progress** — As of December 31, 2012, the most recent actuarial valuation date, the actuarial accrued liability for benefits was \$997.3 million, all of which was unfunded. The covered payroll (annual payroll of active employees covered by the Plans) was approximately \$2,385.2 million and the ratio of the unfunded actuarial accrued liability to the covered payroll was 41.8%.

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 arc 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, 2012 December 31, 2011	\$ -	\$997,281 470,952	\$997,281 470,952	- %	\$2,385,198 2,518,735

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, 2013, the Entry Age Normal actuarial cost method was used. The actuarial method was changed in 2013 from Projected Unit Credit due to the phase out of the Settlement Plan. The actuarial assumptions included an annual healthcare cost trend rate of 9.5% initially, reduced by decrements to an ultimate rate of 5.0% in 2031. The range of rates included a 3% 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 3.0%. The UAAL is amortized as a level dollar amount over ten 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.

		ary of Assumptions and Methods Health Plan		
ltem	2013	2012		
Actuarial valuation date	December 31, 2012	December 31, 2011		
Actuarial cost method	Entry Age Normal	Projected unit credit		
Amortization method	Level dollar, open	Level dollar, closed		
Remaining amortization period	10 years	1 to 5 years		
Asset valuation method	Market value	Market value		
Actuarial assumptions:				
Investment rate of return	3.00%	1.50%		
Projected salary increases	3.00%	3.00%		
Healthcare inflation rate	9.5% initial to 5.0% ultimate	10.5% initial to 5% 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 \$68.5 million and \$68.2 million in 2013 and 2012, 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, 2013 and 2012, are as follows (in thousands):

	2013	2012
Balance — January 1 Claims incurred on current and prior-year events Claims pain on current and prior-year events	\$ 33,211 33,572 (31,690)	\$ 33,172 33,458 (33,419)
Balance — December 31	<u>\$ 35,093</u>	<u>\$ 33,211</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.

The City, who has a 40-year agreement with the DuPage Water Commission (DWC) to provide water service to the DWC and its 24 suburbs commencing on May 1, 1992, has signed an agreement with the DWC to share equally in the aggregate costs in the construction, operation, and maintenance of electrical generation facilities and other capital improvements at the Lexington Pumping station, of which neither party's share will exceed \$15 million without an amendment to the agreement approved by both parties. Payments for the City's share will be in the form of credits against the charges for water supplied to the facility. Total cumulative credits as of December 31, 2013, amounted to \$14.6 million.

At December 31, 2013 and 2012, the Water Fund entered into contracts with outstanding commitments of approximately \$831.7 million and \$109.6 million, respectively, for construction projects.

# 10. RESTATEMENT DUE TO IMPLEMENTATION OF NEW ACCOUNTING STANDARD

As a result of implementing GASB 65, net position was restated at January 1, 2012. With the adoption of GASB 65, the Water Fund is reporting deferred loss on debt refunding as deferred outflow. Bond issuance costs (excluding the portion related to bond insurance) are expensed and no longer amortized annually. The following is a reconciliation of the 2012 amounts that have been restated as a result of the implementation of GASB 65 (dollars in thousands):

	As Originally		
	Reported	Adjustment	As Restated
Statement of financial position:			
Other assets	\$ 16,446	\$(11,075)	\$ 5,371
Deferred outflows	126,371	36,199	162,570
Long-term debt net of current maturities	2,061,696	36,199	2,097,895
Net investment in capital assets	1,073,309	(11,075)	1,062,234
Statement of revenues, expenses, and changes in net position:			
Depreciation and amortization	48,887	(479)	48,408
Interest expense	79,147	2,604	81,751
Total net position —beginning of year	1,102,232	(8,950)	1,093,282
Statement of cash flows — reconciliation of operating income to net cash provided by operating activities:			
Operating income	237,935	479	238,414
Depreciation and amortization	48,887	(479)	48,408

# 11. SUBSEQUENT EVENT

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In March 2014, Moody's Investors Service 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.

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# ADDITIONAL SUPPLEMENTARY INFORMATION SCHEDULE OF UTILITY PLANT FOR THE YEAR ENDED DECEMBER 31, 2013 (In thousands)

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	Balance —		Assets		Balance —	Balance —	Accumulate	Accumulated Depreciation	5	
	January 1, 2013 *	Additions	Adjustments/ Disposals	Transfers	December 31, 2013	January 1, 2013	Provision		Adjustments/ Disposals	Adjustments/ December 31, Disposals 2013
LAND AND LAND RIGHTS: Power and pumping Distribution reservoir Purification General and mantenance	<b>\$</b> 2.367 300 11,739 677	, S	Ś	, 8	<b>5</b> 2,367 300 1,739 677	, S	Š	↔	•	, \$
Total land and land rights	5.083	.	.	.	5,083	.			.	
STRUCTURES AND IMPROVEMENTS: Cnbs Lake and land tunnels	17,337 118,377				17,337 118,377	5,027 37,612	168 1,184			5,195 38,796
Intake structures Power and pumping structures Purification buildings Distribution reservoirs	9,531 127,542 205,890 16,979	115 183		302	9,531 127,959 206,073 16,979	4,470 32,560 98,461 5,230	95 1.600 3.171 226			4.565 34,160 101.632 5.456
Offices, maintenance, and general Contract retainage	39,417 637	129	(637)		39,417 129	6,918	833			7,751
Total structures and improvements	535,710	427	(637)	302	535,802	190,278	7.277	'	ł	197,555
DISTRIBUTION PLANT: Mains and accessions Meters and installations Hydrants and valves Contract retainage	2,237,372 49,572 17,247 1,612	151,678 4,836	(1,338) (243) (1,612)	91,984 39,643	2,479,696 89,215 17,004 4,836	329,484 32,166 10,440	22,374 1,114 262	(1,317) (242)	(,317) (242)	17) 350.541 33.280 42) 10,460
Total distribution plant	2,305,803	156,514	(3,193)	131,627	2,590,751	372,090	23,750	(1,559)	6	9) 394.281
EQUIPMENT, Power production Purnfication Heavy machinery Transportation Miscellaneous Contract retainage	61,671 197,986 312,315 2,318 7,732 17,010	1,487 1.799 2, <u>5</u> 94 1,007	(1,035) (707) (175)	19,936	61,671 219,409 315,560 25,445 8,032 17,010 403	44.531 85.785 142.799 13.970 5.426 13,432	1,239 6,050 8,482 1,511 390 513	(637) (637)	<u> </u>	45.770 91.835 151.281 14.281 14.250 77) 13.945
Total equipment	620,775	7,290	(1,917)	21,382	647,530	305,943	18,185	(1.568)	ଛା	<u> 322,560</u>
Total structures and improvements, distribution plant, and equipment	3,462,288	164,231	(5,747)	153,311	3.774,083	868,311	49,212	(3,127)	ଇ	<u>7</u> ) <u>914,396</u>
CONSTRUCTION IN PROGRESS: Filtration plants Pumping stations Water mains Contract retainage	25,020 50,487 181,756 5,017	17,093 28,295 163,534 4,212	(5,017)	(1,446) (20,238) (131,627)	40,667 58,544 213,663 4,212					
Total construction in progress	262,280	213,134	(5,017)	(153,311)	317,086	•	.	.		
TOTAL UTILITY PLANT	\$3,729,651	\$377,365	<b>\$</b> (10,764)	S	\$4,096,252	<u>5868,311</u>	\$49,212	<u>s(3,127)</u>		\$914,396

- 36 -

## 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**

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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.

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#### **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.

## STATISTICAL DATA CHANGES IN NET POSITION (UNAUDITED) THREE YEARS ENDED DECEMBER 31, 2011–2013 (In millions)

	2011 (As Restated	2012 )(As Restated)	2013
OPERATING REVENUES:			
Water sales	\$ 441.8	\$ 562.6	\$ 620.5
Other operating revenues	12.4	13.7	16.6
oper			
Total operating revenues	454.2	576.3	637.1
OPERATING EXPENSES:			
Source of supply	0.2	0.2	0.1
Power and pumping	38.2	41.7	43.2
Purification	66.5	56.1	60.9
Transmission and distribution	39.0	36.5	29.5
Provision for doubtful accounts	14.0	15.7	25.4
Customer accounting and collection	10.6	10.0	11.6
Administrative and general	17.1	21.9	21.2
Central services and General Fund reimbursements	96.6	107.4	108.7
Total operating expenses	282.2	289.5	300.6
OPERATING INCOME BEFORE DEPRECIATION	•	· ·	
AND AMORTIZATION	172.0	286.8	336.5
DEPRECIATION AND AMORTIZATION	47.1	48.4	49.6
OPERATING INCOME	124.9	238.4	286.9
NONOPERATING REVENUES (EXPENSES):			
Interest income	2.0	0.3	0.4
Interest expenses	(86.5)	(81.7)	(92.2)
Other operating revenues	2.2	1.1	0.5
Total nonoperating expenses — net	(82.3)	(80.3)	(91.3)
CHANGE IN NET POSITION	42.6	158.1	195.6
TOTAL NET POSITION — Beginning of year, as restated	1,050.7	1,093.3	1,251.4
TOTAL NET POSITION — End of year	<u>\$ 1,093.3</u>	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>

Water Fund intends to provide ten-year information as it becomes available.

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## STATISTICAL DATA NET POSITION BY COMPONENTS (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (In millions)

	2010 (As Restated	2011 I)(As Restated	2012 I)(As Restated)	2013
NET POSITION: Net investment in capital assets Restricted net assets for capital projects Unrestricted net assets	\$ 964.9 0.4 85.4	\$ 1,046.1 0.2 47.0	\$ 1,062.3 1.3 187.8	\$ 1,233.2 0.7 <u>213.1</u>
TOTAL NET POSITION	<u>\$ 1,050.7</u>	<u>\$ 1,093.3</u>	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>

Water Fund intends to provide ten year information as it becomes available.

HISTORICAL FINANCIAL OPERATIONS (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013 STATISTICAL DATA E

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2013	\$ 620.5 16.6	<u>637.1</u>	0.1	6.09	29.5	25.4	11.6	21.2	108.7	300.6	0.4	336.9
2012	\$562.6 \$									289.5	0.3	_
2011	\$441.8 12.4		0.2 38.2							282.2	2.0	- 1
2010	\$445.5 12.9									279.1	(0.3)	
2009	\$396.9 13.3	410.2								274.1	1.0	\$137.1
2008	\$358.0 12.2	370.2								276.8	3.7	\$ 97.1
2007	S 323.6 10.8	334.4	0.3	44.2	47.0	3.7	14.8	14.9	83.7	260.8	4.9	\$ 78.5
2006	\$317.2	330.4	0.2 49.8	41.9	41.6	3.6	16.9	15.1	74.0	243.1	3.8	\$ 91.1
2005	\$333.7 10.6	344.3	0.2 \$0.6	43.3	39.4	2.7	16.3	13.2	80.2	245.9	2.6	\$ 101.0
2004	\$307.6 13.0	320.6	0.4 42 1	40.6	39.1	3.7	14.9	11.5	72.3	224.6	1.0	\$ 97.0
	OPERATING REVENUES: Water sales (1) Other operating revenues	Total operating revenues	OPERATING EXPENSES: Source of supply Power and mumning	Purification	Transmission and distribution	Provision for doubtful accounts	Customer accounting and collection	Administrative and general	Central services and General Fund reimbursements	Total operating expenses	INTEREST INCOME (OTHER THAN FROM CONSTRUCTIONAL ACCOUNT)	NET REVENUES — As defined (Note 4)

(1) Operating revenues are net of credits to JAWA and DWC during the year 2004.

Source: City of Chicago Comptroller's Office.

## STATISTICAL DATA WATER SYSTEM ACCOUNTS (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013

Years Ended December 31	Nonmetered	Metered	Total
2004	324,689	167,545	492,234
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

Source: City of Chicago Department of Water Management.

## STATISTICAL DATA TEN LARGEST SUBURBAN CUSTOMERS (UNAUDITED) FOR THE YEAR ENDED DECEMBER 31, 2013 (In thousands)

Customer	Amount of Sales
Dupage Water Commission	\$ 80,944
Oak Lawn, Illinois	32,408
Northwest Suburban Municipal Joint Action Water Agency	30,482
Bedford Park, Illinois	23,167
Harvey, Illinois	9,251
Melrose Park, Illinois	9,016
Cicero, Illinois	7,442
Alsip, Illinois	6,778
McCook, Illinois	5,443
City of Des Plaines	5,310
Total	\$210,241

Source: City of Chicago Department of Water Management.

STATISTICAL DATA REVENUE BOND COVERAGE (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013 (In millions)

PRIOR BONDS COVERAGE CALCULATION

COMBINED PRIOR BONDS, SENIOR LIEN, AND SECOND LIEN DEBT SERVICE CALCULATION	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
REVENUES AVAILABLE FOR BONDS: Net revenues — as defined (Note 4) Transfer from (to) Water Rate Stabilization account & PAYGO Fund	\$ 97.0	\$ 101.0	\$91.1 (7.0)	578.5 7.9	\$97.1	\$ 137.1	\$ 179.0 (10.0)	\$ 174.0	\$ 287.1 (13.5)	\$336.9 (13.5)
NET REVENUES AVAILABLE FOR BONDS	\$ 97.0	\$101.0	\$84.1	\$ 86.4	\$97.1	\$ 137.1	\$ 169.0	\$174.0	<u>\$273.6</u>	\$323.4
DEBT SER VICE REQUIREMENTS: Senior debt service requirements	\$45.8	\$ 30.1	\$ 29.7	\$38.0	\$27.5	\$ 33.8	\$ 29.1	\$ 14.1	\$ 13.9	\$ 21.5
Senior debt service coverage ratio	2.1	3.4	2.8	2.3	3.5	4.1	5.8	12.3	19.7	15.0
Second lien debt service requirements Subordinate lien debt service requirements	\$ 10.3 0.2	\$ 27.3 0.2	\$30.5 0.3	\$43.2 0.4	\$ 62.5 0.4	\$ 75.7 04	\$ 82.1 0.4	\$ 106.6 0.4	\$116.5 <u>1.2</u>	\$1256 1.3
Total second and subordinate lien debt service requirements	<u>\$ 10.5</u>	\$ 27.5	\$30.8	\$43.6	\$ 62.9	\$ 76.1	\$ 82.5	\$ 107.0	<u>\$ 117.7</u>	\$126.9
TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS	\$ 56.3	\$ 57.6	\$ 60.5	\$81.6	\$90.4	\$ 109.9	\$111.6	\$121.1	\$131.6	\$148.4
TOTAL COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE RATIO	1.7	1.8	1.4	1.1	1.1	1.2	1.5	1.4	2.1	2.2
WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE	\$ 52.3	\$ 52.3	\$ 59.3	\$51.4	\$51.4	\$ 51.4	\$ 61.4	\$ 61.4	\$ 74.9	\$ 88.4

Source: City of Chicago Comptroller's Office.

## STATISTICAL DATA LONG-TERM DEBT (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (In millions)

	2010	2011	2012	2013
Senior lien bonds Second lien bonds Commercial paper Subordinate lien — IEPA loan	\$ 83.4 1,614.3 51.5 4.6	\$68.9 1,586.9 46.5 18.9	\$ 60.7 1,951.1 0.0 18.4	\$ 49.0 1,921.6 0.0 26.3
Total long-term debt	<u>\$ 1,721.2</u>	<u>\$ 1,721.2</u>	\$ 2,030.2	<u>\$ 1,996.9</u>

Water Fund intends to provide ten-year information as it becomes available.

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## STATISTICAL DATA CAPITAL IMPROVEMENT PROGRAM (UNAUDITED) 2014–2018 (In thousands)

Years	Amount
2014 2015 2016 2017 2018	\$ 444,975 378,011 439,801 451,502 465,249
Total	\$2,179,538
Note: The information presented in the table above reflects the Water Fund's expected	

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.

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## STATISTICAL DATA WATER SYSTEM PUMPAGE AND CAPACITY (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013

Years	Total Pumpage (MGD)	Average Daily Pumpage (MGD)	Maximum Daily Pumpage (MGD)	System's Rated Pumpage Capacity (MGD)	Maximum Daily Pumpage as % of Capacity
2004	320,069	875	1,134	2,160	53
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	<b>79</b> 3	1,248	2,160	58
2013	276,039	756	1,095	2,160	51

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

## MISCELLANEOUS STATISTICAL DATA (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012

	2013	2012
AREA SERVED (IN SQUARE MILES):		
Chicago	228	228
125 suburbs	578	578
Total area served	806	806
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 2
Shore intakes (filtration plants)	2	
Water supply tunnels (6 to 20 feet in diameter) — miles	64	64
DISTRIBUTION SYSTEM:		
Water mains (miles)	4,321	4,369
Fire hydrants	48,614	48,243
Valves	49,447	47,189

Note: Million Gallons Daily (MGD).

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Source: City of Chicago Department of Water Management.

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- 47 -

## STATISTICAL DATA OPERATING INFORMATION BY FUNCTION (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (Number of employees)

Function	2010	2011	2012	2013
Administration	65	63	62	61
Agency management	37	39	37	37
Safety and security	19	17	16	16
Capital design and construction services	10	10	8	8
Engineering services	4	4	4	4
Inspection services	32	32	30	29
Water quality	48	48	48	47
Water pumping	233	231	234	222
Water treatment	324	326	323	336
Systems installation	39	39	34	75
Systems maintenance	582	581	583	542
Billings and customer service	65	66	50	50
Water meter installation and repair	76	78	82	84
Total	1,534	1,534	<u>1,511</u>	1,511

Water Fund intends to provide ten year information as it becomes available.

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## 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.

## STATISTICAL DATA PRINCIPAL EMPLOYERS (NONGOVERNMENT) (UNAUDITED) FOR THE YEAR ENDED DECEMBER 31, 2013, AND NINE YEARS AGO

		2013 (1	1)		2004	(1)
Employer	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
J.P. Morgan Chase (2)	8,499	1	0.78 %	9,437	1	0.89 %
United Airlines	8,199	2	0.75	6,448	2	0.61
Accenture LLP	5,821	3	0.53	3,869	6	0.36
Northern Trust	5,353	4	0.49	4,659	4	0.44
Ford Motor Company	5,103	5	0.47	2,662	10	0.25
Jewel Food Stores, Inc.	4,441	6	0.41			.00
ABM Janitorial Services — North Central	3,399	7	0.31			
Bank of America NT & SA	3,392	8	0.31	3,139	7	0.30
Walgreen's Co.	2,869	9	0.26	· .		.00
American Airlines	2,749	10	0.25	3,985	5	0.38
SBC Ameritech (3)			.00	4,803	3	0.45
Target Corporation			.00	2,940	8	0.28
ABN Amro			.00	2,923	9	0.28

Source: City of Chicago, Department of Revenue, Employer's Expenses Tax Returns.
 J.P. Morgan Chase, formerly known as Banc One

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(3) Ameritech currently known as SBC/AT&T

POPULATION AND INCOME STATISTICS (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004-2013 STATISTICAL DATA

Year	Population (1)	Median Age (2)	Number of Households (2)	Unemployment Rate (3)	Per Capita Income (4)	Total Income (6)
2004	2,896,016	32.6	1,051,018	7.2	37,169	\$ 107,642,018,704
2005	2,896,016	33.0	1,045,282	7.0	38,439	111,319,959,024
2006	2,896,016	33.5	1,040,000	5.2	41,887	121,305,422,192
2007	2,896,016	33.7	1,033,328	5.7	43,714	126,596,443,424
2008	2,896,016	34.1	1,032,746	6.4	45,328	131,270,613,248
2009	2,896,016	34.5	1,037,069	10.0	43,727	126,634,091,632
2010	2,695,598	34.8	1,045,666	10.1	45,957	123,881,597,286
2011	2,695,598	33.2	1,048,222	9.3	N/A (5)	123,935,509,246
2012	2,695,598	33.0	1,030,746	8.9	N/A (5)	130,210,861,390
2013	2,695,598	33.5	1,062,029	8.3	N/A (5)	N/A (5)

Notes:

(1) Source: U.S. Census Bureau.

(2) Source: World Business Chicago Website & 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 2013 dollars). (5) N/A means not available at time of publication

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## APPENDIX D

## FORM OF OPINIONS OF CO-BOND COUNSEL

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City of Chicago

PNC Capital Markets LLC, as Representative of the Underwriters named in the Contract of Purchase, dated [\_\_\_\_\_\_, 2014], between the City and said Underwriters

The Bank of New York Mellon Trust Company, N.A., as Trustee

> Re: City of Chicago Second Lien Water Revenue Bonds, Project Series 2014

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 \$ aggregate principal amount Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds"). The Series 2014 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 April 30, 2014, authorizing the Series 2014 Bonds (the "Bond Ordinance"). The Series 2014 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 an Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014, dated as of September 1, 2014 (the "Eighth 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 2014 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 2014 Bonds are authorized by the City for the purpose of providing funds to (i) pay costs of the Series 2014 Current Projects and (ii) pay the costs of issuance of the Series 2014 Bonds.

The Series 2014 Bonds are issuable only as fully registered bonds without coupons in Authorized Denominations. The Series 2014 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 May 1, 2015, at the rates per annum, as follows:

Maturity	Principal	Rate Per	Maturity	Principal	Rate per
(November 1)	Amount	Annum	(November 1)	Amount	Annum

[The Series 2014 Bonds are subject to optional and mandatory sinking fund redemption at the times, in the manner and upon the terms specified in the Eighth Supplemental Indenture.] In connection with the issuance of the Series 2014 Bonds we have examined the following:

- (a) a certified copy of the Bond Ordinance;
- (b) an executed or counterpart of the Eighth 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 Eighth Supplemental Indenture with the Trustee and to issue the Series 2014 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 Eighth 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 2014 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 2014 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 Eighth Supplemental Indenture, including amounts on deposit in the 2014 Construction 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 Eighth Supplemental Indenture. The Series 2014 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 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 Bonds.

5. The Bond Ordinance, the Master Indenture and the Eighth 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 2014 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 2014 Bonds to be included in gross income retroactively to the date of issuance of the Series 2014 Bonds. Ownership of the Series 2014 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 2014 Bonds.

7. Interest on the Series 2014 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2014 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 2014 Bonds.

In rendering this opinion, we advise you that the enforceability (but not the validity or binding effect) of the Series 2014 Bonds, the Bond Ordinance, the Master Indenture and the Eighth 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.

In rendering this opinion, we have relied on certifications of the City and certain other parties with respect to certain material facts solely within their knowledge relating to the facilities to be financed with the Series 2014 Bonds, the application of proceeds of the Series 2014 Bonds and certain other matters pertinent to the tax-exempt status of the Series 2014 Bonds.

We express no opinion with respect to the Series 2014 Bonds or other matters related to the Series 2014 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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## **APPENDIX E**

## **RETIREMENT FUNDS**

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## TABLE OF CONTENTS

<u>RETIREMENT FUNDS</u>	
General	E-1
Source Information	E-3
Background Information Regarding the Retirement Funds	E-4
General	E-4
The Retirement Funds	E-5
Overlapping Taxing Bodies	E-6
Certain Duties	E-7
Investments	E-7
Determination of Employee Contributions	E-8
Determination of City's Contributions	E-9
City Contributions to FABF	E-10
City's Required Contributions to PABF and FABF Beginning in 2016	E-10
City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641	E-11
The Actuarial Valuation	E-12
General	
Actuaries and the Actuarial Process	E-12
City's Contributions Not Related to GASB Standards	E-13
City's Contributions to PABF and FABF under P.A. 96-1495	
Will Not Conform to GASB Standards	E-13
Actuarial Methods	E-14
Actuarial Value of Assets	E-14
Actuarial Accrued Liability	E-15
Actuarial Assumptions	E-16
Assumed Investment Rate of Return	E-16
Funded Status of the Retirement Funds	E-17
Projection of Funded Status and Insolvency	E-26
Report and Recommendations of the Commission to Strengthen Chicago's Pension Funds	
Diversion of Grant Money to PABF and FABF Under P.A. 96-1495	E-34
GASB Statements 67 and 68	E-35
Legislative Changes	E-35
P.A. 96-0889	E-35
P.A. 96-1495	E-36
P.A. 98-641	E-36
Pension Reform	E-40

## PAYMENT FOR OTHER POST-EMPLOYMENT BENEFITS

General	E-40
The Settlement	E-41
City Financing of the Health Plan	E-41
Actuarial Considerations	E-42

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City Obligation	E-42
Actuarial Methods and Assumptions	
Funded Status	
Retiree Health Benefits Commission	E-44
Status of Healthcare Benefits After the Settlement Period	E-44

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## **RETIREMENT FUNDS**

#### General

Pursuant to the Illinois Pension Code, as revised from time to time (the "Pension Code"), the City contributes to four retirement funds, which provide benefits upon retirement, death or disability to employees and beneficiaries. Such 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 ("FABF"); and (iv) the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF" and, together with MEABF, PABF and FABF, the "Retirement Funds").

The Retirement Funds are established, administered and financed under the Pension Code, as separate bodies politic and corporate and for the benefit of the employees of the City and their beneficiaries. The City's contributions to the Retirement Funds, and benefits for annuitants of the Retirement Funds, 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 have been actuarially determined to be significantly underfunded. See "— Funded Status of the Retirement Funds" and "— Projection of Funded Status and Insolvency" below. P.A. 98-641, which is defined and described herein, significantly increases the City's contributions to MEABF and LABF and makes other adjustments that caused the unfunded liabilities of MEABF and LABF to decrease on its effective date and will cause such unfunded liabilities to decrease further over time. Although the actuaries for PABF and FABF project that the unfunded liabilities of those Retirement Funds will decrease in the future, such a decrease is expected to result from significantly increased City contributions to those Retirement Funds as a result of the enactment of P.A. 96-1495, which is described and defined herein. The increases in the City's contributions to PABF and FABF mandated by P.A. 96-1495 are expected to substantially burden the City's financial condition. Taken together with the increase in City contributions under P.A. 98-641, the burden on the City's financial condition is expected to be even greater.

In 2010, the Illinois General Assembly enacted legislation to address the pension benefits of members who joined the Retirement Funds on or after January 1, 2011. See "— Legislative Changes" below. While this legislation is expected to reduce the Retirement Funds' liabilities over time, it is not expected to materially reduce such liabilities in the near future. The impact of this legislation is already reflected in the projections contained in this Appendix.

In 2010, the Illinois General Assembly also enacted P.A. 96-1495 which, among other things, significantly increased future contributions to be made by the City to PABF and FABF. See "— Determination of City's Contributions – City's Required Contributions to PABF and FABF Beginning in 2016" below. P.A. 96-1495 has been projected to require an increase in the City's contributions to PABF and FABF from approximately \$300 million in 2015 to approximately \$838 million in 2016, with increase of approximately three percent each year thereafter. See "TABLE 13 – PROJECTION OF

FUTURE FUNDING STATUS – FABF" and "TABLE 14 – PROJECTION OF FUTURE FUNDING STATUS – PABF" below. Given the substantial burden these increased contributions would place on the City's financial condition, the City is exploring options which would reduce the near-term burden of such increased contributions.

As discussed under "— Pension Reform" below, the City believes that modifications in the benefits provided by FABF and PABF are necessary, in combination with a ramp to actuarial funding and increases in employee contributions, to adequately address the unfunded liabilities of those Retirement Funds. Any such modifications would require action by the Illinois General Assembly to modify the Pension Code. No assurance can be given that any proposal to modify the benefits provided by FABF and PABF will be enacted. Furthermore, given the Illinois Pension Clause (defined below) of the Illinois Constitution, no assurance can be given that legislation to modify benefits, if enacted, will be upheld upon a legal challenge. See "— Background Information Regarding the Retirement Funds — General" below.

In 2014, the Illinois General Assembly enacted P.A. 98-641 which, among other things, significantly increased future contributions to be made by the City to MEABF and LABF. See "— Determination of City's Contributions – City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641" below. Information regarding projected future City contributions to LABF and MEABF pursuant to P.A. 98-641 is set forth in "TABLE 16 – PROJECTED CONTRIBUTIONS: MEABF AND LABF" below.

The Retirement Funds' sources of funding 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 financial health of the Retirement Funds and the projected impact of the Retirement Funds' underfunding on future contributions to be made by the City has impacted the rating agencies' determination of the City's creditworthiness. On April 17, 2013, Moody's Investors Service ("Moody's") issued a release (the "Release") announcing a new approach to analyzing state and local government pensions. The method of evaluating public pension plans established in the Release is intended to be a method of standardizing information among public pension plans and does not impact the City's required contributions, the value of the Retirement Funds' assets, or the liabilities owed by the Retirement Funds. The City does not endorse the method of analysis adopted by Moody's in the Release.

Moody's new pension analysis appears to include, among other things, adjusting pension plan Actuarial Accrued Liabilities by using certain common assumptions, such as the discount rate and amortization period. Certain other actuarial assumptions, such as mortality and salary growth rates, were not standardized across governmental plans. To accomplish its review, Moody's stated that it will use a discount rate based on Citibank's Pension Liability Index discount rate as of a pension plan's valuation date. Such a discount rate will be lower than the discount rate currently used by the Retirement Funds and is closer to the discount rate for a typical pension plan in the private sector. The City estimates that Moody's new method of analysis would result in the following Funded Ratios, as hereinafter defined, of the Retirement Funds (based on data as of December 31, 2012): 25.2% for MEABF, 38.4% for LABF, 20.3% for PABF, and 15.8% for FABF. See Tables 5 through 8 below for information on the Retirement Funds' discount rate, see

"— Actuarial Assumptions —Assumed Investment Rate of Return" below. The Release can be obtained from Moody's; provided, however, that the Release is not incorporated herein by such reference.

On March 4, 2014, 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 "A3" to "Baa1," the City's water and sewer senior lien revenue bonds from "A1" to "A2," and the City's water and sewer second lien revenue bonds from "A2" to "A3," each with a negative outlook. This follows previous downgrades by Moody's on July 17, 2013 of the City's general obligation bonds and sales tax revenue bonds from "Aa3" to "A3," the City's water and sewer senior lien revenue bonds from "Aa3" to "A3," the City's water and sewer senior lien revenue bonds from "Aa2" to "A1," and the City's water and sewer second lien revenue bonds from "Aa3" to "A2." Moody's indicated in the Rating Report that the March 4, 2014 downgrades reflect "massive and growing unfunded pension liabilities which threaten the City's fiscal solvency absent major revenue and other budgetary adjustments in the near term and sustained for years to come." 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 February 24, 2014, Standard & Poor's Ratings Group ("S&P") affirmed the City's "A+" general obligation bond rating with a negative outlook assigned to such rating. In affirming the City's general obligation bond rating and outlook, S&P cited the City's pension liabilities. Furthermore, S&P indicated that the increased contributions required by current state law could result in ratings downgrades for the City if the City substantially reduces its reserves to make these increased payments.

On March 3, 2014, Fitch Ratings ("Fitch") affirmed the City's general obligation bond and sales tax bond ratings as "A-" and the City's commercial paper note rating as "BBB+," each with a negative outlook. In announcing these ratings downgrades, Fitch cited, among other things, the City's pension liability and the "strong legal protection to pension benefits" in Illinois.

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.

#### **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 arithmetic calculation of numbers 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 fiscal year on December 31. Each of the Retirement Funds have released their 2013 Actuarial Valuations.

#### **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 retired employees 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 a member 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 retiree healthcare benefits to eligible members.

Section 5 of Article XIII of the Illinois Constitution (the "Illinois Pension Clause") provides as follows:

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"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." For a discussion of the Illinois Pension Clause in the context of possible pension reform related to the Retirement Funds, see "- Pension Reform" below.

For purposes of this Appendix, references to "employee" or "member" are references to the employees of the City, the employees of the Retirement Funds participating in the Retirement Funds, and with regard to MEABF, certain employees and annuitants of the Chicago Board of Education who are members of MEABF as described below.

#### 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 and survivors. 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 employees, MEABF's membership includes non-instructional employees of the Chicago 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 participants and beneficiaries.

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 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 participants and beneficiaries.

The membership of the Retirement Funds, as of December 31, 2013, was as follows:

## TABLE 1 - MEMBERSHIP

Retirement Fund	Active Members	Inactive/ Entitled to Benefits	Retirees and Beneficiaries	Totals
MEABF	30,647	14,254	25,042	69,943
PABF	12,161	654	13,159	25,974
FABF	4,685	57	4,640	9,382
LABF	<u>2,844</u>	<u>1,432</u>	<u>3,954</u>	<u>8,230</u>
Total	50,337	16,397	46,795	113,529

Source: Actuarial Valuations of the Retirement Funds as of December 31, 2013.

#### **Overlapping Taxing Bodies**

The City's tax base overlaps with numerous other units of government, including the Chicago Board of Education, the Chicago Park District ("CPD"), the County of Cook, and the State of Illinois (collectively, all such other units are referred to herein as the "Governmental Units"). Certain of the Governmental Units maintain their own defined benefit pension plans (collectively, all such other plans are referred to herein as the "Other Retirement Funds"), many of which are also significantly underfunded. The underfunding of these Other Retirement Funds places a substantial additional potential burden on the City's taxpayers, who bear the burden of funding a portion of the contributions of the Governmental Units.

On December 5, 2013, Governor Pat Quinn signed Public Act 98-0599 into law (the "State Pension Reform Act"). The State Pension Reform Act provides for certain cost-saving and other reforms to the State's four largest pension plans, including, but not limited to, changes to the employer contribution formula, cost of living adjustments, retirement ages and employee contributions. Such changes were scheduled to take effect on June 1, 2014. The State Pension Reform Act has been challenged by five separate lawsuits on behalf of various classes of annuitants, current and former workers, and labor organizations, alleging, among other things, that the legislation violates the Illinois Pension Clause. The Illinois Supreme Court consolidated these lawsuits into a single lawsuit and ordered that the consolidated lawsuit proceed in Sangamon County Circuit Court. On May 14, 2014, a plaintiff's motion for a temporary restraining order was granted. Such motion stays the implementation of the State Pension Reform Act in its entirety until further order of the court or until it is found unconstitutional. The City makes no prediction as to whether the filing of these lawsuits or their outcome will impact the City's pension reform efforts.

On January 7, 2014, Governor Pat Quinn signed Public Act 98-0622 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 employer contribution formula, cost of living adjustments, retirement ages and employee contributions. Such changes became effective on June 1, 2014. The City is not aware of any lawsuit that has been filed challenging the CPD Pension Reform Act. The City makes no prediction as to whether any lawsuit will be filed challenging the CPD Pension Reform Act, or whether the filing of any such lawsuit or its outcome will impact the City's pension

reform efforts, nor does the City make any prediction as to whether the outcome of the lawsuits against the State Pension Reform Act will impact the CPD Pension Reform Act.

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. The City believes the information on COGFA's website to be reliable; however, the City takes no responsibility for the continued accuracy of the Internet address or for the accuracy or timeliness of information posted on the website.

#### 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 the Retirement Funds. 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 their administration of benefits and other matters in accordance with the Illinois Administrative Procedure Act, and their decisions in 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.

Fiscal				
Year	MEABF	FABF	LABF	PABF
2003	19.6%	28.3%	17.5%	21.2%
2004	10.3	12.8	11.5	11.0
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	19.4	23.7	21.5	21.5
2010	13.7	17.7	15.5	12.7
2011	0.1	(2.0)	(0.3)	0.8
2012	12.9	16.2	14.6	12.4
2013	14.9	19.5	15.8	13.7
Assumed Rate <sup>(1)</sup>	7.5	8.0	7.5	7.75

#### TABLE 2 - INVESTMENT RATES OF RETURN, 2003-2013

Source: The audited financial statements of the FABF as of December 31 of the years 2003-2012. For MEABF, LABF and PABF, the CAFRs of the respective Retirement Fund for the fiscal years ending December 31, 2003-2012. Fiscal Year 2013 information is from the Actuarial Valuations of the Retirement Funds as of December 31, 2013.

(1) Reflects the assumed rate of return of the Retirement Funds as of December 31, 2013, as discussed in further detail under "Actuarial Assumptions—Assumed Investment Rate of Return" below.

#### **Determination of Employee Contributions**

City employees who are members of the Retirement Funds are required to contribute to their respective Retirement Fund as set forth in the Pension Code.

Members of MEABF contribute 8.5% of their salary to MEABF (consisting of a 6.5% contribution for employee benefits, a 1.5% contribution for spouse benefits, and a 0.5% contribution for an annuity increase benefit). For a summary of the increases in employee contributions scheduled to take effect under P.A. 98-641, see "— Legislative Changes — P.A. 98-641."

Members of PABF contribute 9.0% of their salary to PABF (consisting of a 7.0% contribution for employee benefits, a 1.5% contribution for spouse benefits and a 0.5% contribution for an annuity increase benefit).

Members of FABF contribute 9.125% of their salary to FABF (consisting of a 7.125% contribution for employee benefits, a 1.5% contribution for spouse benefits, a 0.375% contribution for an annuity increase benefit and a 0.125% contribution for disability benefits).

Members of LABF contribute 8.5% of their salary to LABF (consisting of a 6.5% contribution for employee benefits, a 1.5% contribution for spouse benefits, and a 0.5% contribution for an annuity increase benefit). For a summary of the increases in employee contributions scheduled to take effect under P.A. 98-641, see "- Legislative Changes - P.A. 98-641."

For each Retirement Fund, if an employee leaves without qualifying for an annuity, accumulated employee contributions are refunded.

#### **Determination of City's Contributions**

Under the Pension Code, the City's contributions to the Retirement Funds are determined pursuant to a statutory formula on an annual basis. Currently, the City's contributions equal the Multiplier Funding (as defined below) and certain other amounts as required by the Pension Code. "Multiplier Funding" is equal to the product of a multiplier established by the Pension Code for each Retirement Fund (each, a "Multiplier") and the amount contributed by the City's employees two years prior to the year in which the tax is levied. With respect to the City's 2015 contribution, the Multiplier for each Retirement Fund is as follows: 1.25 for MEABF; 2.00 for PABF; 2.26 for FABF; and 1.00 for LABF. The City's contributions are made as governed by the Pension Code and are not based on the Actuarially Required Contribution (as hereinafter defined). See "- The Actuarial Valuation-City's Contributions Not Related to GASB Standards" below. However, pursuant to P.A. 96-1495, beginning in 2016, the City's contributions to PABF and FABF will be 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. Furthermore, beginning in 2021, P.A. 98-641 requires that the City's contributions to MEABF and LABF be determined pursuant to the P.A. 98-641 Funding Plan (as hereinafter defined) rather than the Multiplier Funding system. See "-City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641" below.

The Pension Code provides that the Retirement Fund Boards must each annually certify to the City Council a determination of the required City contribution to the Retirement Funds. 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. See "City Contributions to FABF" below.

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. P.A. 98-641 amends the Pension Code such that the Pension Levy is no longer the default funding mechanism for MEABF and LABF beginning in 2015. 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. In recent years, the City has deposited a portion of the City's Personal Property Replacement Tax revenue ("PPRT") with the City Treasurer for this purpose. PPRT revenue is paid by the State of Illinois (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. The City's distributive share of PPRT is not required to be used for this purpose but it can be used by the City for corporate purposes. 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 2011, 2012 and 2013, the amounts of PPRT contributed to the Retirement Funds in the aggregate were approximately \$108,153,000, \$101,875,000 and \$126,639,000, respectively. For those same years, the City's total distributive share of PPRT was \$144,333,000, \$139,461,000 and \$159,559,000, respectively.

The City's contributions in accordance with the Pension Code, which have been generally lower than the Actuarially Required Contribution have contributed to the significant underfunding of the Retirement Funds. Moreover, the contributions to the Retirement Funds in accordance with the Pension 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. Any significant increases in the City's contributions (such as those scheduled to occur under P.A. 96-1495 and P.A. 98-641) to the Retirement Funds can be expected to place significant strain on the City's finances.

#### City's Contributions to FABF

With respect to the contribution to be made in 2015, the FABF has requested certain amounts which the City has determined are not required by the Pension Code. The amount requested by the FABF Board in excess of the amount the City has determined to be the statutory requirement for 2014 was \$18,147,000. The FABF Board has made similar requests for amounts in excess of the amount the City has determined to be the statutory requirement in each of the last several years. In each such year, including the current year, 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 to FABF.

#### City's Required Contributions to PABF and FABF Beginning in 2016

On December 30, 2010, Governor Pat Quinn signed into law Public Act 096-1495 ("P.A. 96-1495") which, among other things, 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 (as hereafter defined) of 90% 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% 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 such, any property tax to be levied by the City for the purpose of raising the P.A. 96-1495 Contribution to be made by the City in 2016 would be levied in calendar year 2015 and collected in calendar year 2016.

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 and will impose a significant financial burden on the City. The City is exploring options to change the P.A. 96-1495 Funding Plan to reduce the near-term burden on the City's financial condition imposed by dramatically increased contributions to PABF and FABF under P.A. 96-1495, including shifting all or a portion of such burden to future years. Any change to the P.A. 96-1495 Funding Plan which would reduce the contributions required of the City would have the effect of increasing the unfunded liabilities and decreasing the Funded Ratio with respect to PABF and FABF when compared to the projected unfunded liabilities and Funded Ratio as set forth in Tables 13 and 14 below. Furthermore, any such change would require legislative action by the Illinois General Assembly.

Illinois House Bill 3088 ("HB 3088") contains a proposed amendment that would: (i) delay implementation of the actuarial funding required by the P.A. 96-1495 Funding Plan until 2021, and instead require the City to continue contributing to PABF and FABF under the Multiplier Funding system through that year; and (ii) provide that PABF and FABF achieve a 90% Funded Ratio by 2061 rather than 2040 as currently required by P.A. 96-1495 (collectively, the "96-1495 Delay Bill"). If enacted, the 96-1495 Delay Bill would increase the cost of PABF's and FABF's respective liabilities, as well as the associated financial risks, including the risk that the PABF and FABF will become insolvent. For more information regarding the possible insolvency of the Retirement Funds, see "Projection of Funded Status and Insolvency" below.

No assurance can be given that a bill modifying the P.A. 96-1495 Funding Plan, including the 96-1495 Delay Bill, will be enacted into law.

#### City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641

On June 9, 2014, P.A. 98-641 was signed into law by the Governor. P.A. 98-641 modifies the manner in which the City's contributions to LABF and MEABF are calculated. For payment years 2016 through 2020, P.A. 98-641 retains the Multiplier Funding system as the method of calculating the City's contributions to LABF and MEABF (unless the amount determined pursuant to the Multiplier Funding system for any year is more than the Normal Cost (as hereinafter defined) for such year plus the amount, determined on a level percentage of payroll basis, that is sufficient to achieve a Funded Ratio of 90% by the end of contribution year 2055), but increases the Multiplier as follows: for the contribution made in 2016, 1.60 (LABF) and 1.85 (MEABF); for the contribution made in 2017, 1.90 (LABF) and 2.15 (MEABF); for the contribution made in 2018, 2.20 (LABF) and 2.45 (MEABF); for the contribution made in 2019, 2.50 (LABF) and 2.75 (MEABF); and for the contribution made in 2020, 2.80 (LABF) and 3.05 (MEABF). Beginning in 2021, the City's contributions for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is sufficient for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is sufficient for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is

sufficient to achieve a Funded Ratio of 90% in LABF and MEABF by the end of contribution year 2055 (the "P.A. 98-641 Funding Plan").

#### **The Actuarial Valuation**

#### General

In addition to the process outlined above, 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. The Actuarial Valuation measures the financial position and determines the Actuarially Required Contribution of such Retirement Fund for reporting purposes pursuant to GASB Statement No. 25 ("GASB 25").

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.

#### Actuaries and the Actuarial Process

GASB standards require disclosure of an "Actuarially Required Contribution," which is a financial reporting requirement but not a funding requirement. One of the primary purposes of the Actuarial Valuations is to determine the Actuarially Required Contribution, which is the annual contribution amount that GASB standards would calculate is needed to fully fund the Retirement Funds. GASB pronouncements refer to this concept 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 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.

The Actuarially Required Contribution consists 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 (defined 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 calculate, as of the valuation date, the Normal Cost, the Actuarial Accrued Liability (defined below), the Actuarial Value of Assets (defined below), and the actuarial present values for the

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Retirement Fund. The Retirement Funds' actuaries use this data to determine the following fiscal year's Actuarially Required Contribution. The Retirement Funds' Actuarial Valuations are publicly available and may be obtained from the Retirement Funds. See "— Source Information" above.

The Actuarial Accrued Liability is an estimate of the present value of the benefits each Retirement Fund must pay to current and retired employees as a result of their past employment with the City and participation in such Retirement Fund. The Actuarial Accrued Liability is 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 reflects the value of the investments and other assets held by each Retirement Fund. Various methods exist 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, see "— Actuarial Methods" and "— Actuarial Assumptions" below.

Any shortfall between the Actuarial Value of Assets and the Actuarial Accrued Liability is referred to as the "Unfunded Actuarial Accrued Liability" or "UAAL." The UAAL represents the present value of benefits attributed to past service that are in excess of plan assets. In addition, the actuary will compute the "Funded Ratio," which is 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.

#### City's Contributions Not Related to GASB Standards

The City's contributions to the Retirement Funds are not based on the contribution standards promulgated by GASB for reporting purposes. Instead, the City's contributions are based on the formulas and amounts established in the Pension Code. Whereas GASB's contribution standards are actuarially based, the contribution amounts required by the Pension Code, with the exception of the P.A. 96-1495 Funding Plan and the P.A. 98-641 Funding Plan discussed above, are not actuarially based. See "— Determination of City's Contributions" above.

The difference between the City's actual contributions and the Actuarially Required Contribution (as calculated by the Retirement Funds' actuaries) for fiscal years 2004-2013 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. P.A. 98-641 changes the method of amortization for LABF and MEABF to a level percent of payroll basis. Both methods of calculating the Actuarially Required Contribution are acceptable under the standards promulgated by GASB.

# City's Contributions under P.A. 96-1495 and P.A. 98-641 Will Not Conform to GASB Financial Reporting Benchmarks

As discussed above, beginning in 2016, the City's contributions to PABF and FABF are required to be calculated pursuant to P.A. 96-1495. The P.A. 98-641 Funding Plan governs calculation of the

City's contributions to LABF and MEABF beginning in 2021. The P.A. 96-1495 Funding Plan and the P.A. 98-641 Funding Plan differ from the manner of calculation GASB requires for financial reporting purposes. The primary difference between GASB's financial reporting standards and these funding plans is that the goal of such funding plans is to reach a Funded Ratio in the respective Retirement Funds of 90%. GASB's financial reporting standards require amortization of the entire UAAL towards attainment of a 100% Funded Ratio.

#### **Actuarial Methods**

The Retirement Funds' actuaries employ a variety of actuarial methods to arrive at the Actuarial Value of Assets and the Actuarial Accrued Liability.

#### Actuarial Value of Assets

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% of the investment gain or loss realized in that year and each of the previous four years. The Asset Smoothing Method is an allowable method of calculation according to GASB.

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 does not reflect the true 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.

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 - ASSET SMOOTHED VALUE OF ASSETS VS. FAIR VALUE OF NET ASSETS -AGGREGATED<sup>(1)</sup>

Fiscal Year	Actuarial Value of Assets <sup>(2)</sup>	Fair Value of Net Assets	Actuarial Value as a Percentage of Fair Value
2004	\$13,108,645	\$12,952,096	101.21%
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	97.51
2013	10,513,564	11,261,254	93.36

Source: 2004 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010. 2011, 2012 and 2013 data is sourced to the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively.

(1) (2) In thousands of dollars. Data is presented in the aggregate for the Retirement Funds.

The Actuarial Value of Assets is calculated through use of the Asset Smoothing Method.

#### Actuarial Accrued Liability

As the final step in the Actuarial Valuation, 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. 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 is a GASB-approved actuarial cost method.

Under the EAN Method, the present value of each member's projected pension is assumed to be funded by annual installments equal to a level percentage of the member's earnings for each year between entry age and assumed exit age. Each member's Normal Cost 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 active members.

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 a member'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 member's salary changes and years of service increase, and as some members leave and new members 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 is the P.A. 96-1495 Funding Plan and under P.A. 98-641). 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 Actuarial Accrued Liability and the Actuarial Value of Assets. 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 an increase or decrease in the Actuarial Value of Assets, the Actuarial Accrued Liability, the UAAL, the Funded Ratio or the Actuarially Required Contribution. Additional information on each Retirement Fund's actuarial assumptions is available in the respective 2013 Actuarial Valuation of a Retirement Fund. 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.

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#### 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.

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% beginning with calendar year 2012. For PABF, the assumed investment rate of return was decreased to 7.75% for calendar year 2012 and 7.50% beginning with calendar year 2013. FABF continues to assume an investment rate of return of 8.0%. For a discussion of the rate to be used by Moody's in analyzing public pension plans, see "— General" 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. 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.

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, the City's contributions to PABF are expected to increase even further as a result of the change in the assumed investment rate of return, taken independently of other factors, because PABF's UAAL will increase as described above and the P.A. 96-1495 Funding Plan requires an amortization of the UAAL to reach the 90% funding target by 2040. Pursuant to P.A. 98-641, beginning in 2021, the City's contributions to LABF and MEABF will be higher as a result of the change in the respective assumed investment rates of return, taken independently of other factors, because the respective UAALs of LABF and MEABF will increase as described above and the P.A. 98-641 Funding Plan requires an amortization of the UAAL to reach the 90% funding target by 2040.

#### **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) and PPRT funds.\* However, these amounts have not been sufficient to fully fund the Retirement Funds' Actuarially Required Contributions. 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 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

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.

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.

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.

Fiscal Year	Actuarially Required Contribution	Actual Employer Contribution <sup>(2)</sup>	Actuarially Actuarially Required Contribution Contributed <sup>(3)</sup>
2004	\$ 545,232	\$345,398	63.3%
2005	698,185	423,515	60.7
2006	785,111	394,899	50.3
2007 <sup>(4)</sup>	865,776	395,483	45.7
2008 <sup>(4)</sup>	886,215	416,130	47.0
2009 <sup>(4)</sup>	990,381	423,929	42.8
2010 <sup>(4)</sup>	1,112,626	425,552	38.2
2011 <sup>(4)</sup>	1,321,823	416,693	31.5
2012 <sup>(4)</sup>	1,470,905	440,120	29.9
2013 <sup>(4)</sup>	1,695,278	442,970	26.1

## TABLE 4 - INFORMATION REGARDING CITY'S CONTRIBUTIONS<sup>(1)</sup> - AGGREGATED

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Sources: Actuarial Valuations of the Retirement Funds as of December 31, 2010, December 31, 2011, December 31, 2012, and December 31, 2013, CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010, and CAFRs of the City for the fiscal years ending 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, 2003 through 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.
- Includes the portion of the PPRT contributed to the Retirement Funds in each year.
   The estimated multipliers that would have been necessary for each Retirement
- (3) The estimated multipliers that would have been necessary for each Retirement Fund to make the full Actuarially Required Contribution in 2013 were as follows: 4.52 for MEABF; 6.45 for FABF; 5.26 for LABF; and 6.92 for PABF. Beginning in 2016, the City's contributions to PABF and FABF will not be calculated in accordance with the Multiplier Funding system. Pursuant to P.A. 98-641, the City's contributions to LABF and MEABF will not be calculated in accordance with the Multiplier Funding system beginning in 2021. 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.

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 and as a result of the delayed recognition of gains and losses resulting from the Retirement Funds' use of the Asset Smoothing Method for financial reporting purposes. See "— Actuarial Methods— Actuarial Value of Assets" above.

As of the end of fiscal year 2010, the Retirement Funds had an aggregate UAAL of approximately \$15.315 billion on a fair value basis and \$14.274 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 42.7% and 46.6%. The UAAL increased between the end of fiscal year 2009 and the end of fiscal year 2010 primarily as a result of (i) insufficient contributions compared to the Actuarially Required Contribution and (ii) investment losses brought on by the severe global economic downturn.

As of the end of fiscal year 2011, the Retirement Funds had an aggregate UAAL of approximately \$17.284 billion on a fair value basis and \$16.299 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 37.9% and 41.4%.

As of the end of fiscal year 2012, the Retirement Funds had an aggregate UAAL of approximately \$19.084 billion on a fair value basis and \$19.352 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 36.1% and 35.2%.

As of the end of fiscal year 2013, the Retirement Funds had an aggregate UAAL of approximately \$19.362 billion on a fair value basis and \$20.110 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 36.8% and 34.3%.

The following tables summarize the financial condition and the funding trends of the Retirement Funds.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$5,922,789	\$6,242,741	\$6,356,888	\$6,841,127	\$7,010,007	\$4,739,614	\$5,166,224	\$5,435,593	\$5,053,249	\$5,182,670
- Mcmber Contributions - City Contributions	155,885 153,919	122,542 155,067	129,466 148,332	132,442 139,552	137,749 146,803	130,981 157,698	133,300 164,302	132,596 156:525	130,266 158,381	131,532 157,705
<ul> <li>Investment Income<sup>(1)</sup></li> <li>Miscellaneous Income</li> </ul>	578,730 -	402,311	778,726	485,926 -	(1,947,576) -	778,562	638,569 24	31,583 -	589,198 -	735,272 -
Total	\$ 888,534	\$ 679,920	\$1,056,524	\$ 757,921	\$(1,663,024) \$1,067,241	\$1,067,241	\$ 936,195	\$ 320,705	\$ 877,845	\$1,024,509
Expenditures - Benefits and Refunds <sup>(2)</sup>	538,910	560,228	565,887	582,046	599,137	632,864	660,081	695,674	741,583	779,003
- Administration	29,672	5,545	6,398	6,995	7,279	7,766	6,745	7,375	6,841	6,499
Total	\$ 568,582	\$ 565,773	\$ 572,285	\$ 589,041	\$ 606,416	606,416 \$ 640,630	\$ - 666,826	\$ 703,050	\$748,425	\$ 785,502
Ending Net Assets (Fair Value)	\$6,242,741	\$6,356,888	\$6,841,127	\$7,010,007	\$4,740,567	\$4,740,567 \$5,166,225	\$5,435,593	\$5,053,249	\$5,182,670	\$5,421,676
Actuarial Value of Assets <sup>(3)</sup>	\$6,343,076	\$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
Actuarial Accrued Liabilities <sup>(4)</sup>	8,808,501	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
UAAL (Fair Value) <sup>(5)</sup>	2,565,760	2,893,324	2,634,991	2,958,740	5,642,591	5,663,894	6,393,073	7,239,681	8,292,706	8,407,244
UAAL (Actuarial Value) <sup>(3)</sup>	2,465,425	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
Funded Ratio (Fair Value) <sup>(5)</sup>	70.9%	68.7%	72.2%	70.3%	45.7%	47.7%	46.0%	41.1%	38.5%	39.2%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	72.0%	68.5%	68.7%	69.1%	64.2%	58.1%	50.8%	45.2%	37.6%	37.0%

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2004 through 2010 data is from the Actuarial Valuation of the MEABF as of December 31, 2010, and the CAFR of the MEABF for the fiscal year ending December 31, 2010 2011, 2013 data is from the Actuarial Valuations of the MEABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively Table may not add due to rounding Source:

Investment income is shown net of fees and expenses.

Beginning in fiscal year 2009, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods – Actuarial Value of Assets" above Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

Calculated using net assets. £66€9

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$3,693,283	\$3,865,809	\$3,954,837	<b>\$</b> 4,192,076	\$4,333,234	\$3,000,998	\$3,326,051	\$3,439,669	\$3,175,509	<b>\$</b> 3,213,432
Income - Member Contributions - City Contributions	78,801 135,669 367 008	89,110 177,911 261 280	91,965 157,689	93,300 178,678 340 014	93,207 181,526 71104 0000	95,614 180,511 567 315	108,402 183,835 360 559	98,222 183,522 23,556	95,892 207,228 353 176	93,329 188,889 415 204
- Miscellaneous Income	75	368	1,070	28	160	199	20	104	423	479
Total	\$ 582,453	\$ 528,778	\$ 697,999	\$ 621,920	\$ (830,016)	\$ 844,239	\$ 661,815	\$ 315,504	\$ 656,719	\$ 697,991
Expenditures - Benefits and Refunds <sup>(2)</sup>	407,301	437,089	458,060	477,685	497,721	514,883	544,272	575,305	613,907	641,926
- Administration	2,626	2,661	2,700	3,077	4,499	4,304	3,925	4,359	4,888	4,298
Total	\$ 409,927	<b>\$</b> 439,750	\$ 460,760	\$ 480,762	\$ 502,220	\$ 519,187	\$ 548,197	\$ 579,664	\$ 618,795	\$ 646,204
Ending Nct Assets (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	<b>\$</b> 3,265,200
Actuarial Value of Assets <sup>(3)</sup>	\$3,933,031	\$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
Actuarial Accrued Liabilities <sup>(4)</sup>	7,034,271	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
UAAL (Fair Value) <sup>(5)</sup>	3,168;462	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
UAAL (Actuarial Value) <sup>(3)</sup>	3,101,240	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
Funded Ratio (Fair Value) <sup>(5)</sup>	55.0%	51.2%	52.8%	52.7%	35.4%	38.1%	37.3%	33.4%	32.0%	31.8%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	55.9%	50.7%	50.4%	51.5%	48.3%	44.5%	40.4%	36.2%	31.3%	29.7%

2004 through 2010 data is from the Actuarial Valuation of the PABF as of December 31, 2010, and CAFR of the PABF for the fiscal year ending December 31, 2010 2011, 2012 and 2013 data is from the Actuarial Valuations of the PABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding. Investment income is shown net of fees and expenses. Source

Beginning in fiscal year 2008, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. The actuarial value is determined by application of the Asset Smoothing Method as discussed in "-- Actuarial Methods --- Actuarial Value of Assets" above

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. Calculated using net assets.

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**TABLE 7 - FINANCIAL CONDITION OF THE FABF** FISCAL YEARS 2004-2013 (S IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$1,109,561	\$1,109,561 \$1,206,177	\$1,274,659	\$1,391,484	\$1,469,455	\$ 914,193	\$1,051,644	\$1,106,078	\$993,774	\$1,032,423
Income - Member Contributions - City Contributions - Investment Income <sup>(1)</sup> - Miscellaneous Income Total	37,734 55,532 139,497 24,322 \$ 257,085	37,734 35,697 55,532 90,129 139,497 112,017 24,322 456 \$ 257,085 \$ 238,299	44,222 78,971 174,406 87 87 87 87	41,120 74,271 148,806 162 \$ 264,359	40,480 83,744 (484,093) 107 \$(359,762)	41,605 91,857 208,537 36 36 36 36	41,730 83,592 150,835 30 30 \$ 276,187	51,918 85,498 (22,434) 17 \$ 114,999	56,718 84,144 135,203 8 8 \$ 276,073	42,520 106,220 190,536 (60) \$339,216
Expenditures - Benefits and Refunds <sup>(2)</sup> - Administration Total	158,372 167,527 2,097 2,290 \$ 160,469 \$ 169,817	167,527 2,290 \$ 169,817	178,214 2,647 \$ 180,861	183,304 3,084 \$ 186,388	192,644 2,856 \$ 195,500	201,146 3,439 \$ 204,585	217,565 4,187 \$ 221,752	223,580 3,723 \$ 227,303	233,840 3,584 \$ 237,424	251,819 3,115 \$254,934
Ending Net Assets (Fair Valuc) Actuarial Value of Assets <sup>(3)</sup> Actuarial Accrued Liabilities <sup>(4)</sup> UAAL (Fair Value) <sup>(5)</sup> UAAL (Actuarial Value) <sup>(3)</sup> Funded Ratio (Actuarial Value) <sup>(3)</sup>	\$1,206,177 \$1,182,579 2,793,524 1,587,347 1,610,945 43.2% 42.3%	\$1,206,177       \$1,274,659         \$1,182,579       \$1,203,654         \$2,793,524       \$1,203,654         2,793,524       2,882,936         1,587,347       1,608,277         1,610,945       1,679,282         43.2%       44.2%         42.3%       41.8%	\$1,391,484 \$1,264,497 3,088,124 1,696,640 1,823,627 45.1% 40.9%	\$1,469,455 \$1,374,960 3,215,874 1,746,419 1,840,914 45.7% 42.8%	<pre>\$ 914,193 \$1,335,695 \$1,335,695 3,311,269 2,397,076 1,975,574 1,975,574 40.3%</pre>	\$1,051,643 \$1,269,231 3,428,838 2,377,195 2,159,607 30.7% 37.0%	\$1,106,079 \$1,198,114 3,655,026 2,548,947 2,48,947 2,48,912 30.3% 32.8%	\$993,774 \$1,101,742 3,851,919 2,858,145 2,750,177 2,55.8% 28.6%	<b>\$1,032,423</b> <b>\$ 993,284</b> <b>4,020,138</b> <b>2,987,715</b> <b>3,026,854</b> <b>25.7%</b> <b>24.7%</b>	<pre>\$1,116,705 \$991,213 \$991,213 4,128,735 3,012,030 3,137,522 27.0% 24.0%</pre>

2004 through 2010 data is from the Actuarial Valuation of the FABF as of December 31, 2010, and CAFR of the FABF for the fiscal year ending December 31, 2010 2011, 2012 and 2013data is from the Actuarial Valuations of FABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding Investment income is shown net of fees and expenses Source.

Beginning in fiscal year 2001, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below The actuarial value is determined by application of the Asset Smoothing Method as discussed in "— Actuarial Methods — Actuarial Value of Assets" above. Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. 59999

Calculated using net assets

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	2011
BF	2010
TABLE 8 - FINANCIAL CONDITION OF THE LABF FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)	2009
NANCIAL CONDITION O FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)	2008
NNCIAL CONDITION SCAL YEARS 2004-2 (\$ IN THOUSANDS)	2007
JE 8 - FINA FIS	2006
TABI	05

	2004	2005	2006	2007	2008	2009	2010	2011	2012	6106
Beginning Net Assets (Fair Value)	\$1,552,361 \$1,637,3	\$1,637,369	\$1,659,061	\$1,739,660	\$1,782,818	\$1,188,580	\$1,332,929	\$1,427,214	\$1,313,604	\$1,371,077
Income - Member Contributions - City Contributions - Investment Income <sup>(1)</sup> - Miscellaneous Income	22,591 197 171,045 5	16,257 40 117,785	18,791 106 174,536	18,413 15,459 125,205	19,419 17,580 (510,463)	17,538 17,190 237,102	16,320 17,939 193,187	16,069 15,359 (4,511)	16,559 14,415 173,460	16,393 14,101 207,344
Total	\$ 193,838	\$ 193,838 \$ 134,082	\$ 193,433	\$ 159,077	\$(473,464)	\$(473,464) \$ 271,830	\$ 227,446	\$ 26,917	\$204,434	\$ 237,838
Expenditures - Benefits and Refunds <sup>(2)</sup> - Administration	105,958 2,872-	109;405 2,985	110,003 2,831	112,567 3,352	117,147 3,626	123,817 3,665	129,297 3,864	136,533 3,994	142,215 4,746	147,108 4,134
Total	\$ 108,830 \$ 112,390	\$ 112,390	\$ 112,834	\$ 115,919	\$ 120,773	\$ 127,482	\$ 133,161	\$ 140,527	\$ 146,961	\$ 151,242
Ending Net Assets (Fair Value)	\$1,637,369	\$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
Actuarial Value of Assets <sup>(3)</sup>	\$1 640 950	\$1 635 595	\$1 664 058	\$1 757 711	\$1 698 477	\$1 601 352	\$1 529 404	\$1 422 414	\$1,315,914	\$1 354 761
Actuarial Accrued Liabilities <sup>(4)</sup>	1,674,615	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
UAAL (Fair Value) <sup>(5)</sup>	37,246	83,239	28,022	25,477	726,743	642,821	602,811	839,250	965,112	925,826
UAAL (Actuarial Value) <sup>(3)</sup>	24,656	106,705	103,624	50,584	216,897	374,397	500,621	730,440	1,020,276	1,029,238
Funded Ratio (Fair Value) <sup>(5)</sup>	97.8%	95.2%	98.4%	98.6%	62.1%	67.5%	70.3%	61.0%	58.7%	61.2%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	98.5%	93.9%	94.1%	97.2%	88.7%	81.1%	75.3%	66.1%	56.3%	56.8%
Source. 2004 through 2010 data is from the Actuarial Valuation of the LABF as of December 31, 2010, and CAFR of the LABF for the fiscal year ending December 31, 2010. 2011, 2012 and 2013 data is from	rom the Actuarial	Valuation of the	LABF as of Dece	ember 31, 2010, s	and CAFR of the	LABF for the fi	scal year ending l	December 31, 20	10. 2011, 2012 a	nd 2013 data is from

the Actuarial Valuations of the LABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively Table may not add due to rounding Investment income is shown net of fees and expenses.

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Beginning in fiscal year 2008, includes expenses related to other post-employment benefits See "Payment for Other Post-Employment Benefits" below. The actuarial value is determined by application of the Asset Smoothing Method as discussed in "— Actuarial Methods — Actuarial Value of Assets" above.

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits See "Payment for Other Post-Employment Benefits" below Calculated using net assets.

**TABLE 9 - FINANCIAL CONDITION OF THE RETIREMENT FUNDS COMBINED** FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$12,277,994 \$12,952,096	\$12,952,096	\$13,245,445	\$14,164,347	\$14,595,514	\$ 9,843,385	\$10,876,848	\$11,408,554	\$10,536,136	\$10,799,603
Income - Member Contributions - City Contributions - Investment Income <sup>(1)</sup> - Miscellaneous Income Total	295,011 345,317 1,257,180 24,402 \$ 1,921,910	295,011 263,606 345,317 423,147 1,257,180 893,502 24,402 824 \$ 1,921,910 \$ 1,581,079	284,444 385,098 1,574,943 1,157 \$ 2,245,642	285,275 407,960 1,109,851 1,109,851 8,1,803,277	290,855 429,653 (4,047,041) <u>267</u> \$(3,326,266)	285,738 447,256 1,791,516 835 \$2,525,345	299,752 449,668 1,352,149 74 8 2,101,643	298,805 440,904 38,295 121 \$ 778,125	299,435 464,168 1,251,037 431 \$ 2,015,071	283,774 466,915 1,548,446 419 \$2,299,554
Expenditures - Benefits and Refunds <sup>(2)</sup> - Administration	1,210,541 37,267	- 1,274,249 13,481	- 1,312,164 14,576	1,355,602 16,508	- 1,406,649 18,260	- 1,472,710 19,174	1,551,215 18,721	- 1,631,093 19,452	1,731,545 20,059	1,819,856 18,046
Total	\$ 1,247,808 \$ 1,287,730	\$ 1,287,730	\$ 1,326,740	\$ 1,372,110	<b>\$</b> 1,326,740 <b>\$</b> 1,372,110 <b>\$</b> 1,424,909	\$ 1,491,884	\$ 1,569,936	\$ 1,650,544	\$ 1,751,604	\$1,837,902
Ending Net Assets (Fair Value)       \$12,952,096.       \$13,245,445         Actuarial Value of Assets <sup>(3)</sup> \$13,108,645       \$13,245,445         Actuarial Value of Assets <sup>(3)</sup> \$13,108,645       \$13,295,060         Actuarial Value) <sup>(3)</sup> \$20,310,911       21,598,185         UAAL (Fair Value) <sup>(3)</sup> 7,358,815       8,352,740         UAAL (Actuarial Value) <sup>(3)</sup> 7,202,266       8,512,125         Funded Ratio (Fair Value) <sup>(3)</sup> 64.54%       60.59%	\$12,952,096. \$13,245,445 \$13,108,645 \$13,086,060 20,310,911 21,598,185 7,358,815 8,352,740 7,202,266 8,512,125 63.77% 61.33% 64.54% 60.59%	\$13,245,445 \$13,086,060 21,598,185 8,352,740 8,512,125 61.33% 60.59%	\$13,455,692 \$13,435,692 \$107,138 8,107,138 8,835,793 63,60% 60.33%	\$\$\$\$14,595,514           \$\$\$\$\$\$\$14,254,816           23,213,269           8,617,755           8,958,453           62,88%           61,41%	\$\$\$14,595,514         \$\$\$9,844,339           \$\$\$14,254,816         \$\$\$13,797,344           \$\$\$23,213,269         \$\$\$24,092,325           \$\$\$\$617,755         \$\$\$\$\$44,39           \$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	\$11,408,555 \$12,449,863 26,723,773 15,315,218 14,273,910 42.69% 46.59%	\$10,536,135 \$11,521,138 27,820,098 17,283,963 16,298,960 37.87% 41.41%	\$10,799,603 \$10,531,448 29,883,532 19,083,929 19,352,084 36.1% 35.2%	\$11,261,254 \$10,513,564 30,623,493 19,362,239 20,109,929 34.3% 34.3%

2004 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010 2011, 2013 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding Investment income is shown net of fees and 'expenses. Source:

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. ΞÐ

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods - Actuarial Value of Assets" above (€) €)

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

Calculated using net assets

TABLE 10 - SCHEDULE OF FUNDING PROGRESS - COMBINED FOR THE RETIREMENT FUNDS FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

Fiscal Year	Actuarial Accrued Liability <sup>(1)</sup>	Actuarial Value of Assets <sup>(2)</sup>	Fair Value of Net Assets	UAAL (Actuarial) <sup>(3)</sup>	UAAL (Fair Value) <sup>(4)</sup>	Funded Ratio (Actuarial) <sup>(3)</sup>	Funded Ratio (Fair Value) <sup>(4)</sup>	Payroll	UAAL to Payroll (Actuarial) <sup>(3)</sup>	UAAL to Payroll (Fair Value) <sup>(4)</sup>
2004	\$20,310,911	\$13,108,645	\$12,952,096	\$7,202,266	\$7,358,815	64.5%	63.8%	\$2,683,331	268.4%	274.2%
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	14,595,514	8,958,453	8,617,755	61.4	62.9	3,185,388	281.2	270.5
2008	24,092,325	13,797,344	9,844,339	10,294,981	14,247,986	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	27,233,004	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	600.0	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

2004 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010 2011, 2012 and 2013 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively Table may not add due to rounding Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. Source<sup>-</sup>

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "— Actuarial Methods — Actuarial Value of Assets" above For purposes of this column, "Actuarial" refers to the fact that the calculation was made using the Actuarial Value of Assets For purposes of this column, "Fair Value" refers to the fact that the calculation was made using the fair value of Assets  $\overline{\mathbf{C}}$ 

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.

#### **Projection of Funded Status and Insolvency**

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.

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, 2013 and are provided to indicate expected trends in the funded status of the Retirement Funds under the applicable law. The Projections reflect P.A. 96-1495 but do not reflect P.A. 98-641. For projections of MEABF and LABF under P.A. 98-641 and a comparison to projections under the law immediately preceding P.A. 98-641, see Tables 16 and 17.

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
<u>کے متعلقہ اور میں اور بن اور بن اور اور اور اور اور اور اور اور اور اور</u>					
2014	\$14,322,312	\$5,277,156	\$ 9,045,156	35.3%	\$156,234
2015	14,788,983	5,088,720	9,700,263	33.1	156,091
2016	15,257,262	4,855,643	10,401,619	31.3	157,427
2017	15,736,491	4,585,770	11,150,721	29.1	161,916
2018	16,213,945	4,264,599	11,949,346	26.3	167,069
2019	16,686,091	3,885,513	12,800,578	23.3	172,600
2020	17,149,388	3,441,412	13,707,976	20.1	178,248
2021	17,600,400	2,925,154	14,675,246	16.6	184,018
2022	18,038,164	2,331,452	15,706,712	12.9	189,873
2023	18,459,401	1,652,472	16,806,929	9.0	195,848
2024	18,874,417	893,662	17,980,755	4.7	201,863
2025	19,269,819	36,495	19,233,324	0.2	208,088
2026	19,644,224	-	19,644,224	0.0	214,489
2027	19,996,084	-	19,996,084	0.0	220,984
2028	20,324,749	-	20,324,749	0.0	227,654
2029	20,628,151	-	20,628,151	0.0	234,442
2030	20,904,445	-	20,904,445	0.0	241,387
2031	21,153,680	-	21,153,680	0.0	248,481
2032	21,376,674	-	21,376,674	0.0	255,727
2033	21,574,935	-	21,574,935	0.0	263,007
2034	21,750,671	-	21,750,671	0.0	270,436
2035	21,906,148	-	21,906,148	0.0	278,088
2036	22,043,770	-	22,043,770	0.0	285,948
2037	22,166,160	-	22,166,160	0.0	293,986
2038	22,275,941	-	22,275,941	0.0	302,297
2039	22,376,201	-	22,376,201	0.0	310,857
2040	22,470,299	-	22,470,299	0.0	319,656

# TABLE 11 - PROJECTION OF FUTURE FUNDING STATUS - MEABF<sup>(1)</sup>

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Such projections assume that the City will continue to contribute to MEABF pursuant to the Multiplier Funding system upon the insolvency of MEABF. Projection derived from actuarial data as of December 31, 2013.

In thousands of dollars. Projections calculated on a cash basis. Represents contributions expected to be made by the City during the fiscal year. (1) (2)

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
2014	\$2,448,874	\$1,436,908	\$1,011,966	55.7%	\$14,032
2015	2,504,477	1,408,178	1,096,299	53.9	14,472
2016 2017	2,558,009	1,371,220	1,186,789	52.8	14,411
2017	2,612,627	1,329,444	1,283,183	50.9	15,387
2018	2,665,643	1,279,237	1,386,406	48.0	15,722
2019	2,716,750	1,219,905	1,496,845	44.9	16,168
2020	2,765,274	1,150,320	1,614,954	41.6	16,675
2021	2,811,041 2,853,770	1,069,824	1,741,217	38.1	17,228
2022	2,853,770 2,892,919	977,541 872,303	1,876,229	34.3	17,813 18,431
2023	2,892,919	872,303 753,999	2,020,616 2,175,007	30.2 25.7	19,075
2025	2,929,000	620,999	2,175,007	23.7 21:0	19,075
2026	2,988,935	472,234	2,540,115	15.8	20,462
2027	3,012,165	306,567	2,705,598	10.2	21,185
2028	3,030,629	122,928	2,907,701	4.1	21,941
2029	3,044,169	-	3,044,169	0.0	22,725
2030	3,052,779	-	3,052,779	0.0	23,521
2031	3,056,992	-	3,056,992	0.0	24,337
2032	3,057,367	-	3,057,367	0.0	25,179
2033	3,054,510	-	3,054,510	0.0	26,018
2034	3,049,319	-	3,049,319	0.0	26,845
2035	3,042,417	-	3,042,417	0.0	27,688
2036	3,034,418	-	3,034,418	0.0	28;540
2037	3,026,025	-	3,026,025	0.0	29,395
2038	3,017,590	-	3,017,590	0.0	30,184
2039	3,009,528	· _	3,009,528	0.0	30,909
2040	3,002,648	-	3,002,648	0.0	31,610

#### TABLE 12 - PROJECTION OF FUTURE FUNDING STATUS - LABF<sup>(1)</sup>

- (1) (2) In thousands of dollars. Projections calculated on a cash basis.
- Represents contributions expected to be made by the City during the fiscal year.

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Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Such projections assume that the City will continue to contribute to LABF pursuant to the Multiplier Funding system upon the insolvency of LABF. Projection derived from actuarial data as of December 31, 2013.

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilitics (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
2014	\$4,225,089	\$1,075,899	\$3,149,190	25.5%	\$106,220
2015	4,360,451	1,151,244	3,209,207	26.4	112,169
2016	4,493,997	1,228,083	3,265,914	27.3	246,132
2017	4,627,415	1,308,900	3,318,515	28.3	253,201
2018	4,756,606	1,390,934	3,365,672	29.2	260,425
2019	4,880,732	1,474,650	3,406,082	30.2	268,308
2020	4,999,515	1,560,688	3,438,827	31.2	276,737
2021	5,113,491	1,650,085	3,463,406	32.3	285,445
2022	5,222,832	1,744,194	3,478,638	33.4	294,115
2023	5,327,614	1,845,044	3,482,570	34.6	303,384
2024	5,427,336	1,953,846	3,473,490	36.0	313,868
2025	5,522,162	2,072,117	3,450,045	37.5	324,809
2026	5,612,668	2,201,689	3,410,979	39.2	336,114
2027	5,698,370	2,345,817	3,352,553	41.2	347,685
2028	5,778,147	2,506,373	3,271,774	43.4	359,377
2029	5,852,755	2,683,046	3,169,709	45.8	370,304
2030	5,923,952	2,875,431	3,048,521	48.5	379,314
2031	5,990,906	3,082,710	2,908,196	51.5	387,355
2032	6,053,664	3,305,508	2,748,156	54.6	393,836
2033	6,112,722	3,545,346	2,567,376	58.0	399,775
2034	6,169,734	3,804,297	2,365,437	61.7	405,703
2035	6,226,073	4,084,259	2,141,814	65.6	410,627
2036	6,282,292	4,386,722	1,895,570	69.8	415,213
2037	6,340,833	4,715,323	1,625,510	74.4	419,169
2038	6,403,348	5,073,492	1,329,856	79.2	423,542
2039	6,471,937	5,464,928	1,007,009	84.4	428,171
2040	6,546,019	5,891,417	654,602	90.0	432,956

# TABLE 13 - PROJECTION OF FUTURE FUNDING STATUS - FABF<sup>(1)</sup>

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Source: The Actuarial Valuation of FABF as of December 31, 2013.

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In thousands of dollars. Projections are calculated on an actuarial basis. Represents contributions expected to be made by the City during the fiscal year. (1) (2)

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Fundcd Ratio (b/a)	Employer Contribution <sup>(2)</sup>
2014	\$10,401,796	\$3,116,381	\$7,285,415	30.0%	\$ 188,889
2015	10,729,870	3,331,205	7,398,665	31.0	188,431
2016	11,062,868	3,559,011	7,503,857	32.2	592,863
2017	11,409,721	3,810,987	7,598,734	33.4	613,138
2018	11,760,065	4,077,395	7,682,670	34.7	634,824
2019	12,111,074	4,357,100	7,753,974	36.0	655,923
2020	12,460,807	4,650,079	7,810,728	37.3	677,323
2021	12,807,516	4,956,243	7,851,273	38.7	699,118
2022	13,150,495	5,277,247	7,873,248	40.1	721,134
2023	13,488,428	5,613,787	7,874,641	41.6	744,034
2024	13,820,165	5,968,320	7,851,845	43.2	767,240
2025	14,144,765	6,343,147	7,801,618	44.8	792,087
2026	14,461,365	6,740,553	7,720,812	46.6	818,071
2027	14,768,889	7,162,785	7,606,104	48.5	844,860
2028	15,068,056	7,614,943	7,453,113	50.5	872,392
2029	15,346,057	8,097,936	7,248,121	52.8	901,827
2030	15,602,859	8,610,245	6,992,614	.55.2	928,497
2031	15,838,748	9,150,449	6,688,299	57.8	951,481
2032	16,058,874	9,719,291	6,339,583	60.5	970,499
2033	16,264,244	10,318,876	5,945,368	63.4	987,603
2034	16,456,853	10,952,376	5,504,477	66.6	1,003,483
2035	16,641,419	.11,626,336	5,015,083	69.9	1,017,489
2036	16,820,971	12,345,734	4,475,237	73.4	1,031,361
2037	16,999,574	13,117,020	3,882,554	77.2	1,043,923
2038	17,179,866	13,945,618	3,234,248	81.2	1,056,617
2039	17,363,605	14,837,009	2,526,596	85.4	1,068,641
2040	17,551,592	15,796,433	1,755,159	.90.0	1,080,783

# TABLE 14 - PROJECTION OF FUTURE FUNDING STATUS - PABF<sup>(1)</sup>

7

Source: The Actuarial Valuation of PABF as of December 31, 2013.

In thousands of dollars. Projections are calculated on an actuarial basis. Represents contributions expected to be made by the City during the fiscal year. (1) (2)

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(3)</sup>
	A. M. MAR				
2014	\$31,398,071	\$10,906,344	\$20,491,727	34.7%	\$ 465,375
2015	32,383,781	10,979,347	21,404,434	33.9	471,163
2016	33,372,136	11,013,957	22,358,179	33.0	1,010,833
2017	34,386,254	11,035,101	23,351,153	32.1	1,043,642
2018	35,396,259	11,012,165	24,384,094	31.1	1,078,040
2019	36,394,647	10,937,168	25,457,479	30.1	1,112,999
2020	37,374,984	10,802,499	26,572,485	28.9	1,148,983
2021	38,332,448	10,601,306	27,731,142	27.7	1,185,809
2022	39,265,261	10,330,434	28,934,827	26.3	1,222,935
2023	40,168,363	9,983,606	30,184,757	24.9	1,261,697
2024	41,050,925	9,569,827	31,481,098	23.3	1,302,046
2025	41,897,851	9,072,749	32,825,102	21.7	1,344,736
2026	42,707,192	9,414,476	33,292,716	22.0	1,389,136
2027	43,475,507	9,815,169	33,660,338	22.6	1,434,714
2028	44,201,581	10,244,244	33,957,337	23.2	1,481,364
2029	44,871,132	10,780,982	34,090,150	24.0	1,529,298
2030	45,484,036	11,485,676	33,998,360	25.3	1,572,719
2031	46,040,325	12,233,159	33,807,166	26.6	1,611,654
2032	46,546,579	13,024,799	33,521,780	28.0	1,645,241
2033	47,006,411	13,864,222	33,142,189	29.5	1,676,403
2034	47,426,577	14,756,673	32,669,904	31.1	1,706,467
2035	47,816,057	15,710,595	32,105,462	32.9	1,733,892
2036	48,181,450	16,732,456	31,448,994	34.7	1,761,062
2037	48,532,591	17,832,343	30,700,248	36.7	1,786,473
2038	48,876,745	19,019,110	29,857,635	38.9	1,812,640
2039	49,221,271	20,301,937	28,919,334	41.2	1,838,578
2040	49,570,558	21,687,850	27,882,708	43.8	1,865,005

# TABLE 15 - PROJECTION OF FUTURE FUNDING STATUS - AGGREGATE<sup>(1)(2)</sup>

Source: The aggregated information presented in this table is derived from the projections presented in Tables 11-14. Please refer to Tables 11-14 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.

Aggregate data presented in this table includes data for all four Retirement Funds." (2) (3)

Represents contributions expected to be made by the City during the fiscal year.

The projections in Tables 11 and 12 show that the assets of MEABF and LABF will be depleted by 2026 and 2029, respectively; however, the projections do not take into account P.A. 98-641. As a

result, if P.A. 98-641 is not upheld upon a legal challenge to its validity and the law in effect prior to the enactment of P.A. 98-641 remains, MEABF and LABF will not have assets on hand to make payments to beneficiaries beginning in 2026 and 2029, respectively. See "Legislative Changes—P.A. 98-641" for additional information.

The City cannot predict the impact that the insolvency of MEABF or LABF would have on its contributions to these Retirement Funds. One possibility upon insolvency of MEABF or LABF would be changes in the Pension Code to provide for pay-as-you-go funding. Under pay-as-you-go funding, the employer contribution equals the amount necessary, when added to other income, specifically employee contributions, to fund the current year benefits to be paid by the retirement fund. Gabriel Roeder Smith & Company ("GRS") projects that, should the City be required to adopt pay-as-you-go funding to ensure that payments to beneficiaries are made to MEABF and LABF beneficiaries following the insolvency of such Retirement Funds, the City's contributions to such Retirement Funds would increase substantially. With respect to MEABF, GRS projects that pay-as-you-go funding would increase the City's contribution in 2025 to \$1.107 billion in 2026, \$1.607 billion in 2042 and \$1.581 billion in 2060. With respect to LABF, GRS projects that pay-as-you-go funding would increase the City's contribution in 2036 and \$231 million in 2060. Such large increases in the City's contributions, if required, could have a material adverse impact on the City's financial condition.

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.

The projections in Tables 13 and 14 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. This projection does not consider the impact of the 96-1495 Delay Bill. The City projects that, should the 96-1495 Delay Bill be enacted in its current form, the Funded Ratio of such Retirement Funds would continue to decrease during the period by which P.A. 96-1495 is delayed.

The statements made in this subsection 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.

#### Report and Recommendations of the Commission to Strengthen Chicago's Pension Funds

The information contained in this subsection describing the CSCP and the Final Report (each as defined herein) relies on information produced by the CSCP, including the Final Report. The Final Report is available at http://www.chipabf.org/ChicagoPolicePension/PDF/Financials/pension\_commissio n/CSCP\_Final\_Report\_Vol.1\_4.30.2010.pdf; however, the content of the Final Report and such website are not incorporated herein by such reference. The City makes no representation nor expresses any opinion as to the accuracy of the Final Report, the statements made or the information therein, some of which may be conflicting. Furthermore, information about the Final Report is being provided for historical purposes only.

On January 11, 2008, then Mayor Richard M. Daley announced the formation of the Commission to Strengthen Chicago's Pension Funds (the "CSCP"), which was composed of a broad cross-section of City officials, union leaders, pension fund executives, and business and civic professionals. The CSCP was charged with examining the Retirement Funds and recommending ways to improve the Funded Ratio of each Retirement Fund. The CSCP met several times in 2008 through 2010, and at the CSCP's final meeting on March 24, 2010, the CSCP endorsed its final report, with three commissioners dissenting. The CSCP's final report, which included letters from the dissenting commissioners, was submitted to Mayor Daley on April 30, 2010 (the "Final Report").

The CSCP's approval of the Final Report occurred before the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641 and, therefore, does not consider the impact of these acts on the Retirement Funds. See "— Determination of City's Contributions" above and "— Legislative Changes" below for additional information on these acts. As described below, certain of the CSCP's findings and recommendations as contained in the Final Report are addressed by these acts.

The CSCP found that the financial health of the Retirement Funds had deteriorated due to a combination of factors, including the following: increasing liabilities due to enhanced benefits (e.g., non-recurring early retirement programs that were not properly funded); inadequate contributions, which were based upon a fixed percentage of payroll and not actuarial need (i.e., the Multiplier Funding); and adverse market conditions leading to fluctuating returns on investments (in 2000-2002 and 2007-2009) which could not keep pace with growth in liabilities. P.A. 96-1495 and P.A. 98-641 address the CSCP's finding of inadequate contributions to the Retirement Funds. See "— Determination of City's Contributions" above for information on the significant increases to the City's contributions to PABF and FABF pursuant to P.A. 96-1495 and to MEABF and LABF pursuant to P.A. 98-641.

The CSCP found that due to the inadequate contributions, the Retirement Funds have had to use assets to pay current benefits, which in turn put pressure on the asset bases and Funded Ratios of the Retirement Funds.

The CSCP modeled a set of scenarios for the Retirement Funds and found that, based on the actuarial assumptions in use by the Retirement Funds and the condition of the Retirement Funds at the

end of 2009, the Retirement Funds would, in the absence of substantial changes to the Retirement Funds' funding policy and/or benefit structure, deplete all assets in each of the Retirement Funds at different dates but all within twenty years of the date of the Final Report. However, the CSCP's approval of the Final Report occurred before the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641, and the depletion dates as estimated in the Final Report would not have taken into account the impact of such legislation. See "— Projection of Funded Status" above for the projections based upon the current legislative structure applicable to the Retirement Funds.

The CSCP suggested that the issues related to the Retirement Funds need to be addressed as soon as possible and offered the following specific recommendations: (i) the defined benefit structure used by the Retirement Funds should remain (as opposed to a defined contribution structure); (ii) new employees should continue to become members of the Retirement Funds; (iii) the Retirement Funds should be funded on an actuarial basis; (iv) changes in the Retirement Funds for new members, while recognized by the CSCP as undesirable, will probably be necessary; (v) contributions to the Retirement Funds should be increased and revenue sources identified; (vi) employee contributions should not exceed the value of benefits on a career basis; (vii) any provisions in current law for refunds or for alternative benefit calculations should be reviewed to ensure that the anticipated financial results of a reform program are actually obtained; (viii) in general, no changes in the Retirement Funds should be made unless financially neutral or advantageous to the Retirement Funds, now or in the future; (ix) a variety of other reforms should be considered, including reforming potential abuses, establishing sound reciprocity with other Illinois public pensions, implementing new structures to manage investments of the Retirement Funds, and improving administration of disability claims and benefits; and (x) any reform legislation must comprehensively and simultaneously address all aspects of the pension funding program.

CSCP's recommendations were made prior to the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641. Certain of the CSCP's recommendations, including changes in the Retirement Funds for new members, were part of the Pension Reform Act and P.A. 98-641 (with regard to MEABF and LABF) and P.A. 96-1495 (with regard to PABF and FABF).

#### Diversion of Grant Money to the Retirement Funds Under P.A. 96-1495 and P.A. 98-641

P.A. 96-1495 and P.A. 98-641 allow the State Comptroller to divert State grant money intended for the City of the Retirement Funds to satisfy contribution shortfalls by the City (the "Recapture Provisions"). If the City fails to contribute to the Retirement Funds 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 for 90 days past the due date, (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 in the following proportions: (i) in fiscal year 2016, one-third of the City's State grant money, (ii) in fiscal year 2017, two-thirds of the City's State grant money, and (iii) in fiscal year 2018 and in each fiscal year thereafter, 100% of the City's State grant money. Should the Recapture Provisions in either of P:A. 96-1495 or P.A. 98-641 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. A delay bill such as the P.A. 96-1495 Delay Bill may, if enacted, delay the implementation of the Recapture Provision of P.A. 96-1495. No assurance can be given that a bill such as the P.A. 96-1495 Delay Bill will be enacted. See "— Determination of City's Contributions— City's Required Contributions to PABF and FABF Beginning in 2016"

#### GASB Statements 67 and 68

On June 25, 2012, GASB announced it was adopting new Statements 67 and 68 (collectively, the "Statements") covering the manner in which pension plans and governments, respectively, account for and report information regarding those pension plans. The Statements take effect in fiscal years 2014 and 2015, respectively. The City expects they will significantly alter the financial statements produced by the City and the Retirement Funds; however, because the City contributes to the Retirement Funds pursuant to the methods established in the Pension Code, the Statements would not impact the contributions made by the City without legislative action.

#### **Legislative Changes**

#### P.A. 96-0889

On April 14, 2010, Governor Quinn signed Public Act 96-0889 (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 members or participants prior to its effective date of January 1, 2011.

Among other changes, the Pension Reform Act: (i) increases the minimum age at which an active 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% or 50% 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%, 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 Actuarial Accrued Liability, the UAAL and the Actuarially Required Contribution for MEABF and LABF. In calculating the Actuarial Accrued 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 Actuarial Accrued Liability is expected to decrease compared to what it would have been under previous law. Consequently, the UAAL is expected to grow more slowly and the Funded Ratio to improve. As the growth in the UAAL

slows, the Actuarially Required Contribution is expected to be reduced as the amount of UAAL to be amortized decreases. However, no assurance can be given that these expectations will be the actual experience going forward.

#### P.A. 96-1495

i

P.A. 96-1495 has a significant impact on PABF and FABF. Certain provisions of P.A. 96-1495 are discussed above in "— Determination of City's Contributions — City's Required Contributions to PABF and FABF Beginning in 2016." The P.A. 96-1495 Funding Plan will have the effect of significantly increasing 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. The greater contributions projected to be required under the P.A. 96-1495 Funding Plan are expected to pose a substantial burden for the City's financial condition beginning in 2016. See "—Projection of Funded Status and Insolvency" above.

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% 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% or 50% of the change in the consumer price index for all urban consumers ("CPI-u"), whichever is lower, commencing at age 60; (v) provides that widow benefits are 66 2/3% 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).

While the reforms discussed in this sub-section are expected to contribute to a reduction in the respective UAALs of PABF and FABF over time, such reforms are not expected to materially reduce such UAALs in the near future.

#### P.A. 98-641

P.A. 98-641 makes significant changes to LABF and MEABF. Certain provisions relating to the City's contributions to LABF and MEABF under P.A. 98-641 are discussed above in "— Determination of City's Contributions — City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641." The P.A. 98-641 Funding Plan will have the effect of significantly increasing the City's contributions to LABF and MEABF.

In addition, P.A. 98-641 impacts LABF and MEABF as follows:

• The cost of living adjustment ("COLA") will be skipped in 2017, 2019 and 2025 for retired members that would otherwise be entitled to receive them and who have an annuity greater than \$22,000;

- Members who retire after the effective date of P.A. 98-641 are not eligible to receive a COLA adjustment until one full year after they otherwise would have.
- For Tier I Members, the COLA rate is reduced to the lesser of 3.0% or 50% of the CPI-u, except that retirees with an annual annuity of less than \$22,000 will receive at least a 1% COLA in each year, including in the COLA skip years described above;
- For Tier II Members, the minimum eligibility age for unreduced retirement benefits is reduced to 65 with 10 years of service and, for reduced retirement benefits, to age 60 with 10 years of service;
- Employee contribution rates for both Tier I Members and Tier II Members are increased to 9.0% in calendar year 2015, 9.5% in calendar year 2016, 10.0% in calendar year 2017, 10.5% in calendar year 2018 and 11.0% for calendar year 2019 and after until the respective Retirement Fund reaches a 90% Funded Ratio, at which point the employee contribution rate is reduced to 9.75%; and
- Institutes the Recapture Provisions with respect to MEABF and LABF.

The consulting actuary for MEABF and LABF has prepared projections of City contributions and funded status of LABF and MEABF based on the enactment of P.A. 98-641. Such projections are based on the data, assumptions and methods used in the actuarial valuations for LABF and MEABF as of December 1, 2012. Tables 16 and 17 provide such projections as compared to projected results under current Pension Code provisions.

	LABF			MEABF			
Contribution Year	Contributions to LABF Before P.A. 98-641	Contributions to LABF Under P.A. 98-641	Increase in Contributions to LABF Under P.A. 98-641	Contributions to MEABF Before P.A. 98-641	Contributions to MEABF Under P.A. 98-641	Increase in Contributions to MEABF Under P.A. 98-641	
2015	\$ 14.5	\$ 14.5	\$ 0.0	\$156.1	\$156.1	\$ 0.0	
2016	14.4	24.0	9.6	157.4	242.7	85.3	
2017	15.4	30.5	15.1	161.9	290.1	128.2	
2018	15.7	38.2	22.5	167.1	361.2	194.1	
2019	16.2	47.1	30.9	172.6	442.1	269.5	
2020	16.7	57.3	40.6	178.2	533.0	354.8	
2021	17.2	67.7	50.5	184.0	585.6	401.6	
2022	17.8	69.6	51.8	189.9	600.3	410.4	
2030	232.6	86.2	(146.4)	1,325.3	724.7	(600.6)	
2040	244.8	105.5	(139.3)	1,598.9	917.4	(681.5)	
2050	217.1	124.3	(92.8)	1,530.1	1,184.5	(345.6)	
2055	218.1	135.3	(82.8)	1,519.9	1,332.2	(187.7)	

# TABLE 16 - PROJECTED CONTRIBUTIONS: MEABF AND LABF<sup>(1)</sup>

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Projection derived from actuarial data as of December 31, 2013.
 (1) In millions of dollars.

	LAI	BF	MEABF		
	Funded	Funded Ratio	Funded Ratio	Funded	
Contribution	<b>Ratio Before</b>	Under P.A.	Before P.A.	<b>Ratio Under</b>	
Year	P.A. 98-641	98-641	98-641	P.A. 98-641	
2015	53.9%	62.5%	33.1%	38.5%	
2016	52.8	62.3	31.3	37.6	
2017	50.9	61.7	29.1	36.8	
2018	48.0	60.5	26.3	35.8	
2019	44.9	59.5	23.3	35.4	
2020	41.6	59.0	20.1	35.6	
2021	38.1	58.7	16.6	35.9	
2022	34.3	58.5	12.9	36.2	
2030	0.0	57.2	0.0	38.8	
2040	0.0	60.2	0.0	45.0	
2050	0.0	76.5	0.0	68.7	
2055	0.0	90.0	0.0	90.0	

### TABLE 17 - PROJECTED FUNDED RATIOS: MEABF AND LABF<sup>(1)</sup>

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Projection derived from actuarial data as of December 31, 2013.

(1) In millions of dollars.

P.A. 98-641 also provides that, beginning on January 1, 2015, the Retirement Board of LABF or MEABF may bring a mandamus action to compel the City to make the contributions required by the Pension Code, in addition to other remedies that may be available by law. P.A. 98-641 further provides that the court may order a reasonable payment schedule to enable the City to make payments without imperiling the City's public health, safety, or welfare.

Under P.A. 98-641, such payments are expressly subordinated to the payment of the principal, interest, premium, if any, and other payments on or related to any bonded debt obligation of the City, either currently outstanding or to be issued, for which the source of repayment or security thereon is derived directly or indirectly from any funds collected or received by the City or collected or received on behalf of the City. Per P.A. 98-641, such payments on bonded obligations include any statutory fund transfers or other prefunding mechanisms or formulas set forth, now or hereafter, in State law, City ordinance, or bond indentures, into debt service funds or accounts of the City related to such bonded obligations, consistent with the payment schedules associated with such obligations.

As of the date hereof, no lawsuits challenging any of the provisions of P.A. 98-641 have been filed. The City intends to vigorously defend any lawsuits filed in the future challenging P.A. 98-641.

For projections of the impact of P.A. 98-641 on City contributions to MEABF and LABF and such Retirement Funds' respective Funded Ratios, see Tables 16 and 17.

#### **Pension Reform**

The City continues to believe that significant legislative changes, such as those applicable to MEABF and LABF under P.A. 98-641, are required to properly fund the Retirement Funds and continues to consider the options available to address the unfunded liabilities of FABF and PABF. Based on its work in developing pension reform proposals and other analysis, the City believes that the unfunded liabilities of FABF and PABF cannot be adequately and practically addressed through increases in the City's contributions alone and without a modification to the current level of benefits. If the City attempted to fund such increased contributions through an increase in taxes, the increase would be larger than any increase in recent history, politically difficult to enact, and harmful to the City's financial condition and, likely, its economy. If the City attempted to fund such increased contributions through expenditure cuts, essential City services, including, but not limited to, public health and safety, would be jeopardized. And the amount that could be derived from the sale of City assets would be inconsequential when compared to the Retirement Funds' unfunded liabilities. Finally, a combination of revenue increases and expenditure cuts likely would not be practical to address the unfunded liabilities, given their magnitude. This is true both when considering the Retirement Funds on their own, and when viewed collectively with the unfunded liabilities of the Other Retirement Funds, whose sponsoring Governmental Units' have tax bases that overlap with the City's tax base. See "-Overlapping Tax Bodies." Therefore, the City believes that modifications in the benefits provided by FABF and PABF are necessary, in combination with any increases in employer and employee contributions, to adequately address the unfunded liabilities of such Retirement Funds.

No assurance can be given that further legislation addressing the needs of FABF and PABF will be enacted. Additionally, given the Illinois Pension Clause in the Illinois Constitution, any legislation which reduces benefits may be challenged under this constitutional provision, and no assurance can be given that such legislation will be upheld upon a legal challenge.

The City continues to make its statutory contributions to each Retirement Fund.

#### 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 20 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.<sup>1</sup> 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. Annuitants who retired prior to July 1, 2005 receive a 55% subsidy from the City, whereas annuitants retiring on or after such date receive a subsidy equal to 50%, 45%, 40% or zero percent based on the annuitant's length of actual employment with the City. The Retirement Funds contribute a fixed dollar amount monthly (\$65 for each Medicare-eligible annuitant and \$95 for each non-Medicare eligible annuitant) for each of their annuitants. 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.

The Retirement Funds' subsidies are paid from the City contribution, as provided in the Pension Code and described in "Retirement Funds — 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 "Retirement Funds—Funded Status of 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 19 below for a schedule of historical contributions made by the City to the Health Plan.

<sup>&</sup>lt;sup>1</sup> 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 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 "Retirement Funds — The Actuarial Valuation — Actuaries and the Actuarial Process." In addition, the Retirement Funds produce an 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 "Retirement Funds — Source Information" above, and Note 11(b) to the City's Basic Audited Financial Statements. which available the City's website are on 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 "Retirement Funds" 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.

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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 "Retirement Funds — Actuarial Methods" above.

The City's 2013 Actuarial Valuation ("2013 Actuarial Valuation") amortizes 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 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 "Retirement Funds — 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 18 summarizes the current financial condition and the funding progress of the Health Plan.

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	415,753	415,753	0	3,223,720	12.9
2013	0 .	70,715	70,715	0	3,212,559	2.2

#### TABLE 18 - SCHEDULE OF FUNDING PROGRESS<sup>(1)</sup>

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending December 31, 2010-2013.

- (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 19 shows the amounts actually contributed to the Health Plan by the City.

#### TABLE 19 - HISTORY OF CITY'S CONTRIBUTIONS<sup>(1)</sup>

	Actual City		
	<b>Contribution</b>		
2008	\$98,065		
2009	98,000		
2010	107,431		
2011	99,091		
2012	97,531		
2013	97,500		

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending 2008-2013.

(1) In thousands of dollars.

(2) The City, as required, adopted GASB Statement No. 45 in fiscal year 2007.

#### **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 RHBC's members were appointed by the Mayor of the City for terms that do not expire. 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.

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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\_healthcarebenefits commissionreporttothemayor.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% 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.

On May 30, 2013, the 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 of Cook County, Illinois 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 plaintiffs assert, among other things, that pursuant to the Illinois Pension Clause, each such City employee is entitled to a permanent and unreduced level of healthcare coverage by the City, which vests as of the date they began participating in any of the four Retirement Funds and is subsidized by their respective Retirement Fund. The City subsequently removed the Lawsuit to federal court, and filed a motion to dismiss the Lawsuit with prejudice. The court granted the City's motion to dismiss, and plaintiffs appealed and motioned for an injunction pending the appeal. The court denied plaintiffs' motion for an injunction and subsequently determined that the plaintiffs' appeal should be held in abeyance pending the resolution of Kanerva (defined below).

The lower court in the Lawsuit dismissed the plaintiffs' case on the grounds that healthcare benefits are not protected by the Illinois Pension Clause. However, on July 3, 2014, the Supreme Court of Illinois issued an opinion in the case of *Kanerva v. Weems* ("Kanerva") determining that retiree healthcare benefits provided to State retirees are protected under the Illinois Pension Clause. The City has filed a brief in the Lawsuit asserting alternate grounds upon which the dismissal of the Lawsuit could be sustained. The City believes that the Lawsuit is factually and legally distinguishable from Kanerva and intends to vigorously defend the appeal. The City can give no assurance as to the ultimate outcome of the Lawsuit or any similar litigation.

If the City prevails in the Lawsuit, it expects to save approximately \$100 million annually beginning in 2017 as a result of the phase-out of the Health Plan.

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#### **NEW ISSUE – BOOK ENTRY**

#### RATINGS: See "RATINGS" herein.

Subject to compliance by the City of Chicago (the "City") with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Series 2014 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 2014 Bonds will, however, be taken into account in computing the corporate alternative minimum tax for certain corporations. Interest on the Series 2014 Bonds is not exempt from present State of Illinois income taxes. See "TAX MATTERS" herein for a more complete discussion.



#### \$367,925,000 CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

Dated: Date of Delivery

Due: As shown on the inside front cover

The Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds") will be issued in fully registered form through a global book-entry system operated by The Depository Trust Company, New York, New York ("DTC"). No physical delivery of the Series 2014 Bonds will be made to purchasers. The Bank of New York Mellon Trust Company, N.A. will act as trustee (the "Trustee") with respect to the Series 2014 Bonds. Principal of and interest on the Series 2014 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 Series 2014 Bonds. The Series 2014 Bonds will be issued in denominations of \$5,000 or any integral multiple thereof. Interest on the Series 2014 Bonds is payable on each May 1 and November 1, with the first interest payment date being May 1, 2015. Principal of each Series 2014 Bond is payable at maturity or upon earlier redemption.

#### For maturity schedules, interest rates, prices, yields, and CUSIP numbers, see the inside front cover.

As more fully described herein, the Series 2014 Bonds are subject to optional and mandatory redemption prior to maturity.

The Series 2014 Bonds are being issued to (i) pay costs of the Series 2014 Expected Projects (as defined herein) and (ii) pay costs of issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program."

The Series 2014 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 Series 2014 Bonds have a claim for payment from such Second Lien Bond Revenues on an equal and ratable basis with the City's Outstanding Second Lien Water Revenue 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 SERIES 2014 BONDS. THE SERIES 2014 BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AS TO INDEBTEDNESS. THE SERIES 2014 BONDS DO NOT HAVE A CLAIM FOR PAYMENT FROM ANY TAXES OF THE CITY. THE SERIES 2014 BONDS ARE NOT SECURED BY A LIEN ON OR SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE WATER SYSTEM, INCLUDING THOSE FINANCED WITH PROCEEDS OF THE SERIES 2014 BONDS.

The Series 2014 Bonds are being offered when, as and if issued, and subject to the delivery of an approving legal opinion by 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, Burke Burns & Pinelli, Ltd., Chicago, Illinois, and Greene and Letts, Chicago, Illinois, Co-Disclosure Counsel to the City, and (iii) in connection with APPENDIX E "RETIREMENT FUNDS" 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 Burke, Warren, MacKay & Serritella, P.C., Chicago, Illinois, Underwriters' Counsel. It is expected that the Series 2014 Bonds will be available for delivery through the facilities of DTC on or about September 17, 2014.

PNC Capital Markets LLC							
BMO Capital Markets Siebert Brandford Shank & Co., L.L.C.							
Academy Securities, Inc.	Blaylock Beal Van, LLC	Cabrera Capital Markets, LLC					
CastleOak Securities, L.P.	Jefferies	J.J.B Hilliard, W.L. Lyons, LLC					
Melvin & Company, LLC		<b>RBC Capital Markets</b>					
Stern Brothers & Co.		US Bancorp					

#### Dated September 10, 2014

## MATURITIES, AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIPS<sup>1</sup>

## \$367,925,000 CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

Maturity	Principal	Interest			
November 1	Amount	<u>Rate</u>	Price	<u>Yield</u>	CUSIP <sup>(1)</sup>
2015	\$ 4,020,000	3.00%	103.022%	0.300%	167736 A23
2016	6,295,000	3.00	105.053	0.600	167736 A31
2017	6,485,000	4.00	109.489	0.910	167736 A49
2018	6,745,000	4.00	110.716	1.320	167736 A56
2019	7,015,000	3.00	106.148	1.740	167736 A64
2020	7,225,000	5.00	116.576	2.100	167736 A72
2021	7,585,000	5.00	116.427	2.470	167736 A80
2022	7,965,000	5.00	116.354	2.740	167736 A98
2023	8,365,000	5.00	116.287	2.950	167736 B22
2024	8,780,000	3.15	100.000	3.150	167736 B30
2025	9,055,000	5.00	115.268 °	3.220	167736 B48
2026	9,510,000	5.00	<sup>°</sup> 114.339	3.320	167736 B55
2027	9,985,000	5.00	113.327 °	3.430	167736 B63
2028	10,485,000	5.00	112.961 °	3.470	167736 B71
2029	11,010,000	5.00	112.235 °	3.550	167736 B89
2030	11,560,000	5.00	111.694 °	3.610	167736 B97
2031	12,135,000	5.00	110.888 °	3.700	167736 C21
2032	12,745,000	4.00	99.358	4.050	167736 C39
2033	13,255,000	5.00	110.089 °	3.790	167736 C47
2034	13,915,000	5.00	109.913 °	3.810	167736 C54

\$80,740,000 5.000% due November 1 2039, Price 108.686% <sup>c</sup>, Yield 3.950%, CUSIP 167736 C62

\$103,050,000 5.000% due November 1 2044, Price 108.165% <sup>c</sup>, Yield 4.010%, CUSIP 167736 C70

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<sup>&</sup>lt;sup>1</sup> Copyright 2014; 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 only at the time of issuance of the Series 2014 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 Series 2014 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 Series 2014 Bonds.

<sup>&</sup>lt;sup>c</sup> Priced to call date, November 1, 2024.

## **CITY OF CHICAGO**

MAYOR Rahm Emanuel

**CITY TREASURER** Stephanie D. Neely

**CITY CLERK** Susana A. Mendoza

## CITY COUNCIL COMMITTEE ON FINANCE Edward M. Burke, Chairman

CHIEF FINANCIAL OFFICER Lois A. Scott

> **CITY COMPTROLLER** Daniel J. Widawsky

BUDGET DIRECTOR Alexandra Holt

**CORPORATION COUNSEL** Stephen R. Patton, Esq.

**DEPARTMENT OF WATER MANAGEMENT** Thomas H. Powers, P.E., Commissioner

## **CO-BOND COUNSEL**

Pugh Jones & Johnson, P.C. Chicago, Illinois

Cotillas and Associates Chicago, Illinois

## FINANCIAL ADVISOR

Acacia Financial Group, Inc. Chicago, Illinois 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 Series 2014 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 Series 2014 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 SERIES 2014 BONDS, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE SERIES 2014 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 SERIES 2014 BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE SERIES 2014 BONDS ARE RELEASED FOR SALE, AND THE SERIES 2014 BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE SERIES 2014 BONDS INTO INVESTMENT ACCOUNTS.

#### **OFFICIAL STATEMENT SUMMARY**

This Summary does not constitute a part of the Official Statement for the issuance and sale by the City of Chicago of its Series 2014 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 the Official Statement. Capitalized terms used in this Summary are defined in the Official Statement.

Issuer	City of Chicago.
The Series 2014 Bonds	\$367,925,000 Second Lien Water Revenue Bonds, Project Series 2014.
Payment of Interest	Interest on the Series 2014 Bonds will be payable on each May 1 and November 1, commencing May 1, 2015. The Series 2014 Bonds will bear interest at the rates per year shown on the inside cover of the Official Statement and will be computed on the basis of a 360-day year consisting of twelve 30-day months. The Series 2014 Bonds will bear interest from and including the date of issuance, until payment of the principal or redemption price of such Series 2014 Bonds will have been made or provided for, whether at the maturity date of such Series 2014 Bonds or otherwise. See "DESCRIPTION OF THE SERIES 2014 BONDS – General" in the Official Statement.
Redemption	The Series 2014 Bonds are subject to optional redemption prior to maturity at a redemption price determined as described in the Official Statement. The Series 2014 Bonds maturing on November 1 of the years 2039 and 2044 are subject to mandatory sinking fund redemption as described in the Official Statement. See "DESCRIPTION OF THE SERIES 2014 BONDS – Redemption" in the Official Statement.
Ratings	The Serics 2014 Bonds have received ratings of "A3" (negative outlook) from Moody's, "AA-" (stable outlook) from S&P, "AA" (stable outlook) from Fitch and "AA" (stable outlook) from Kroll. See "RATINGS" in the Official Statement.
Security for the Series 2014 Bonds	The Series 2014 Bonds, together with (i) the Outstanding Second Lien Bonds and any Sccond 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 (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. The Series 2014 Bonds are further secured by amounts on deposit from time to time in the 2014 Construction Account. See "SECURITY FOR THE SERIES 2014 BONDS" in the 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 collected 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 is used 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 in the Ordinance (and described under the caption "SECURITY FOR THE SERIES 2014 BONDS – Flow of Funds" in the 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 arc 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 are only expended for lawful purposes of the Water System. See "SECURITY FOR THE SERIES 2014 BONDS – Flow of Funds," and"– Cash and Investments" in the Official Statement.

# **Rate Covenant** The City has covenanted in the Ordinance and the Indenture 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 "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 herein. 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 "INTRODUCTION – Rate Covenant," "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" in the Official Statement.

Limited Obligation The Series 2014 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 (as defined

	in the Eighth Supplemental Indenture) 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 Series 2014 Bonds. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds do not have a claim for payment from any taxes of the City. The Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including those financed with proceeds of the Series 2014 Bonds. See "SECURITY FOR THE SERIES 2014 BONDS" in the Official Statement.
Authority for Issuance	The Scries 2014 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 April 30, 2014 and 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 August 1, 2004, and as further supplemented by the Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014 dated as of September 1, 2014. See "INTRODUCTION" in the 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. See "THE WATER SYSTEM," "THE WATER SYSTEM SERVICE AREA" and "FINANCIAL OPERATIONS" in the 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. The 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, the Water System rates set for that year represented a 25% increase over the rates for the previous year; Water System rates set for 2013 represented a 15% increase over the previous year; and Water System rates set for 2014 represented a 15% increase over the previous year. Water System rates for the year beginning January 1, 2015 have been set by the City Council at a rate representing a 15% increase over rates for 2014. 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. The City Council may take action at any time to alter the thencurrent schedule of water rates. See "FINANCIAL OPERATIONS" in the Official Statement.
Use of Proceeds	Proceeds of the Series 2014 Bonds will be used to (i) pay costs of the Series 2014 Expected Projects and (ii) pay the Costs of Issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program" in the Official Statement.
Trustee	The Bank of New York Mellon Trust Company, N.A., Chicago, Illinois, will serve as Trustee and Paying Agent.
Tax Matters	Subject to compliance by the City with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Series 2014 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 2014 Bonds will, however, be taken into account in

computing the corporate alternative minimum tax for certain corporations. Interest on the Series 2014 Bonds is not exempt from present State of Illinois income taxes. See "TAX MATTERS" in the Official Statement.

Delivery and<br/>ClearanceThe Series 2014 Bonds are expected to be available for delivery through DTC on or about<br/>September 17, 2014.

Legal Matters Certain legal matters will be passed upon for the parties to the financing as set forth on the cover page to the Official Statement.

**Retirement Funds** City employees who work for the Department of Water Management participate in one of two defined-benefit retirement plans of the City. The City's retirement plans have been actuarially determined to be significantly underfunded. Under current law, the City's retirement costs (and the Water Fund's share thereof), is expected to increase beginning in 2016 (budgeted in (2015). For additional information, see "FINANCIAL OPERATIONS – Pension and Other Post-Employment Benefit Costs" and APPENDIX E – "RETIREMENT FUNDS." Increased Water System operating revenues from scheduled water rate increases are expected to more than offset increases in retirement costs allocable to the Water Fund. See "FINANCIAL OPERATIONS – Historical and Projected Financial Operations."

The City and the retirement plans share the cost of post-employment healthcare benefits available for certain retired City employees ("Health Plan"). The City contributed to the Health Plan pursuant to a settlement agreement between the City and the retirement plans. The settlement agreement expired on June 30, 2013, and the City intends to phase out health benefits for most participants by 2017. 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 E – "RETIREMENT FUNDS – Payment for Other Post-Employment Benefits."

## TABLE OF CONTENTS

	Page
OFFICIAL STATEMENT SUMMARY	
INTRODUCTION	
Purpose	
Authorization	
Security for the Series 2014 Bonds	
Rate Covenant	
The City of Chicago Water System	
Water System Rates	
USE OF PROCEEDS	
Series 2014 Expected Projects	
Estimated Sources and Uses of Funds	
DESCRIPTION OF THE SERIES 2014 BONDS	
General	
Redemption	
Book-Entry System	7
General Provisions of the Series 2014 Bonds When Not in Book-Entry System	9
SECURITY FOR THE SERIES 2014 BONDS	
General	
Pledge of Second Lien Bond Revenues	
Flow of Funds	
Cash and Investments	
Investment of Funds	
Senior Lien Parity Bonds	
Second Lien Parity Bonds	
Subordinate Lien Obligations	
Bankruptcy	
OUTSTANDING DEBT AND ANNUAL DEBT SERVICE	
Outstanding Obligations	
Swaps	
Liquidity and Letter of Credit Providers	
Annual Debt Service	
THE DEPARTMENT OF WATER MANAGEMENT	
THE WATER SYSTEM	
Billing for Water and Sewer Services	
Description of Facilities	
Capital Improvement Program	
THE WATER SYSTEM SERVICE AREA	
Scrvice Area	
Population Served	
Water Accounts	
Suburban Customers, State of Illinois as Customer	
Water Pumpage	
Lake Michigan Allocations	
Quality of Water Supplied	
FINANCIAL OPERATIONS	
Rates, Fees and Users	

Water System Rates	31
Water Rate Comparisons	
Distribution of Revenues by Type of Account	
Annual Budget Review and Implementation of Annual Budget	
Historical and Projected Financial Operations	33
Collections and Delinquencies	
Pension and Other Post-Employment Benefit Costs	
LITIGATION	
CERTAIN LEGAL MATTERS	40
INDEPENDENT AUDITORS	
FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR	41
UNDERWRITING	41
TAX MATTERS	42
Federal Tax Exemption	42
Original Issue Discount	
Market Discount	44
Bond Premium	
No State Tax Exemption	44
SECONDARY MARKET DISCLOSURE	44
Annual Financial Information Disclosure	45
Reportable Events Disclosure	45
Consequences of Failure of the City to Provide Information	
Amendment; Waiver	47
EMMA	
Termination of Undertaking	47
Additional Information	
Corrective Action Related to Certain Bond Disclosure Requirements	
RATINGS	
MISCELLANEOUS	

## **APPENDICES**

- A CERTAIN DEFINITIONS
- B SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE
- C CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION AND INDEPENDENT AUDITORS' REPORT
- D FORM OF OPINIONS OF CO-BOND COUNSEL
- E RETIREMENT FUNDS

## \$367,925,000 CITY OF CHICAGO Second Lien Water Revenue Bonds, Project Series 2014

#### **INTRODUCTION**

This Official Statement, including the cover page hereof and the Appendices hereto, sets forth certain information in connection with the sale of \$367,925,000 aggregate principal amount of Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 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 of the Series 2014 Bonds will be used to (i) pay costs of the Series 2014 Expected Projects (as defined herein) and (ii) pay the Costs of Issuance of the Series 2014 Bonds. See "USE OF PROCEEDS" and "THE WATER SYSTEM – Capital Improvement Program."

#### Authorization

The Series 2014 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 April 30, 2014 (the "Ordinance") and 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 August 1, 2004 ("Amendment No. 1"), and as further supplemented by the Eighth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2014 dated as of September 1, 2014 (the "Eighth Supplemental Indenture,").

#### Security for the Series 2014 Bonds

The Series 2014 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 (including those amounts on deposit in the 2014 Second Lien Project Bonds Subaccount established under the Ordinance, 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), the sources pledged under the Indenture and amounts on deposit in the Construction Account: 2014 Second Lien Project Water Revenue Bonds (the "2014 Construction Account") 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 Licn Bond Revenues (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) is granted to the Registered Owners of the Second Lien Bonds Outstanding from time to time, and a lien on amounts in the 2014 Construction Account is granted to the Registered Owners of the Series 2014 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 Series 2014 Bonds to payment from amounts in the Water

Fund is subordinate to the claim of Senior Lien Bonds. See "SECURITY FOR THE SERIES 2014 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 Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including the Series 2014 Expected Projects. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds do not have a claim for payment from any taxes of the City. See "SECURITY FOR THE SERIES 2014 BONDS – General."

#### **Rate Covenant**

The City has covenanted in the Ordinance and the Indenture 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 "Rate Covenant").

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. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – 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."

#### The 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 customers. See APPENDIX A – "CERTAIN DEFINITIONS" for the definition of the term "Water System" as such term is defined in the Indenture. The Water System currently serves a population of 5.37 million. The Water System's water is allocated from Lake Michigan pursuant to regulations of the Illinois Department of Natural Resources. See "THE WATER SYSTEM SERVICE AREA— Lake Michigan Allocations."

As of December 31, 2013, 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 2013, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 46.5 percent 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. The 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, the Water System rates set for that year represented a 25% increase over the rates for the previous year; Water System rates in 2013 represented a 15% increase over the previous year; and Water System rates set for 2014 represented a 15% increase over the previous year; and Water System rates for 2014 represented a 15% increase over the previous year. Water System rates for the year beginning January 1, 2015 have been set by the City Council at a rate representing a 15% increase over rates for 2014. 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. The City Council may take action at any time to alter the then-current schedule of water rates. See "FINANCIAL OPERATIONS."

#### **USE OF PROCEEDS**

#### Series 2014 Expected Projects

Proceeds of the Series 2014 Bonds are expected to be used to (i) finance capital improvements to and upgrades of the Water System, including improvements to the City's two purification plants, upgrading various pumping stations, installing new and replacing old grid mains and replacing and installing new meters (collectively, the "Series 2014 Expected Projects"), and (ii) pay the Costs of

Issuance of the Series 2014 Bonds. The City reserves the right to change any of the foregoing expected uses of proceeds and use proceeds of the Series 2014 Bonds to finance any of the other capital improvements in the Capital Improvement Program described in this Official Statement. See "THE WATER SYSTEM – Capital Improvement Program."

#### **Estimated Sources and Uses of Funds**

SOURCES OF FUNDS.

The following table sets forth the estimated sources and uses of funds in connection with the issuance of the Series 2014 Bonds.

SOURCES OF FUNDS:			
Principal Amount of the Series 2014 Bonds Net Bond Premium	\$367,925,000 <u>34,835,570</u>		
Total Sources of Funds \$402			
USES OF FUNDS:			
Costs of the Series 2014 Expected Projects Costs of Issuance (including the	\$400,000,000		
underwriters' discount)	2,760,570		
Total Uses of Funds	\$402,760,570		

#### **DESCRIPTION OF THE SERIES 2014 BONDS**

#### General

The Series 2014 Bonds will be issued as fully registered bonds without coupons in the bookentry-only system described below under "– Book-Entry System," in denominations of \$5,000 and any integral multiple of \$5,000. The Series 2014 Bonds will be dated the date of issuance, and will mature on November 1 in each of the years and in the principal amounts and shall bear interest at the respective rates per year set forth on the inside cover page of this Official Statement.

Interest on the Series 2014 Bonds will be payable on each May 1 and November 1, commencing May 1, 2015 (each, an "Interest Payment Date"), computed upon the basis of a 360-day year consisting of twelve 30-day months. The Series 2014 Bonds will bear interest from and including the date of issuance, until payment of the principal or redemption price of such Series 2014 Bonds will have been made or provided for in accordance with the provisions of the Eighth Supplemental Indenture, whether at the maturity date of such Series 2014 Bonds or otherwise. No interest shall accrue on any Series 2014 Bond after the maturity date thereof (provided, the payment at maturity is paid or provided for in accordance with the provisions of the Indenture). Each Series 2014 Bond will bear interest on overdue principal and, to the extent permitted by law, on overdue premium, if any, and interest at the rate borne by such Series 2014 Bond on the date on which such principal, premium or interest came due and payable.

#### Redemption

Optional Redemption of Series 2014 Bonds. The Series 2014 Bonds maturing on or after November 1, 2025, 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, 2024, 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 principal amount of such Series 2014 Bonds, together with accrued interest to the date fixed for redemption.

Mandatory Sinking Fund Redemption. The Series 2014 Bonds due November 1, 2039 (the "2039 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Donus que November 1, 2039		
Year	Principal Amount	
2035	\$14,610,000	
2036	15,345,000	
2037	16,110,000	
2038	16,915,000	
2039 <sup>†</sup>	17,760,000	

Series 2014 Bonds due November 1, 2030

<sup>†</sup> Stated Maturity

The Series 2014 Bonds due November 1, 2044 (the "2044 Term Bonds" and, together with the 2039 Term Bonds, the "Series 2014 Term Bonds") are subject to mandatory sinking fund redemption prior to maturity in part at a redemption price of 100 percent of the principal amount thereof on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date:

Series 2014 Bonds	Series 2014 Bonds due November 1, 2044		
Year	Principal Amount		
2040	\$18,650,000		
2041	19,580,000		
2042	20,560,000		
2043	21,590,000		
2044 †	22,670,000		

#### 3014 D 1 2044

<sup>†</sup> Stated Maturity

In lieu of redeeming the Series 2014 Term Bonds pursuant to the mandatory sinking fund redemption provisions described above, on or before the 60th day next preceding any mandatory sinking fund redemption date for such Series 2014 Term Bonds, the Trustee may, at the written direction of the Authorized Officer, use such funds available under the Indenture to purchase Series 2014 Term Bonds in the open market at a price not exceeding par plus accrued interest.

Reduction of Mandatory Redemption Amounts. On or before the 60th day next preceding any mandatory sinking fund redemption date for the Series 2014 Term Bonds (or such shorter period as may be acceptable to the Trustee), the City may, at its option, (i) deliver to the Trustee for cancellation, Series 2014 Term Bonds or portions thereof in Authorized Denominations subject to mandatory sinking fund redemption or (ii) receive a credit in respect of its mandatory sinking fund redemption obligation for Series 2014 Term Bonds or portions thereof in Authorized Denominations which prior to said date have been redeemed (otherwise than through the operation of such mandatory sinking fund redemption) and canceled by the Trustee and not theretofore applied as a credit against any mandatory sinking fund redemption obligation. Each Series 2014 Term Bond or portion thereof subject to mandatory sinking fund redemption so delivered or previously redeemed will be credited against future mandatory sinking fund redemption obligations on Series 2014 Term Bonds in such order as the City designates, or if no such designation is made, in chronological order, the principal amount of such Series 2014 Term Bonds to be redeced by operation of such mandatory redemption to be accordingly reduced.

Notice of Redemption. Unless waived by any owner of Series 2014 Bonds to be redeemed, notice of the call for any optional or mandatory redemption shall be given by the Trustee on behalf of the City by mailing the redemption notice by first class mail at least thirty days and not more than forty-five days prior to the date fixed for redemption to the registered owner of the Series 2014 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 2014 Bond shall not affect the validity of the proceedings for the redemption of any other Series 2014 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 2014 Bonds or any portion thereof to be redeemed will specify, at a minimum, (i) the series name and designation and certificate numbers of Series 2014 Bonds being redeemed, (ii) the CUSIP numbers of the Series 2014 Bonds being redeemed, (iii) the principal amount of Series 2014 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 2014 Bonds being redeemed, (vii) the interest rate and maturity date of the Series 2014 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 Scries 2014 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 2014 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 2014 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 2014 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 2014 Bonds of a series, the City will deposit with the Trustee an amount of money sufficient to pay the redemption price of all such Series 2014 Bonds or portions thereof which are to be redeemed on that date.

Notice of redemption having been given as described above, the Series 2014 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 2014 Bonds, or portions thereof, shall cease to bear interest. Upon surrender of such Series 2014 Bonds for 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 2014 Bond, there will be prepared for the registered owner a new Series 2014 Bond or Series 2014 Bonds of the same interest rate and maturity in the amount of the unpaid principal. If any Series 2014 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 2014 Bond, or portion thereof, so called for redemption.

#### Selection of Series 2014 Bonds for Redemption.

In the event of the redemption of fewer than all the Series 2014 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 2014 Bond of such maturity and interest rate a distinctive number for each minimum Authorized Denomination of such Series 2014 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 2014 Bonds to be redeemed. The Series 2014 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 2014 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 2014 Bonds of a single maturity and interest rate, the particular Series 2014 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 2014 Bonds, if fewer than all of the Series 2014 Bonds of any maturity and interest rate are called for redemption, the particular Series 2014 Bonds or portions of Series 2014 Bonds of Series 2014 Bonds, if fewer than all of the Series 2014 Bonds of Series 2014 Bonds Series 2014 Bonds of Series 2014 Bonds

#### **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 Series 2014 Bonds. The Series 2014 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 the Series 2014 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 bookentry 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 Series 2014 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2014 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2014 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 Series 2014 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 Series 2014 Bonds, except in the event that use of the Book Entry System for the Series 2014 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2014 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 Series 2014 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 Series 2014 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2014 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 Series 2014 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 Series 2014 Bonds may wish to ascertain that the nominee holding the Series 2014 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 Series 2014 Bonds of a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Series 2014 Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2014 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 Series 2014 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and interest payments on the Series 2014 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 the

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 Series 2014 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 Series 2014 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 Series 2014 Bonds will be printed and delivered to DTC.

#### Additional Information

For every transfer and exchange of the Series 2014 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 SERIES 2014 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 SERIES 2014 BONDS, OR ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN WITH RESPECT TO THE SERIES 2014 BONDS, INCLUDING ANY NOTICE OF REDEMPTION THE SELECTION OF SPECIFIC SERIES 2014 BONDS FOR REDEMPTION OR ANY OTHER ACTION TAKEN, BY DTC AS REGISTERED OWNER OF THE SERIES 2014 BONDS.

In reading this Official Statement it should be understood that while the Series 2014 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 Series 2014 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 Series 2014 Bonds When Not in Book-Entry System

During any period in which the Series 2014 Bonds are not registered in the name of DTC or its nominee, the principal of all Series 2014 Bonds and the Redemption Price, if any, of all Series 2014 Bonds (and the interest payable on any date of redemption other than on an Interest Payment Date) shall be payable at the principal office of the Trustee, which is the paying agent for the Series 2014 Bonds. Interest on the Series 2014 Bonds payable on any Interest Payment Date shall be payable by check mailed by the Trustee to the registered owners of the Series 2014 Bonds at their addresses as shown on the registration books of the City maintained by the Trustee. The interest payable on the Series 2014 Bonds are registered as of the applicable Record Date. Upon request of a Registered Owner of at least \$1,000,000 outstanding principal amount of the Series 2014 Bonds, all payments of interest on all Series 2014 Bonds shall be paid by wire transfer in federal funds to an account in the continental United States designated by such Registered Owner. The principal and Redemption Price of each Series 2014 Bond shall be payable in clearinghouse funds upon surrender of such Series 2014 Bond at the principal amount of Series The Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond at the principal amount of Series Series 2014 Bond Bond Bond Bond Bond Bond

2014 Bonds of the same maturity in Authorized Denominations upon surrender at the principal office of the Trustee, together with an assignment executed by the Registered Owner or by the Registered Owner's duly authorized agent. Payment of any tax, fee or other governmental charge, other than one imposed by the City, arising from any transfer or exchange of Series 2014 Bonds may be required to be paid by the Registered Owner as a condition for exercising that privilege. Neither the City nor the Trustee will be required to transfer any Series 2014 Bond during the 15 days next preceding an Interest Payment Date or, in the case of a proposed redemption of the Series 2014 Bonds, after the selection by the Trustee of such Series 2014 Bonds for redemption. In the event any Series 2014 Bond is mutilated, lost, stolen or destroyed, the City shall execute and the Trustee shall authenticate a new Series 2014 Bond upon satisfaction of the provisions of the Indenture.

#### **SECURITY FOR THE SERIES 2014 BONDS**

#### General

The Series 2014 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 (as defined in the Eighth Supplemental Indenture) 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 Series 2014 Bonds. The Series 2014 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Series 2014 Bonds do not have a claim for payment from any taxes of the City. The Series 2014 Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including those financed with proceeds of the Series 2014 Bonds.

As described herein, the Series 2014 Bonds, 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 Series 2014 Bonds are further secured by amounts on deposit from time to time in the 2014 Construction Account. 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**

The Ordinance authorizes the issuance of up to \$475,000,000 principal amount of water revenue obligations for the purpose of financing improvements and extensions of the Water System and up to \$100,000,000 principal amount of water revenue obligations for the purpose of refunding water revenue obligations issued for such purposes. Such water revenue obligations include the Series 2014 Bonds, which will be issued as Second Lien Bonds pursuant to the Ordinance and the Indenture. Under the Ordinance and the Indenture, the Series 2014 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, including those on deposit in the 2014 Second Lien Project Bonds Subaccount held under the Ordinance (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), amounts on deposit in the 2014 Construction Account held under the Ordinance, and amounts held by the Trustee under the terms of the Eighth Supplemental 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 Series 2014 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 collected 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). The Water Fund is used 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, 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 and in accordance with the provisions 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 Series 2014 Bonds and any other Second Lien Parity 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 Parity 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 Parity Bonds in order to satisfy the debt service and other payment obligations under the Indenture and any ordinance or indenture authorizing such Second Lien Parity Bonds. Moneys on deposit in the Second Lien Bonds Account shall be applied without priority as to any particular series of Second Lien Parity 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.

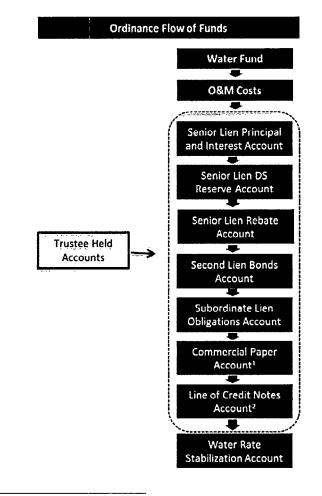
6. The *Commercial Paper Account* is used to make debt service payments and other required deposits with respect to any Commercial Paper Notes authorized and issued under any ordinances or related indentures. The moneys on deposit in the Commercial Paper Account are required to be transferred by the 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 such 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."



- <sup>1</sup> As of the date of this Official Statement, there are no Commercial Paper Notes outstanding, nor are there any current plans for the issuance of Commercial Paper Notes.
  - As of the date of this Official Statement, there are no Water System Line of Credit Notes outstanding, nor are there any current plans for the issuance of Water System Line of Credit Notes.

To provide for debt service on the Series 2014 Bonds, the City, on each May 1 and November 1 (each a "Deposit Date"), commencing May 1, 2015, is required to deposit into the 2014 Second Lien Project Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, from amounts on deposit in the Second Lien Bonds Account, 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 the Business Day next preceding each such Deposit Date):

2

(a) for deposit into the Principal and Interest Account of the 2014 Second Lien Project Bond Subaccount, an amount equal to the Principal and Interest Account Requirement; and

(b) for deposit into the Program Fee Account of the 2014 Second Lien Project Bond 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 Scries 2014 Bonds on such Deposit Date. Moneys on deposit in the Principal and Interest Account will be held by the Trustee for the sole and exclusive benefit of the Series 2014 Bonds and used for the purpose of paying the principal of and interest on such Bonds when duc. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – Application of Series 2014 Bond Proceeds – Deposits into 2014 Second Lien Bond Project Subaccount and Accounts Therein."

#### **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, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION 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 and the Capitalized 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 Series 2014 Bonds, or (B) six months from the date of investment for amounts representing interest payable on the Series 2014 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, 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."

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**

The Ordinance does not restrict the City's ability to issue obligations payable on a basis subordinate to the Series 2014 Bonds.

#### 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.

#### OUTSTANDING DEBT AND ANNUAL DEBT SERVICE

#### **Outstanding Obligations**

After giving effect to the issuance of the Series 2014 Bonds, the outstanding indebtedness of the Water System was \$48,982,274 aggregate principal amount of Senior Lien Bonds and \$2,289,505,000 aggregate principal amount of Second Lien Bonds.

The City has also entered into seven loan agreements with the Illinois Environmental Protection Agency ("IEPA") as shown in the following table. The claim of the loans for payment from moneys in the Water Fund is subordinated to the claim of the Series 2014 Bonds.

Loan <u>Nos.</u>	Maturity <u>Dates</u>	Interest <u>Rate</u>	Amount of Loan Outstanding <sup>(1)</sup> (\$000)
L17-1247	11/01/22	2.905%	1,912
L17-2054	05/01/25	2.570	1,799
L17-3770	02/12/32	0.000	8,206
L17-3769	08/01/32	1.250	1,493
L17-4564	02/03/32	1.250	5,953
L17-4686	08/01/32	1.250	1,468
L17-4687	02/03/33	1.250	5,465
Total Outsta Principal Ba			<u>_26,296</u>

#### **IEPA Water Fund Loans Outstanding**

Source: City of Chicago, Department of Water Management, Water Fund Comprehensive Financial Report for the Years Ended December 31, 2013 and 2012.

<sup>(1)</sup> The outstanding principal amounts are as of December 31, 2013.

(2) This total does not include five IEPA loans in the aggregate maximum amount of \$161.5 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.

The Series 2004 Second Lien Bond Ordinance authorizes the issuance from time to time of Commercial Paper Notes and Water System 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. There are no Commercial Paper Notes or Water System Line of Credit Notes currently Outstanding. 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 Series 2014 Bonds.

#### Swaps

The City entered into the interest rate swaps set forth below as a means of limiting, reducing or managing the City's interest cost with respect to certain Outstanding Second Lien Bonds, limiting the interest rate risk inherent in variable rate debt. However, the interest rate swaps may expose the City to certain market and credit risks. The City may terminate interest rate swaps at any time at market value or upon the occurrence of certain events. In addition, the City or the counterparties may terminate the related interest rate swaps if the other party fails to perform under the terms of such swaps. If the interest rate swaps are terminated, the related bonds would continue to bear interest at a variable rate (unless converted by the City to a fixed interest rate), and the City could be liable for a termination payment if the swaps have a negative market value. The estimated mid-mark-to-market valuation for all of the interest rate swaps listed in the table below is negative \$91.6 million. This estimate is based on the information provided by each counterparty and has not been independently verified by the City.

The City has entered into three outstanding interest-rate swaps constituting Section 2.09 Obligations in connection with certain Second Lien Bonds, as described in the following table.

#### Swaps Related to Outstanding Water Revenue Bonds

Issuc	Current Notional Amount <u>(\$000)</u>	Counter- party	City ATE Level <sup>(1)</sup>	<u>Typc</u>	City Pays <u>(%)</u>	City <u>Receives</u>	Effective <u>Date</u>	Termination Date	Mark to Market <sup>(2)</sup> (\$)
2nd Lien Series 2000	100,000	UBS	Baal / BBB+	Floating -to- Fixed	3.8694	67% of LIBOR	4/16/08	11/1/30	(25,091,959)
2nd Lien	179,690	UBS	Baal / BBB+	Floating -to- Fixed	3.8694	67% of LIBOR	8/5/04	11/1/25	(30,531,734)
Series 2004	186,460	RBC	Baa1 / BBB+	Floating -to- Fixed	3.8669	67% of LIBOR	8/5/04	11/1/31	(36,019,537)

Source: City of Chicago, Department of Finance.

(1)

(2)

A counterparty may terminate its related interest rate swap if the rating for the Second Lien Water Revenue Bond credit falls below the rating listed in the column "City ATE Level" by Moody's or S&P.

Valuations provided at mid-market by the Swap counterparty and are as of June 30, 2014.

#### Liquidity and Letter of Credit Providers

The City has entered into four letter of credit and/or liquidity facilities constituting Section 2.08 Obligations to provide for the payment of debt service on or tender prices for certain Second Lien Bonds that were issued in variable rate modes. The City intends to extend or substitute all of the letter of credit and/or liquidity facilities prior to their respective expiration dates. The following table describes these facilities.

<u>Series</u>	Outstanding Principal Amount <u>(\$000)</u>	Facility Expiration	Bond <u>Maturity</u>	Provider	Ratir	<u>ngs Thresho</u>	<u>lds (1)</u>
					<u>Fitch</u>	Moody's	<u>S&amp;P</u>
2000	100,000	12/01/14	11/01/30	JPMorgan	BBB-	Baa3	BBB-
2004-1	162,250	11/15/14	11/01/31	CalPers	BBB-	Baa3	BBB-
2004-2	162,250	11/15/14	11/01/31	CalPers	BBB-	Baa3	BBB-
2004-3	41,650	11/15/14	11/01/31	State Street	BBB-	Baa3	BBB-

Source: City of Chicago, Department of Finance.

<sup>(1)</sup> A Second Lien Water Revenue Bond debt rating below what is shown in the chart in the "Ratings Thresholds" column would constitute an event of default under the agreements with the related banks.

#### **Annual Debt Service**

The debt service of the Water System as of the date of issuance of the Series 2014 Bonds, assuming no refundings of Senior Lien or Second Lien Bonds prior to their maturities, is shown below (columns may not total due to rounding).

Calendar <u>Year</u>	Outstanding Senior Lien Bonds Principal and Interest	Outstanding Second Lien Bonds Principal and Interest <sup>(1) (2)</sup>	Series 2014 Bonds Principal and Interest	Total Senior and Second Lien Bonds <sup>(3)</sup> Principal and Interest
2014	\$ 21,070,953	\$ 80,486,505	-	\$ 101,557,459
2015	21,484,831	126,223,678	\$ 23,801,939	171,510,447
2016	21,485,206	133,956,529	23,801,870	179,243,605
2017	15,590,000	139,869,707	23,803,020	179,262,727
2018	15,595,000	139,915,400	23,803,620	179,314,020
2019	7,550,000	147,989,389	23,803,820	179,343,209
2020	7,555,000	148,130,992	23,803,370	179,489,362
2021	_	155,530,044	23,802,120	179,332,164
2022	_	155,623,761	23,802,870	179,426,631
2023	_	155,703,428	23,804,620	179,508,048
2024	_	156,174,774	23,801,370	179,976,144
2025	_	153,455,022	23,799,800	177,254,822
2026	_	139,755,834	23,802,050	163,557,884
2027	-	139,081,959	23,801,550	162,883,509
2028	_	147,814,207	23,802,300	171,616,507
2029	_	147,410,309	23,803,050	171,213,359
2030	-	143,684,283	23,802,550	167,486,833
2031	-	109,721,451	23,799,550	133,521,001
2032	_	99,437,432	23,802,800	123,240,232
2033	-	98,991,720	23,803,000	122,794,720
2034		98,535,961	23,800,250	122,336,211
2035	-	98,051,746	23,799,500	121,851,246
2036	-	97,546,690	23,804,000	121,350,690
2037	-	87,457,847	23,801,750	111,259,597
2038	_	86,807,338	23,801,250	110,608,588
2039	_	69,540,626	23,800,500	93,341,126
2040	_	68,648,397	23,802,500	92,450,897
2041	_	26,404,750	23,800,000	50,204,750
2042	_	26,402,250	23,801,000	50,203,250
2043	-	-	23,803,000	23,803,000
2044			23,803,500	23,803,500
TOTAL	<u>\$110,330,991</u>	<u>\$3,378,352,025</u>	<u>\$714,062,519</u>	<u>\$4,202,745,535</u>

Source: City of Chicago, Department of Finance.

(1) The City has entered into interest rate hedge agreements for its Series 2000 Second Lien Bonds and Series 2004 Second Lien Bonds and debt service is calculated based on the swap rate. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE – Swaps" above..

(2) 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.

<sup>(3)</sup> Does not include the Subordinate Lien Obligations. See "- Outstanding Obligations" above.

#### THE DEPARTMENT OF WATER MANAGEMENT

The Department of Water Management 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 of Water Management as of December 31, 2013 for Water Fund employees was 1,511 and Sewer Revenue Fund 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 of Water Management 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 of Water Management's employees are covered by collective bargaining agreements that expire in 2017. The Department of Water Management 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 of Water Management 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 of Water Management 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 of Water Management participates in monthly 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 of Water Management is also committed to increasing its use of mapping and technology, for example, by utilizing geographic information systems. The Department of Water Management believes cost savings from these efforts were \$4.8 million in 2011, \$6.0 million in 2012 and \$7.6 million in 2013. Cost savings realized allow for increased expenditures in the Capital Improvement Program.

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

- 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

#### THE WATER SYSTEM

#### **Billing for Water and Sewer Services**

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 both water usage and sewer service charges are established by ordinance of the City. The sewer service charge is established in an amount designed to pay the costs of Sewer System operations and capital improvements, including any related debt service.

Currently, the sewer service charge is set at 96% percent of the water usage charge within the City. Any delinquencies for sewer service charges are carried on the books of the Sewer Revenue Fund. Billings and collections for both funds are handled by the Water Division of the City of Chicago Department of Finance. See "FINANCIAL OPERATIONS – Collections and Delinquencies."

#### **Description of Facilities**

*Treatment Plants.* The Department of Water Management operates two of the world's largest water treatment facilities, the South Water Purification Plant and the James W. Jardine Water Purification Plant, aggregating a continuous service capacity of 2,177 million gallons per day ("MGD"). The South Water Purification Plant has a rated capacity of 720 MGD and serves the City south of 39<sup>th</sup> 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 1,457 MGD. It has been in operation since 1964 serving the City north of 39<sup>th</sup> 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.* Of the Water System's 12 pumping stations, four are steam-powered and eight are electric-powered. Included is the electric-powered Lexington pumping station completed by DWC in 1992 which was acquired by the City through a credit for a portion of the charges for water purchased by DWC. 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 approximately 4,369 miles of water mains ranging in size from four to 60 inches in diameter.

*Water Distribution.* The water distribution system consists of approximately 4,321 miles of water mains, approximately 48,614 fire hydrants and approximately 49,447 valves.

#### **Capital Improvement Program**

The City, through the Department of Water Management, is continually improving and rehabilitating the Water System. To provide for future additions to the Water System, replacement of facilities and rehabilitation of existing facilities, in 2012 the Department of Water Management put in place a ten-year capital improvement plan (the "Capital Improvement Program"). The Capital Improvement Program constitutes a series of annual benchmarks that the Department of Water Management intends to achieve in order to implement the entire Program. In the midst of the third year of the ten-year Capital Improvement Program, the Department of Water Management achieved its 2013 goal of replacing 75 miles of water main by September 2013 and exceeded its 2013 goal of installing 10,000 meters by 37%.

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 of Water Management addresses funding and expenditure in five-year increments. The information presented in the following table reflects the Department of Water Management's proposed expenditures for capital improvements under the Capital Improvement Program.

Year	Estimated Amount of Capital _Improvements (in Thousands)		
2014	\$ 446,531		
2015	378,011		
2016	439,801		
2017	451,502		
2018	465,249		
Total	<u>\$2,181,094</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 40 percent of the projects will be funded from net revenues of the Water System with the remainder funded from the sale of indebtedness of the Water System.

The Capital Improvement Program addresses the renewal and replacement of the Water System's infrastructure, and focuses on four major areas: water main replacement, meter installation, electrification of pumping stations, and rehabilitation and upgrading of the Water System's two purification plants. The Department of Water Management replaced 70 miles of water main in 2012, 75 miles of water main in 2013 and is on track to replace 85 miles of water main in 2014 and 90 miles of water main in 2015. Over the ten-year period from 2012 through 2021, the Department of Water Management plans to replace an average of 88 miles of water mains annually, install 204,000 meters, design the electrification of four existing pumping stations, and convert three pumping stations from steam to electricity. The ongoing projects of the Department of Water Management 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.

The Series 2014 Expected Projects expected to be funded from proceeds of the Series 2014 Bonds relate to the ongoing implementation of the Capital Improvement Program. Two of the larger single projects among those expected to be funded from Series 2014 Bond proceeds are the conversion of the Springfield Pumping Station from steam to electric power and the replacement of a roof at the James W. Jardine Water Purification Plant. Contracts have already been let for these projects and completion of both is anticipated within a twelve-month period.

In the opinion of the Department of Water Management, the current Capital Improvement Program is adequate to maintain the Water System and reduce costs through improvements to the Water System where such improvements are feasible.

#### THE WATER SYSTEM SERVICE AREA

#### Service Area

The Water System supplied water to a service area of approximately 806 square miles as of December 31, 2013. The City accounted for approximately 228 square miles of this service area and the suburban customers supplied in 2013 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 of Water Management 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:

Population of Service Area <sup>(*)</sup>								
Chicago	Suburban Customers	Total	Number of Suburbs Served					
3,550,404	833,424	4,383,828	58					
3,369,357	1,127,446	4,496,803	72					
3,005,072	1,152,614	4,157,686	75					
2,783,726	1,589,557	4,373,283	95					
2,896,016	2,410,021	5,306,037	125					
2,695,598	2,600,496	5,296,094	125					
	Chicago 3,550,404 3,369,357 3,005,072 2,783,726 2,896,016	Chicago         Suburban Customers           3,550,404         833,424           3,369,357         1,127,446           3,005,072         1,152,614           2,783,726         1,589,557           2,896,016         2,410,021	Suburban Chicago         Suburban Customers         Total           3,550,404         833,424         4,383,828           3,369,357         1,127,446         4,496,803           3,005,072         1,152,614         4,157,686           2,783,726         1,589,557         4,373,283           2,896,016         2,410,021         5,306,037					

#### (1)1 . 41 66 . . . . . .

 $\overline{\mathbf{m}}$ 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.

Addison Alsip	Elmhurst Elmwood Park	Leyden Township Lincolnwood	Phoenix 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
Bloomingdale	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 <sup>(1)</sup>	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	

### Suburban Customers Served by the Water System

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup> 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, 2013, the Water System supplied 494,185 accounts. Of these, 273,426 were non-metered and 220,759 were metered. The number of non-metered accounts exceeds the number of metered accounts because all single-family and two-family dwellings within the City were non-metered

accounts prior to 1984. 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					
2004	324,689	167,545	492,234					
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 (1)	258,000	236,000	494,000					

### Water System Accounts

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup> Projected by Department of Water Management

Beginning in 2006, certain previously exempt charitable accounts began paying a portion of their water bill. See "FINANCIAL OPERATIONS – Rates, Fees and Users."

#### Suburban Customers, State of Illinois as Customer

The Department of Water Management'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 of Water Management'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 of Water Management's mains. The Department of Water Management 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 in 2013 with a 40-year term, expiring at the end of calendar year 2042. In 2013, DWC was the Department of Water Management's largest suburban customer, Oak Lawn was the second largest suburban customer and JAWA was the third largest suburban customer, with sales of approximately \$80,944,000, \$32,408,000 and \$30,482,000, 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 2013, the suburban customers accounted for approximately 37 percent of water pumpage and approximately 47 percent of net water sales of the Water System.

Listed below are the Department of Water Management's 10 largest suburban customers in 2013. Several of these customers supply one or more other suburban customers. In 2013, the Department of Water Management's 10 largest customers, supplying a total of 58 suburban customers, accounted for approximately 34.5 percent of net water sales.

Customer	Amount of Sales (in Thousands)
DuPage Water Commission	\$ 80,944
Oak Lawn, Illinois	32,408
Northwest Suburban Municipal Joint Action Water Agency	30,482
Bedford Park, Illinois	23,167
Harvey, Illinois	9,251
Melrose Park, Illinois	9,016
Cicero, Illinois	7,442
Alsip, Illinois	6,778
McCook, Illinois	5,443
Des Plaines, Illinois	5,310
Total	\$210,241

### 10 Largest Suburban Customers of the Water System in 2013

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. The City of Harvey, Illinois ("Harvey") has been delinquent since November 2008 in paying for water service from the City, having paid slightly less than half the amount owed. The amount currently owed by Harvey to the City, including penalties, is approximately \$25,840,000. Harvey's water account with the City represents approximately 1.5% of 2013 operating revenues for the Water Fund. The City commenced litigation against Harvey in December 2012 to recover monies owed. See "LITIGATION."

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 of Illinois 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 flow through the State of Illinois; all such revenues are paid directly to the City.

#### Water Pumpage

During 2013, the Water System pumped approximately 276 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 of Water Management to account exactly for its total system pumpage. However, the Department of Water Management estimates that in 2013 approximately 8.5 percent of the Water System's total pumpage was unaccounted flow, water lost through system leakage and other unaccounted-for flows. Of the water pumped in 2013, approximately 37 percent was supplied to suburban customers.

Year	City	IAWA	DWC	Other Suburban Customers	Total
2004	205,404	12,613	31,481	70,571	320,069
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

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

Source: City of Chicago, Department of Water Management.

As the table below indicates, from 2004 through 2013 the Water System's maximum daily pumpage ranged from 47 percent to 64 percent of the Water System's capacity.

	Total Annual Pumpage	Average Daily Pumpage	Maximum Daily Pumpage	System's Rated Pumpage Capacity	Maximum Daily Pumpage as % of
<u>Year</u>	(MGD)	<u>(MGD)</u>	(MGD)	(MGD)	Capacity
2004	320,069	875	1,134	2,160	53
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

### Water System Pumpage and Capacity

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 of Water 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 <u>et seq</u>.). 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:

t	to City and Suburbs served by City							
Year	City	Suburbs	<u> </u>					
2000	713.0	334.3	1,047					
2010	737.1	362.8	1,100					
2020	750.1	391.3	1,141					

### Lake Michigan Allocation under Order LMO 99-3 to City and Suburbs served by City <sup>(1)</sup>

(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 unaccountedfor 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.

### **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. Lake Michigan water quality has shown substantial improvement in the last decade due to the pollution control efforts in the region.

### 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 "FINANCIAL OPERATIONS – Suburban Customers, State of Illinois as Customer."

Water System rates are set by City Council. No regulation by any administrative agency applies to the City Water System rates. The 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. 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 Budget Office (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."

### Water System Rates

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

Historical Water Rate Increases

	Gross Metere	ed Water Rate	i Water Rate Net Metered Water R		
Date Effective	1,000 Cubic Feet	<u>1,000 Gallons</u>	1,000 Cubic Feet	1,000 Gallons	Percentage Increase Over Prior Rate
Jan. 1, 2005	9.95	1.326	9.70	1.291	3
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

(1) Reflects two and one-half percent discount for payment within 21 days, which was discontinued beginning January 1, 2006.

Source: City of Chicago, Department of Water Management.

Future Water System rates have been authorized by the City Council, as summarized in the table below.

		Future Wa	ter Rates		
	Gross Metere	d Water Rate	Net Metered		
Date Effective	1,000 Cubic <u>Feet</u>	1,000 Gallons	1,000 Cubic Feet	1,000 Gallons	Percentage Increase Over Prior Rate
Jan. 1, 2015	28.52	3.812	28.52	3.812	15

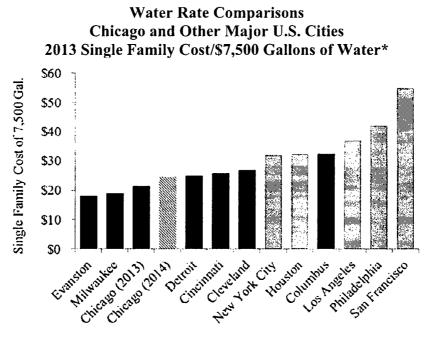
Source: City of Chicago, Department of Water Management.

Under currently applicable ordinances of the City, beginning June 1, 2016, and every year thereafter, annual 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. The City Council may take action at any time to alter the then-current schedule or water rates.

### 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 the water systems serving other selected

U.S. cities. The chart compares the Water System's 2013 and 2014 rates to the 2013 water rates of the other cities.



\* Great Lakes region cities in solid black. Source: City of Chicago – Department of Water Management

### Distribution of Revenues by Type of Account

The following table identifies the approximate percentage distribution of revenues by type of account for the years 2004 through 2013:

		Residential						
Year	Metered	Non-Metered	Total	Industrial and Commercial	Suburban Service Area			
2004	14	19	33	24	43			
2005	15	18	33	23	44			
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	13	48			
2012	18	22	40	14	46			
2013	20	19	39	14	47			

# **City Service Area**

Source: City of Chicago, Department of Water Management

#### Annual Budget Review and Implementation of Annual Budget

The Department of Water Management'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 of Water Management'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 of Water Management's proposed annual budget. See APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE – 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 of Water Management has finalized its proposed annual budget, the Commissioner recommends it to the Budget Director. The Budget Director considers the Department of Water Management'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 2014 budget was approved by the City Council on November 26, 2013.

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, 2009 through December 31, 2013 together with projected financial operations and projected debt service coverage calculations for the years ending December 31, 2014 through December 31, 2016, reflecting the issuance of the Series 2014 Bonds and the application of the proceeds therefrom.

Operating revenues are expected to increase by approximately twelve percent in 2014, twelve percent in 2015, and 0% in 2016 based on already approved rate increases offset by slight decreases in consumption. The Department of Water Management projects that consumption will decrease by two

percent in 2014. Operating expenses for the years 2014 through 2016 are projected to increase at a rate of approximately 0% in 2014, 7% in 2015, and 5% in 2016.

Water usage is assumed to decline slightly during the projection period due to water conservation efforts. 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 ORDINANCE AND THE INDENTURE - 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 \$637.1 million operating revenues. Water sales and other operating revenues for 2013 were \$620.5 million and \$16.6 million, respectively. The increase in 2013 operating revenues of \$60.8 million (10.6%) from 2012 was primarily due to a 15% increase in water rates effective January 1, 2013, offset by the conversion of 17,427 non-metered accounts to metered accounts and a decrease in consumption resulting from a cooler summer in 2013.

Fiscal year 2013 nonoperating revenues of \$1.0 million are comprised mainly of net interest income, grants, and third-party payments totaling \$0.5 million. The increase in interest expense of \$10.5 million (12.9%) is primarily due to the first full year of interest expense for the Series 2012 Second Lien Bonds (\$8.5 million in 2012 and \$18.7 million in 2013).

Operating expenses before depreciation and amortization for the year ended December 31, 2013 increased by \$11.1 million (3.8%) from the year ended December 31, 2012 mainly due to an increase in provision for doubtful accounts of \$9.7 million (62%) resulting from an increase in accounts receivable; an increase in purification of \$4.7 million (8.4%), customer accounts and collection of \$1.6 million (16.1%), power and pumping of \$1.5 million (3.6%), and central services and General Fund reimbursement of \$1.4 million (1.3%) due to overtime and natural gas and electronic charges resulting

from an extremely cold winter; offset by a decrease in transmission and distribution of \$7.0 million (19.2%) due to a decrease in fuel consumption.

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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Water Rate Stabilization Account Year-End Balance	Stabilization Account Net Revenues Available for Bonds	Net Revenues Transfers from (to) Water Rate	construction accounts)	Interest income (other than from	Total operating expenses	Contribution	Additional Pension	fund reimbursement	Central services and general	Administrative and general	Accounting and collection	Provision for doubtful accounts	Transmission and distribution	Purification	Power and pumping	Source of supply	Operating Expenses <sup>(2)</sup>			
<u>\$ 51.4</u>	$\frac{0.0}{$137.1}$	<u>\$13/.1</u>	1.0		274.1	0.0		98.5		16.1	11.2	10.4	40.9	49.4	47.5	0.1		\$410.2	2009	
\$ 61.4	(10.0) <u>\$ 169.0</u>	<u>s 179.0</u>	(0.3)		279.1	0.0		103.0		18.6	10.3	15.9	38.7	49.7	42.9	0.1		\$ 458.4	2010	
<u>\$ 61.4</u>	$\frac{0.0}{$174.0}$	<u>\$ 1/4.0</u>	2.0		282.2	0.0		96.6		17.1	10.7	13.9	39.0	66.5	38.2	0.2		\$ 454.2	2011	ACTUAL
\$ 74.9	<u>(13.5)</u> <u>\$ 273.6</u>	<u>\$ 287.1</u>	0.3		289.5	0.0		107.4		21.9	10.0	15.7	36.5	56.1	41.7	0.2		\$ 576.3	2012	
<u>\$ 88.4</u>	(13.5) <u>\$ 323.4</u>	\$ 336.9	0.4		300.6	0.0		108.7		21.2	11.6	25.4	29.5	60.8	43.2	0.1		\$ 637.1	2013	
\$ 88.4	0.0 <u>\$ 412.2</u>	<u>\$412.2</u>	1.0		300.1	0.0		112.0		22.2	12.0	16.2	30.4	62.7	44.5	0.1		\$711.3	2014	
\$ 91.2	(2.8) <u>\$ 477.5</u>	<u>\$ 480.2</u>	1.0		320.9	11.4		115.3		23.4	12.3	16.7	31.3	64.5	45.9	0.1		\$ 800.1	2015	PROJECTI
\$ 92.2	(1.0) <u>\$ 466.1</u>	<u>\$ 467.1</u>	1.0		337.5	18.3		118.8		24.5	12.7	17.2	32.2	66.5	47.2	0.1		\$803.7	2016	ED

Source: Actual: City of Chicago, Water Fund Basic Financial Statements as of and for the Years Ended December 31, 2013 And 2012; Projected: City of Chicago, Department of Water Management.

Projected operating revenues reflect an annual increase of approximately 12% in 2014, 12% in 2015 and 0% in 2016.
 Projected operating expenses reflect an annual increase of approximately 0% in 2014, 7% in 2015, and 5% in 2016.

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

Combined Senior and Second Lien Debt Service Coverage <sup>(4)</sup>	3)		-	:	Senior Lien Debt Service	Net Revenues Available for Bonds	1	
1.2x	<u>6.601 \$</u>	0.4	75.7	4.1x	33.8	S 137.1	2009	
l.5x	<u>\$_111.6</u>	0.4	82.1	5.8x	<u>29.1</u>	\$ 169.0	2010	
1.4x	<u>\$ 121.1</u>	0.4	106.6	12.3x	<u> </u>	S 174.0	2011	ACTUAL
2.1x	<u>\$ 131.6</u>	<u> </u>	116.5	19.7x	13.9	\$ 273.6	2012	
2.2x	<u>S 148.4</u>	1.3	125.6	15.0x	21.5	S 323.4	2013	
2.8x	<u>\$ 152.2</u>	2.1	128.6	19.2x	<u>21.5</u>	\$412.2	2014	P
2.7x	<u>\$ 152.2</u> <u>\$ 176.6</u> <u>\$ 190.6</u>	5.1	150.0	22.2x	21.5	S 477.5	2015	ROJECTEL
2.4x	<u>9.061 \$</u>	11.3	157.8	21.7x	<u>21.5</u>	S 466.1	2016	

Source: Actual: City of Chicago, Water Fund Basic Financial Statements as of and for the Years Ended December 31, 2013 And 2012; Projected: City of Chicago, Department of Water Management.

Э The City has entered into interest rate hedge agreements for its Series 2000 Second Lien Bonds and Series 2004 Second Lien Bonds. The City pays interest at a fixed rate of 3.8694 percent per annum on the Series 2000 Second Lien Bonds. The City pays interest at fixed rate of 3.8694 percent per annum on \$179.7 million and 3.8669 percent per annum on \$186.5 million of Series 2004 Second Lien Bonds. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE - Swaps."

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- <u>6</u> adjustment for the direct payment subsidies expected by the City to be received from the U.S. Treasury. Interest for each year includes the full amount of the interest payable on the City's Series 2010B Bonds and Series 2010C Bonds without
- <sup>(3)</sup> After giving effect to the issuance of the Series 2014 Bonds.
- 4 See APPENDIX B - "SUMMARY OF CERTAIN PROVISIONS OF THE ORDINANCE AND THE INDENTURE -Rate Covenant."

### **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 22,318 per week in 2013, 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 collections.

Additionally, the Department of Finance, through its collection system refers any account for service shut-off to the Department of Water Management 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.

Year	Net Water Sales <sup>(1)</sup>	Cash Collected During Year for Current and Prior Years' Sales	Percentage of Sales Collected
2004	\$308,530,361	\$308,167,206	99.9%
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

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

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup>Net of credits to JAWA and DWC through 2004.

### **Pension and Other Post-Employment Benefit Costs**

The Department of Water Management 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 ORDINANCE AND THE INDENTURE – Rate Covenant." The Department of Water Management expects to continue its current practice of treating pension costs as Operation and Maintenance Costs.

Water System employees participate in one of two single-employer defined-benefit pension plans established under State law for City employees: 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 annual contributions to these plans have been funded by a separate property tax levy and a portion of the City's share of the State's personal property replacement tax. The Water System, through the Water Fund, reimburses the City's General Fund for the estimated pension cost applicable to the covered payroll of Water System employees. As discussed above, those reimbursements 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, 2013 AND 2012, REQUIRED SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, STATISTICAL DATA AND INDEPENDENT AUDITORS' REPORT – Notes to Basic Financial Statements – 6. Pension Plans."

Both MEABF and LABF are significantly underfunded. In June 2014, the State enacted legislation, known as P.A. 98-641, that, among other things, requires the City to significantly increase its payments to these plans beginning in 2016 (budgeted in 2015). For 2014, the Department of Water Management budgeted \$13.6 million in the Water Fund to reimburse the City for contributions on behalf of Water System employees enrolled in MEABF and LABF. As a result of P.A. 98-641, the Water System's pension costs, based upon employees allocable to the Water System, are expected to increase to approximately \$25 million in budget year 2015 (paid in 2016) and to slightly more than \$30 million in budget year 2016 (paid in 2017). Thereafter, the Water System's pension costs are expected to increase by an annual average of approximately 25 percent until budget year 2019 (payment year 2020). Beginning in budget year 2020 (payment year 2021), the City's payments to MEABF and LABF (and the Water System's share thereof) will be based upon actuarial funding requirements under P.A. 98-641. Notwithstanding the foregoing, the City reserves the right to change the amount it allocates to the Water Fund in any given year, for employee pension costs allocable to the Water Fund, at any time. For more information on P.A. 98-641, see APPENDIX E - "RETIREMENT FUNDS." Increased Water System operating revenues from scheduled water rate increases are expected to more than offset increases in retirement costs allocable to the Water Fund. See "FINANCIAL OPERATIONS - Historical and Projected Financial Operations."

As described in APPENDIX E – "RETIREMENT FUNDS – Other Post-Employment Benefits," the City and its retirement funds currently share the cost of post-employment healthcare benefits available to City employees participating in the retirement funds (the "Health Plan"). The costs of the Health Plan were previously shared pursuant to a settlement agreement between the City and its retirement funds regarding the responsibility for payment of these healthcare benefits. The settlement agreement expired on June 30, 2013, and the City intends to phase out health benefits for most retirees by 2017. In 2013, the Department of Water Management paid \$5,185,936 from the Water Fund for Health Plan costs allocable to retirees who are former Water System employees. For 2014, the Department of Water Management budgeted \$4,158,052 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 City's plans to phase out the Health

Plan and the settlement agreement, see APPENDIX E – "RETIREMENT FUNDS – Other Post-Employment Benefits."

For additional information on the City's retirement funds, including MEABF and LABF, and the Health Plan, see APPENDIX E – "RETIREMENT FUNDS."

#### 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 Series 2014 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 Scries 2014 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 Series 2014 Bonds.

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 has been delinquent in fully paying for water service since November 2008, with the last partial payment having been received by the City in April 2014. The City's complaint further names five other suburbs which purchase water from Harvey and seeks 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 in a fund other than a water fund and from using its water revenues on anything other than water-related expenses. The City intends to vigorously pursue this case.

### CERTAIN LEGAL MATTERS

Issuance of the Series 2014 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. The proposed form of their opinions is included herein as APPENDIX D — "FORM OF OPINIONS OF 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, Burke Burns & Pinelli, Ltd., Chicago, Illinois, and Greene and Letts, Chicago, Illinois, Co-Disclosure Counsel to the City, and (iii) in connection with APPENDIX E – "RETIREMENT FUNDS" 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 Burke, Warren, MacKay & Serritella, Chicago, P.C., Illinois, Underwriters' Counsel.

### **INDEPENDENT AUDITORS**

The audited financial statements of the Water Fund as of and for the years ended December 31, 2013 and 2012 included as APPENDIX C to this Official Statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein, which includes an emphasis of a matter as beginning net position was restated due to the Water Fund's adoption of Statement No. 65 of the Governmental Accounting Standards Board ("GASB"), *Items Previously Reported as Assets and Liabilities*.

### FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR

The City has retained Acacia Financial Group, Inc. to act as financial advisor (the "Financial Advisor") in connection with the issuance and sale of the Series 2014 Bonds. The Financial Advisor is not obligated to undertake, and has 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. The 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 Series 2014 Bonds.

### UNDERWRITING

The Underwriters have agreed, subject to certain conditions, to purchase from the City (i) the Series 2014 Bonds at a price of \$400,871,091.92 (representing the aggregate principal amount of the Series 2014 Bonds, plus net premium of \$34,835,570.10, less an underwriting discount of \$1,889,478.18).

The Series 2014 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.

Certain of the Underwriters have provided the following information for inclusion in this Official Statement:

"BMO Capital Markets" (one of the Underwriters listed on the cover page of this Official Statement) is the trade name for certain capital markets and investment banking services of the Bank of Montreal and its subsidiaries, including BMO Capital Markets GKST Inc. which is a direct, wholly-owned subsidiary of BMO Financial Corp. which is itself a wholly-owned subsidiary of Bank of Montreal.

"US Bancorp" (one of the Underwriters listed on the cover page of this Official Statement) is the marketing name of U.S. Bancorp and its subsidiaries, including U.S. Bancorp Investments, Inc.

Blaylock Beal Van, LLC ("Blaylock Beal Van" or "BBV," one of the Underwriters listed on the cover page of this Official Statement) has entered into a distribution agreement (the "Agreement") with TD Ameritrade, Inc. ("TD") for the retail distribution of certain municipal securities offerings underwritten by or allocated to Blaylock Beal Van, including the Series 2014 Bonds. Under the Agreement, Blaylock Beal Van will share with TD a portion of the underwriting compensation paid to BBV.

Academy Securities, Inc. (one of the Underwriters listed on the cover page of this Official Statement) intends to enter into distribution agreements (the "Distribution Agreements") with E\*Trade Securities LLC, IFS Securities, TD Ameritrade (agreement with TD Ameritrade is on a deal by deal basis), Ridgeway & Conger Inc., The ISC Group Inc., UBS Financial Services (agreement with UBS is on a deal by deal basis), R Seelaus & Co. Inc, Ladenburg Thalman & Co., World Equity Group Inc., Maxim Group LLC, Bonwick Capital Partners LLC, Newbridge Independent Services, JHS Capital Advisors,

World First Financial Services and National Alliance Services for the retail distribution of certain municipal securities offerings, at the original issue prices. Pursuant to these Distribution Agreements (if applicable for this transaction), Academy Securities Inc. may share a portion of its underwriting compensation with these firms.

Siebert Brandford Shank & Co., L.L.C., (one of the Underwriters listed on the cover page of this Official Statement), has entered into a separate agreement with Credit Suisse Securities USA LLC for retail distribution of certain municipal securities offerings at the original issue prices. Pursuant to said agreement, if applicable to the Series 2014 Bonds, Siebert Brandford Shank & Co., L.L.C. will share a portion of its underwriting compensation with respect to the Series 2014 Bonds, with Credit Suisse Securities USA LLC.

### **TAX MATTERS**

### **Federal Tax Exemption**

Federal tax law contains a number of requirements and restrictions which apply to the Series 2014 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 2014 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 2014 Bonds to become includible in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2014 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 2014 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 2014 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 upon certifications of the City with respect to certain material facts within the City's knowledge relating to the facilities to be financed with the Series 2014 Bonds, the application of the proceeds of the Series 2014 Bonds and certain other matters pertinent to the tax exemption of the Series 2014 Bonds. Co-Bond Counsel's opinions represents 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 2014 Bonds.

Ownership of the Series 2014 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 2014 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 in 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 2014 Bonds. If an audit is commenced, under current procedures the Service will treat the City as the taxpayer and the Series 2014 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 2014 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 2014 Bonds. It cannot be predicted whether or in what form any such proposal might be enacted or whether, if enacted, it would apply to bonds issued prior to enactment. Prospective purchasers of the Series 2014 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.

### **Original Issue Discount**

An amount equal to the excess of the stated redemption price at maturity of any Series 2014 Bonds (the "Discount Bonds") over the initial public offering price of such Discount Bonds, assuming that a substantial amount of such maturity is first sold at such price (the "Offering Price"), will be treated as "original issue discount." With respect to a taxpayer who purchases a Discount Bond in the initial public offering at the Offering Price and who holds such Discount Bond to maturity, the full amount of original issue discount will constitute interest which is not includible in the gross income of the owner of such Discount Bond for Federal income tax purposes to the same extent as current interest and will not be treated as taxable capital gain upon payment of such Discount Bond upon maturity.

The original issue discount on each of the Discount Bonds is treated as accruing daily over the term of such Discount Bond on the basis of a constant yield computed at the end of each six month period (or shorter period from the date of original issue). The amount of original issue discount accruing during such period will be added to the owner's tax basis for the Discount Bonds. Such adjusted tax basis will be used to determine taxable gain or loss upon disposition of the Discount Bonds (including sale, redemption or payment at maturity). An owner of a Discount Bond who disposes of it prior to maturity should consult such owner's tax advisor as to the amount of original issue discount accrued over the period held and the amount of taxable gain or loss upon the sale or other disposition of such Discount Bond prior to maturity.

Owners who purchase Discount Bonds in the initial public offering but at a price different from the Offering Price or who do not purchase Discount Bonds in the initial public offering should consult their tax advisors with respect to the tax consequences of the ownership of such Discount Bonds.

Owners of Discount Bonds should consult their own tax advisors with respect to the state and local tax consequences of owning Discount Bonds. It is possible that under the applicable provisions

governing the determination of state or local income taxes, accrued original issue discount on the Discount Bonds may be deemed to be received in the year of accrual even though there will not be a corresponding cash payment until a later year.

### **Market Discount**

If a Series 2014 Bond is purchased at any time for a price that is less than the Series 2014 Bond's stated redemption price at maturity or, in the case of a Discount Bond, its Offering Price plus accrued original issue discount, the purchaser will be treated as having purchased a Series 2014 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 2014 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 2014 Bond. Purchasers should consult their own tax advisors regarding the potential implications of market discount with respect to the Series 2014 Bonds.

### **Bond Premium**

An investor may purchase a Series 2014 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 2014 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 2014 Bond.

The rules governing amortization of bond premium are complex. Investors who purchase a Series 2014 Bond at a premium should consult their own tax advisors regarding the amortization of bond premium and its effect on the Series 2014 Bond's basis for purposes of computing gain or loss in connection with the sale, exchange, redemption or early retirement of the Series 2014 Bond.

### No State Tax Exemption

Interest on the Series 2014 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2014 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 2014 Bonds. Prospective purchasers of the Series 2014 Bonds should consult their tax advisors regarding the applicability of any such state and local taxes.

#### SECONDARY MARKET DISCLOSURE

The City will enter into a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of the beneficial owners of the Series 2014 Bonds to send certain information annually and to provide notice of certain events to the Municipal Securities Rulemaking Board (the "MSRB") pursuant to the requirements of Rule 15c2-12 adopted by the Commission under the Exchange Act (the "Rule"). 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 that 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 Series 2014 Bonds or the Ordinance and beneficial owners of the Series 2014 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 Series 2014 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series 2014 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 its Annual Financial Information and its Audited Financial Statements (as described below) to the MSRB. The City is required to deliver such information so that the MSRB receives the information by the dates specified in the Undertaking.

"Annual Financial Information" means information generally consistent with that contained under the table included under the caption ""THE WATER SYSTEM – Capital Improvement Program," the tables captioned "Population of Service Area," "Water System Accounts" and "Water System Pumpage and Capacity" under the caption "THE 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 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 Series 2014 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 2014 Bonds, or other material events affecting the tax status of the Series 2014 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;

(1) 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 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 Series 2014 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. A default under the Undertaking shall not be deemed a default under the Series 2014 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 Series 2014 Bonds, as determined by a party unaffiliated with the City (such as the Trustee or cobond counsel), or by approving vote of the owners of the Series 2014 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 Series 2014 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 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.

During 1996 through 2007, the City issued multiple series of Collateralized Single Family Mortgage Revenue Bonds (the "Single Family Bonds"). The trustees for the respective series of the Single Family Bonds are responsible for continuing disclosure filings as the City's dissemination agent under the applicable continuing disclosure undertakings. No annual reports were filed in the following years for the following series: 2004 (2002C and 2002D), 2006 (2000C), 2007 (2006K, 2007A and 2007B), and 2008 (2000C). During 2005-2009, annual reports were filed late for one or more years for the following series: 1996A, 1996B, 1997A, 1997B, 1998A1, 1998C, 1999A, 1999C, 2000A, 2000C, 2001A, 2001C, 2002A, 2002B, 2002C, 2006A, 2006B, 2006C, 2006D, 2006E, 2006F, 2006G, 2006H, 2006I, 2006J, 2007-2A, 2007-2B, 2007-2G and 2007-2H. A material event notice was not filed with respect to a tender offer occurring on June 29, 2011 with respect to the following series: 2006C, 2006I, 2007A, 2007G, 2007-2A, 2007-2C and 2007-2E. With respect to the City's Residual Revenue Capital Appreciation Bonds, Series 2003 (the "Residual Revenue Bonds"), which were payable solely from residual revenues available under the indentures for the Single Family Bonds, Series 1996 through 1999, after payment in full of such bonds, no annual reports were filed by the trustee as the City's dissemination agent with respect to the Residual Revenue Bonds. Redemption notices for the Residual Revenue Bonds were filed by the trustee for January and February 2010, with the Residual Revenue Bonds being fully redeemed in February 2010.

No annual reports were filed by the City in 2008 with respect to three subseries of its General Obligation Direct Access Bonds. No annual report was filed by the City in 2010 with respect to one subseries of such bonds. A material event notice regarding the downgrade of the rating on the City's general obligation bonds by Fitch on October 12, 2009 was not filed for one subseries of such bonds.

Annual reports were not filed by the City in 2010 with respect to one series of the City's Chicago O'Hare International Airport General Airport Revenue Bonds and one series of its Chicago O'Hare International Airport Passenger Facility Charge Revenue Bonds. Annual reports were not filed by the City in 2011 and 2012 with respect to two series of such bonds.

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 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 (other than Single Family 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 and 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 the Bond Insurers, occurring during the last seven years.

### RATINGS

The Series 2014 Bonds have received ratings of "A3" (negative outlook) from Moody's Investors Service ("Moody's"), "AA-" (stable outlook) from Standard and Poor's, a Division of The McGraw-Hill Companies, Inc. ("S&P"), "AA" (stable 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 Series 2014 Bonds may be resold.

### **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 Series 2014 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/ Lois A. Scott 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 SIFMA Municipal Swap Index (or successor) 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 SIFMA Municipal Swap Index (or successor) 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 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.

"Authenticating Agent" means such banking institution as may be appointed by the Chief Financial Officer as authenticating agent for the Series 2014 Bonds, or any successor to it in that capacity appointed by the Chief Financial Officer and any co-authenticating agent separately appointed by the Chief Financial Officer.

"Authorized Denominations" means, with respect to a particular Series 2014 Bond, \$5,000 and any integral multiple of \$5,000.

"Authorized Officer" means each of the persons duly appointed and serving as the City Treasurer, Chief Financial Officer and City Comptroller of 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.

"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, the principal office of any remarketing agent and the office of a Letter of Credit Provider at which drawings under a Letter of Credit are made, 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, payable from the Commercial Paper Account.

"Constitution" means the 1970 Constitution of the State of Illinois.

"Costs of Issuance" means any item of expense payable or reimbursable, directly or indirectly, by the City and related to the authorization, offering, sale, issuance and delivery of Second Lien Bonds, including but not limited to travel and other expenses of any officer or employee of the City in connection with the authorization, offering, sale, issuance and delivery of such Second Lien Bonds, printing costs, costs of preparation and reproduction of documents, filing and recording fees, fees and disbursements of financial advisors, accountants and engineers, initial fees and charges of the Trustee, legal fees and disbursements, fees and disbursements of other consultants and professionals, costs of credit ratings, fees and charges for preparation, execution, transportation and safekeeping of Second Lien Bonds, application fees and premiums on municipal bond insurance, surety bond and credit facility charges and costs.

"Costs of Issuance Account" means the account designated "2014 Second Lien Bonds, Costs of Issuance Account" in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"Debt Service Reserve Account" means any debt service reserve which may be established for a series of Second Lien Bonds.

"Defeasance Obligations" means, to the extent permitted by the Indenture, means (i) cash, (ii) Governmental Obligations, (iii) securities that are described in clause (c) of the definition of Permitted Investments; (iv) securities that are obligations described in clause (f) of the definition of Permitted Investments (A) that have been refunded in advance of their maturity and are, at the time of purchase, rated by at least two Rating Agencies in their highest respective long-term rating categories for comparable types of debt obligations or (B) that have been refunded in advance of their maturity with cash, direct U.S. or U.S. guaranteed obligations, or rated pre-refunded municipals and arc, at the time of purchase, rated by a single Rating Agency in its highest long-term rating category for comparable types of debt obligations, (iv) the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form, or (v) obligations issued by the following agencies which are backed by the full faith and credit of the U.S.: Farmers Home Administration (FmHA) (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financing), U.S. Department of Housing and Urban Development (HUD) (Project Notes, Local Authority Bonds, New Communities Debentures --- U.S. government guaranteed debentures), and U.S. Public Housing Notes and Bonds — U.S. government guaranteed public housing notes and bonds.

"Depository Agreement" means the Depository Agreement dated September 17, 2014 between the City and The Bank of New York Mellon Trust Company, N.A., as depository, pursuant to which funds on deposit in the 2014 Construction Account shall be held and disbursed.

"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.

**"Federal Compliant Obligation Authorization"** means legislation hereafter enacted by the Congress of the United States to provide subsidies, tax credits or other incentives or benefits at various subsidy levels to state and local governments in connection with the issuance of debt obligations by such governments.

**"Federal Subsidies"** means to the extent hereafter provided in Federal Compliant Obligation Authorization, payments by the Treasury Department to the City resulting from subsidies, tax credits or other incentives or benefits to state and local governments in connection with the issuance of debt obligations by such governments.

"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 (a) amounts credited to customers on their bills, such as for payment of the price of purchasing from them capital assets of the water systems, or (b) Federal Subsidies.

"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 May 1, 2015.

"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 2014 Construction Account or any Second Lien Rebate Accounts established under the Indenture.

"Letter of Credit Provider" means the issuer of a letter of credit with respect to which the reimbursement obligation is a Section 2.08 Obligation.

"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 Series 2014 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 April 30, 2014, authorizing the Series 2014 Bonds, the Eighth Supplemental Indenture and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2014 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, <u>provided</u> 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 Eighth Supplemental Indenture as a paying agent for the Series 2014 Bonds, and any successor or successors appointed by an Authorized Officer or the Trustee under the Eighth Supplemental Indenture.

"Payment Date" means any date on which a Principal Installment or interest on any series of Sccond 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, <u>provided</u> 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 <u>et seq</u>. or 31 C.F.R. 350.0 <u>et seq</u>. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of the execution and delivery of the Eighth 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 Series 2014 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 Series 2014 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, <u>provided</u> (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, <u>provided</u> 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 and Interest Account" means the account designated the "Series 2014 Bonds, Principal and Interest Account" established in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"Principal and Interest Account Requirement" means an amount, calculated as of each Deposit Date, equal to the total Principal Installments and interest due on the Series 2014 Bonds on such Deposit Date.

#### "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 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 2014 Bonds, Program Fee Account" established in the 2014 Second Lien Project Bonds Subaccount as described in the Eighth Supplemental Indenture.

"**Project Costs**" means the costs of acquiring, constructing and equipping the Projects, including without limitation, acquisition of necessary interests in property, engineering fees or costs of the City, restoration costs, legal fees or costs of the City and, except with respect to Subordinate Lien Obligations, Senior Lien Bond Costs of Issuance.

"Projects" means the program of improvements and extensions to the Water System designated by the Commissioner of Water Management including, but not limited to constructing and installing water mains; rehabilitating, upgrading, replacing, repairing, renovating, improving and extending facilities at the water purification plants; improving and extending facilities at any or all of the pumping stations; providing any and all necessary facilities, services and equipment to protect and enhance the safety, integrity and security of the Water System; providing new equipment and technology and rehabilitating existing equipment necessary to continue to provide existing customers with the quality and quantity of water required and to meet future customer demand.

"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 Agency" means any nationally recognized securities rating agency.

"Record Date" means, with respect to the Series 2014 Bonds, each April 15 and October 15 (whether or not a Business Day).

"Redemption Price" means with respect to any Series of Series 2014 Bonds, the redemption prices set forth under the caption "DESCRIPTION OF THE SERIES 2014 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 Series 2014 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 Series 2014 Bonds filed with the Office of the City Clerk or the Deputy City Clerk, addressed to the City Council as provided in the Ordinance subject to the priority for the deposit of Net Revenues Available for Bonds established 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.

"Second Lien Bonds" means the 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 Second Lien 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 on the date of or after the issuance of the Series 2014 Bonds which are payable from Second Lien Bond Revenues on an equal and ratable basis with the Series 2014 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 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 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; (ii) with respect to the 2000 Senior Lien Bonds, as of any date of computation, an amount equal to the least of (A) the highest future Senior Lien Debt Service Requirement of all 2000 Senior Lien 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 the 2000 Senior Lien Bonds (less any original issue discount); or (C) 125 percent of the average annual Senior Lien Debt Service Requirement on the 2000 Senior Lien Bonds; and (iii) 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 Bond Ordinance" means the ordinance passed by the City Council on August 4, 1993, authorizing the issuance of the Series 1993 Bonds, and the Senior Lien Bond Determination Certificate of the City Comptroller in connection with the Series 1993 Bonds.

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

"Series 1997 Bond Ordinance" means the ordinance passed by the City Council on June 4, 1997, authorizing the issuance of the Series 1997 Bonds, and the Senior Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 1997 Bonds.

"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" mcans, collectively, the 2000 Senior Lien Bonds, the 2000 Second Lien Bonds and the 2000 Subordinate Lien Obligations of the City which are Outstanding from time to time.

"Series 2001 Bonds" means the 2001 Second Lien Bonds and the 2001 Subordinate Lien Obligations which are Outstanding from time to time.

"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 Senior 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 Second Lien Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2004 Bonds.

"Series 2004 Second Lien Bonds" means the Second Lien Water Revenue Refunding Bonds, Series 2004, of the City, which are Outstanding from time to time.

"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 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 Bond Ordinance" means the ordinance passed by the City Council on September 27, 2007, authorizing, among other things, the issuance of the Series 2008 Second Lien Bonds, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2008 Second Lien Bonds.

"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 2010 Second Lien Bond Ordinance" means the ordinance passed by the City Council on September 8, 2010, authorizing, among other things, the issuance of the Series 2010 Second Lien Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2010 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 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 Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2012 Second Lien Bonds.

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"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 2014 Second Lien Project Bonds authorized by the Ordinance which are Outstanding from time to time.

"Series 2014 Current Projects" means those improvements to the Water System financed with amounts on deposit in the 2014 Construction Account.

"Series 2014 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 Series 2014 Bond Proceeds — Deposits into 2014 Second Lien Project Bonds Subaccount and Accounts Therein."

"Series 2014 Project Costs" means the Project Costs related to the Series 2014 Current Projects.

"SIFMA Municipal Swap Index" means the "Securities Industry and Financial Markets Association Municipal Swap Index" as of the most recent date for which such index was produced by Municipal Market Data, a division of Thomson Financial Services ("MMD"). The SIFMA Municipal Swap Index is a 7-day high grade market index comprised of tax-exempt variable rate demand obligations from MMD's extensive database. If such index is no longer produced by MMD, then "SIFMA Municipal Swap Index" means such other reasonably comparable index selected by the City.

#### "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 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 Eighth Supplemental Indenture.

**"Tax Regulatory Agreement"** means the Tax Regulatory Agreement of the City relating to the Series 2014 Bonds.

**"Trust Estate"** means the property conveyed to the Trustee pursuant to the granting clauses of the Master Indenture and each Supplemental Indenture.

**"2000 Second Lien Bonds"** means the Second Lien Water Revenue Bonds, Series 2000, of the City which are Outstanding from time to time.

**"2000 Senior Lien Bonds"** means the Senior Lien Water Revenue Bonds, Series 2000, 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 Senior Lien Bond Ordinance.

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

**"2008 Subordinate Lien Obligations"** means the Loans authorized by and defined in the Series 2008 Senior 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.

**"2014 Construction Account"** means the Construction Account: 2014 Second Lien Project Water Revenue Bonds established pursuant to the Ordinance, as described in the Eighth Supplemental Indenture.

**"2014 Second Lien Project Bonds Subaccount"** means the 2014 Second Lien Project Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Ordinance, as described in Eighth Supplemental Indenture.

"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 the Series 2014 Current Projects and 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.

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# 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 Series 2014 Bonds. The Series 2014 Bonds are issued under the Ordinance and the Indenture as Second Lien Bonds.

The Series 2014 Bonds shall be limited obligations of the City having a claim for payment of principal, redemption premium and interest solely from amounts in the 2014 Second Lien Project Bonds Subaccount of the Second Lien Bonds Account, the sources pledged under the Indenture and from amounts on deposit in the 2014 Construction Account and, together with any Outstanding and Second Lien Parity Bonds, from Second Lien Bond Revenues. The Series 2014 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 2014 Second Lien Project Bonds Subaccount and the 2014 Construction Account is granted to the Registered Owners of the Series 2014 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," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction Account," "–2014 Second Lien Project Bonds Subaccount and 2014 Construction 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 Series 2014 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 Second 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 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 Bonds, as applicable, and (iii) any net payments due on other Senior Lien Bonds or Second Lien Bonds, as applicable, and (iii) any net payments due on other Senior Lien Bonds or Second Lien Bonds, as applicable, and (iii) any net 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.

#### **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 ordinances authorizing the issuance of Senior Lien Bonds, 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 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 with respect to all Second Lien Bonds Outstanding and all Section 2.08 Obligations and Section 2.09 Obligations, 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 arc 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 Subordinate Lien Obligations Account), Commercial Paper 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 Subordinate Lien Obligations Account), Commercial Paper Notes (but solely with respect to amounts on deposit in the Commercial Paper 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).

The Water Fund is used 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; <u>provided</u> 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 Ordinance (other than the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account and the Line of Credit Notes Account) and in the 2014 Construction 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 Ordinance, 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 Ordinance 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, Line of Credit Notes Account and 2014 Construction 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 Ordinance.

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 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 Ordinance, 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).

All or any part of the Senior Lien Debt Service Reserve Requirement for any series of (3) 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 Scnior Lien Dcbt 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 Ordinance.

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 Ordinance. 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 ordinances authorizing the various series of Senior Lien Bonds.

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 Series 2014 Bonds a separate and segregated 2014 Second Lien Project 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 Eighth 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 Licn Bonds. See "-2014 Second Lien Project Bonds Subaccount and 2014 Construction Account" below.

<u>Subordinate Lien Obligations Account</u>. 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 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.

<u>Commercial Paper Account</u>. 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.

#### 2014 Second Lien Project Bond Subaccount and 2014 Construction Account

Moneys on deposit in the 2014 Second Lien Project Bond 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 Series 2014 Bonds. In the Eighth Supplemental Indenture, the City creates and establishes with the Trustee separate Accounts within the 2014 Second Lien Project Bond Subaccount as follows:

- (i) the Costs of Issuance Account;
- (ii) the Program Fee Account; and
- (iii) the Principal and Interest Account.

#### **Application of Series 2014 Bond Proceeds**

The aggregate proceeds received by the City from the sale of the Series 2014 Bonds (exclusive of underwriters' discount), shall be applied as follows:

(i) the Trustee shall deposit into the Costs of Issuance Account the amount necessary to pay the Costs of Issuance of the Series 2014 Bonds; and

(ii) the balance of the proceeds of the Series 2014 Bonds shall be deposited in the 2014 Construction Account, which shall be held pursuant to the Depository Agreement. Amounts on deposit in the 2014 Construction Account shall be applied as described under "Use of Moneys in 2014 Construction Account," below.

**Deposits into 2014 Second Lien Bond Project Subaccount and Accounts Therein.** On the date of initial issuance of the Series 2014 Bonds, there shall be deposited in the Principal and Interest Account and the Program Fee Account the amounts required by the Ordinance. On each Deposit Date, there shall be deposited into the 2014 Second Lien Bond Project 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 Authorized 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 2014 Deposit Requirement"):

(a) for deposit into the Principal and Interest Account, an amount equal to the Principal and Interest Account Requirement; and

(b) 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 2014 Deposit Requirement, there shall be deposited into the 2014 Second Lien Bond Project Subaccount any other moneys received by the Trustee under and pursuant to the Indenture, including the Eighth Supplemental Indenture, when accompanied by directions from the person depositing such moneys that such moneys are to be paid into the 2014 Second Lien Bond Project Subaccount or to one or more accounts in that Subaccount.

Upon calculation by the Trustee of each Series 2014 Deposit Requirement, the Trustee shall notify the City of the Series 2014 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 Principal and Interest Account. Moneys in the Principal and Interest Account shall be used solely for the payment of the principal of, premium, if any, and interest on the Series 2014 Bonds, for the redemption of the Series 2014 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 2014 Bonds (including the optional redemption of the Series 2014 Bonds pursuant to the Eighth Supplemental Indenture and not otherwise provided for, and with respect to Section 2.08 Obligations and Section 2.09 Obligations and Section 2.09 Obligations, shall be derived from moneys held in the 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.

Use of Moneys in Costs of Issuance Account and Program Fee Account. Moneys deposited into the Costs of Issuance Account shall be used solely for the payment of Costs of Issuance of the Series 2014 Bonds as directed in a certificate of the City filed with the Trustee. If, after the earlier to occur of (i) payment of all Costs of Issuance payable from such Account, as specified in a certificate of the City filed with the Trustee or (ii) March 17, 2015, there shall be any balance remaining in the Costs of Issuance Account, any such balance shall be transferred to the 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 Series 2014 Bonds as set forth in a certificate of the City filed with the Trustee.

Use of Moneys in 2014 Construction Account. Except as otherwise provided in the Ordinance and the Eighth Supplemental Indenture, and subject to the provisions of and limitations contained in the Tax Regulatory Agreement, (i) moneys on deposit in the 2014 Construction Account shall be disbursed and applied to pay, or to reimburse the payment of, Project Costs related to the Series 2014 Current Projects.

#### **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, Aggregate Second Lien Debt Service or Aggregate Subordinate 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 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. In the Eighth Supplemental Indenture, the City covenants to take any action required by the provisions of the Code and within its power to take in order to preserve the exclusion of interest on the Series 2014 Bonds from gross income for federal income tax purposes, including, but not limited to, the provisions of Section 148 of the Code relating to "arbitrage bonds."

(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 carnings 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 scrics 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 Trustce 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, an any manner provided by law the moneys adjudged to be payable.

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 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 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 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 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 Indenture, except that such direction shall not be otherwise than in accordance with law or the provisions of the 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 Indenture, or for the protection or enforcement of any right or remedy under the 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 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 Indenture or for any other remedy under the Indenture or under law.

#### Supplemental Indentures without Consent of Registered 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.

#### Supplemental Indenture with Consent of Registered 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 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 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 SERIES 2014 BONDS — Book-Entry System" is discontinued and certificates representing replacement Series 2014 Bonds are delivered to the Registered Owners, payment of principal of and interest on the Series 2014 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 Series 2014 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 Series 2014 Bonds are payable only upon presentation and surrender of such replacement Series 2014 Bonds at the principal corporate trust office of the Trustee.

#### **APPENDIX C**

#### CITY OF CHICAGO, ILLINOIS WATER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, REQUIRED SUPPLEMENTARY AND ADDITIONAL INFORMATION 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, 2013 and 2012, Required Supplementary Information, Additional Information, Statistical Data, and Independent Auditors' Report

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# CITY OF CHICAGO, ILLINOIS WATER FUND

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# TABLE OF CONTENTS

	Page
INDEPENDENT AUDITORS' REPORT	1–2
MANAGEMENT'S DISCUSSION AND ANALYSIS	3–10
BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012:	
Statements of Net Position	11
Statements of Revenues, Expenses, and Changes in Net Position	12
Statements of Cash Flows	13–14
Notes to Basic Financial Statements	15-35
ADDITIONAL SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED DECEMBER 31, 2013 — Schedule of Utility Plant	36
STATISTICAL DATA:	37
Changes in Net Position, Three Years Ended December 31, 2011–2013	38
Net Position by Components, Three Years Ended December 31, 2011–2013	39
Historical Financial Operations, Ten Years Ended December 31, 2004-2013	40
Water System Accounts, Ten Years Ended December 31, 2004–2013	41
Ten Largest Suburban Customers, for the Year Ended December 31, 2013	42
Revenue Bond Coverage, Ten Years Ended December 31, 2004–2013	43
Long-Term Debt, Three Years Ended December 31, 2011–2013	44
Capital Improvement Program, 2014–2018	45
Water System Pumpage and Capacity, Ten Years Ended December 31, 2004–2013	46
Miscellaneous Statistical Data, for the Years Ended December 31, 2013 and 2012	47
Operating Information by Function, Three Years Ended December 31, 2011–2013	48
Population of Service Area Last Five Census Periods, 1970–2010	49
Principal Employers (Nongovernment), for the Year Ended December 31, 2013, and Nine Years Ago	50
Population and Income Statistics, Ten Years Ended December 31, 2004–2013	51

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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, 2013 and 2012, 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 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 financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 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, 2013 and 2012, and the changes in its financial position and its cash flows thereof 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, 2013 and 2012, changes in its financial position, or where applicable, 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.

As discussed in Notes 1 and 10 to the basic financial statements, prior year amounts were restated due to the Water Fund's adoption of Statement 65 of the Governmental Accounting Standards Board (GASB), *Items Previously Reported as Assets and Liabilities.* 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.

Deloite & Jouche ILP

June 30, 2014

#### 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, 2013 and 2012. Please read this discussion in conjunction with the Water Fund's basic financial statements and the notes to basic financial statements following this section. Due to the implementation of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* ("GASB 65") in fiscal year 2013, as described in Note 10 to the basic financial statements, 2012 and 2011 numbers within the management's discussion and analysis have been restated retroactively.

#### FINANCIAL HIGHLIGHTS

#### 2013

- Operating 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 17,427 accounts from non-metered to metered.
- Operating expenses before depreciation and amortization for 2013 increased by \$11.1 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.

#### 2012

- Operating revenues for 2012 increased by \$122.1 million compared to 2011 operating revenues. This increase is primarily due to a water rate increase of 25% and increase in usage in the drought summer of 2012.
- Operating expenses before depreciation and amortization for 2012 increased by \$7.3 million compared to 2011 mainly due to increase in costs of fringe benefits to employees, Water Fund's share of indirect costs, and diesel and gasoline costs offset by decrease in costs of sediment disposals.
- The Water Fund's restated net position at December 31, 2012, was \$1,251.4 million. This is an increase of \$158.1 million over net position at December 31, 2011.
- Utility plant additions in 2012 were \$318.9 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, 2013, the Water Fund's financial position continued to be strong with total assets and deferred outflows of \$3,827.7 million, total liabilities of \$2,380.7 million, and net position of \$1447.0 million. A comparative condensed summary of the Water Fund's net position at December 31, 2013, 2012 and 2011, is as follows:

		Net Assets	
(In thousands)	2013	2012	2011
Current assets	\$ 310,830	\$ 294,077	\$ 196,738
Restricted and other assets	223,135	441,220	229,599
Utility plant — net	3,181,856	2,861,340	2,594,391
Deferred outflows	111,907	162.570	167,064
Total assets and deferred outflows	\$3,827,728	\$3,759,207	\$3,187,792
Current liabilities	\$ 134,443	\$ 147,844	\$ 132,903
Long-term liabilities and payable from restricted assets	2,246,308	2,359,989	1,961,607
Total liabilities	\$2,380,751	\$2,507,833	\$2,094,510
Net position:			
Net investment in capital assets	\$ 1,233,185	\$1,062,234	\$1,046,104
Restricted for capital projects	719	1,308	209
Unrestricted	213.073	187,832	46,969
Total net position	<u>\$ 1,446,977</u>	\$1.251,374	<u>\$1.093,282</u>

#### 2013

Current assets of \$310.8 million at December 31, 2013, increased by \$16.7 million (5.7%) 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 offset by a decrease in cash and cash equivalents of \$80.8 million. Restricted and other assets decreased by \$218.1 million (49.4%) primarily due to the funding of the capital improvement program and utility plant — net increased by \$320.5 million (11.2%). 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 \$13.4 million (9.1%) 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 and payable from restricted assets decreased by \$113.7 million (4.8%) 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.

#### 2012

Current assets of \$294.1 million at December 31, 2012, increased by \$97.3 million (49.5%) over 2011 as a result of increases in cash and cash equivalents of \$56.6 million, investments of \$10.2 million, and accounts receivable of \$26.5 million resulting from an increase in water rates. Restricted and other assets increased by \$213.7 million (89.6%) primarily due to the funding of the capital improvement program through the issuance of long-term debt and utility plant — net increased by \$266.9 million (10.3%) due to the ongoing capital improvement.

The increase in current liabilities of \$14.9 million (11.2%) during 2012 is directly related to the timing of payments of accounts payable and increases in accrued liabilities and unearned revenue offset by decrease in due to other city funds. Long-term liabilities and payable from restricted assets increased by \$400.9 million (20.8%) mainly due to debt issuances 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, 2012, net position was \$1,251.4 million, an increase of \$158.1 million (14.5%) over 2011.

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, 2013, 2012, and 2011, is as follows:

	Revenues, Expenses, and Changes in Net Position		
(In thousands)	2013	2012	2011
Revenues: Operating revenues			
Water sales Other operating revenues	\$ 620,498 <u>16,616</u>	\$ 562,572 13,715	\$ 441,769 12,452
Total operating revenues	637,114	576,287	454,221
Nonoperating revenues	963	1,429	4,163
Total revenues	638,077	577,716	458,384
Expenses: Operating expenses Depreciation and amortization Interest expense	300,592 49,630 92,252	289,465 48,408 81,751	282,164 47,112 86,522
Total expenses	442,474	419,624	415,798
Change in net position	195,603	158,092	42,586
Net position — beginning of year, as restated	1,251,374	1,093,282	1,050,696
Net position — end of year	<u>\$1,446,977</u>	<u>\$1,251,374</u>	\$1,093,282

#### 2013

Water sales and other operating revenues comprise the Water Fund's \$637.1 million operating revenues. Water sales and other operating revenues for 2013 were \$620.5 million and \$16.6 million, respectively. The increase in 2013 operating revenues of \$60.8 million (10.6%) from 2012 was primarily due to a 15% water rate increase offset by the conversion of 17,427 non-metered accounts to metered and a decrease in consumption resulting from a cooler summer in 2013.

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

#### 2012

Water sales and other operating revenues comprise the Water Fund's \$576.3 million operating revenues. Water sales and other operating revenues for 2012 were \$562.6 million and \$13.7 million, respectively. The increase in 2012 operating revenues of \$122.1 million (26.9%) from 2011 was primarily due to a 25% increase in water rates and increase in usage resulting from a drought summer in 2012.

In 2012, net nonoperating revenues of \$1.4 million were composed mainly of federal grants received for water mains replacement and net forced account totaling \$1.2 million.

A comparative summary of the Water Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2013, 2012, and 2011, is as follows:

	Operating Expenses		
(In thousands)	2013	2012	2011
Source of supply	\$ 99	\$ 168	\$ 185
Power and pumping	43,230	41,728	38,182
Purification	60,836	56,136	66,471
Transmission and distribution	29,496	36,494	38,985
Provision for doubtful accounts	25,400	15,714	13,947
Customer accounting and collection	11,615	10,004	10,663
Administrative and general	21,188	21,861	17,143
Central services and General Fund reimbursements	108,728	107,360	96,588
Operating expenses before depreciation and amortization	300,592	289,465	282,164
Depreciation and amortization	49,630	48,408	47,112
Total operating expenses	\$350,222	\$337,873	\$329,276

#### 2013

Operating expenses before depreciation and amortization for the year ended 2013 increased by \$11.1 million (3.8%) from the year ended 2012 due to increases in provision for doubtful accounts of \$9.7 million (61.6%) and 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.

#### 2012

Operating expenses before depreciation and amortization for the year ended 2012 increased by \$7.3 million (2.6%) from the year ended 2011 due to an increase in central services and General Fund reimbursements of \$10.8 million (11.2%) primarily due to an increase in fringe benefits to employees of about \$6.3 million, increase in the Water Fund's share of indirect costs of about \$4.7 million, increase in power and pumping of about \$3.5 million (9.3%) and increase in administrative and general of about \$4.7 million (27.5%) this was offset by a decrease in purification of about \$10.3 million (15.5%) resulting from a decrease in costs of sediment disposals of about \$11.7 million.

A comparative summary of the Water Fund's cash flows for the years ended December 31, 2012, 2011, and 2010, is as follows:

	Cash Flows		
(In thousands of dollars)	2013	2012	2011
Cash from activities:			
Operating	\$ 310,205	\$ 270,821	\$ 176,651
Capital and related financing	(520,166)	4,282	(265,251)
Investing	122,961	(209,656)	(33,168)
Net change in cash and cash equivalents	(87,000)	65,447	(121,768)
Cash and cash equivalents:			
Beginning of year	123,531	58,084	179,852
End of year	<u>\$ 36,531</u>	<u>\$ 123,531</u>	<u>\$ 58,084</u>

#### 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.

#### 2012

As of December 31, 2012, the Water Fund's cash and cash equivalents of \$123.5 million increased from December 31, 2011, by \$65.4 million mainly due to the cash provided of \$270.8 from operating activities, cash provided by issuance of bonds and notes of \$447.5 million offset by cash used in acquisition and construction of capital assets of \$254.8 million and net cash used in investing activities of \$209.7 million. Total cash and cash equivalents at December 31, 2012, are composed of unrestricted and restricted cash and cash equivalents of \$84.4 million and \$39.1 million, respectively.

#### UTILITY PLANT AND DEBT ADMINISTRATION

#### 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).

#### 2012

At the end of 2012 and 2011, the Water Fund had \$2,861.3 million and \$2,594.4 million, respectively, invested in utility plant, net of accumulated depreciation. During 2012, the Water Fund expended \$318.9 million on capital activities. This included \$2.2 million for structures and improvements, \$133.9 million for distribution plant, \$5.8 million for equipment, and \$177.2 million for construction in progress.

During 2012, net completed projects totaling \$63.7 million were transferred from construction in progress to applicable capital accounts. The major completed projects were related to installation and replacements of water mains (\$63.4 million).

The Water Fund's utility plant at December 31, 2013, 2012, and 2011, is summarized as follows:

	Net Utility Plant at Year-End			
(In thousands)	2013	2012	2011	
Utility plant not depreciated:				
Land and land rights	\$ 5,083	\$ 5,083	\$ 5,083	
Construction in progress	317,086	262,280	148,871	
Total utility plant not depreciated	322,169	267,363	153,954	
Utility plant being depreciated:				
Structures and improvements	535,802	535,710	534,472	
Distribution plant	2,590,751	2,305,803	2,111,790	
Equipment	647,530	620,775	617,159	
Total utility plant being depreciated	3,774,083	3,462,288	3,263,421	
Less accumulated depreciation:				
Structures and improvements	(197,555)	(190,278)	(182,537)	
Distribution plant	(394,281)	(372,090)	(351,343)	
Equipment	(322,560)	(305,943)	(289,104)	
Total accumulated depreciation	(914,396)	(868,311)	(822,984)	
Total utility plant being depreciated — net	2,859,687	2,593,977	_2,440,437	
Total utility plant — net	\$3,181,856	\$2,861,340	\$2,594,391	

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.

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The Water Fund's long-term liabilities at December 31, 2013, 2012, and 2011, are summarize as follows:

	Long-Term Liabilities at Year-End			
(In thousands)	2013	2012	2011	
Revenue bonds and notes payable Add:	\$ 1,996,858	\$2,030,177	\$1,721,188	
Accretion of Capital Appreciation Bonds	43,885	47,658	46,946	
Bond discount/premium	66,934	71,041	30,498	
Total revenue bonds/notes payable net	2,107,677	2,148,876	1,798,632	
Less current portion of accretion	(9,169)	(8,749)	(4,493)	
Less current bonds/notes payable	(43,846)	(42,232)	(44,448)	
Total long-term revenue bonds/notes payable — net	2,054,662	2,097,895	1,749,691	
Derivative instrument liability	78,246	126,371	128,386	
Long-term purchase obligations		1,027	3,290	
Water pipe extension certificates	1,577	1,576	1,590	
Total long-term liabilities	\$2,134,485	\$2,226,869	\$1,882,957	

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, 2013, have underlying credit ratings with each of the three major rating agencies as follows:

	Moody's Investor Services	Standard & Poor's	Fitch Ratings
Senior Lien Water Revenue Bonds	A1	AA	AA+
Second Lien Water Revenue Bonds	A2	AA-	AA

In March 2014, Moody's Investors Service 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.

At December 31, 2013, 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.

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# STATEMENTS OF NET POSITION AS OF DECEMBER 31, 2013 AND 2012 (In thousands)

Total noncurrent assets Total assets DEFERRED OUTFLOWS TOTAL ASSETS AND DEFERRED OUTFLOWS	Less accumulated deprectation	Construction in progress 	Utility plant (Note 5): Land and land rights Structures and improvements Distribution plant Foundament	NONCURRENT ASSETS: Other assets	Cash and cash equivalents Investments Interest receivable Total restricted assets	Inventories Current unrestricted assets Restricted assets (Notes 2 and 3):	Accounts receivable — net of allowance for doubtful accounts of approximately \$85,277 in 2013 and \$64,161 in 2012 Interest receivable Due from other City funds	ASSETS AND DEFERRED OUTFLOWS CURRENT ASSETS: Cash and cash equivalents (Note 2) Investments (Note 2)
3,186,990 3,715,821 111,907 \$ 3,827,728	<u>(914,396)</u> 3.181.856	4,096,252	5,083 535,802 2,590,751 647 530	5,134	32,915 184,367 719 218,001	<u>21,839</u> 310,830	136,367 77 19,435	<b>2013</b> 3,616 129,496
2,866,711 3,596,637 162,570 5 3,759,207	<u>(868,311)</u> 2.861.340	262,280 3,729,651	5,083 535,710 2,305,803	5,371	39,102 395,439 1,308 435,849	17,356 294,077	127,390 107 20,607	<b>2012</b> S 84,429 44,188
TOTAL	Unrestricted Total net position	NET POSITION (Note 1): Net investment in capital assets Restricted for capital projects	Total noncurrent liabilities Total habilities	Long-term debt — net of current maturities (Note 4) Derivative instrument liability Long-term purchase obligation (Note 4) Water pipe extension certificates	Current portion of long-term debt (Note 4) Total liabilities payable from restricted assets NONCURRENT LIABILITIES:	LIABILITIES PAYABLE FROM RESTRICTED ASSETS Accounts payable Due to other City funds Interest payable	Accrued hiabilities Unearned revenue Total current habilities	LIABILITIES CURRENT LIABILITIES: Accounts payable Due to other City funds
S 3.827,728	1,446,977	1,233.185	2,134,485 2,380,751	2,054,662 78,246 1,577	53,015 111,823	41,764 1,070 15,974	78,396 21,250 134,443	<b>2013</b> S 20,650 14.147
S 3.759.207	1,251,374	1,062,234	2.226,869 2.507,833	2.097,895 126,371 1,027 1,576	50,981 133,120	63,094 2,693 16,352	82.296 26.746 147.844	<b>2012</b> \$ 30,299 8.503

See notes to basic financial statements.

#### STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

	2013	2012
OPERATING REVENUES:		
Water sales	\$ 620,498	\$ 562,572
Other operating revenues	16,616	13,715
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Total operating revenues	637,114	576,287
OPERATING EXPENSES:		
Source of supply	99	168
Power and pumping	43,230	41,728
Purification	60,836	56,136
Transmission and distribution	29,496	36,494
Provision for doubtful accounts	25,400	15,714
Customer accounting and collection	11,615	10,004
Administrative and general	21,188	21,861
Central services and General Fund reimbursements	108,728	107,360
Total operating expenses before depreciation and amortization	300,592	289,465
OPERATING INCOME BEFORE DEPRECIATION AND		
AMORTIZATION	336,522	286,822
DEPRECIATION AND AMORTIZATION	49,630	48,408
OPERATING INCOME	286,892	238,414
NONOPERATING REVENUES (EXPENSES):		
Interest income	420	270
Interest expense	(92,252)	(81,751)
Other	543	1,159
Total nonoperating expenses — net	(91,289)	(80,322)
CHANGE IN NET POSITION	195,603	158,092
TOTAL NET POSITION — Beginning of year, as restated	1,251,374	1,093,282
TOTAL NET POSITION — End of year	<u>\$1,446,977</u>	<u>\$1,251,374</u>

See notes to basic financial statements.

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#### STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

	2013	2012
CASH FLOWS FROM OPERATING ACTIVITIES:		
Received from customers	\$ 596,613	\$ 546,056
Transactions with other City funds	(61,653)	(80,972)
Payments to vendors	(113,227)	(84,738)
Payments to employees	(111,528)	(109,525)
Net cash provided by operating activities	310,205	270,821
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(370,228)	(254,843)
Interest paid	(107,900)	(91,514)
Proceeds from issuance of bonds and IEPA loans	276	447,538
Principal paid on bonds Payments of refunded bonds	(42,439)	(59,859) (35,595)
Payments of bonds issuance costs	(418)	(2,604)
Construction reimbursements	543	1,159
Net cash (used in) provided by capital and related financing activities	(520,166)	4,282
CASH FLOWS FROM INVESTING ACTIVITIES:		
Sales and purchases of investments — net	125,764	(212,113)
Investment interest	(2,803)	2,457
Net cash provided by (used in) investing activities	122,961	(209,656)
NET CHANGE IN CASH AND		
CASH EQUIVALENTS	(87,000)	65,447
CASH AND CASH EQUIVALENTS — Beginning of year	123,531	58,084
CASH AND CASH EQUIVALENTS — End of year	<u>\$ 36,531</u>	<u>\$ 123,531</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS REPORTED IN THE STATEMENTS OF NET POSITION:		
Unrestricted	\$ 3,616	\$ 84,429
Restricted	32,915	39,102
TOTAL	<u>\$ 36,531</u>	<u>\$ 123,531</u>
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(Continued)

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#### STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (In thousands)

	2013	2012
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$ 286,892	\$238,414
Adjustments to reconcile:		
Depreciation and amortization	49,630	48,408
Provision for doubtful accounts	25,400	15,714
Changes in assets and liabilities:		
Increase in accounts receivable	(35,005)	(42,570)
Increase in inventories	(4,483)	(1,011)
Decrease (increase) in due from other City funds	1,172	(3,100)
(Decrease) increase in unrestricted accounts payable	(9,649)	
Increase (decrease) in due to other City funds	5,644	(9,709)
(Decrease) increase in accrued liabilities	(3,900)	11,176
Decrease in water pipe extension certificate		(13)
(Decrease) increase in unearned revenue	(5,496)	12,352
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$310,205	<u>\$270,821</u>
SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS — Property additions in 2013 and 2012 of \$42,834 and \$65,787, respectively, have outstanding accounts payable.		

See notes to basic financial statements.

(Concluded)

#### NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012 (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 and unamortized loss on bond refundings.

**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 Discounts, and Refunding Transactions** — Bond issuance costs related to bond insurance 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, net of interest income, on construction bond proceeds is 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 2013 and 2012 totaled \$17.0 million and \$23.0 million, respectively.

**Revenue Recognition** — Revenue from water sales is recognized when the water is consumed by customers. Of the accounts receivable balances, \$63.6 million and \$50.0 million represent revenue recognized on water sales, which had not yet been billed to customers at December 31, 2013 and 2012, respectively. Unearned revenue represents amounts billed to nonmetered 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 — In March 2012, the GASB issued GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* ("GASB 65"). The objective of this statement is to establish accounting and financial reporting standards that reclassify, as deferred outflows of resources or deferred inflows of resources, certain items that were previously reported as assets and liabilities and recognizes, as outflows of resources or inflows of resources, certain items that were previously reported as assets and liabilities. The financial reporting impact resulting from the implementation of GASB 65 is primarily the change in terminology from long term liabilities to deferred outflows for unamortized loss on refundings. Bond issuance costs (excluding costs related to bond insurance) and certain other assets have been written off as of January 1, 2012. GASB 65 is effective for the Water Fund's financial statements for the fiscal year ending December 31, 2013, resulting in a restatement of net position as of January 1, 2012, see Note 10.

In March 2012, the GASB issued GASB Statement No. 66, *Technical Corrections -2012- an amendment* of GASB Statements No. 10 and No. 62 ("GASB 66"). The objective of this statement is to improve accounting and financial reporting for a governmental financial reporting entity by resolving conflicting guidance that resulted from the issuance of two pronouncements, Statements No. 54, *Fund Balance* Reporting and Governmental Fund Type Definitions, and No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. There was no impact on the Water Fund's financial statements as a result of the implementation of GASB 66.

**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 Water Fund 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 long-term obligation for pension benefits as a liability 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.

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 will be effective for the Water Fund beginning with its year ending 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.

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 will be effective for the Water Fund beginning with its year ending 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. 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.

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.

#### 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, 2013, are as follows (in thousands):

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

**Cash Equivalents and Investments** — The Water Fund's cash equivalents and investments as of December 31, 2012, are as follows (in thousands):

	Less than 1	1–5	6–10	More than 10	Fair Value
U.S. agencies Certificates of deposit and	\$11,519	\$186,844	\$157,329	\$ -	\$355,692
other short-term Commercial paper	39,559 1,300	12 507			39,559 1,300
Corporate bonds Municipal bonds		12,507 	8,029	<u> </u>	12,507 27,241
Subtotal	\$52,378	\$218,563	<u>\$ 165,358</u>	<u>\$ -</u>	436,299
Share in City's pooled funds					60,431
Total					\$496,730

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, 2013 and 2012, is as follows (in thousands):

Quality Rating	2013	2012
Aaa/AAA Aa/AA	\$ 246,556	\$ 8,018 373,085
A/A P1/A1	4,378	4,417 1,300
Not rated	22,622	49,479
Total	\$273,556	\$436,299

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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 \$490.6 million. Of the bank balance, 99% was either insured or collateralized with securities held by City agents in the City's name. \$4.0 million was uncollateralized at December 31, 2013, and thus was subject to custodial credit risk.

Investments reported in the basic financial statements as of December 31, 2013 and 2012, are summarized as follows (in thousands):

	2013	2012
Per Note 2:		
Investments — Water Fund	\$273,556	\$436,299
Investments — City Treasurer Pooled Fund	75,466	60,431
	\$349,022	<u>\$496,730</u>
Per financial statements:		
Restricted investments	\$184,367	\$ 395,439
Unrestricted investments	129,496	44,188
Investments included as cash and cash equivalents on the		
statements of net assets	35,159	57,103
	\$ 349,022	\$496,730

#### 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, 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, 2013 and 2012, are as follows (in thousands):

	2013	2012
Senior lien debt service reserve	\$ -	\$ 3,563
Second lien revenue bonds	17,276	30,472
Water rate stabilization	88,397	74,897
Construction	111,609	325,609
Total	\$217,282	<u>\$434,541</u>

At December 31, 2013 and 2012, 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, 2013 and 2012, consisted of the following (in thousands):

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	2013	2012
\$49,880 Series 1993 Water Revenue Refunding Bonds, issued October 1, 1993, due through 2016; interest at 4.125% to 6.5%	\$ 15,810	\$ 20,635
\$277,911 Series 1997 Water Revenue Bonds, issued September 1, 1997, due through 2019; interest at 3.9% to 5.25%	14,019	17,389
\$100,000 Series 2000 Second Lien Water Revenue Bonds, issued December 22, 1999, due 2030, variable floating interest rate; interest at 3.8694%	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%	19,153	22,664
81,500 Series 2001 Second Lien Water Revenue Refunding Bonds, issued December 13, 2001, due 2030; interest at 3.0% to 5.75%	80,900	80,945
52,292 Illinois Environmental Protection Agency Loan Agreement, signed June 30, 2003, due 2025; interest at 2.57%	1,799	1,926
\$3,605 Illinois Environmental Protection Agency Loan Agreement, signed October 16, 2003, due 2022; interest at 2.905%	1,912	2,095
\$500,000 Series 2004 Second Lien Water Revenue Refunding Bonds, issued August 5, 2004, due through 2031, variable floating interest rate;	366,150	376,300
\$215,400 Series 2006A Second Lien Water Revenue Bonds, issued July 26, 2006, due through 2036; interest at 4.5% to 5.0%	188,985	193,330
\$549,915 Series 2008 Second Lien Water Revenue Bonds, issued April 2, 2008, due through 2038; interest at 4.0% to 5.25%	485,745	500,710
\$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%	5,465	5,734
\$9,077 Illinois Environmental Protection Agency Loan Agreement, issued February 2, 2010, due 2031; noninterest bearing	8,206	8,649
\$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%	1,493	
\$1,502 Illinois Environmental Protection Agency Loan Agreement, issued September 15, 2013, due 2032; interest at 1.25%	1,468	
\$6,092 Illinois Environmental Protection Agency Loan Agreement, 1ssued October 25, 2013, due 2032; interest at 1.25%	5,953	
	1,996,858	2,030,177
Add accretion of capital appreciation bonds	43,885	47,658
Less current portion of accretion	(9,169)	(8,749)
Less current portion of long-term debt	(43,846)	(42,232)
Add unamortized bond discount/premium net	66,934	71,041
Long-term portion — net	\$ 2,054,662	\$ 2,097,895

Long-term debt changed during the years ended December 31, 2013 and 2012, is as follows (in thousands):

	Balance January 1, 2013	Additions	Reductions	Balance December 31, 2013	Due within One Year
Revenue bonds/notes payable Accretion of capital appreciation bonds Unamortized bond discount/premium — net	\$2,030,177 47,658 71,041	\$ 9,121 4,976	\$ (42,440) (8,749) (4,107)	\$1,996,858 43,885 <u>66,934</u>	\$43,846 9,169
Total	<u>\$2,148,876</u>	<u>\$ 14,097</u>	<u>\$ (55,296)</u>	\$2,107,677	<u>\$53,015</u>
	Balance			Balance	Due within
	January 1, 2012	Additions	Reductions	December 31, 2012	One Year
Revenue bonds/notes payable Accretion of capital appreciation bonds Unamortized bond discount/premium net	January 1,	Additions \$399,950 5,205 47,588	Reductions \$ (90,961) (4,493) (7,045)	December 31,	One

Interest expense includes amortization of the deferred loss on bond refunding for 2013 and 2012 of \$2.5 million; amortization of bond discount of \$4.1 million and \$7.0 million, respectively; and accretion of Series 1997 and Series 2000 capital appreciation bonds of \$9.2 million and \$8.7 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 2013 and 2012.

**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, 2013, was \$21.56 per 1,000 cubic feet.

**Issuance of Debt** — On July 8, 2010, a loan agreement was signed with the Illinois Environment Protection Agency to install water meters. In 2013, the Water Fund initiated a \$1.5 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from November 1, 2013, to November 1, 2032.

On September 15, 2013, a loan agreement was signed with the Illinois Environment Protection Agency to install water meters. In 2013, the Water Fund initiated a \$1.5 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from November 1, 2013, to November 1, 2032.

On October 25, 2013, a loan agreement was signed with the Illinois Environment Protection Agency to install water mains. In 2013, the Water Fund initiated a \$6.0 million loan from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from December 27, 2013, to December 27, 2032.

A schedule of bond and note debt service requirements to maturity at December 31, 2013, is as follows (in thousands):

Years Ending December 31	Principal	Interest	Total Debt Service
2014	\$ 43,846	\$ 105,592	\$ 149,438
2015	45,107	104,344	149,451
2016 2017	54,308 56,243	102,876 100,959	157,184 157,202
2017	58,273	98,980	157,252
2019–2023	375,468	411,084	786,552
2024–2028	433,647	309,608	743,255
2029–2033	399,692	204,055	603,747
2034–2038	359,160	109,240	468,400
2039–2043	171,114	19,881	190,995
Total	\$1,996,858	\$1,566,619	\$3,563,477

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, 2013.

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, 2013, 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, 2013, 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 August 18, 2014. An irrevocable letter of credit provides for the timely payment of principal and interest on the Series 2004 bonds until November 15, 2014. At December 31, 2013, 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. There is no principal due on potential term loans within the next fiscal year.

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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 F	air Value	Fair Valu December 3		
	Classification	Amount	Classification	Amount	Notional
Cash flow hedges — pay-fixed interest rate swaps	Deferred outflow		Deferred outflow		
increst fue swaps	of resources	<u>\$ (48,125)</u>	of resources	\$78,246	<u>\$476,300</u>

**Terms, Fair Values, and Credit Risk** — The terms, including the fair value and credit ratings of the outstanding swaps as of December 31, 2013, 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	Counterparty Credit Rating
Hedging instruments Bonds (Series 2004) Bonds (Series 2004) Bonds (Series 2000)	\$185.780 190,520 100.000	August 5, 2004	Pay 3.8694%; receive 67% of 1-month LIBOR Pay 3.8669%: receive 67% of 1-month LIBOR Pay 3.8694%, receive 67% of 1-month LIBOR	\$(28,148) (30,124) (19,974)	November 1, 2025 November 1, 2031 November 1, 2030	Aa3/AA-
Total	\$476,300			<u>\$(78,246</u> )		

**Fair Value** — As of December 31, 2013 and 2012, the swaps had a negative fair value of \$78.2 million and \$126.4 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.

**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, 2013) remain the same for their term, are as follows (in thousands):

Years Ending December 31	Principal	Interest	Swaps — Net	Total
2014	\$ 10,575	\$ 506	\$ 17,526	\$ 28,607
2015	11,000	597	17,026	28,623
2016	11,450	587	16,611	28,648
2017	11,925	576	16,179	28,680
2018	12,425	564	15,730	28,719
2019–2023	159,525	2,483	65,680	227,688
2024–2028	161,810	1,634	32,916	196,360
2029–2033	87,440	293	5,217	92,950
Total	\$466,150	<u>\$7,240</u>	<u>\$186,885</u>	\$660,275

**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, 2013.

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#### 5. UTILITY PLANT

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Utility plant changed during the years ended December 31, 2013 and 2012, as follows (in thousands):

	Balance — January 1, 2013	Additions	Disposals and Transfers	Balance — December 31, 2013
Utility plant not depreciated:				
Land and land rights	\$ 5,083	\$ -	\$ - (159.209)	\$ 5,083
Construction in progress	262,280	213,134	(158,328)	317,086
Total utility plant not depreciated	267,363	213,134	(158,328)	322,169
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	620,775	7,290	19,465	647,530
Total utility plant being depreciated	3,462,288	164,231	147,564	3,774,083
Less accumulated depreciation:				
Structures and improvements	(190,278)	(7,277)		(197,555)
Distribution plant	(372,090)	(23,750)	1,559	(394,281)
Equipment	(305,943)	(18,185)	1,568	(322,560)
Total accumulated depreciation	(868,311)	(49,212)	3,127	(914,396)
Utility plant being depreciated — net	2,593,977	115,019	150,691	2,859,687
Utility plant — net	\$2,861,340	\$328,153	<u>\$ (7,637)</u>	\$3,181,856
	Balance — January 1, 2012	Additions	Disposals and Transfers	Balance — December 31, 2012
Utility plant not depreciated:	January 1,	Additions	and	December 31,
Utility plant not depreciated:	January 1, 2012		and Transfers	December 31, 2012
Land and land rights	January 1, 2012 \$5,083	\$ -	and Transfers \$ -	December 31, 2012 \$ 5,083
Land and land rights Construction in progress	January 1, 2012 \$ 5,083 148,871	\$	and Transfers \$(63,743)	December 31, 2012 \$ 5,083 262,280
Land and land rights	January 1, 2012 \$5,083	\$ -	and Transfers \$ -	December 31, 2012 \$ 5,083
Land and land rights Construction in progress	January 1, 2012 \$ 5,083 148,871	\$	and Transfers \$(63,743)	December 31, 2012 \$ 5,083 262,280
Land and land rights Construction in progress Total utility plant not depreciated	January 1, 2012 \$ 5,083 148,871	\$	and Transfers \$(63,743)	December 31, 2012 \$ 5,083 262,280
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated:	January 1, 2012 \$ 5,083 148,871 153,954	\$ <u>177,152</u>	and Transfers (63,743) (63,743)	December 31, 2012 \$ 5,083 262,280 267,363
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements	January 1, 2012 \$ 5,083 148,871 153,954 534,472	\$ <u>177,152</u>	and Transfers \$(63,743) (63,743) (927)	December 31, 2012 \$ 5,083 262,280 267,363 535,710
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant	January 1, 2012 \$ 5,083 	\$	and Transfers \$(63,743) (63,743) (63,743) (927) 60,142	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated	January 1, 2012 \$ 5,083 	\$	and Transfers \$(63,743) (63,743) (63,743) (927) 60,142 (2,143)	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation:	January 1, 2012 \$ 5,083 	\$ <u>177,152</u> <u>177,152</u> 2,165 133,871 <u>5,759</u> <u>141,795</u>	and Transfers \$(63,743) (63,743) (63,743) (927) 60,142 (2,143)	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation: Structures and improvements	January 1, 2012 \$ 5,083 	\$	and Transfers \$(63,743) (63,743) (63,743) (927) 60,142 (2,143) 57,072	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288 (190,278)
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation:	January 1, 2012 \$ 5,083 	\$ <u>177,152</u> <u>177,152</u> 2,165 133,871 <u>5,759</u> <u>141,795</u>	and Transfers \$(63,743) (63,743) (63,743) (927) 60,142 (2,143)	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation: Structures and improvements Distribution plant	January 1, 2012 \$ 5,083 	\$ <u>177,152</u> <u>177,152</u> 2,165 133,871 <u>5,759</u> <u>141,795</u> (7,741) (21,804)	and Transfers \$(63,743) (63,743) (927) (60,142 (2,143) 57,072 1,057	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288 (190,278) (372,090)
Land and land rights Construction in progress Total utility plant not depreciated Utility plant being depreciated: Structures and improvements Distribution plant Equipment Total utility plant being depreciated Less accumulated depreciation: Structures and improvements Distribution plant Equipment	January 1, 2012 \$ 5,083 	\$	and Transfers \$(63,743) (63,743) (927) 60,142 (2,143) (2,143) 57,072 1,057 1,891	December 31, 2012 \$ 5,083 262,280 267,363 535,710 2,305,803 620,775 3,462,288 (190,278) (372,090) (305,943)

#### 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). These Plans are administered by individual retirement boards represented by elected and appointed officials. 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 10 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 minimum of 2.4% 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 \$13.0 million in 2013 and \$12.7 million in 2012. 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, 2013 and 2012, were 1.25% for the Municipal Employees' and 1% for the Laborers' and Retirement Board Employees' Annuity and Benefit Funds, respectively. The City has made the required contributions under State law.

Beginning in 2016, State law requires significantly increased contributions by the City to the Municipal Employees' Annuity and Benefit Fund and the Laborers' and Retirement Board Employees' Annuity and Benefit Fund.

The following table as of December 31, 2013, 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	Percent of Annual Pension Cost Contributed	Annual Required Contribution	Percent of Required Contributions Contributed	Net Pension Obligation (Asset)
Municipal employees:					
2011	\$609,491	24.12 %	\$611,756	24.00 %	\$1,469,886
2012	687,519	21.65	690,823	21.50	2,008,546
2013	812,463	18.24	820,023	18.10	2,672,812
Laborers:					
2011	\$ 57,651	22.17 %	\$ 57,259	22.30 %	\$ (129,712)
2012	77,858	15.22	77,566	15.30	(63,707)
2013	106,439	10.88	106,199	10.90	31,148

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 24,408 annuitants and their dependents was approximately \$97.5 million in 2013 and 2012.

The annuitants who retired prior to July 1, 2005 received a 55 percent subsidy from the City and the annuitants who retired on or after July 1, 2005 received a 50, 45, 40 and zero percent 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 \$66.6 million and \$67.8 million in 2013 and 2012, 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 healthcare 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. Additional step downs in subsidy levels for 2015 and 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-asyou-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 2013 in the City CAFR, is the annual OPEB cost (expense).

	Annual OPEB Cost and Contributions Made (In thousands)				
	2013 Health Plan	2012 Health Plan			
Contribution rates: City Plan members	Pay as you go N/A	Pay as you go N/A			
Annual required contribution Interest on net OPEB obligation Adjustment to annual required contribution	\$134,083 8,614 _(25,531)	\$ 252,747 3,816 (179,586)			
Annual OPEB cost	117,166	76,977			
Contributions made	139,336	115,961			
Decrease in net OPEB obligation	(22,170)	(38,984)			
Net OPEB obligation — beginning of year	215,361	254,345			
Net OPEB obligation — end of year	<u>\$193,191</u>	<u>\$ 215,361</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 2013, 2012, and 2011 are as follows (in thousands):

		Schedule of Contributions, OPEB Costs, and Net Obligations					
Fiscal Years Ended	Annual OPEB Cost	Annual Percentage of OPEB Annual OPEB O					
December 31, 2013 December 31, 2012 December 31, 2011	\$117,166 76,977 48,954	118.9 % 150.6 202.4	\$ 193,191 215,361 254,345				

**Funded Status and Funding Progress** — As of December 31, 2012, the most recent actuarial valuation date, the actuarial accrued liability for benefits was \$997.3 million, all of which was unfunded. The covered payroll (annual payroll of active employees covered by the Plans) was approximately \$2,385.2 million and the ratio of the unfunded actuarial accrued liability to the covered payroll was 41.8%.

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, 2012	\$ -	\$997,281	\$997,281	- %	\$2,385,198
December 31, 2011		470,952	470,952		2,518,735

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, 2013, the Entry Age Normal actuarial cost method was used. The actuarial method was changed in 2013 from Projected Unit Credit due to the phase out of the Settlement Plan. The actuarial assumptions included an annual healthcare cost trend rate of 9.5% initially, reduced by decrements to an ultimate rate of 5.0% in 2031. The range of rates included a 3% 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 3.0%. The UAAL is amortized as a level dollar amount over ten 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						
	Health Plan					
Item	2013	2012				
Actuarial valuation date	December 31, 2012	December 31, 2011				
Actuarial cost method	Entry Age Normal	Projected unit credit				
Amortization method	Level dollar, open	Level dollar, closed				
Remaining amortization period	10 years	1 to 5 years				
Asset valuation method	Market value	Market value				
Actuarial assumptions: Investment rate of return	3.00%	1.50%				
	4100.1					
Projected salary increases	3.00%	3.00%				
Healthcare inflation rate	9.5% initial to 5.0% ultimate	10.5% initial to 5% 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 \$68.5 million and \$68.2 million in 2013 and 2012, 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, 2013 and 2012, are as follows (in thousands):

	2013	2012
Balance — January 1 Claims incurred on current and prior-year events Claims pain on current and prior-year events	\$ 33,211 33,572 (31,690)	\$ 33,172 33,458 (33,419)
Balance — December 31	<u>\$ 35,093</u>	<u>\$ 33,211</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.

The City, who has a 40-year agreement with the DuPage Water Commission (DWC) to provide water service to the DWC and its 24 suburbs commencing on May 1, 1992, has signed an agreement with the DWC to share equally in the aggregate costs in the construction, operation, and maintenance of electrical generation facilities and other capital improvements at the Lexington Pumping station, of which neither party's share will exceed \$15 million without an amendment to the agreement approved by both parties. Payments for the City's share will be in the form of credits against the charges for water supplied to the facility. Total cumulative credits as of December 31, 2013, amounted to \$14.6 million.

At December 31, 2013 and 2012, the Water Fund entered into contracts with outstanding commitments of approximately \$831.7 million and \$109.6 million, respectively, for construction projects.

#### 10. RESTATEMENT DUE TO IMPLEMENTATION OF NEW ACCOUNTING STANDARD

As a result of implementing GASB 65, net position was restated at January 1, 2012. With the adoption of GASB 65, the Water Fund is reporting deferred loss on debt refunding as deferred outflow. Bond issuance costs (excluding the portion related to bond insurance) are expensed and no longer amortized annually. The following is a reconciliation of the 2012 amounts that have been restated as a result of the implementation of GASB 65 (dollars in thousands):

	As Originally Reported	Adjustment	As Restated
Statement of financial position: Other assets Deferred outflows	\$    16,446 126,371	\$(11,075) 36,199	\$
Long-term debt — net of current maturities Net investment in capital assets	2,061,696 1,073,309	36,199 (11,075)	2,097,895 1,062,234
Statement of revenues, expenses, and changes in net position:			
Depreciation and amortization Interest expense	48,887 79,147	(479) 2,604	48,408 81,751
Total net position —beginning of year Statement of cash flows — reconciliation of	1,102,232	(8,950)	1,093,282
operating income to net cash provided by operating activities: Operating income	237,935	479	238,414
Depreciation and amortization	48,887	(479)	48,408

#### **11. SUBSEQUENT EVENT**

In March 2014, Moody's Investors Service 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.

\* \* \* \* \* \*

CONSTRUCTION IN PROGRESS Filtration plants Pumping stations Water mains Contract retainage Total construction in progress TOTAL UTILITY PLANT	Total structures and improvements, distribution plant, and equipment	EQUIPMENT: Power production Pumping Purification Heavy machinery Transportation Miscellaneous Contract retainage Total equipment	Total distribution plant	DISTRIBUTION PLANT: Mains and accessories Meters and unstallations Hydrants and valves Contract retainage	Total structures and improvements	STRUCTURES AND IMPROVEMENTS: Cribs Lake and land tunnels Intake structures Power and pumping structures Purification buildings Distribution reservoirs Offices, maintenance, and general Contract retainage	Total land and land rights	LAND AND LAND RIGHTS: Power and pumping Distribution reservour Purification General and maintenance	
25.020 50.487 181,756 <u>5.017</u> <u>262,280</u> <u>53.729,651</u>	3,462,288	61.671 197.986 312.315 23.886 7.732 17.010 175 620.775	2,305,803	2,237,372 49,572 17,247 1,612	535,710	17,337 118,377 9,532 127,542 205,890 16,979 39,417 637	5.083	January 1, 2013 \$ 2.367 300 1,739 677	Balance -
17,093 28,295 163,534 4,212 213,134 213,134	164,231	1,487 1,799 2,594 1,007 403 7,290	156,514	151,678 4,836	427	115 183	-	Additions	
<u>(5.017)</u> (5.017) <u>(5.017)</u> <u>\$(10,764)</u>	(5,747)	(1.035) (707) (175) (1.917)	(3,193)	(1,338) (243) (1,612)	(637)	(637)	 	Adjustments/ Disposals S -	Assets
(1.446) (20,238) (131,627) (153,311) <b>\$</b>	153,311	19,936 1.446 21,382	131,627	91.984 39,643	302	302	 	Transfers S -	
40.667 58.544 213.664 4.212 317.086 317.086 \$4.096.252	3,774,083	61.671 219,409 315.560 25,445 8,032 17,010 403 647,530	2,590.751	2,479,696 89,215 17,004 4,836	535.802	17,337 118,377 9,531 127,959 206,073 206,073 16,979 39,417 129	5.083	December 31, 2013 S 2.367 300 I,739 677	Balance
- - - - - - - - - - - - - - - - - 	868.311	44.531 85.785 142.799 13.970 5.426 13.432 305.943	372,090	329,484 32,166 10,440	190,278	5.027 37.612 4.470 32.560 98.461 5.230 6.918	  -	January 1, 2013 \$	Balance —
<u>-</u> <u>-</u> <u>549,212</u>	49.212	1.239 6.050 8.482 1.511 390 513 18.185	23.750	22.374 1.114 262	7.277	168 1.184 95 1.600 3.171 226 833	.	9 rovision 5 -	Accumulate
	(3,127)	(931) (637) 	(1,559)	(1.317) (242)	, 		.	Adjustments/ Disposals S -	Accumulated Depreciation
S914.396	914.396	45.770 91.835 151.281 14.550 5.179 13.945 322.560	394,281	350,541 33,280 10,460	197.555	5,195 38,796 4,565 34,160 101,632 5,456 7,751			Balance —
40.667 58.544 213.663 - 4.212 317.086 \$3.181.856	2,859,687	15.901 127.574 164.279 10.895 2.853 3.065 	2,196,470	2.129.155 55.935 6.544 4.836	338,247	12.142 79.581 4.966 93.799 104.441 11.523 31.666 31.666	5.083	December 31, 2013 \$ 2.367 300 1.739 677	Net Balance —

ADDITIONAL SUPPLEMENTARY INFORMATION SCHEDULE OF UTILITY PLANT FOR THE YEAR ENDED DECEMBER 31, 2013 (In thousands)

#### 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.

### STATISTICAL DATA CHANGES IN NET POSITION (UNAUDITED) THREE YEARS ENDED DECEMBER 31, 2011–2013 (In millions)

	2011 (As Restated)	2012 (As Restated)	2013
OPERATING REVENUES:			
Water sales	\$ 441.8	\$ 562.6	\$ 620.5
Other operating revenues	12.4	13.7	16.6
Total operating revenues	454.2	576.3	637.1
OPERATING EXPENSES:			
Source of supply	0.2	0.2	0.1
Power and pumping	38.2	41.7	43.2
Purification	66.5	56.1	60.9
Transmission and distribution	39.0	36.5	29.5
Provision for doubtful accounts	14.0	15.7	25.4
Customer accounting and collection	10.6	10.0	11.6
Administrative and general	17.1	21.9	21.2
Central services and General Fund reimbursements	96.6	107.4	108.7
Total operating expenses	282.2	289.5	300.6
OPERATING INCOME BEFORE DEPRECIATION		;	
AND AMORTIZATION	172.0	286.8	336.5
DEPRECIATION AND AMORTIZATION	47.1	48.4	49.6
OPERATING INCOME	124.9	238.4	286.9
NONOPERATING REVENUES (EXPENSES):			
Interest income	2.0	0.3	0.4
Interest expenses	(86.5)	(81.7)	(92.2)
Other operating revenues	2.2	1.1	0.5
Total nonoperating expenses — net	(82.3)	(80.3)	(91.3)
CHANGE IN NET POSITION	42.6	158.1	195.6
TOTAL NET POSITION — Beginning of year, as restated	1,050.7	1,093.3	1,251.4
TOTAL NET POSITION — End of year	<u>\$ 1,093.3</u>	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>

\$

Water Fund intends to provide ten-year information as it becomes available.

### STATISTICAL DATA NET POSITION BY COMPONENTS (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (In millions)

	2010 (As Restated	2011 I)(As Restated	2012 I)(As Restated	) 2013
NET POSITION: Net investment in capital assets Restricted net assets for capital projects Unrestricted net assets	\$ 964.9 0.4 <u>85.4</u>	\$ 1,046.1 0.2 <u>47.0</u>	\$ 1,062.3 1.3 <u>187.8</u>	\$ 1,233.2 0.7 213.1
TOTAL NET POSITION	<u>\$ 1,050.7</u>	<u>\$ 1,093.3</u>	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>

Water Fund intends to provide ten year information as it becomes available.

STATISTICAL DATA HISTORICAL FINANCIAL OPERATIONS (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013 (In millions)	NAUDITE -2013	D)						i		
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
OPERATING REVENUES: Water sales (1) Other operating revenues	\$ 307.6 <u>13.0</u>	\$ 333.7 10.6	\$317.2 13.2	\$ 323.6 10.8	\$ 358.0 12.2	\$ 396.9 <u>13.3</u>	\$ 445.5 12.9	\$ 441.8 12.4	\$ 562.6 <u>13.7</u>	\$ 620.5
Total operating revenues	320.6	344.3	330.4	334.4	370.2	410.2	458.4	454.2	576.3	637.1
OPERATING EXPENSES: Source of supply Power and pumping	0.4 42.1	0.2 50.6	0.2 49.8	0.3 52.2	0. <u>2</u> 54.7	0.1 47.5	0.1 42.9	0.2 38.2	0.2 41.7	0.1 43.2
Purification Transmission and distribution	40.6 39.1	43.3 39.4	41.9 41.6	44.2 47.0	48.4 47.1	49.4 40.9	49.7 38.7	66.5 39.0	56.1 36.5	60.9 29.5
Provision for doubtful accounts	3.7	2.7	3.6	3.7	د. د. د د	10.4	15.9	14.0	15.7	25.4
Administrative and general Central services and General Fund reimbursements	11.5 72.3	13.2 80.2	15.1 74.0	14.9 83.7	18.1 87.2	16.1 98.5	18.5 103.0	17.1 96.6	21.9 107.4	21.2 108.7
Total operating expenses	224.6	245.9	243.1	260.8	276.8	274.1	279.1	282.2	289.5	300.6
INTEREST INCOME (OTHER THAN FROM CONSTRUCTIONAL ACCOUNT)	1.0	2.6	3.8	4.9	3.7	1.0	(0.3)	2.0	0.3	0.4
NET REVENUES — As defined (Note 4)	\$ 97.0	\$101.0	\$ 91.1	\$ 78.5	\$ 97.1	\$137.1	\$179.0	\$174.0	\$287.1	\$ 336.9
(1) Operating revenues are net of credits to JAWA and DWC during the year 2004.	DWC durin	g the year 20	04.							

Source: City of Chicago Comptroller's Office.

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### STATISTICAL DATA WATER SYSTEM ACCOUNTS (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013

Years Ended December 31	Nonmetered	Metered	Total
2004	324,689	167,545	492,234
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

Source: City of Chicago Department of Water Management.

### STATISTICAL DATA TEN LARGEST SUBURBAN CUSTOMERS (UNAUDITED) FOR THE YEAR ENDED DECEMBER 31, 2013 (In thousands)

Customer	Amount of Sales	ł
Dupage Water Commission	\$ 80,944	
Oak Lawn, Illinois	32,408	
Northwest Suburban Municipal Joint Action Water Agency	30,482	
Bedford Park, Illinois	23,167	
Harvey, Illinois	9,251	
Melrose Park, Illinois	9,016	
Cicero, Illinois	7,442	
Alsip, Illinois	6,778	
McCook, Illinois	5,443	
City of Des Plaines	5,310	
Total	<u>\$210,241</u>	

Source: City of Chicago Department of Water Management.

### STATISTICAL DATA REVENUE BOND COVERAGE (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013 (In millions)

PRIOR BONDS COVERAGE CALCULATION

Z006         Z007         Z008         Z009         Z010         Z017         Z017 <t< th=""><th>WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE \$52.3</th><th>TOTAL COMBINED SENIOR AND SECOND LIEN DEBT</th><th>TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS</th><th>Total second and subordinate lien debt service requirements \$10.5</th><th>Second lien debt service requirements <u>0.2</u></th><th>Senior debt service coverage ratio</th><th>DEBT SERVICE REQUIREMENTS: Senior debt service requirements</th><th>NET REVENUES AVAILABLE FOR BONDS <u>\$97.0</u></th><th>REVENUES AVAILABLE FOR BONDS: Net revenues — as defined (Note 4) Transfer from (to) Water Rate Stabilization account &amp; PAYGO Fund</th><th>COMBINED PRIOR BONDS, SENIOR LIEN, AND SECOND LIEN DEBT SERVICE CALCULATION 2004</th></t<>	WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE \$52.3	TOTAL COMBINED SENIOR AND SECOND LIEN DEBT	TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS	Total second and subordinate lien debt service requirements \$10.5	Second lien debt service requirements <u>0.2</u>	Senior debt service coverage ratio	DEBT SERVICE REQUIREMENTS: Senior debt service requirements	NET REVENUES AVAILABLE FOR BONDS <u>\$97.0</u>	REVENUES AVAILABLE FOR BONDS: Net revenues — as defined (Note 4) Transfer from (to) Water Rate Stabilization account & PAYGO Fund	COMBINED PRIOR BONDS, SENIOR LIEN, AND SECOND LIEN DEBT SERVICE CALCULATION 2004
Z007         Z008         Z009         Z010         Z010         Z011         Z017         Z017 <t< td=""><td>\$ 52.3</td><td>1.8</td><td>\$ 57.6</td><td>\$ 27.5</td><td></td><td>3.4</td><td>\$ 30.1</td><td>\$101.0</td><td>\$101.0</td><td>2005</td></t<>	\$ 52.3	1.8	\$ 57.6	\$ 27.5		3.4	\$ 30.1	\$101.0	\$101.0	2005
Z008         Z009         Z010         Z011         Z011         Z011         Z011         Z012           \$97.1         \$137.1         \$179.0         \$174.0         \$287.1         (13.5)           \$97.1         \$137.1         \$169.0         \$174.0         \$287.1         (13.5)           \$97.1         \$137.1         \$169.0         \$174.0         \$287.1         (13.5)           \$27.5         \$33.8         \$29.1         \$14.1         \$13.9         \$14.1         \$13.9           \$62.5         \$75.7         \$82.1         \$10.4 $0.4$ $12.3$ 19.7           \$62.9         \$76.1         \$82.5         \$107.0         \$116.5 $1.2$ $1.2$ \$80.4         \$0.4         \$0.4 $0.4$ $1.2$ $1.2$ \$11.1         \$12.2         \$11.6         \$117.7         \$116.5           \$51.4         \$109.9         \$111.6         \$121.1         \$131.6           \$51.4         \$61.4         \$61.4         \$74.9	\$ 59.3	1.4	\$60.5	\$30.8	\$ 30.5 0.3	2.8	<u>S 29.7</u>	\$84.1	\$91.1 (7.0)	2006
2009       2010       2011       2011       2012         \$137.1       \$179.0       \$174.0       \$287.1       (13.5)         \$137.1       \$169.0       \$174.0       \$287.1       (13.5)         \$137.1       \$169.0       \$174.0       \$287.1       (13.5)         \$137.1       \$169.0       \$174.0       \$287.1       (13.5)         \$137.1       \$169.0       \$174.0       \$273.6         \$137.1       \$169.0       \$174.0       \$273.6         \$137.1       \$169.0       \$174.0       \$273.6         \$137.1       \$169.0       \$174.0       \$273.6         \$137.1       \$169.0       \$14.1       \$13.9         \$117.7       \$82.1       \$106.6       \$116.5         \$1.2       \$1.5       \$1.4       \$131.6         \$1.2       \$1.5       \$1.4       \$2.1         \$1.2       \$1.5       \$1.4       \$2.1         \$51.4       \$61.4       \$74.9       \$74.9	\$51.4	<u>-</u>	\$81.6	\$43.6	$\frac{\$43.2}{0.4}$	2.3	\$ 38.0	\$86.4	\$78.5 7.9	2007
zoro       zori       zori       zori         \$179.0       \$174.0       \$287.1 $(10.0)$ $(13.5)$ \$169.0       \$174.0       \$287.1         \$169.0       \$174.0       \$273.6         \$29.1       \$14.1       \$13.9 $5.8$ 12.3       19.7         \$82.1       \$106.6       \$116.5 $0.4$ $0.4$ 1.2         \$82.5       \$107.0       \$117.7         \$111.6       \$121.1       \$131.6         1.5       1.4       2.1         \$61.4       \$61.4       \$74.9	\$51.4	1.1	\$90.4	\$62.9	\$62.5 0.4	3.5	\$27.5	\$97.1	\$97.1	2008
zoro       zori       zori       zori         \$179.0       \$174.0       \$287.1 $(10.0)$ $(13.5)$ \$169.0       \$174.0       \$287.1         \$169.0       \$174.0       \$273.6         \$29.1       \$14.1       \$13.9 $5.8$ 12.3       19.7         \$82.1       \$106.6       \$116.5 $0.4$ $0.4$ 1.2         \$82.5       \$107.0       \$117.7         \$111.6       \$121.1       \$131.6         1.5       1.4       2.1         \$61.4       \$61.4       \$74.9	\$ 51.4	1.2	\$ 109.9	S 76.1	S 75.7 0.4	4.1	\$ 33.8	\$137.1	\$ 137.1	2009
2011     2012       \$ 174.0     \$ 287.1       \$ 174.0     \$ (13.5)       \$ 174.0     \$ 273.6       \$ 14.1     \$ 13.9       12.3     19.7       \$ 106.6     \$ 116.5       0.4     1.2       \$ 117.0     \$ 117.7       \$ 107.0     \$ 117.7       \$ 117.7     \$ 131.6       \$ 12.1     \$ 131.6       \$ 117.7     \$ 131.6       \$ 5 61.4     \$ 74.9			\$111.6	\$ 82.5	\$ 82.1 0.4	5.8	\$ 29.1	\$169.0	\$179.0	2010
	\$ 61.4	1.4			\$106.6 0.4	12.3	\$ 14.1	\$174.0	\$ 174.0	2011
<b>2013</b> (13.5) (1	\$ 74.9	2.1	\$131.6	\$117.7	\$116.5 1.2	19.7	\$ 13.9	\$273.6	\$287.1 (13.5)	2012
	\$ 88.4	2.2	\$ 148.4	\$126.9	\$125.6 <u>1.3</u>	15.0	\$ 21.5	\$ 323.4	\$ 336.9 (13.5)	2013

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Source: City of Chicago Comptroller's Office.

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### STATISTICAL DATA LONG-TERM DEBT (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (In millions)

	2010	2010 2011		2013
Senior lien bonds Second lien bonds Commercial paper Subordinate lien — IEPA Ioan	\$ 83.4 1,614.3 51.5 <u>4.6</u>	\$68.9 1,586.9 46.5 18.9	\$ 60.7 1,951.1 0.0 <u>18.4</u>	\$ 49.0 1,921.6 0.0 26.3
Total long-term debt	<u>\$ 1,721.2</u>	<u>\$ 1,721.2</u>	<u>\$ 2,030.2</u>	<u>\$ 1,996.9</u>

Water Fund intends to provide ten-year information as it becomes available.

### STATISTICAL DATA CAPITAL IMPROVEMENT PROGRAM (UNAUDITED) 2014–2018 (In thousands)

Years	Amount
2014 2015 2016 2017 2018	\$ 444,975 378,011 439,801 451,502 465,249
Total	\$2,179,538

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.

### STATISTICAL DATA WATER SYSTEM PUMPAGE AND CAPACITY (UNAUDITED) TEN YEARS ENDED DECEMBER 31, 2004–2013

Years	Total Pumpage (MGD)	Average Daily Pumpage (MGD)	Maximum Daily Pumpage (MGD)	System's Rated Pumpage Capacity (MGD)	Maximum Daily Pumpage as % of Capacity
2004	320,069	875	1,134	2,160	53
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

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

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### MISCELLANEOUS STATISTICAL DATA (UNAUDITED) FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012

	2013	2012
AREA SERVED (IN SQUARE MILES):		
Chicago	228	228
125 suburbs	578	578
Total area served	806	806
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 2
Water supply tunnels (6 to 20 feet in diameter) miles	64	64
DISTRIBUTION SYSTEM:		
Water mains (miles)	4,321	4,369
Fire hydrants	48,614	48,243
Valves	49,447	47,189

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

### STATISTICAL DATA OPERATING INFORMATION BY FUNCTION (UNAUDITED) FOUR YEARS ENDED DECEMBER 31, 2010–2013 (Number of employees)

Function	2010	2011	2012	2013
Administration	65	63	62	61
Agency management	37	39	37	37
Safety and security	19	17	16	16
Capital design and construction services	10	10	8	8
Engineering services	4	4	4	4
Inspection services	32	32	30	29
Water quality	48	48	48	47
Water pumping	233	231	234	222
Water treatment	324	326	323	336
Systems installation	39	39	34	75
Systems maintenance	582	581	583	542
Billings and customer service	65	66	50	50
Water meter installation and repair	76	78	82	84
Total	1,534	1,534	1,511	1,511

Water Fund intends to provide ten year information as it becomes available.

### 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.

### STATISTICAL DATA PRINCIPAL EMPLOYERS (NONGOVERNMENT) (UNAUDITED) FOR THE YEAR ENDED DECEMBER 31, 2013, AND NINE YEARS AGO

		2013 (1	I)		2004	(1)
Employer	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
J.P. Morgan Chase (2)	8,499	1	0.78 %	9,437	1	0.89 %
United Airlines	8,199	2	0.75	6,448	2	0.61
Accenture LLP	5,821	3	0.53	3,869	6	0.36
Northern Trust	5,353	4	0.49	4,659	4	0.44
Ford Motor Company	5,103	5	0.47	2,662	10	0.25
Jewel Food Stores, Inc.	4,441	6	0.41			.00
ABM Janitorial Services — North Central	3,399	7	0.31			
Bank of America NT & SA	3,392	8	0.31	3,139	7	0.30
Walgreen's Co.	2,869	9	0.26			.00
American Airlines	2,749	10	0.25	3,985	5	0.38
SBC Ameritech (3)			.00	4,803	3	0.45
Target Corporation			.00	2,940	8	0.28
ABN Amro			.00	2.923	9	0.28

(1) Source: City of Chicago, Department of Revenue, Employer's Expenses Tax Returns.

(2) J.P. Morgan Chase, formerly known as Banc One

(3) Ameritech currently known as SBC/AT&T

### **POPULATION AND INCOME STATISTICS (UNAUDITED)** STATISTICAL DATA TEN YEARS ENDED DECEMBER 31, 2004-2013

Year	Population (1)	Median Age (2)	Number of Households (2)	Unemployment Rate (3)	Per Capita Income (4)	Total Income (6)
2004	2,896,016	32.6	1,051,018	7.2	-	\$ 107,642,018,704
2005	2,896,016	33.0	1,045,282	7.0	-	111,319,959,024
2006	2,896,016	33.5	1,040,000	5.2	41,887	121,305,422,192
2007	2,896,016	33.7	1,033,328	5.7	•	126,596,443,424
2008	2,896,016	34.1	1,032,746	6.4		131,270,613,248
2009	2,896,016	34.5	1,037,069	10.0	~	126,634,091,632
2010	2,695,598	34.8	1,045,666	10.1		123,881,597,286
2011	2,695,598	33.2	1,048,222	9.3		123,935,509,246
2012	2,695,598	33.0	1,030,746	8.9		130,210,861.390
2013	2,695,598	33.5	1,062,029	8.3	N/A (5)	N/A (5)

Notes:

Source: U.S. Census Bureau.
 Source: World Business Chicago Website & Environmental System Research Institute data estimates.
 Source: Bureau of Labor Statistics 2013, Unemployment rate for Chicago-Naperville-Illinois Metropolitan Area.
 Source: U.S. Department of Commerce, Bureau of Economic Analysis, Per Capita Personal Income for

Chicago-Naperville-Illinois Metropolitan Area (in 2013 dollars).

(5) N/A means not available at time of publication

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### APPENDIX D

FORM OF OPINIONS OF CO-BOND COUNSEL

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September 17, 2014

City of Chicago

PNC Capital Markets LLC, as Representative of the Underwriters named in the Contract of Purchase, dated September 10, 2014, between the City and said Underwriters

The Bank of New York Mellon Trust Company, N.A., as Trustee

> Re: City of Chicago Second Lien Water Revenue Bonds, Project Series 2014

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 \$367,925,000 aggregate principal amount Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds"). The Series 2014 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 April 30, 2014, authorizing the Series 2014 Bonds (the "Bond Ordinance"). The Series 2014 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 an Eighth 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 2014 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 2014 Bonds are authorized by the City for the purpose of providing funds to (i) pay costs of the Series 2014 Current Projects and (ii) pay the costs of issuance of the Series 2014 Bonds.

The Series 2014 Bonds are issuable only as fully registered bonds without coupons in Authorized Denominations. The Series 2014 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 May 1, 2015, at the rates per annum, as follows:

Maturity (November 1)	Principal Amount	Rate Per Annum	Maturity (November 1)	Principal Amount	Rate per Annum
2015	\$ 4,020,000	3.00%	2026	\$ 9,510,000	5.00%
2016	6,295,000	3.00	2027	9,985,000	5.00
2017	6,485,000	4.00	2028	10,485,000	5.00
2018	6,745,000	4.00	2029	11,010,000	5.00
2019	7,015,000	3.00	2030	11,560,000	5.00
2020	7,225,000	5.00	2031	12,135,000	5.00
2021	7,585,000	5.00	2032	12,745,000	4.00
2022	7,965,000	5.00	2033	13,255,000	5.00
2023	8,365,000	5.00	2034	13,915,000	5.00
2024	8,780,000	3.15	2039	80,740,000	5.00
2025	9,055,000	5.00	2044	103,050,000	5.00

The Series 2014 Bonds are subject to optional and mandatory sinking fund redemption at the times, in the manner and upon the terms specified in the Eighth Supplemental Indenture. In connection with the issuance of the Series 2014 Bonds we have examined the following:

- (a) a certified copy of the Bond Ordinance;
- (b) an executed or counterpart of the Eighth 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 Eighth Supplemental Indenture with the Trustee and to issue the Series 2014 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 Eighth 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 2014 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 2014 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 Eighth Supplemental Indenture, including amounts on deposit in the 2014 Construction 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 Eighth Supplemental Indenture. The Series 2014 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 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 Bonds.

5. The Bond Ordinance, the Master Indenture and the Eighth 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 2014 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 2014 Bonds to be included in gross income retroactively to the date of issuance of the Series 2014 Bonds. Ownership of the Series 2014 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 2014 Bonds.

7. Interest on the Series 2014 Bonds is not exempt from present Illinois income taxes. Ownership of the Series 2014 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 2014 Bonds.

In rendering this opinion, we advise you that the enforceability (but not the validity or binding effect) of the Series 2014 Bonds, the Bond Ordinance, the Master Indenture and the Eighth 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.

In rendering this opinion, we have relied on certifications of the City and certain other parties with respect to certain material facts solely within their knowledge relating to the facilities to be financed with the Series 2014 Bonds, the application of proceeds of the Series 2014 Bonds and certain other matters pertinent to the tax-exempt status of the Series 2014 Bonds.

We express no opinion with respect to the Series 2014 Bonds or other matters related to the Series 2014 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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### APPENDIX E

### **RETIREMENT FUNDS**

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### TABLE OF CONTENTS

### <u>Page</u>

### **RETIREMENT FUNDS**

General	E-1
Source Information	E-3
Background Information Regarding the Retirement Funds	E-4
General	E-4
The Retirement Funds	E-5
Overlapping Taxing Bodies	E-6
Certain Duties	E-7
Investments	E-7
Determination of Employee Contributions	E-8
Determination of City's Contributions	E-9
City Contributions to FABF	E-10
City's Required Contributions to PABF and FABF Beginning in 2016	E-10
City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641	E-11
The Actuarial Valuation	E-12
General	E-12
Actuaries and the Actuarial Process	E-12
City's Contributions Not Related to GASB Standards	E-13
City's Contributions to PABF and FABF under P.A. 96-1495	
and P.A. 98-641 Will Not Conform to GASB Financial Reporting Benchmarks	E-13
Actuarial Methods	E-14
Actuarial Value of Assets	E-14
Actuarial Accrued Liability	E-15
Actuarial Assumptions	E-16
Assumed Investment Rate of Return	E-16
Funded Status of the Retirement Funds	E-17
Projection of Funded Status and Insolvency	E-26
Report and Recommendations of the Commission to Strengthen Chicago's Pension Funds	E-33
Diversion of Grant Money to PABF and FABF Under P.A. 96-1495 and P.A. 98-641	E-34
GASB Statements 67 and 68	E-35
Legislative Changes	E-35
P.A. 96-0889	E-35
P.A. 96-1495	E-36
P.A. 98-641	E-36
Pension Reform	E-40

### PAYMENT FOR OTHER POST-EMPLOYMENT BENEFITS

General	E-40
The Settlement	E-41
City Financing of the Health Plan	E-41
Actuarial Considerations	E-42

City Obligation	E-42
Actuarial Methods and Assumptions	E-42
Funded Status	E-43
Retiree Health Benefits Commission	E-44
Status of Healthcare Benefits After the Settlement Period	E-44

### **RETIREMENT FUNDS**

### General

Pursuant to the Illinois Pension Code, as revised from time to time (the "Pension Code"), the City contributes to four retirement funds, which provide benefits upon retirement, death or disability to employees and beneficiaries. Such 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" and, together with MEABF, PABF and FABF, the "Retirement Funds").

The Retirement Funds are established, administered and financed under the Pension Code, as separate bodies politic and corporate and for the benefit of the employees of the City and their beneficiaries. The City's contributions to the Retirement Funds, and benefits for annuitants of the Retirement Funds, 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 have been actuarially determined to be significantly underfunded. See "— Funded Status of the Retirement Funds" and "— Projection of Funded Status and Insolvency" below. P.A. 98-641, which is defined and described herein, significantly increases the City's contributions to MEABF and LABF and makes other adjustments that caused the unfunded liabilities of MEABF and LABF to decrease on its effective date and will cause such unfunded liabilities to decrease further over time. Although the actuaries for PABF and FABF project that the unfunded liabilities of those Retirement Funds will decrease in the future, such a decrease is expected to result from significantly increased City contributions to those Retirement Funds as a result of the enactment of P.A. 96-1495, which is described and defined herein. The increases in the City's financial condition. Taken together with the increase in City contributions under P.A. 98-641, the burden on the City's financial condition is expected to be even greater.

In 2010, the Illinois General Assembly enacted legislation to address the pension benefits of members who joined the Retirement Funds on or after January 1, 2011. See "— Legislative Changes" below. While this legislation is expected to reduce the Retirement Funds' liabilities over time, it is not expected to materially reduce such liabilities in the near future. The impact of this legislation is already reflected in the projections contained in this Appendix.

In 2010, the Illinois General Assembly also enacted P.A. 96-1495 which, among other things, significantly increased future contributions to be made by the City to PABF and FABF. See "— Determination of City's Contributions – City's Required Contributions to PABF and FABF Beginning in 2016" below. P.A. 96-1495 has been projected to require an increase in the City's contributions to PABF and FABF from approximately \$300 million in 2015 to approximately \$838 million in 2016, with increase of approximately three percent each year thereafter. See "TABLE 13 – PROJECTION OF

FUTURE FUNDING STATUS – FABF" and "TABLE 14 – PROJECTION OF FUTURE FUNDING STATUS – PABF" below. Given the substantial burden these increased contributions would place on the City's financial condition, the City is exploring options which would reduce the near-term burden of such increased contributions.

As discussed under "— Pension Reform" below, the City believes that modifications in the benefits provided by FABF and PABF are necessary, in combination with a ramp to actuarial funding and increases in employee contributions, to adequately address the unfunded liabilities of those Retirement Funds. Any such modifications would require action by the Illinois General Assembly to modify the Pension Code. No assurance can be given that any proposal to modify the benefits provided by FABF and PABF will be enacted. Furthermore, given the Illinois Pension Clause (defined below) of the Illinois Constitution, no assurance can be given that legislation to modify benefits, if enacted, will be upheld upon a legal challenge. See "— Background Information Regarding the Retirement Funds — General" below.

In 2014, the Illinois General Assembly enacted P.A. 98-641 which, among other things, significantly increased future contributions to be made by the City to MEABF and LABF. See "— Determination of City's Contributions – City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641" below. Information regarding projected future City contributions to LABF and MEABF pursuant to P.A. 98-641 is set forth in "TABLE 16 – PROJECTED CONTRIBUTIONS: MEABF AND LABF" below.

The Retirement Funds' sources of funding 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 financial health of the Retirement Funds and the projected impact of the Retirement Funds' underfunding on future contributions to be made by the City has impacted the rating agencies' determination of the City's creditworthiness. On April 17, 2013, Moody's Investors Service ("Moody's") issued a release (the "Release") announcing a new approach to analyzing state and local government pensions. The method of evaluating public pension plans established in the Release is intended to be a method of standardizing information among public pension plans and does not impact the City's required contributions, the value of the Retirement Funds' assets, or the liabilities owed by the Retirement Funds. The City does not endorse the method of analysis adopted by Moody's in the Release.

Moody's new pension analysis appears to include, among other things, adjusting pension plan Actuarial Accrued Liabilities by using certain common assumptions, such as the discount rate and amortization period. Certain other actuarial assumptions, such as mortality and salary growth rates, were not standardized across governmental plans. To accomplish its review, Moody's stated that it will use a discount rate based on Citibank's Pension Liability Index discount rate as of a pension plan's valuation date. Such a discount rate will be lower than the discount rate currently used by the Retirement Funds and is closer to the discount rate for a typical pension plan in the private sector. The City estimates that Moody's new method of analysis would result in the following Funded Ratios, as hereinafter defined, of the Retirement Funds (based on data as of December 31, 2012): 25.2% for MEABF, 38.4% for LABF, 20.3% for PABF, and 15.8% for FABF. See Tables 5 through 8 below for information on the Retirement Funds' historical Funded Ratios. For information regarding the Retirement Funds' discount rate, see

"— Actuarial Assumptions —Assumed Investment Rate of Return" below. The Release can be obtained from Moody's; provided, however, that the Release is not incorporated herein by such reference.

On March 4, 2014, 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 "A3" to "Baa1," the City's water and sewer senior lien revenue bonds from "A1" to "A2," and the City's water and sewer second lien revenue bonds from "A2" to "A3," each with a negative outlook. This follows previous downgrades by Moody's on July 17, 2013 of the City's general obligation bonds and sales tax revenue bonds from "Aa3" to "A3," the City's water and sewer senior lien revenue bonds from "Aa3" to "A3," the City's water and sewer senior lien revenue bonds from "Aa2" to "A1," and the City's water and sewer second lien revenue bonds from "Aa3" to "A2." Moody's indicated in the Rating Report that the March 4, 2014 downgrades reflect "massive and growing unfunded pension liabilities which threaten the City's fiscal solvency absent major revenue and other budgetary adjustments in the near term and sustained for ycars to come." 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 February 24, 2014, Standard & Poor's Ratings Group ("S&P") affirmed the City's "A+" general obligation bond rating with a negative outlook assigned to such rating. In affirming the City's general obligation bond rating and outlook, S&P cited the City's pension liabilities. Furthermore, S&P indicated that the increased contributions required by current state law could result in ratings downgrades for the City if the City substantially reduces its reserves to make these increased payments.

On March 3, 2014, Fitch Ratings ("Fitch") affirmed the City's general obligation bond and sales tax bond ratings as "A-" and the City's commercial paper note rating as "BBB+," each with a negative outlook. In announcing these ratings downgrades, Fitch cited, among other things, the City's pension liability and the "strong legal protection to pension benefits" in Illinois.

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.

### **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 arithmetic calculation of numbers 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 fiscal year on December 31. Each of the Retirement Funds have released their 2013 Actuarial Valuations.

### **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 retired employees 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 a member 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 retiree healthcare benefits to eligible members.

Section 5 of Article XIII of the Illinois Constitution (the "Illinois 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." For a discussion of the Illinois Pension Clause in the context of possible pension reform related to the Retirement Funds, see "— Pension Reform" below.

For purposes of this Appendix, references to "employee" or "member" are references to the employees of the City, the employees of the Retirement Funds participating in the Retirement Funds, and with regard to MEABF, certain employees and annuitants of the Chicago Board of Education who are members of MEABF as described below.

### 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 and survivors. 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 employees, MEABF's membership includes non-instructional employees of the Chicago 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 participants and beneficiaries.

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 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 participants and beneficiaries.

The membership of the Retirement Funds, as of December 31, 2013, was as follows:

### **TABLE 1 - MEMBERSHIP**

Retirement Fund	Active Members	Inactive/ Entitled to Benefits	Retirees and Beneficiaries	Totals
MEABF	30,647	14,254	25,042	69,943
PABF	12,161	654	13,159	25,974
FABF	4,685	57	4,640	9,382
LABF	2,844	1,432	<u>3,954</u>	<u>8,230</u>
Total	50,337	16,397	46,795	113,529

Source: Actuarial Valuations of the Retirement Funds as of December 31, 2013.

### **Overlapping Taxing Bodies**

The City's tax base overlaps with numerous other units of government, including the Chicago Board of Education, the Chicago Park District ("CPD"), the County of Cook, and the State of Illinois (collectively, all such other units are referred to herein as the "Governmental Units"). Certain of the Governmental Units maintain their own defined benefit pension plans (collectively, all such other plans arc referred to herein as the "Other Retirement Funds"), many of which are also significantly underfunded. The underfunding of these Other Retirement Funds places a substantial additional potential burden on the City's taxpayers, who bear the burden of funding a portion of the contributions of the Governmental Units.

On December 5, 2013, Governor Pat Quinn signed Public Act 98-0599 into law (the "State Pension Reform Act"). The State Pension Reform Act provides for certain cost-saving and other reforms to the State's four largest pension plans, including, but not limited to, changes to the employer contribution formula, cost of living adjustments, retirement ages and employee contributions. Such changes were scheduled to take effect on June 1, 2014. The State Pension Reform Act has been challenged by five separate lawsuits on behalf of various classes of annuitants, current and former workers, and labor organizations, alleging, among other things, that the legislation violates the Illinois Pension Clause. The Illinois Supreme Court consolidated these lawsuits into a single lawsuit and ordered that the consolidated lawsuit proceed in Sangamon County Circuit Court. On May 14, 2014, a plaintiff's motion for a temporary restraining order was granted. Such motion stays the implementation of the State Pension Reform Act in its entirety until further order of the court or until it is found unconstitutional. The City makes no prediction as to whether the filing of these lawsuits or their outcome will impact the City's pension reform efforts.

On January 7, 2014, Governor Pat Quinn signed Public Act 98-0622 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 employer contribution formula, cost of living adjustments, retirement ages and employee contributions. Such changes became effective on June 1, 2014. The City is not aware of any lawsuit that has been filed challenging the CPD Pension Reform Act. The City makes no prediction as to whether any lawsuit will be filed challenging the CPD Pension Reform Act, or whether the filing of any such lawsuit or its outcome will impact the City's pension reform efforts, nor does the City make any prediction as to whether the outcome of the lawsuits against the State Pension Reform Act will impact the CPD Pension Reform Act.

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. The City believes the information on COGFA's website to be reliable; however, the City takes no responsibility for the continued accuracy of the Internet address or for the accuracy or timeliness of information posted on the website.

### 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 the Retirement Funds. 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 their administration of benefits and other matters in accordance with the Illinois Administrative Procedure Act, and their decisions in 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.

Fiscal				
Year	MEABF	FABF	LABF	PABF
2003	19.6%	28.3%	17.5%	21.2%
2004	10.3	12.8	11.5	11.0
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	19.4	23.7	21.5	21.5
2010	13.7	17.7	15.5	12.7
2011	0.1	(2.0)	(0.3)	0.8
2012	12.9	16.2	14.6	12.4
2013	14.9	19.5	15.8	13.7
Assumed Rate <sup>(1)</sup>	7.5	8.0	7.5	7.75

 TABLE 2 - INVESTMENT RATES OF RETURN, 2003-2013

Source: The audited financial statements of the FABF as of December 31 of the years 2003-2012. For MEABF, LABF and PABF, the CAFRs of the respective Retirement Fund for the fiscal years ending December 31, 2003-2012. Fiscal Year 2013 information is from the Actuarial Valuations of the Retirement Funds as of December 31, 2013.

(1) Reflects the assumed rate of return of the Retirement Funds as of December 31, 2013, as discussed in further detail under "Actuarial Assumptions—Assumed Investment Rate of Return" below.

### **Determination of Employee Contributions**

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City employees who are members of the Retirement Funds are required to contribute to their respective Retirement Fund as set forth in the Pension Code.

Members of MEABF contribute 8.5% of their salary to MEABF (consisting of a 6.5% contribution for employee benefits, a 1.5% contribution for spouse benefits, and a 0.5% contribution for an annuity increase benefit). For a summary of the increases in employee contributions scheduled to take effect under P.A. 98-641, see "--- Legislative Changes --- P.A. 98-641."

Members of PABF contribute 9.0% of their salary to PABF (consisting of a 7.0% contribution for employee benefits, a 1.5% contribution for spouse benefits and a 0.5% contribution for an annuity increase benefit).

Members of FABF contribute 9.125% of their salary to FABF (consisting of a 7.125% contribution for employee benefits, a 1.5% contribution for spouse benefits, a 0.375% contribution for an annuity increase benefit and a 0.125% contribution for disability benefits).

Members of LABF contribute 8.5% of their salary to LABF (consisting of a 6.5% contribution for employee benefits, a 1.5% contribution for spouse benefits, and a 0.5% contribution for an annuity increase benefit). For a summary of the increases in employee contributions scheduled to take effect under P.A. 98-641, see "— Legislative Changes — P.A. 98-641."

For each Retirement Fund, if an employee leaves without qualifying for an annuity, accumulated employee contributions are refunded.

### **Determination of City's Contributions**

Under the Pension Code, the City's contributions to the Retirement Funds are determined pursuant to a statutory formula on an annual basis. Currently, the City's contributions equal the Multiplier Funding (as defined below) and certain other amounts as required by the Pension Code. "Multiplier Funding" is equal to the product of a multiplier established by the Pension Code for each Retirement Fund (each, a "Multiplier") and the amount contributed by the City's employees two years prior to the year in which the tax is levied. With respect to the City's 2015 contribution, the Multiplier for each Retirement Fund is as follows: 1.25 for MEABF; 2.00 for PABF; 2.26 for FABF; and 1.00 for LABF. The City's contributions are made as governed by the Pension Code and are not based on the Actuarially Required Contribution (as hereinafter defined). See "- The Actuarial Valuation-City's Contributions Not Related to GASB Standards" below. However, pursuant to P.A. 96-1495, beginning in 2016, the City's contributions to PABF and FABF will be 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. Furthermore, beginning in 2021, P.A. 98-641 requires that the City's contributions to MEABF and LABF be determined pursuant to the P.A. 98-641 Funding Plan (as hercinafter defined) rather than the Multiplier Funding system. See "-City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641" below.

The Pension Code provides that the Retirement Fund Boards must each annually certify to the City Council a determination of the required City contribution to the Retirement Funds. 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. See "City Contributions to FABF" below.

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. P.A. 98-641 amends the Pension Code such that the Pension Levy is no longer the default funding mechanism for MEABF and LABF beginning in 2015. 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. In recent years, the City has deposited a portion of the City's Personal Property Replacement Tax revenue ("PPRT") with the City Treasurer for this purpose. PPRT revenue is paid by the State of Illinois (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. The City's distributive share of PPRT is not required to be used for this purpose but it can be used by the City for corporate purposes. 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 2011, 2012 and 2013, the amounts of PPRT contributed to the Retirement Funds in the aggregate were approximately \$108,153,000, \$101,875,000 and \$126,639,000, respectively. For those same years, the City's total distributive share of PPRT was \$144,333,000, \$139,461,000 and \$159,559,000, respectively.

The City's contributions in accordance with the Pension Code, which have been generally lower than the Actuarially Required Contribution have contributed to the significant underfunding of the Retirement Funds. Moreover, the contributions to the Retirement Funds in accordance with the Pension 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. Any significant increases in the City's contributions (such as those scheduled to occur under P.A. 96-1495 and P.A. 98-641) to the Retirement Funds can be expected to place significant strain on the City's finances.

### City's Contributions to FABF

With respect to the contribution to be made in 2015, the FABF has requested certain amounts which the City has determined are not required by the Pension Code. The amount requested by the FABF Board in excess of the amount the City has determined to be the statutory requirement for 2014 was \$18,147,000. The FABF Board has made similar requests for amounts in excess of the amount the City has determined to be the statutory requirement in each of the last several years. In each such year, including the current year, 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 to FABF.

### City's Required Contributions to PABF and FABF Beginning in 2016

On December 30, 2010, Governor Pat Quinn signed into law Public Act 096-1495 ("P.A. 96-1495") which, among other things, 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 (as hereafter defined) of 90% 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% 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 such, any property tax to be levied by the City for the purpose of raising the P.A. 96-1495 Contribution to be made by the City in 2016 would be levied in calendar year 2015 and collected in calendar year 2016.

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 and will impose a significant financial burden on the City. The City is exploring options to change the P.A. 96-1495 Funding Plan to reduce the near-term burden on the City's financial condition imposed by dramatically increased contributions to PABF and FABF under P.A. 96-1495, including shifting all or a portion of such burden to future years. Any change to the P.A. 96-1495 Funding Plan which would reduce the contributions required of the City would have the effect of increasing the unfunded liabilities and decreasing the Funded Ratio with respect to PABF and FABF when compared to the projected unfunded liabilities and Funded Ratio as set forth in Tables 13 and 14 below. Furthermore, any such change would require legislative action by the Illinois General Assembly.

Illinois House Bill 3088 ("HB 3088") contains a proposed amendment that would: (i) delay implementation of the actuarial funding required by the P.A. 96-1495 Funding Plan until 2021, and instead require the City to continue contributing to PABF and FABF under the Multiplier Funding system through that year; and (ii) provide that PABF and FABF achieve a 90% Funded Ratio by 2061 rather than 2040 as currently required by P.A. 96-1495 (collectively, the "96-1495 Delay Bill"). If enacted, the 96-1495 Delay Bill would increase the cost of PABF's and FABF's respective liabilities, as well as the associated financial risks, including the risk that the PABF and FABF will become insolvent. For more information regarding the possible insolvency of the Retirement Funds, see "Projection of Funded Status and Insolvency" below.

No assurance can be given that a bill modifying the P.A. 96-1495 Funding Plan, including the 96-1495 Delay Bill, will be enacted into law.

### City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641

On June 9, 2014, P.A. 98-641 was signed into law by the Governor. P.A. 98-641 modifies the manner in which the City's contributions to LABF and MEABF are calculated. For payment years 2016 through 2020, P.A. 98-641 retains the Multiplier Funding system as the method of calculating the City's contributions to LABF and MEABF (unless the amount determined pursuant to the Multiplier Funding system for any year is more than the Normal Cost (as hereinafter defined) for such year plus the amount, determined on a level percentage of payroll basis, that is sufficient to achieve a Funded Ratio of 90% by the end of contribution year 2055), but increases the Multiplier as follows: for the contribution made in 2016, 1.60 (LABF) and 1.85 (MEABF); for the contribution made in 2017, 1.90 (LABF) and 2.15 (MEABF); for the contribution made in 2018, 2.20 (LABF) and 2.45 (MEABF); for the contribution made in 2019, 2.50 (LABF) and 2.75 (MEABF); and for the contribution made in 2020, 2.80 (LABF) and 3.05 (MEABF). Beginning in 2021, the City's contributions for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is sufficient for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is sufficient for LABF and MEABF will equal the normal cost for such year plus the amount, determined on a level percentage of payroll basis that is

sufficient to achieve a Funded Ratio of 90% in LABF and MEABF by the end of contribution year 2055 (the "P.A. 98-641 Funding Plan").

### The Actuarial Valuation

### General

In addition to the process outlined above, 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. The Actuarial Valuation measures the financial position and determines the Actuarially Required Contribution of such Retirement Fund for reporting purposes pursuant to GASB Statement No. 25 ("GASB 25").

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.

### Actuaries and the Actuarial Process

GASB standards require disclosure of an "Actuarially Required Contribution," which is a financial reporting requirement but not a funding requirement. One of the primary purposes of the Actuarial Valuations is to determine the Actuarially Required Contribution, which is the annual contribution amount that GASB standards would calculate is needed to fully fund the Retirement Funds. GASB pronouncements refer to this concept 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 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.

The Actuarially Required Contribution consists 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 (defined 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 calculate, as of the valuation date, the Normal Cost, the Actuarial Accrued Liability (defined below), the Actuarial Value of Assets (defined below), and the actuarial present values for the

Retirement Fund. The Retirement Funds' actuaries use this data to determine the following fiscal year's Actuarially Required Contribution. The Retirement Funds' Actuarial Valuations are publicly available and may be obtained from the Retirement Funds. See "— Source Information" above.

The Actuarial Accrued Liability is an estimate of the present value of the benefits each Retirement Fund must pay to current and retired employees as a result of their past employment with the City and participation in such Retirement Fund. The Actuarial Accrued Liability is 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 reflects the value of the investments and other assets held by each Retirement Fund. Various methods exist 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, see "— Actuarial Methods" and "— Actuarial Assumptions" below.

Any shortfall between the Actuarial Value of Assets and the Actuarial Accrued Liability is referred to as the "Unfunded Actuarial Accrued Liability" or "UAAL." The UAAL represents the present value of benefits attributed to past service that are in excess of plan assets. In addition, the actuary will compute the "Funded Ratio," which is 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.

### City's Contributions Not Related to GASB Standards

The City's contributions to the Retirement Funds are not based on the contribution standards promulgated by GASB for reporting purposes. Instead, the City's contributions are based on the formulas and amounts established in the Pension Code. Whereas GASB's contribution standards are actuarially based, the contribution amounts required by the Pension Code, with the exception of the P.A. 96-1495 Funding Plan and the P.A. 98-641 Funding Plan discussed above, are not actuarially based. See "— Determination of City's Contributions" above.

The difference between the City's actual contributions and the Actuarially Required Contribution (as calculated by the Retirement Funds' actuaries) for fiscal years 2004-2013 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. P.A. 98-641 changes the method of amortization for LABF and MEABF to a level percent of payroll basis. Both methods of calculating the Actuarially Required Contribution are acceptable under the standards promulgated by GASB.

### City's Contributions under P.A. 96-1495 and P.A. 98-641 Will Not Conform to GASB Financial Reporting Benchmarks

As discussed above, beginning in 2016, the City's contributions to PABF and FABF are required to be calculated pursuant to P.A. 96-1495. The P.A. 98-641 Funding Plan governs calculation of the

City's contributions to LABF and MEABF beginning in 2021. The P.A. 96-1495 Funding Plan and the P.A. 98-641 Funding Plan differ from the manner of calculation GASB requires for financial reporting purposes. The primary difference between GASB's financial reporting standards and these funding plans is that the goal of such funding plans is to reach a Funded Ratio in the respective Retirement Funds of 90%. GASB's financial reporting standards require amortization of the entire UAAL towards attainment of a 100% Funded Ratio.

### **Actuarial Methods**

The Retirement Funds' actuaries employ a variety of actuarial methods to arrive at the Actuarial Value of Assets and the Actuarial Accrued Liability.

### Actuarial Value of Assets

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% of the investment gain or loss realized in that year and each of the previous four years. The Asset Smoothing Method is an allowable method of calculation according to GASB.

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 does not reflect the true 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.

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 - ASSET SMOOTHED VALUE OF ASSETS VS. FAIR VALUE OF NET ASSETS -AGGREGATED<sup>(1)</sup>

Fiscal Year	Actuarial Value of Assets <sup>(2)</sup>	Fair Value of Net Assets	Actuarial Value as a Percentage of Fair Value
2004	\$13,108,645	\$12,952,096	101.21%
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	97.51
2013	10,513,564	11,261,254	93.36

Source: 2004 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010. 2011, 2012 and 2013 data is sourced to the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively.

In thousands of dollars. Data is presented in the aggregate for the Retirement Funds.

(1) (2) The Actuarial Value of Assets is calculated through use of the Asset Smoothing Method.

### Actuarial Accrued Liability

As the final step in the Actuarial Valuation, 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. 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 is a GASB-approved actuarial cost method.

Under the EAN Method, the present value of each member's projected pension is assumed to be funded by annual installments equal to a level percentage of the member's earnings for each year between entry age and assumed exit age. Each member's Normal Cost 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 active members.

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 a member'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 member's salary changes and years of service increase, and as some members leave and new members 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 is the P.A. 96-1495 Funding Plan and under P.A. 98-641). 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 Actuarial Accrued Liability and the Actuarial Value of Assets. 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 an increase or decrease in the Actuarial Value of Assets, the Actuarial Accrued Liability, the UAAL, the Funded Ratio or the Actuarially Required Contribution. Additional information on each Retirement Fund's actuarial assumptions is available in the respective 2013 Actuarial Valuation of a Retirement Fund. 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.

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% beginning with calendar year 2012. For PABF, the assumed investment rate of return was decreased to 7.75% for calendar year 2012 and 7.50% beginning with calendar year 2013. FABF continues to assume an investment rate of return of 8.0%. For a discussion of the rate to be used by Moody's in analyzing public pension plans, see "— General" 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. 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.

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, the City's contributions to PABF are expected to increase even further as a result of the change in the assumed investment rate of return, taken independently of other factors, because PABF's UAAL will increase as described above and the P.A. 96-1495 Funding Plan requires an amortization of the UAAL to reach the 90% funding target by 2040. Pursuant to P.A. 98-641, beginning in 2021, the City's contributions to LABF and MEABF will be higher as a result of the change in the respective assumed investment rates of return, taken independently of other factors, because the respective UAALs of LABF and MEABF will increase as described above and the P.A. 98-641 Funding Plan requires an amortization of the UAAL to reach the 90% funding target by 2054.

### **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) and PPRT funds.\* However, these amounts have not been sufficient to fully fund the Retirement Funds' Actuarially Required Contributions. 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 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

<sup>\*</sup> 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.

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.

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.

Fiscal Year	Actuarially Required Contribution	Actual Employer Contribution <sup>(2)</sup>	Percentage of Actuarially Required Contribution Contributed <sup>(3)</sup>
2004	\$ 545,232	\$345,398	63.3%
2005	698,185	423,515	60.7
2006	785,111	394,899	50.3
2007(4)	865,776	395,483	45.7
2008 <sup>(4)</sup>	886,215	416,130	47.0
2009 <sup>(4)</sup>	990,381	423,929	42.8
2010 <sup>(4)</sup>	1,112,626	425,552	38.2
2011 <sup>(4)</sup>	1,321,823	416,693	31.5
2012 <sup>(4)</sup>	1,470,905	440,120	29.9
2013(4)	1,695,278	442,970	26.1

### TABLE 4 - INFORMATION REGARDING CITY'S CONTRIBUTIONS<sup>(1)</sup> - AGGREGATED

Sources: Actuarial Valuations of the Retirement Funds as of December 31, 2010, December 31, 2011, December 31, 2012, and December 31, 2013, CAFRs of the Retirement Funds for the fiscal year ending December 31, 2010, and CAFRs of the City for the fiscal years ending December 31, 2011, December 31, 2012, and December 31, 2013.

- In thousands of dollars. Data is presented in the aggregate for the Retirement Funds and uses assumptions (1) and methods employed by each of the Retirement Funds. For the data presented as of December 31, 2003 through 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.
- Includes the portion of the PPRT contributed to the Retirement Funds in each year.

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- (2) (3) The estimated multipliers that would have been necessary for each Retirement Fund to make the full Actuarially Required Contribution in 2013 were as follows: 4.52 for MEABF; 6.45 for FABF; 5.26 for LABF; and 6.92 for PABF. Beginning in 2016, the City's contributions to PABF and FABF will not be calculated in accordance with the Multiplier Funding system. Pursuant to P.A. 98-641, the City's contributions to LABF and MEABF will not be calculated in accordance with the Multiplier Funding system beginning in 2021. See "- Determination of City's Contributions" above.
- Beginning in 2006, as a result of a change in GASB standards, the information in this Table 4 does not (4) include other post-employment benefits, which the City's Comprehensive Annual Financial Report presents separately.

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 and as a result of the delayed recognition of gains and losses resulting from the Retirement Funds' use of the Asset Smoothing Method for financial reporting purposes. See "- Actuarial Methods-Actuarial Value of Assets" above.

As of the end of fiscal year 2010, the Retirement Funds had an aggregate UAAL of approximately \$15.315 billion on a fair value basis and \$14.274 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 42.7% and 46.6%. The UAAL increased between the end of fiscal year 2009 and the end of fiscal year 2010 primarily as a result of (i) insufficient contributions compared to the Actuarially Required Contribution and (ii) investment losses brought on by the severe global economic downturn.

As of the end of fiscal year 2011, the Retirement Funds had an aggregate UAAL of approximately \$17.284 billion on a fair value basis and \$16.299 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 37.9% and 41.4%.

As of the end of fiscal year 2012, the Retirement Funds had an aggregate UAAL of approximately \$19.084 billion on a fair value basis and \$19.352 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 36.1% and 35.2%.

As of the end of fiscal year 2013, the Retirement Funds had an aggregate UAAL of approximately \$19.362 billion on a fair value basis and \$20.110 billion on an actuarial basis (using the Asset Smoothing Method). The respective Funded Ratios for these UAALs are 36.8% and 34.3%.

The following tables summarize the financial condition and the funding trends of the Retirement Funds.

# TABLE 5 - FINANCIAL CONDITION OF THE MEABF FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$5,922,789	\$6,242,741	\$6,356,888	\$6,841,127	\$7,010,007	\$4,739,614	\$5,166,224	\$5,435,593	\$5,053,249	\$5,182,670
- Member Contributions	155,885	122,542	129,466	132,442	137,749	130,981	133,300	132,596	130,266	131,532
- City Contributions	153,919	155,067	148,332	139,552	146,803	157,698	164,302	156,525	158,381	157,705
- Investment Income <sup>(1)</sup>	578,730	402,311	778,726	485,926	(1,947,576)	778,562	638,569	31,583	589.198	735,272
- Miscellancous Income	1	,	ŀ	•	•	•	24	•	1	1
Total	\$ 888,534	\$ 679,920	\$ 679,920 \$1,056,524 \$ 757,921	\$ 757,921	\$(1,663,024)	\$1,067,241	\$(1,663,024) \$1,067,241 \$ 936,195 \$ 320,705 \$ 877,845	S 320,705	\$ 877,845	S1,024,509
Expenditures	600 003	000	6/6 007	200 002	500 127	V70 L67		105 171	C03 17L	C00 007
- Administration	29,672	5,545	6,398	6,995	7,279	7,766	6,745	7,375	6,841	6,499
Total	\$ 568,582	S 565,773	\$ 572,285	\$ 572,285 \$ 589,041	\$ 606,416 \$	\$ 640,630	\$ 666,826 \$ 703,050	\$ 703,050	\$748,425	\$ 785,502
Ending Net Assets (Fair Value)	\$6,242,741	\$6,356,888	\$6,841,127	\$7,010,007	\$4,740,567 S5,166,225	\$5,166,225	\$5,435,593 \$5,053,249		\$5,182,670	\$5,421,676
Actuarial Value of Assets <sup>(3)</sup>	S6,343,076	\$6,332,379	\$6,509,146	\$6,890,463	\$6,669,502 \$6,295,788	\$6,295,788	S6,003,390	S5,552,291	\$5,073,320	S5,114,208
Actuarial Accrued Liabilities <sup>(4)</sup>	8,808,501	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
UAAL (Fair Value) <sup>(5)</sup>	2,565,760	2,893,324	2,634,991	2,958,740	5,642,591	5,663,894	6,393,073	7,239,681	8,292,706	8,407,244
UAAL (Actuarial Value) <sup>(3)</sup>	2,465,425	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
Funded Ratio (Fair Value) <sup>(5)</sup>	70.9%	68.7%	72.2%	70.3%	45.7%	47.7%	46.0%	41.1%	38.5%	39.2%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	72.0%	68.5%	68.7%	69.1%	64.2%	58.1%	50.8%	45.2%	37.6%	37.0%
Source: 2004 through 2010 data is from the Actuarial Valuation of the MEABF as of December 31, 2010, and the CAFR of the MEABF for the fiscal year ending December 31, 2010, 2011, 2012, and 2013 data	from the Actuaria	al Valuation of the	: MEABF as of D	ecember 31, 201	0. and the CAFR of	f the MEABF for	the fiscal year en	ding December 3	1. 2010. 2011. 2	012 and 2013 data
									1.2010.2011.2	

Source: is from the Actuarial Valuations of the MEABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively Table may not add due to rounding. 2004 through 2010 data is from the Actuarial Valuation of the MEABF as of December 31, 2010, and the CAFR of the MEABF for the fiscal year ending December 31, 2010. 2011, 2012 and 2013 data

Beginning in fiscal year 2009, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. Investment income is shown net of fees and expenses.

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods - Actuarial Value of Assets" above.

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below

Investment income is shown net
 Beginning in fiscal year 2009, in
 The actuarial value is determined
 Beginning with fiscal year 2006,
 Calculated using net assets.

## **TABLE 6 - FINANCIAL CONDITION OF THE PABF** FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$3,693,283	\$3,865,809	\$3,954,837	\$4,192,076	\$4,333,234	\$3,000,998	\$3,326,051	\$3,439,669	\$3,175,5()9	\$3,213.432
Income - Member Contributions	78.801	89,110	91,965	93,300	93,207	95,614	108,402	98,222	95,892	93,329
- City Contributions	135,669	177,911	157,689	178,678	181,526	180,511	183,835	183,522	207,228	188.889
- Investment Income <sup>(1)</sup>	367,908	261,389	447,275	349,914	(1, 104, 909)	567,315	369,558	33,656	353,176	415,294
- Miscellaneous Income	75	368	1,070	28	160	799	20	104	423	479
Total	\$ 582,453	\$ 528,778	\$ 697,999	\$ 621,920	\$ (830.016)	S 844,239	\$ 661,815	\$ 661,815 \$ 315,504	\$ 656,719	\$ 656,719 \$ 697,991
Expenditures - Benefits and Refunds <sup>(2)</sup>	407,301	437,089	458,060	477,685	497,721	514,883	544,272	575,305	613,907	641,926
- Administration	2,626	2,661	2,700	3,077	4,499	4,304	3,925	4,359	4,888	4,298
Total	\$ 409,927	\$ 439,750	\$ 460,760	\$ 480,762	\$ 502,220	\$ 519,187	\$ 548,197	\$ 548,197 S 579,664	\$ 618,795	\$ 646,204
Ending Net Assets (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	\$3,265,200
Actuarial Value of Assets <sup>(3)</sup>	\$3,933,031	\$3,914,432	\$3,997,991	\$4,231,682	\$4,093,720	\$3,884,978	\$3,718,955	\$3,444,690	S 3,148,930	\$ 3,053.882
Actuarial Accrued Liabilities <sup>(4)</sup>	7,034,271	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
UAAL (Fair Value) <sup>(5)</sup>	3,168,462	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
UAAL (Actuarial Value) <sup>(3)</sup>	3,101,240	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
Funded Ratio (Fair Value) <sup>(5)</sup>	55.0%	51.2%	52.8%	52.7%	35.4%	38.1%	37.3%	33.4%	32.0%	31.8%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	55.9%	50.7%	50.4%	51.5%	48.3%	44.5%	40.4%	36.2%	31.3%	29.7%
	-	in stike DADE	as of December	31 2010 and C.	A FD of the DAR.		: 1	-		

the Actuarial Valuations of the PABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding.

 $\mathbf{E} \subseteq \mathbf{G} \subseteq \mathbf{E} \subset \mathbf{C}$ Investment income is shown net of fees and expenses.

Beginning in fiscal year 2008, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. The actuarial value is determined by application of the Asset Smoothing Method as discussed in "— Actuarial Methods — Actuarial Value of Assets" above.

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

Calculated using net assets.

## **TABLE 7 - FINANCIAL CONDITION OF THE FABF** FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	S1,109,561	\$1,206,177	S1,274,659	S1,391,484	\$1,469,455	\$ 914,193	14,193 \$1,051,644 \$1,106,078	\$1,106,078	\$993,774	\$993,774 \$1,032,423
Income - Member Contributions - City Contributions - Investment Income <sup>(1)</sup> - Miscellaneous Income Total	37,734 55,532 139,497 24,322 \$ 257,085	37,734 35,697 55,532 90,129 139,497 112,017 24,322 456 257,085 \$ 238,299	44,222 41,120 78,971 74,271 174,406 148,806 87 162 \$ 297,686 \$ 264,359	41,120 74,271 148,806 162 S 264,359	40,480 83,744 (484,093) 107 \$(359,762)	41,605 91,857 208,537 36 \$ 342,035	41,730 83,592 150,835 <u>30</u> \$ 276,187	41,730 51,918 56,718 83,592 85,498 84,144 150,835 (22,434) 135.203 30 17 8 \$ 276,187 \$ 114,999 \$ 276,073	56,718 84,144 135,203 8 \$ 276,073	42,520 106,220 190,536 (60) \$339,216
Expenditures - Benefits and Refunds <sup>(2)</sup> - Administration Total	158,372 2,097 S 160,469	167,527 2,290 \$ 169,817	178,214 2,647 \$ 180,861	183,304 3,084 S 186,388	192,644 2,856 \$ 195,500	201,146 3,439 \$ 204,585	217,565 4,187 S 221,752	217,565 223,580 4,187 3,723 S 221,752 \$ 227,303	233,840 3,584 \$ 237,424	251,819 3,115 \$254,934
Ending Net Assets (Fair Value) Actuarial Valuc of Assets <sup>(3)</sup> Actuarial Accrued Liabilities <sup>(4)</sup> UAAL (Fair Value) <sup>(5)</sup> UAAL (Actuarial Value) <sup>(3)</sup> Funded Ratio (Fair Value) <sup>(3)</sup>	\$1,206,177 \$1,182,579 2,793,524 1,587,347 1,610,945 43.2% 42.3%	\$1,274,659 \$1,203,654 2,882,936 1,608,277 1,679,282 44.2% 41.8%	\$1,391,484 \$1,264,497 3,088,124 1,696,640 1,823,627 45.1% 40.9%	S1,469,455 S1,374,960 3,215,874 1,746,419 1,840,914 45.7% 42.8%	\$ 914,193 \$1,335,695 3,311,269 2,397,076 1,975,574 27.6% 40.3%	\$1,051,643 \$1,269,231 3,428,838 2,377,195 2,159,607 30.7% 37.0%	S1,106,079 S1,198,114 3,655,026 2,548,947 2,456,912 30.3% 32.8%	\$993,774 \$1,101,742 3,851,919 2,858,145 2,750,177 25.8% 28.6%	\$1,032,423 \$ 993,284 4,020,138 2,987,715 3,026,854 25.7% 24.7%	S1,116,705 \$991,213 4,128,735 3,012,030 3,137,522 27.0% 24.0%
Source: 2004 through 2010 data is from the Actuarial Valuation of the FABF as of December 31, 2010, and CAFR of the FABF for the fiscal year ending December 31, 2010. 2011. 2012 and 2013data is from	the Actuarial Value	tion of the FAB	F as of Decembe	r 31, 2010, and C	CAFR of the FAE	F for the fiscal y	ear ending Dece	nber 31, 2010. 2	011, 2012 and 20	)13data is from

the Actuarial Valuations of FABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding. Investment income is shown net of fees and expenses. Beginning in fiscal year 2001, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below The actuarial value is determined by application of the Asset Smoothing Method as discussed in "--- Actuarial Methods --- Actuarial Value of Assets" above. Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below. Calculated using net assets.

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## **TABLE 8 - FINANCIAL CONDITION OF THE LABF** FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

UAAL (Fair Value) <sup>(3)</sup> 37,246         83,239         28,022           UAAL (Actuarial Value) <sup>(3)</sup> 24,656         106,705         103,624           Funded Ratio (Fair Value) <sup>(5)</sup> 97.8%         95.2%         98.4%	ir Value) <u>\$1,637,369</u> <u>\$1,659,061</u> <u>\$1,739,660</u> sets <sup>(3)</sup> <u>\$1,649,959</u> <u>\$1,635,595</u> <u>\$1,664,058</u> bilities <sup>(4)</sup> <u>1,674,615</u> <u>1,742,300</u> <u>1,767,682</u>	Expenditures       105,958       109,405       110,003       112,567       117,147       1         - Benefits and Refunds <sup>(2)</sup> 2,872       2,985       2,831       3,352       3,626         - Administration       2,872       2,985       212,834       \$ 115,919       \$ 120,773       \$ 1	Income       22,591       16,257       18,791       18,413         - Member Contributions       197       40       106       15,459         - City Contributions       171,045       117,785       174,536       125,205         - Miscellaneous Income       5       -       -       -         Total       \$ 193,838       \$ 134,082       \$ 193,433       \$ 159,077	2004         2005         2006           Beginning Net Assets (Fair Value)         \$1,552,361         \$1,637,369         \$1,659,061         \$1
25,477 50,584 98.6% 97.2%	\$1,782,818 \$1,757,711 1,808,295	112,567 3,352 115,919	18,413 15,459 125,205 - 159,077	<b>2007</b> \$1,739,660
726,743 216,897 62.1% 88.7%	\$1,188,581 \$1,698,427 1,915,324	117,147 3,626 \$ 120,773	19,419 17,580 (510,463) - \$(473,464)	<b>2008</b> \$1,782,818
642,821 374,397 67.5% 81.1%	\$1,332,928 \$1,601,352 1,975,749	123,817 3,665 \$ 127,482	19,419       17,538       16,320       16,069         17,580       17,190       17,939       15,359         (510,463)       237,102       193,187       (4,511)         -       -       -       -         \$(473,464)       \$271,830       \$227,446       \$26,917	2009         2010         2011         2012           \$1,188,580         \$1,332,929         \$1,427,214         \$1,313,604
602,811 500,621 70.3% 75.3%	\$1,427,214 \$1,529,404 2,030,025	129,297 3,864 \$ 133,161	16,320 17,939 193,187 - S 227,446	<b>2010</b> \$1,332,929
839,250 730,440 61.0% 66.1%	\$1,313,604 \$1,422,414 2,152,854	136,533 3,994 \$ 140,527	16,069 15,359 (4,511) - S 26,917	<b>2011</b> S1,427,214
965,112 1,020,276 58.7% 56.3%	\$1,371,077 \$1,315,914 2,336,189	123,817 129,297 136,533 142,215 147,108 3,665 3,864 3,994 4,746 4,134 127,482 \$ 133,161 \$ 140,527 \$ 146,961 \$ 151,242		
925,826 1,029,238 61.2% 56.8%	S1,457,673 S1,354,261 2,383,499	147,108 4,134 S 151,242	16,559 16,393 14,415 14,101 173,460 207,344 - \$204,434 \$ 237,838	<b>2013</b> \$1,371,077

Source: the Actuarial Valuations of the LABF as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding 2004 through 2010 data is from the Actuarial Valuation of the LABF as of December 31, 2010, and CAFR of the LABF for the fiscal year ending December 31, 2010. 2011, 2012 and 2013 data is from

(5) (4) (3) (2) (1) Investment income is shown net of fees and expenses.

Beginning in fiscal year 2008, includes expenses related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods - Actuarial Value of Assets" above.

Calculated using net assets. Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

## **TABLE 9 - FINANCIAL CONDITION OF THE RETIREMENT FUNDS COMBINED** ι FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning Net Assets (Fair Value)	\$12,277,994 \$12,952,096	\$12,952,096	\$13,245,445	\$13,245,445 \$14,164,347 \$14,595,514	\$14,595,514	\$ 9,843,385	\$10,876,848	\$11,408,554	\$10,536,136	\$10,799,603
Income	205 011	202 626	777 790	201 201	200 022	205 720	1967 AAC	200 000	200	103 774
- City Contributions	345 317	423 147	385 098	407 960	479 653	447 256	449 668	440 904	464 168	466 915
		120,171							101,100	
- Investment Income <sup>v</sup>	1,257,180	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
- Miscellaneous Income	24,402	824	1,157	190	267	835	74	121	431	419
Total	S 1,921,910 \$ 1,581,079	\$ 1,581,079	\$ 2,245,642	\$ 1,803,277 \$(3,326,266)	\$(3,326,266)	\$ 2,525,345	\$ 2,101,643	\$ 778,125	\$ 778,125 \$ 2,015,071	S2,299,554
Expenditures		-	-	-	-	-		-	1 73 1 646	1010050
- Administration	37,267	13,481	14,576	16,508	18,260	19,174	18,721	19,452	20,059	18,046
									S	\$1,837,902
Total	S 1,247,808	\$ 1,247,808 \$ 1,287,730 \$ 1,326,740 \$ 1,372,110 \$ 1,424,909	S 1,326,740	S 1,372,110	\$ 1,424,909	S 1,491,884	1,491,884 S 1,569,936 \$ 1,650,544	\$ 1,650,544	1,751,604	
Ending Net Assets (Fair Value)	\$12,952,096	\$13,245,445	\$14,164,347	\$14,595,514	\$ 9,844,339	S10,876,846	\$11,408,555	\$10,536,135	\$10,799,603	\$11,261,254
Actuarial Value of Assets <sup>(3)</sup>	\$13,108,645	\$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
Actuarial Accrued Liabilities <sup>(4)</sup>	20,310,911	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
UAAL (Fair Value) <sup>(5)</sup>	7,358,815	8,352,740	8,107,138	8,617,755	14,247,986	14,093,962	15,315,218	17,283,963	19,083,929	19,362,239
UAAL (Actuarial Value) <sup>(3)</sup>	7,202,266	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
Funded Ratio (Fair Value) <sup>(5)</sup>	63.77%	61.33%	63.60%	62.88%	40.86%	43.56%	42.69%	37.87%	36.1%	36.8%
Funded Ratio (Actuarial Value) <sup>(3)</sup>	64.54%	60.59%	60.33%	61.41%	57.27%	52.27%	46.59%	41.41%	35.2%	34.3%
Source: 2004 through 2010 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2010, and CAFRs of	the Actuarial Valı	ations of the Reti	rement Funds as (	of December 31,	2010, and CAFRs	of the Retirement	Funds for the fis	the Retirement Funds for the fiscal year ending December 31, 2010. 2011,	cember 31, 2010.	2011,
	otuarial Valuation	e of the Patiromon	t Eurode as of Dec	omber 21 2011 1	Jecember 11 2012	and Decombor 1	1 2012 monantur	dv Table may not	add doe to coundi	

Š Investment income is shown net of fees and expenses. 2012 and 2013 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding

(2 E See "Payment for Other Post-Employment Benefits" below. 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.

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods - Actuarial Value of Assets" above.

Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below.

(3) The actuarial value is determined by application
(4) Beginning with fiscal year 2006, does not include
(5) Calculated using net assets.

## **TABLE 10 - SCHEDULE OF FUNDING PROGRESS - COMBINED FOR THE RETIREMENT FUNDS** FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

602.7	626.0	3,212,558	36.8	34.3	19,362,239	20,109,929	11,261,254	10,513,564	30,623,493	2013
592.0	600.0	3,223,720	36.1	35.2	19,083,929	19,352,084	10,799,603	10,531,448	29,883,532	2012
512.0	499.8	3,261,021	37.9	41.4	16,696,869	16,298,960	10,536,135	11,521,138	27,233,004	2011
480.1	447.5	3,189,739	42.7	46.6	15,315,218	14,273,910	11,408,555	12,449,863	26,723,773	2010
444.2	375.7	3,172,716	43.6	52.3	14,093,962	11,919,459	10,876,846	13,051,349	24,970,808	2009
448.0	323.7	3,180,484	40.9	57.3	14,247,986	10,294,981	9,844,339	13,797,344	24,092,325	2008
270.5	281.2	3,185,388	62.9	61.4	8,617,755	8,958,453	14,595,514	14,254,816	23,213,269	2007
264.1	287.9	3,069,479	63.6	60.3	8,107,138	8,835,793	14,164,347	13,435,692	22,271,485	2006
290.0	295.5	2,880,358	61.3	60.6	8,352,740	8,512,125	13,245,445	13,086,060	21,598,185	2005
274.2%	268.4%	\$2,683,331	63.8%	64.5%	\$7,358,815	\$7,202,266	\$12,952,096	\$13,108,645	\$20,310,911	2004
UAAL to Payroll (Fair Value) <sup>(4)</sup>	UAAL to Payroll (Actuarial) <sup>(3)</sup>	Payroll	Funded Ratio (Fair Value) <sup>(4)</sup>	Funded Ratio (Actuarial) <sup>(3)</sup>	UAAL (Fair Value) <sup>(4)</sup>	UAAL (Actuarial) <sup>(3)</sup>	Fair Value of Net Assets	Actuarial Value of Assets <sup>(2)</sup>	Actuarial Accrued Liability <sup>(1)</sup>	Fiscal Year

2012 and 2013 data is from the Actuarial Valuations of the Retirement Funds as of December 31, 2011, December 31, 2012, and December 31, 2013, respectively. Table may not add due to rounding. Beginning with fiscal year 2006, does not include liability related to other post-employment benefits. See "Payment for Other Post-Employment Benefits" below

The actuarial value is determined by application of the Asset Smoothing Method as discussed in "- Actuarial Methods - Actuarial Value of Assets" above.

(4) (3) (2) (E) For purposes of this column. "Actuarial" refers to the fact that the calculation was made using the Actuarial Value of Assets.

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.

### **Projection of Funded Status and Insolvency**

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.

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, 2013 and are provided to indicate expected trends in the funded status of the Retirement Funds under the applicable law. The Projections reflect P.A. 96-1495 but do not reflect P.A. 98-641. For projections of MEABF and LABF under P.A. 98-641 and a comparison to projections under the law immediately preceding P.A. 98-641, see Tables 16 and 17.

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
· · · · ·					
2014	\$14,322,312	\$5,277,156	\$ 9,045,156	35.3%	\$156,234
2015	14,788,983	5,088,720	9,700,263	33.1	156,091
2016	15,257,262	4,855,643	10,401,619	31.3	157,427
2017	15,736,491	4,585,770	11,150,721	29.1	161,916
2018	16,213,945	4,264,599	11,949,346	26.3	167,069
2019	16,686,091	3,885,513	12,800,578	23.3	172,600
2020	17,149,388	3,441,412	13,707,976	20.1	178,248
2021	17,600,400	2,925,154	14,675,246	16.6	184,018
2022	18,038,164	2,331,452	15,706,712	12.9	189,873
2023	18,459,401	1,652,472	16,806,929	9.0	195,848
2024	18,874,417	893,662	17,980,755	4.7	201,863
2025	19,269,819	36,495	19,233,324	0.2	208,088
2026	19,644,224	-	19,644,224	0.0	214,489
2027	19,996,084	-	19,996,084	0.0	220,984
2028	20,324,749	-	20,324,749	0.0	227,654
2029	20,628,151	-	20,628,151	0.0	234,442
2030	20,904,445	-	20,904,445	0.0	241,387
2031	21,153,680	-	21,153,680	0.0	248,481
2032	21,376,674	-	21,376,674	0.0	255,727
2033	21,574,935	-	21,574,935	0.0	263,007
2034	21,750,671	-	21,750,671	0.0	270,436
2035	21,906,148	-	21,906,148	0.0	278,088
2036	22,043,770	-	22,043,770	0.0	285,948
2037	22,166,160	-	22,166,160	0.0	293,986
2038	22,275,941	-	22,275,941	0.0	302,297
2039	22,376,201	-	22,376,201	0.0	310,857
2040	22,470,299	-	22,470,299	0.0	319,656

### TABLE 11 - PROJECTION OF FUTURE FUNDING STATUS - MEABF<sup>(1)</sup>

- In thousands of dollars. Projections calculated on a cash basis.
- (1) (2) Represents contributions expected to be made by the City during the fiscal year.

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Such projections assume that the City will continue to contribute to MEABF pursuant to the Multiplier Funding system upon the insolvency of MEABF. Projection derived from actuarial data as of December 31, 2013.

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
			dination of the second		
2014	\$2,448,874	\$1,436,908	\$1,011,966	55.7%	\$14,032
2015	2,504,477	1,408,178	1,096,299	53.9	14,472
2016	2,558,009	1,371,220	1,186,789	52.8	14,411
2017	2,612,627	1,329,444	1,283,183	50.9	15,387
2018	2,665,643	1,279,237	1,386,406	48.0	15,722
2019 2020	2,716,750	1,219,905	1,496,845	44.9	16,168
	2,765,274	1,150,320	1,614,954	41.6	16,675
2021	2,811,041	1,069,824	1,741,217	38.1	17,228
2022 2023	2,853,770	977,541	1,876,229	34.3	17,813
	2,892,919	872,303	2,020,616	30.2	18,431
2024	2,929,006	753,999	2,175,007	25.7	19,075
2025	2,961,105	620,990	2,340,115	21.0	19,752
2026	2,988,935	472,234	2,516,701	15.8	20,462
2027	3,012,165	306,567	2,705,598	10.2	21,185
2028	3,030,629	122,928	2,907,701	4.1	21,941
2029	3,044,169	-	3,044,169	0.0	22,725
2030 2031	3,052,779	-	3,052,779	0.0	23,521
	3,056,992	-	3,056,992	0.0	24,337
2032	3,057,367	-	3,057,367	0.0	25,179
2033	3,054,510	-	3,054,510	0.0	26,018
2034	3,049,319	-	3,049,319	0.0	26,845
2035	3,042,417	-	3,042,417	0.0	27,688
2036	3,034,418	-	3,034,418	0.0	28,540
2037	3,026,025	-	3,026,025	0.0	29,395
2038	3,017,590	-	3,017,590	0.0	30,184
2039	3,009,528	-	3,009,528	0.0	30,909
2040	3,002,648	-	3,002,648	0.0	31,610

### TABLE 12 - PROJECTION OF FUTURE FUNDING STATUS - LABF<sup>(1)</sup>

(1)

1

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Such projections assume that the City will continue to contribute to LABF pursuant to the Multiplier Funding system upon the insolvency of LABF. Projection derived from actuarial data as of December 31, 2013.

In thousands of dollars. Projections calculated on a cash basis. Represents contributions expected to be made by the City during the fiscal year. (2)

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
<u></u>	e rational definitions and				
2014	\$4,225,089	\$1,075,899	\$3,149,190	25.5%	\$106,220
2015	4,360,451	1,151,244	3,209,207	26.4	112,169
2016	4,493,997	1,228,083	3,265,914	27.3	246,132
2017	4,627,415	1,308,900	3,318,515	28.3	253,201
2018	4,756,606	1,390,934	3,365,672	29.2	260,425
2019	4,880,732	1,474,650	3,406,082	30.2	268,308
2020	4,999,515	1,560,688	3,438,827	31.2	276,737
2021	5,113,491	1,650,085	3,463,406	32.3	285,445
2022	5,222,832	1,744,194	3,478,638	33.4	294,115
2023	5,327,614	1,845,044	3,482,570	34.6	303,384
2024	5,427,336	1,953,846	3,473,490	36.0	313,868
2025	5,522,162	2,072,117	3,450,045	37.5	324,809
2026	5,612,668	2,201,689	3,410,979	39.2	336,114
2027	5,698,370	2,345,817	3,352,553	41.2	347,685
2028	5,778,147	2,506,373	3,271,774	43.4	359,377
2029	5,852,755	2,683,046	3,169,709	45.8	370,304
2030	5,923,952	2,875,431	3,048,521	48.5	379,314
2031	5,990,906	3,082,710	2,908,196	51.5	387,355
2032	6,053,664	3,305,508	2,748,156	54.6	393,836
2033	6,112,722	3,545,346	2,567,376	58.0	399,775
2034	6,169,734	3,804,297	2,365,437	61.7	405,703
2035	6,226,073	4,084,259	2,141,814	65.6	410,627
2036	6,282,292	4,386,722	1,895,570	69.8	415,213
2037	6,340,833	4,715,323	1,625,510	74.4	419,169
2038	6,403,348	5,073,492	1,329,856	79.2	423,542
2039	6,471,937	5,464,928	1,007,009	84.4	428,171
2040	6,546,019	5,891,417	654,602	90.0	432,956

### TABLE 13 - PROJECTION OF FUTURE FUNDING STATUS - FABF<sup>(1)</sup>

Source: The Actuarial Valuation of FABF as of December 31, 2013.

In thousands of dollars. Projections are calculated on an actuarial basis. Represents contributions expected to be made by the City during the fiscal year. (1) (2)

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Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(2)</sup>
				98:99). Yan (	
2014	\$10,401,796	\$3,116,381	\$7,285,415	30.0%	\$ 188,889
2015	10,729,870	3,331,205	7,398,665	31.0	188,431
2016	11,062,868	3,559,011	7,503,857	32.2	592,863
2017	11,409,721	3,810,987	7,598,734	33.4	613,138
2018	11,760,065	4,077,395	7,682,670	34.7	634,824
2019	12,111,074	4,357,100	7,753,974	36.0	655,923
2020	12,460,807	4,650,079	7,810,728	37.3	677,323
2021	12,807,516	4,956,243	7,851,273	38.7	699,118
2022	13,150,495	5,277,247	7,873,248	40.1	721,134
2023	13,488,428	5,613,787	7,874,641	41.6	744,034
2024	13,820,165	5,968,320	7,851,845	43.2	767,240
2025	14,144,765	6,343,147	7,801,618	44.8	792,087
2026	14,461,365	6,740,553	7,720,812	46.6	818,071
2027	14,768,889	7,162,785	7,606,104	48.5	844,860
2028	15,068,056	7,614,943	7,453,113	50.5	872,392
2029	15,346,057	8,097,936	7,248,121	52.8	901,827
2030	15,602,859	8,610,245	6,992,614	55.2	928,497
2031	15,838,748	9,150,449	6,688,299	57.8	951,481
2032	16,058,874	9,719,291	6,339,583	60.5	970,499
2033	16,264,244	10,318,876	5,945,368	63.4	987,603
2034	16,456,853	10,952,376	5,504,477	66.6	1,003,483
2035	16,641,419	11,626,336	5,015,083	69.9	1,017,489
2036	16,820,971	12,345,734	4,475,237	73.4	1,031,361
2037	16,999,574	13,117,020	3,882,554	77.2	1,043,923
2038	17,179,866	13,945,618	3,234,248	81.2	1,056,617
2039	17,363,605	14,837,009	2,526,596	85.4	1,068,641
2040	17,551,592	15,796,433	1,755,159	90.0	1,080,783

### TABLE 14 - PROJECTION OF FUTURE FUNDING STATUS - PABF<sup>(1)</sup>

Source: The Actuarial Valuation of PABF as of December 31, 2013.

(1) (2)

In thousands of dollars. Projections are calculated on an actuarial basis. Represents contributions expected to be made by the City during the fiscal year.

Fiscal Year	Actuarial Accrued Liability (a)	Market Assets (b)	Market Unfunded Accrued Actuarial Liabilities (UAAL) (a-b)	Market Funded Ratio (b/a)	Employer Contribution <sup>(3)</sup>
2014	\$31,398,071	\$10,906,344	\$20,491,727	34.7%	\$ 465,375
2015	32,383,781	10,979,347	21,404,434	33.9	471,163
2016	33,372,136	11,013,957	22,358,179	33.0	1,010,833
2017	34,386,254	11,035,101	23,351,153	32.1	1,043,642
2018	35,396,259	11,012,165	24,384,094	31.1	1,078,040
2019	36,394,647	10,937,168	25,457,479	30.1	1,112,999
2020	37,374,984	10,802,499	26,572,485	28.9	1,148,983
2021	38,332,448	10,601,306	27,731,142	27.7	1,185,809
2022	39,265,261	10,330,434	28,934,827	26.3	1,222,935
2023	40,168,363	9,983,606	30,184,757	24.9	1,261,697
2024	41,050,925	9,569,827	31,481,098	23.3	1,302,046
2025	41,897,851	9,072,749	32,825,102	21.7	1,344,736
2026	42,707,192	9,414,476	33,292,716	22.0	1,389,136
2027	43,475,507	9,815,169	33,660,338	22.6	1,434,714
2028	44,201,581	10,244,244	33,957,337	23.2	1,481,364
2029	44,871,132	10,780,982	34,090,150	24.0	1,529,298
2030	45,484,036	11,485,676	33,998,360	25.3	1,572,719
2031	46,040,325	12,233,159	33,807,166	26.6	1,611,654
2032	46,546,579	13,024,799	33,521,780	28.0	1,645,241
2033	47,006,411	13,864,222	33,142,189	29.5	1,676,403
2034	47,426,577	14,756,673	32,669,904	31.1	1,706,467
2035	47,816,057	15,710,595	32,105,462	32.9	1,733,892
2036	48,181,450	16,732,456	31,448,994	34.7	1,761,062
2037	48,532,591	17,832,343	30,700,248	36.7	1,786,473
2038	48,876,745	19,019,110	29,857,635	38.9	1,812,640
2039	49,221,271	20,301,937	28,919,334	41.2	1,838,578
2040	49,570,558	21,687,850	27,882,708	43.8	1,865,005

### TABLE 15 - PROJECTION OF FUTURE FUNDING STATUS - AGGREGATE<sup>(1)(2)</sup>

Source: The aggregated information presented in this table is derived from the projections presented in Tables 11-14. Please refer to Tables 11-14 for source information.

In thousands of dollars. Projections for MEABF and LABF are calculated on a cash basis. Projections for (1) PABF and FABF are calculated on an accrual basis.

Aggregate data presented in this table includes data for all four Retirement Funds. (2) (3)

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Represents contributions expected to be made by the City during the fiscal year.

The projections in Tables 11 and 12 show that the assets of MEABF and LABF will be depleted by 2026 and 2029, respectively; however, the projections do not take into account P.A. 98-641. As a

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result, if P.A. 98-641 is not upheld upon a legal challenge to its validity and the law in effect prior to the enactment of P.A. 98-641 remains, MEABF and LABF will not have assets on hand to make payments to beneficiaries beginning in 2026 and 2029, respectively. See "Legislative Changes—P.A. 98-641" for additional information.

The City cannot predict the impact that the insolvency of MEABF or LABF would have on its contributions to these Retirement Funds. One possibility upon insolvency of MEABF or LABF would be changes in the Pension Code to provide for pay-as-you-go funding. Under pay-as-you-go funding, the employer contribution equals the amount necessary, when added to other income, specifically employee contributions, to fund the current year benefits to be paid by the retirement fund. Gabriel Roeder Smith & Company ("GRS") projects that, should the City be required to adopt pay-as-you-go funding to ensure that payments to beneficiaries are made to MEABF and LABF beneficiaries following the insolvency of such Retirement Funds, the City's contributions to such Retirement Funds would increase substantially. With respect to MEABF, GRS projects that pay-as-you-go funding would increase the City's contribution in 2025 to \$1.107 billion in 2026, \$1.607 billion in 2042 and \$1.581 billion in 2060. With respect to LABF, GRS projects that pay-as-you-go funding would increase the City's contribution from approximately \$21.9 million in 2028 to \$99.6 million in 2029, \$248 million in 2036 and \$231 million in 2060. Such large increases in the City's contributions, if required, could have a material adverse impact on the City's financial condition.

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.

The projections in Tables 13 and 14 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. This projection does not consider the impact of the 96-1495 Delay Bill. The City projects that, should the 96-1495 Delay Bill be enacted in its current form, the Funded Ratio of such Retirement Funds would continue to decrease during the period by which P.A. 96-1495 is delayed.

The statements made in this subsection 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.

### Report and Recommendations of the Commission to Strengthen Chicago's Pension Funds

The information contained in this subsection describing the CSCP and the Final Report (each as defined herein) relies on information produced by the CSCP, including the Final Report. The Final Report is available at http://www.chipabf.org/ChicagoPolicePension/PDF/Financials/pension\_commissio n/CSCP\_Final\_Report\_Vol.1\_4.30.2010.pdf; however, the content of the Final Report and such website are not incorporated herein by such reference. The City makes no representation nor expresses any opinion as to the accuracy of the Final Report, the statements made or the information therein, some of which may be conflicting. Furthermore, information about the Final Report is being provided for historical purposes only.

On January 11, 2008, then Mayor Richard M. Daley announced the formation of the Commission to Strengthen Chicago's Pension Funds (the "CSCP"), which was composed of a broad cross-section of City officials, union leaders, pension fund executives, and business and civic professionals. The CSCP was charged with examining the Retirement Funds and recommending ways to improve the Funded Ratio of each Retirement Fund. The CSCP met several times in 2008 through 2010, and at the CSCP's final meeting on March 24, 2010, the CSCP endorsed its final report, with three commissioners dissenting. The CSCP's final report, which included letters from the dissenting commissioners, was submitted to Mayor Daley on April 30, 2010 (the "Final Report").

The CSCP's approval of the Final Report occurred before the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641 and, therefore, does not consider the impact of these acts on the Retirement Funds. See "— Determination of City's Contributions" above and "— Legislative Changes" below for additional information on these acts. As described below, certain of the CSCP's findings and recommendations as contained in the Final Report are addressed by these acts.

The CSCP found that the financial health of the Retirement Funds had deteriorated due to a combination of factors, including the following: increasing liabilities due to enhanced benefits (e.g., non-recurring early retirement programs that were not properly funded); inadequate contributions, which were based upon a fixed percentage of payroll and not actuarial need (i.e., the Multiplier Funding); and adverse market conditions leading to fluctuating returns on investments (in 2000-2002 and 2007-2009) which could not keep pace with growth in liabilities. P.A. 96-1495 and P.A. 98-641 address the CSCP's finding of inadequate contributions to the Retirement Funds. See "— Determination of City's Contributions" above for information on the significant increases to the City's contributions to PABF and FABF pursuant to P.A. 96-1495 and to MEABF and LABF pursuant to P.A. 98-641.

The CSCP found that due to the inadequate contributions, the Retirement Funds have had to use assets to pay current benefits, which in turn put pressure on the asset bases and Funded Ratios of the Retirement Funds.

The CSCP modeled a set of scenarios for the Retirement Funds and found that, based on the actuarial assumptions in use by the Retirement Funds and the condition of the Retirement Funds at the

end of 2009, the Retirement Funds would, in the absence of substantial changes to the Retirement Funds' funding policy and/or benefit structure, deplete all assets in each of the Retirement Funds at different dates but all within twenty years of the date of the Final Report. However, the CSCP's approval of the Final Report occurred before the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641, and the depletion dates as estimated in the Final Report would not have taken into account the impact of such legislation. See "— Projection of Funded Status" above for the projections based upon the current legislative structure applicable to the Retirement Funds.

The CSCP suggested that the issues related to the Retirement Funds need to be addressed as soon as possible and offered the following specific recommendations: (i) the defined benefit structure used by the Retirement Funds should remain (as opposed to a defined contribution structure); (ii) new employees should continue to become members of the Retirement Funds; (iii) the Retirement Funds should be funded on an actuarial basis; (iv) changes in the Retirement Funds for new members, while recognized by the CSCP as undesirable, will probably be necessary; (v) contributions to the Retirement Funds should be increased and revenue sources identified; (vi) employee contributions should not exceed the value of benefits on a career basis; (vii) any provisions in current law for refunds or for alternative benefit calculations should be reviewed to ensure that the anticipated financial results of a reform program are actually obtained; (viii) in general, no changes in the Retirement Funds should be made unless financially neutral or advantageous to the Retirement Funds, now or in the future; (ix) a variety of other reforms should be considered, including reforming potential abuses, establishing sound reciprocity with other Illinois public pensions, implementing new structures to manage investments of the Retirement Funds, and improving administration of disability claims and benefits; and (x) any reform legislation must comprehensively and simultaneously address all aspects of the pension funding program.

CSCP's recommendations were made prior to the enactment of the Pension Reform Act, P.A. 96-1495 and P.A. 98-641. Certain of the CSCP's recommendations, including changes in the Retirement Funds for new members, were part of the Pension Reform Act and P.A. 98-641 (with regard to MEABF and LABF) and P.A. 96-1495 (with regard to PABF and FABF).

### Diversion of Grant Money to the Retirement Funds Under P.A. 96-1495 and P.A. 98-641

P.A. 96-1495 and P.A. 98-641 allow the State Comptroller to divert State grant money intended for the City of the Retirement Funds to satisfy contribution shortfalls by the City (the "Recapture Provisions"). If the City fails to contribute to the Retirement Funds 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 for 90 days past the due date, (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 in the following proportions: (i) in fiscal year 2016, one-third of the City's State grant money, (ii) in fiscal year 2017, two-thirds of the City's State grant money, and (iii) in fiscal year 2018 and in each fiscal year thereafter, 100% of the City's State grant money. Should the Recapture Provisions in either of P.A. 96-1495 or P.A. 98-641 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.

A delay bill such as the P.A. 96-1495 Delay Bill may, if enacted, delay the implementation of the Recapture Provision of P.A. 96-1495. No assurance can be given that a bill such as the P.A. 96-1495 Delay Bill will be enacted. See "-- Determination of City's Contributions— City's Required Contributions to PABF and FABF Beginning in 2016"

### GASB Statements 67 and 68

On June 25, 2012, GASB announced it was adopting new Statements 67 and 68 (collectively, the "Statements") covering the manner in which pension plans and governments, respectively, account for and report information regarding those pension plans. The Statements take effect in fiscal years 2014 and 2015, respectively. The City expects they will significantly alter the financial statements produced by the City and the Retirement Funds; however, because the City contributes to the Retirement Funds pursuant to the methods established in the Pension Code, the Statements would not impact the contributions made by the City without legislative action.

### Legislative Changes

### P.A. 96-0889

On April 14, 2010, Governor Quinn signed Public Act 96-0889 (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 members or participants prior to its effective date of January 1, 2011.

Among other changes, the Pension Reform Act: (i) increases the minimum age at which an active 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% or 50% 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%, 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 Actuarial Accrued Liability, the UAAL and the Actuarially Required Contribution for MEABF and LABF. In calculating the Actuarial Accrued 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 Actuarial Accrued Liability is expected to decrease compared to what it would have been under previous law. Consequently, the UAAL is expected to grow more slowly and the Funded Ratio to improve. As the growth in the UAAL

slows, the Actuarially Required Contribution is expected to be reduced as the amount of UAAL to be amortized decreases. However, no assurance can be given that these expectations will be the actual experience going forward.

### P.A. 96-1495

P.A. 96-1495 has a significant impact on PABF and FABF. Certain provisions of P.A. 96-1495 are discussed above in "— Determination of City's Contributions — City's Required Contributions to PABF and FABF Beginning in 2016." The P.A. 96-1495 Funding Plan will have the effect of significantly increasing 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. The greater contributions projected to be required under the P.A. 96-1495 Funding Plan are expected to pose a substantial burden for the City's financial condition beginning in 2016. See "—Projection of Funded Status and Insolvency" above.

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 cligibility 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% 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% or 50% of the change in the consumer price index for all urban consumers ("CPI-u"), whichever is lower, commencing at age 60; (v) provides that widow benefits are 66 2/3% 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).

While the reforms discussed in this sub-section are expected to contribute to a reduction in the respective UAALs of PABF and FABF over time, such reforms are not expected to materially reduce such UAALs in the near future.

### P.A. 98-641

P.A. 98-641 makes significant changes to LABF and MEABF. Certain provisions relating to the City's contributions to LABF and MEABF under P.A. 98-641 are discussed above in "— Determination of City's Contributions — City's Required Contributions to LABF and MEABF Pursuant to P.A. 98-641." The P.A. 98-641 Funding Plan will have the effect of significantly increasing the City's contributions to LABF and MEABF.

In addition, P.A. 98-641 impacts LABF and MEABF as follows:

• The cost of living adjustment ("COLA") will be skipped in 2017, 2019 and 2025 for retired members that would otherwise be entitled to receive them and who have an annuity greater than \$22,000;

- Members who retire after the effective date of P.A. 98-641 are not eligible to receive a COLA adjustment until one full year after they otherwise would have.
- For Tier I Members, the COLA rate is reduced to the lesser of 3.0% or 50% of the CPI-u, except that retirees with an annual annuity of less than \$22,000 will receive at least a 1% COLA in each year, including in the COLA skip years described above;
- For Tier II Members, the minimum eligibility age for unreduced retirement benefits is reduced to 65 with 10 years of service and, for reduced retirement benefits, to age 60 with 10 years of service;
- Employee contribution rates for both Tier I Members and Tier II Members are increased to 9.0% in calendar year 2015, 9.5% in calendar year 2016, 10.0% in calendar year 2017, 10.5% in calendar year 2018 and 11.0% for calendar year 2019 and after until the respective Retirement Fund reaches a 90% Funded Ratio, at which point the employee contribution rate is reduced to 9.75%; and
- Institutes the Recapture Provisions with respect to MEABF and LABF.

The consulting actuary for MEABF and LABF has prepared projections of City contributions and funded status of LABF and MEABF based on the enactment of P.A. 98-641. Such projections are based on the data, assumptions and methods used in the actuarial valuations for LABF and MEABF as of December 1, 2012. Tables 16 and 17 provide such projections as compared to projected results under current Pension Code provisions.

		LABF			MEABF	
Contribution Year	Contributions to LABF Before P.A. 98-641	Contributions to LABF Under P.A. 98-641	Increase in Contributions to LABF Under P.A. 98-641	Contributions to MEABF Before P.A. 98-641	Contributions to MEABF Under P.A. 98-641	Increase in Contributions to MEABF Under P.A. 98-641
2015 2016 2017 2018 2019	\$ 14.5 14.4 15.4 15.7 16.2	\$ 14.5 24.0 30.5 38.2 47.1	\$ 0.0 9.6 15.1 22.5 30.9	\$156.1 157.4 161.9 167.1 172.6	\$156.1 242.7 290.1 361.2 442.1	\$ 0.0 85.3 128.2 194.1 269.5
2020 2021 2022 2030 2040 2050 2055	16.2 16.7 17.2 17.8 232.6 244.8 217.1 218.1	57.3 67.7 69.6 86.2 105.5 124.3 135.3	40.6 50.5 51.8 (146.4) (139.3) (92.8) (82.8)	178.2 178.2 184.0 189.9 1,325.3 1,598.9 1,530.1 1,519.9	533.0 585.6 600.3 724.7 917.4 1,184.5 1,332.2	354.8 401.6 410.4 (600.6) (681.5) (345.6) (187.7)

### TABLE 16 - PROJECTED CONTRIBUTIONS: MEABF AND LABF<sup>(1)</sup>

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Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Projection derived from actuarial data as of December 31, 2013.
 In millions of dollars.

(1)

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	LABF		MEABF		
	Funded	Funded Ratio	Funded Ratio	Funded	
Contribution	<b>Ratio Before</b>	Under P.A.	Before P.A.	<b>Ratio Under</b>	
Year	P.A. 98-641	98-641	98-641	P.A. 98-641	
aniteritin in an					
2015	53.9%	62.5%	33.1%	38.5%	
2016	52.8	62.3	31.3	37.6	
2017	50.9	61.7	29.1	36.8	
2018	48.0	60.5	26.3	35.8	
2019	44.9	59.5	23.3	35.4	
2020	41.6	59.0	20.1	35.6	
2021	38.1	58.7	16.6	35.9	
2022	34.3	58.5	12.9	36.2	
2030	0.0	57.2	0.0	38.8	
2040	0.0	60.2	0.0	45.0	
2050	0.0	76.5	0.0	68.7	
2055	0.0	90.0	0.0	90.0	

### TABLE 17 - PROJECTED FUNDED RATIOS: MEABF AND LABF<sup>(1)</sup>

Source: Gabriel Roeder Smith & Company. Gabriel Roeder Smith & Company is the consulting actuary for the Retirement Funds. Projection derived from actuarial data as of December 31, 2013.

(1) In millions of dollars.

P.A. 98-641 also provides that, beginning on January 1, 2015, the Retirement Board of LABF or MEABF may bring a mandamus action to compel the City to make the contributions required by the Pension Code, in addition to other remedies that may be available by law. P.A. 98-641 further provides that the court may order a reasonable payment schedule to enable the City to make payments without imperiling the City's public health, safety, or welfare.

Under P.A. 98-641, such payments are expressly subordinated to the payment of the principal, interest, premium, if any, and other payments on or related to any bonded debt obligation of the City, either currently outstanding or to be issued, for which the source of repayment or security thereon is derived directly or indirectly from any funds collected or received by the City or collected or received on behalf of the City. Per P.A. 98-641, such payments on bonded obligations include any statutory fund transfers or other prefunding mechanisms or formulas set forth, now or hereafter, in State law, City ordinance, or bond indentures, into debt service funds or accounts of the City related to such bonded obligations, consistent with the payment schedules associated with such obligations.

As of the date hereof, no lawsuits challenging any of the provisions of P.A. 98-641 have been filed. The City intends to vigorously defend any lawsuits filed in the future challenging P.A. 98-641.

For projections of the impact of P.A. 98-641 on City contributions to MEABF and LABF and such Retirement Funds' respective Funded Ratios, see Tables 16 and 17.

### **Pension Reform**

The City continues to believe that significant legislative changes, such as those applicable to MEABF and LABF under P.A. 98-641, are required to properly fund the Retirement Funds and continues to consider the options available to address the unfunded liabilities of FABF and PABF. Based on its work in developing pension reform proposals and other analysis, the City believes that the unfunded liabilities of FABF and PABF cannot be adequately and practically addressed through increases in the City's contributions alone and without a modification to the current level of benefits. If the City attempted to fund such increased contributions through an increase in taxes, the increase would be larger than any increase in recent history, politically difficult to enact, and harmful to the City's financial condition and, likely, its economy. If the City attempted to fund such increased contributions through expenditure cuts, essential City services, including, but not limited to, public health and safety, would be jeopardized. And the amount that could be derived from the sale of City assets would be inconsequential when compared to the Retirement Funds' unfunded liabilities. Finally, a combination of revenue increases and expenditure cuts likely would not be practical to address the unfunded liabilities, given their magnitude. This is true both when considering the Retirement Funds on their own, and when viewed collectively with the unfunded liabilities of the Other Retirement Funds, whose sponsoring Governmental Units' have tax bases that overlap with the City's tax base. See "-Overlapping Tax Bodies." Therefore, the City believes that modifications in the benefits provided by FABF and PABF are necessary, in combination with any increases in employer and employee contributions, to adequately address the unfunded liabilities of such Retirement Funds.

No assurance can be given that further legislation addressing the needs of FABF and PABF will be enacted. Additionally, given the Illinois Pension Clause in the Illinois Constitution, any legislation which reduces benefits may be challenged under this constitutional provision, and no assurance can be given that such legislation will be upheld upon a legal challenge.

The City continues to make its statutory contributions to each Retirement Fund.

### **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 20 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.<sup>1</sup> 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. Annuitants who retired prior to July 1, 2005 receive a 55% subsidy from the City, whereas annuitants retiring on or after such date receive a subsidy equal to 50%, 45%, 40% or zero percent based on the annuitant's length of actual employment with the City. The Retirement Funds contribute a fixed dollar amount monthly (\$65 for each Medicare-eligible annuitant and \$95 for each non-Medicare eligible annuitant) for each of their annuitants. 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.

The Retirement Funds' subsidies are paid from the City contribution, as provided in the Pension Code and described in "Retirement Funds — 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 "Retirement Funds—Funded Status of 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 19 below for a schedule of historical contributions made by the City to the Health Plan.

<sup>&</sup>lt;sup>1</sup> 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 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 "Retirement Funds — The Actuarial Valuation — Actuaries and the Actuarial Process." In addition, the Retirement Funds produce an 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 "Retirement Funds — Source Information" above, and Note 11(b) 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 "Retirement Funds" 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 "Retirement Funds — Actuarial Methods" above.

The City's 2013 Actuarial Valuation ("2013 Actuarial Valuation") amortizes 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 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 "Retirement Funds — 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 18 summarizes the current financial condition and the funding progress of the Health Plan.

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	415,753	415,753	0	3,223,720	12.9
2013	0	70,715	70,715	0	3,212,559	2.2

### TABLE 18 - SCHEDULE OF FUNDING PROGRESS<sup>(1)</sup>

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending December 31, 2010-2013.

(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 19 shows the amounts actually contributed to the Health Plan by the City.

### **TABLE 19 - HISTORY OF CITY'S CONTRIBUTIONS(1)**

	Actual City
	<b>Contribution</b>
2008	\$98,065
2009	98,000
2010	107,431
2011	99,091
2012	97,531
2013	97,500

Sources: Comprehensive Annual Financial Report of the City for the fiscal years ending 2008-2013.

(1) In thousands of dollars.

(2) The City, as required, adopted GASB Statement No. 45 in fiscal year 2007.

### **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 RHBC's members were appointed by the Mayor of the City for terms that do not expire. 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\_healthcarebenefits commissionreporttothemayor.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% 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.

On May 30, 2013, the 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 of Cook County, Illinois 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 plaintiffs assert, among other things, that pursuant to the Illinois Pension Clause, each such City employee is entitled to a permanent and unreduced level of healthcare coverage by the City, which vests as of the date they began participating in any of the four Retirement Funds and is subsidized by their respective Retirement Fund. The City subsequently removed the Lawsuit to federal court, and filed a motion to dismiss the Lawsuit with prejudice. The court granted the City's motion to dismiss, and plaintiffs appealed and motioned for an injunction pending the appeal. The court denied plaintiffs' motion for an injunction and subsequently determined that the plaintiffs' appeal should be held in abeyance pending the resolution of Kanerva (defined below).

The lower court in the Lawsuit dismissed the plaintiffs' case on the grounds that healthcare benefits are not protected by the Illinois Pension Clause. However, on July 3, 2014, the Supreme Court of Illinois issued an opinion in the case of *Kanerva v. Weems* ("Kanerva") determining that retiree healthcare benefits provided to State retirees are protected under the Illinois Pension Clause. The City has filed a brief in the Lawsuit asserting alternate grounds upon which the dismissal of the Lawsuit could be sustained. The City believes that the Lawsuit is factually and legally distinguishable from Kanerva and intends to vigorously defend the appeal. The City can give no assurance as to the ultimate outcome of the Lawsuit or any similar litigation.

If the City prevails in the Lawsuit, it expects to save approximately \$100 million annually beginning in 2017 as a result of the phase-out of the Health Plan.

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# EXHIBIT C

# **OFFICIAL STATEMENT**

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ITEM	CUSIP NUMBER	MATURITY DATE	PRINCIPAL
		11/1/	AMOUNT
			(\$)
1.	167736 A23	2015	4,020,000
2.	167736 A31	2016	6,295,000
3.	167736 A49	2017	6,485,000
4.	167736 A56	2018	6,745,000
5.	167736 A64	2019	7,015,000
6.	167736 A72	2020	7,225,000
7.	167736 A80	2021	7,585,000
8.	167736 A98	2022	7,965,000
9.	167736 B22	2023	8,365,000
10.	167736 B30	2024	8,780,000
11.	167736 B48	2025	9,055,000
12.	167736 B55	2026	9,510,000
13.	167736 B63	2027	9,985,000
14.	167736 B71	2028	10,485,000
15.	167736 B89	2029	11,010,000
16.	167736 B97	2030	11,560,000
17.	167736 C21	2031	12,135,000
18.	167736 C39	2032	12,745,000
19.	167736 C47	2033	13,255,000
20.	167736 C54	2034	13,915,000
21.	167736 C62	2039	80,740,000
22.	167736 C70	2044	103,050,000

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# EXHIBIT D ASSIGNED CUSIP NUMBERS WATER REVENUE BONDS, PROJECT SERIES 2014

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# EXHIBIT E

EIGHTH SUPPLEMENTAL INDENTURE

# **CITY OF CHICAGO**

to

# THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee

# EIGHTH SUPPLEMENTAL INDENTURE

SECURING

SECOND LIEN WATER REVENUE BONDS,

**PROJECT SERIES 2014** 

DATED AS OF September 1, 2014

Supplementing a Master Indenture of Trust Securing Second Lien Water Revenue Bonds, dated as of December 15, 1999, from the City of Chicago to The Bank of New York Mellon Trust Company, NA., as successor Trustee, as amended by Amendment No. 1 To Master Indenture, dated as of August 1, 2004. THIS EIGHTH SUPPLEMENTAL INDENTURE is made and entered into as of September 1, 2014 (this "Eighth Supplemental Indenture"), from the City of Chicago (the "City"), a municipal corporation and home rule unit of local government duly organized and existing under the Constitution and laws of the State of Illinois, to The Bank of New York Mellon Trust Company, N.A., as successor Trustee (the "Trustee"), a national banking association duly organized, existing and authorized to accept and execute trusts of the character set out in this Eighth Supplemental Indenture under and by virtue of the laws of the United States of America, as Trustee.

#### WITNESSETH:

WHEREAS, the City is a duly constituted and existing municipality within the meaning of Section 1 of Article VII of the 1970 Constitution of the State of Illinois, and is a "home rule unit" of local government under Section 6(a) of Article VII of the 1970 Constitution; and

WHEREAS, the City has constructed and is maintaining and operating the Water System (as defined in the Series 2014 Bond Ordinance described below) to meet the needs of the City's inhabitants and other users of the Water System; and

WHEREAS, the Water System is operated under the supervision and control of the Department of Water Management of the City; and

WHEREAS, the City has determined to improve and extend the Water System, and to issue bonds to pay the costs of such improvements and extension (the "Series 2014 Current Projects"); and

WHEREAS, the estimated amount of Project Costs relating to the Series 2014 Current Projects is not less than \$475,000,000; and

**WHEREAS**, the City does not have available funds sufficient to pay the Project Costs relating to the Series 2014 Current Projects; and

WHEREAS, the City has issued and has outstanding with respect to the Water System the following: (i) the Series 1993 Bonds, the Series 1997 Bonds and the 2000 Senior Lien Bonds (each as defined in the Series 2014 Bond Ordinance); (ii) the 2000 Second Lien Bonds, the 2001 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds and the Series 2012 Second Lien Bonds (each as defined in the Series 2014 Bond Ordinance); (iii) the 2000 Subordinate Lien Obligations, the 2001 Subordinate Lien Obligations (each as defined in the Series 2014 Bond Ordinance); (iii) the 2000 Subordinate Lien Obligations (each as defined in the Series 2014 Bond Ordinance); and

WHEREAS, in addition to the foregoing the City has executed and delivered: (i) in connection with the issuance of the Series 2004 Second Lien Bonds, (A) the ISDA Master Agreement, the Schedule and the Credit Support Annex to the Schedule, each dated as of August 5, 2004, and the related Confirmation, between the City and UBS AG; and (B) the ISDA Master Agreement, the Schedule and the Credit Annex to the Schedule, each dated as of August 5, 2004, and the related Confirmation, between the City and Royal Bank of Canada; and (ii) certain agreements providing for credit or liquidity support with respect to the obligations described in the preceding preamble, each having a claim for payment from the Net Revenues of the Water System; and

WHEREAS, pursuant to an ordinance duly adopted by the City Council on April 30, 2014 (the "Series 2014 Bond Ordinance"), the City has determined to authorize the issuance of its Senior Lien Water Revenue Project and Refunding Bonds, Series 2014 (the "2014 Senior Lien Project and Refunding Bonds") and its Second Lien Water Revenue Project and Refunding Bonds, Series 2014 (the "2014 Second Lien Project and Refunding Bonds" and together with the 2014 Senior Lien Project and Refunding Bonds, the "Series 2014 Project and Refunding Bonds"), or any combination of 2014 Senior Lien Project and Refunding Bonds and 2014 Second Lien Project and Refunding Bonds and 2014 Second Lien Project and Refunding Bonds, in one or more series for any one or more of the purposes described therein; and

WHEREAS, the City has entered into a Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of December 15, 1999, as heretofore supplemented and as amended by Amendment No. 1 To Master Indenture, dated as of August 1, 2004 (said Master Indenture as heretofore and hereafter supplemented and amended, including by this Eighth Supplemental Indenture, the "*Indenture*"), with the Trustee, which Indenture authorizes the issuance of Second Lien Parity Bonds in one or more series pursuant to one or more Supplemental Indentures and the incurrence by the City of Section 2.08 Obligations (as defined in the Indenture) and Section 2.09 Obligations (as defined in the Indenture); and

WHEREAS, pursuant to Section 2.01 of Part C of the Series 2014 Bond Ordinance, the City has authorized the issuance and sale of the 2014 Second Lien Project and Refunding Bonds pursuant to the Indenture in one or more separate series of 2014 Senior Lien Project and Refunding Bonds and/or 2014 Second Lien Project and Refunding Bonds that may be issued under or pursuant to the Series 2014 Bond Ordinance and the Indenture (provided that (a) the total principal amount of any Project Bonds shall not exceed \$475,000,000, and (b) the total principal amount of any Refunding Bonds shall not exceed \$100,000,000, plus an amount equal to the amount of any original issue discount (not to exceed 10 percent of the aggregate principal amount of such series of Bonds) used in the marketing of such Series 2014 Project and Refunding Bonds); and

WHEREAS, pursuant to such authorization, in order to (i) pay Series 2014 Project Costs (as defined herein), and (ii) pay Costs of Issuance (as defined in the Series 2014 Bond Ordinance) of the Series 2014 Bonds, the City has, pursuant to authorization granted in the Series 2014 Bond Ordinance, determined to issue and sell a portion of the Series 2014 Project and Refunding Bonds authorized as aforesaid; and

WHEREAS, such Series 2014 Project and Refunding Bonds shall be issued and sold in a single series of Bonds as provided in this Eighth Supplemental Indenture, being the aggregate principal amount of \$367,925,000 and designated as "Second Lien Water Revenue Bonds, Project Series 2014 (the "Series 2014 Bonds")]; and

**WHEREAS**, the Series 2014 Bonds, and the Trustee's Certificate of Authentication to be endorsed on such Bonds, shall be substantially in the forms attached to this Eighth Supplemental Indenture as *Exhibit A*, with necessary and appropriate variations, omissions and insertions as permitted or required by the Bond Ordinance, the Indenture or this Eighth Supplemental Indenture;

#### NOW, THEREFORE, THIS EIGHTH SUPPLEMENTAL INDENTURE WITNESSETH:

#### **GRANTING CLAUSES**

That the City, in consideration of the premises and the acceptance by the Trustee of the trusts created by this Eighth Supplemental Indenture, and of the purchase and acceptance of the Series 2014 Bonds by their Registered Owners, and of the sum of one dollar, lawful money of the United States of America, to it duly paid by the Trustee at or before the execution and delivery of these presents, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, to secure the payment of the principal of, premium, if any, and interest on the Series 2014 Bonds according to their tenor and effect, and to secure the performance and observance by the City of all the covenants expressed or implied in this Eighth Supplemental Indenture and in the Series 2014 Bonds, assigns and grants a security interest in and to the following to the Trustee, and its successors in trust and assigns forever, for the securing of the performance of the obligations of the City set forth below (the *"Trust Estate"*):

#### **GRANTING CLAUSE FIRST**

All right, title and interest of the City in and to Second Lien Bond Revenues (as defined the Series 2014 Bond Ordinance); and amounts on deposit in the Second Lien Bonds Account (as defined in the Series 2014 Bond Ordinance) (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), and in the 2014 Construction Account (as defined herein), in each case to the extent pledged and assigned in the granting clauses of the Indenture, as supplemented by the Series 2014 Bond Ordinance;

#### **GRANTING CLAUSE SECOND**

All moneys and securities from time to time held by the Trustee under the terms of this Eighth Supplemental Indenture; and

#### **GRANTING CLAUSE THIRD**

Any and all other property, rights and interests of every kind and nature from time to time hereafter by delivery or by writing of any kind granted, bargained, sold, alienated, demised, released, conveyed, assigned, transferred, mortgaged, pledged, hypothecated or otherwise subjected to this Eighth Supplemental Indenture, as and for additional security under this Eighth Supplemental Indenture by the City or by any other person on its behalf or with its written consent to the Trustee, and the Trustee is by this Eighth Supplemental Indenture authorized to receive any and all such property at any and all times and to hold and apply the same subject to the terms of this Eighth Supplemental Indenture;

**TO HAVE AND TO HOLD** all and singular the Trust Estate, whether now owned or hereafter acquired, unto the Trustee and its successors in said trust and assigns forever;

**IN TRUST, NEVERTHELESS**, upon the terms and trusts set forth in this Eighth Supplemental Indenture for the equal and proportionate benefit, security and protection of all present and future Registered Owners of the Series 2014 Bonds and all other Second Lien Bonds issued or secured from time to time under the provisions of the Indenture, without privilege, priority or distinction as to the lien or otherwise of any of the foregoing over any other of the foregoing, except to the extent otherwise specifically provided in this Eighth Supplemental Indenture;

**PROVIDED, HOWEVER**, that if the City, its successors or assigns shall well and truly pay, or cause to be paid, the principal of, premium, if any, and interest on the Series 2014 Bonds, and shall cause the payments to be made on such Series 2014 Bonds as required in this Eighth Supplemental Indenture, and shall well and truly cause to be kept, performed and observed all of its covenants and conditions pursuant to the terms of the Indenture and this Eighth Supplemental Indenture and shall pay or cause to be paid to the Trustee all sums of money due or to become due to the Trustee in accordance with the terms and provisions of this Eighth Supplemental Indenture, then upon the final payment of such sums this Eighth Supplemental Indenture and the rights by this Eighth Supplemental Indenture granted shall cease, determine and be void; otherwise this Eighth Supplemental Indenture shall remain in full force and effect.

THIS EIGHTH SUPPLEMENTAL INDENTURE FURTHER WITNESSETH, and it is expressly declared; that all Series 2014 Bonds issued and secured under this Eighth Supplemental Indenture are to be issued, authenticated and delivered, and all said property, rights and interests and any other amounts assigned and pledged by this Eighth Supplemental Indenture are to be dealt with and disposed of, under, upon and subject to the terms, conditions, stipulations, covenants, agreements, trusts, uses and purposes expressed in this Eighth Supplemental Indenture, and the City has agreed and covenanted and by this Eighth Supplemental Indenture agrees and covenants with the Trustee, the respective owners of the Series 2014 Bonds as follows:

# **ARTICLE I**

#### DEFINITIONS

Section 1.01. Definitions. All capitalized terms used in this Eighth Supplemental Indenture unless otherwise defined shall have the same meaning as used in Article I of the Indenture and in the Series 2014 Bond Ordinance. In addition to the terms defined in the preambles of this Eighth Supplemental Indenture, the following words and phrases shall have the following meanings for purposes of this Eighth Supplemental Indenture:

*"Authorized Denomination"* means, with respect to a particular Series 2014 Bond, \$5,000 and any integral multiple of \$5,000.

*"Authorized Officer"* means each of the persons duly appointed and serving as the City Treasurer, the Chief Financial Officer and the City Comptroller of the City.

*"Bondholder," "holder," "owner of the Series 2014 Bonds"* or *"Registered Owner"* means the Registered Owner of any Series 2014 Bond.

*"Bond Register"* means the registration books of the City kept by the Trustee (in its capacity as Bond Registrar) to evidence the registration and transfer of Series 2014 Bonds.

"Bond Registrar" means the Trustee.

*"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"* means the City of Chicago, a municipal corporation and home rule unit of local government, organized and existing under the Constitution and laws of the State.

*"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 thereunder as in effect from time to time and as applicable to obligations issued on the Date of Issuance.

*"Costs of Issuance Account"* means the account of that name established within the 2014 Second Lien Project Bonds Subaccount as described in Section 4.02(b)(i) and Section 4.06 hereof.

*"Date of Issuance"* means September 17, 2014, the date of original issuance and delivery of the Series 2014 Bonds under this Eighth Supplemental Indenture.

*"Depository Agreement"* means the Depository Agreement dated September 17, 2014between the City and The Bank of New York Mellon Trust Company, N.A., as depository, pursuant to which funds on deposit in the 2014 Construction Account shall be held and disbursed.

*"DTC"* means The Depository Trust Company, New York, New York, or its nominee, and its successors and assigns, or any other depository performing similar functions.

*"Eighth Supplemental Indenture"* means this Eighth Supplemental Indenture and any amendments and supplements to this Eighth Supplemental Indenture.

*"Indenture"* means the Master Indenture of Trust Securing Second Lien Water Revenue Bonds, dated as of December 15, 1999, from the City to the Trustee, pursuant to which Bonds are authorized to be issued, as heretofore supplemented and as amended by Amendment No. 1 To Master Indenture, dated as of August 1, 2004 and any additional amendments and supplements to it, including this Eighth Supplemental Indenture. References to Articles and Sections of the Indenture shall be deemed to refer to Articles and Sections of the Indenture as amended.

"Interest Payment Date" means each May 1 and November 1, commencing on May 1, 2015.

*"Maturity Date"* means, with respect to a particular Series 2014 Bond, the maturity date for such Series 2014 Bond set forth in Section 2.01(c) hereof.

*"Opinion of Bond Counsel"* means a written opinion of Bond Counsel 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.

*"Participant,"* when used with respect to any Securities Depository, means any participant of such Securities Depository.

*"Paying Agent"* means the Trustee and any other bank, national banking association or trust company designated by the City or the Trustee pursuant to Section 8.03 hereof as a paying agent for the Series 2014 Bonds, and any successor or successors appointed by the Authorized Officer or the Trustee under this Eighth Supplemental Indenture.

*"Permitted Investments"* means any of the following to the extent permitted by law and by the Master Indenture at the time of such investment:

(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 execution and delivery of this Eighth 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 all Series 2014 Bonds or other obligations which 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 Series 2014 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 which has capital of not less than \$250,000,000 (including the Trustee and its affiliates) or (ii) by certificates of deposit which 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 which 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 categories 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 which 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 Investments"), with any bank, trust company, national banking association (which may include any Paying Agent or Bond Registrar), insurance company or any other financial institution which 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 respective long-term rating categories, without regard to any refinement or gradation of rating categories 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 and Interest Account"* means the account designated the "Series 2014 Bonds, Principal and Interest Account" established in the 2014 Second Lien Project Bonds Subaccount as described in Section 4.02(b)(iii) and Section 4.05 hereof.

*"Principal and Interest Account Requirement"* means an amount, calculated as of each Deposit Date, equal to the total Principal Installments and interest due on the Series 2014 Bonds on such Deposit Date.

*"Program Fee Account"* means the account designated the "Series 2014 Bonds, Program Fee Account" established in the 2014 Second Lien Project Bonds Subaccount as described in Section 4.02(b)(ii) and Section 4.06 hereof.

"Program Fees" means:

(a) the fees, expenses and other charges payable to each fiduciary, including the Trustee, the Trustee's Agent and any Paying Agent, pursuant to the provisions of Section 8.05 of the Indenture; *provided* that if at any time there shall be any Series of Second Lien Bonds Outstanding under the Indenture other than the Series 2014 Bonds, then *"Program Fees"* 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 the Series 2014 Bonds;

(b) ongoing fees payable to any Rating Agency maintaining a rating on any Series 2014 Bonds; and

(c) any other fees, expenses and other charges of a similar nature payable by the City to any person under this Eighth Supplemental Indenture or otherwise with respect to the Series 2014 Bonds.

*"Project Bonds"* has the meaning ascribed to such term as set forth in the Series 2014 Bond Ordinance.

*"Rating Agency"* means any nationally recognized ratings service that shall have assigned ratings to any Series 2014 Bond as requested by or on behalf of the City and which ratings are then currently in effect.

*"Record Date"* means April 15 and October 15 of each year (whether or not a Business Day).

*"Registered Owner"* or *"Owner"* means the person or persons in whose name or names a Series 2014 Bond shall be registered in the Bond Register.

*"Securities Depository"* means DTC and any other securities depository registered as a clearing agency with the Securities and Exchange Commission pursuant to Section 17A of the Securities Exchange Act of 1934, as amended, and appointed as the securities depository for the Series 2014 Bonds.

*"Series 2014 Bonds"* means the \$367,925,000 aggregate principal amount of Second Lien Water Revenue Bonds, Project Series 2014 authorized to be issued pursuant to Section 2.01 hereof.

*"Series 2014 Current Projects"* means those improvements to and extensions of the Water System financed with amounts on deposit in the 2014 Construction Account.

*"Series 2014 Project Costs"* means the Project Costs related to the Series 2014 Current Projects.

"State" means the State of Illinois.

*"Tax Regulatory Agreement"* means the Tax Regulatory Agreement of the City relating to the Series 2014 Bonds delivered by the City on the date of issuance of the Series 2014 Bonds.

*"Trust Estate"* means the property conveyed to the Trustee pursuant to the Granting Clauses of this Eighth Supplemental Indenture.

*"Trustee"* means The Bank of New York Mellon Trust Company, N.A., a national banking association organized and existing under the laws of the United States of America (as successor trustee), and its successors and any entity resulting from or surviving any consolidation or merger to which it or its successors may be a party, and any successor Trustee at the time serving as successor trustee under this Eighth Supplemental Indenture.

*"Trustee's Agent"* means any agent designated as Trustee's Agent by the Trustee and at the time serving in that capacity. Any agent so designated by the Trustee shall execute a written agreement with the Trustee assuming all obligations of the Trustee under this Eighth Supplemental Indenture with respect to those duties of the Trustee which such agent agrees to perform on behalf of the Trustee.

*"2014 Construction Account"* means the Construction Account: 2014 Second Lien Project Water Revenue Bonds established pursuant to Section 3.05 of Part C of the 2014 Bond Ordinance, as described in Section 4.08 hereof.

*"2014 Second Lien Project Bonds Subaccount"* means the fund of that name established within the Second Lien Bonds Account created under Section 4.03(d) of Part C of the Series 2014 Bond Ordinance and described in Section 4.02 hereof.

# **ARTICLE II**

#### THE SERIES 2014 BONDS

Section 2.01. Authority for and Issuance of Series 2014 Bonds. (a) No Series 2014 Bonds may be issued under the provisions of this Eighth Supplemental Indenture except in accordance with this Article. The Series 2014 Bonds are being issued to provide funds to (i) pay Series 2014 Project Costs and (ii) pay Costs of Issuance (as defined in the Series 2014 Bond Ordinance) of the Series 2014 Bonds.

(b) Pursuant to the Series 2014 Bond Ordinance, the total principal amount of any Project Bonds (as defined herein) shall not exceed \$475,000,000, plus an amount equal to the amount of any original issue discount (not to exceed 10 percent of the aggregate principal amount of such series of Bonds (other than Series 2014 Bonds issued in lieu of or in substitution for which other Series 2014 Bonds have been authenticated and delivered pursuant

to Sections 2.01(c), 2.03, 2.04, 2.06, 2.07 or 3.03(d) hereof). The Series 2014 Bonds shall be issuable as fully registered bonds, without coupons, in Authorized Denominations, substantially in the form attached as *Exhibit A*. Unless the City shall otherwise direct, the Series 2014 Bonds shall be lettered and numbered from R-1 and upwards, but need not be numbered consecutively.

(c) The Series 2014 Bonds shall be designated "City of Chicago Second Lien Water Revenue Bonds, Project Series 2014" and shall be issued in the aggregate principal amount of \$367,925,000. The Series 2014 Bonds shall be dated the Date of Issuance, and shall mature on November 1 in each of the years and in the principal amounts and shall bear interest at the respective rates per annum set forth in the table below:

Maturity	Principal	Rate Per	Maturity	Principal	Rate per
(November 1)	Amount	Annum	(November 1)	Amount	Annum
2015	\$4,020,000	3.00%	2026	\$9,510,000	5.00%
2016	6,295,000	3.00%	2027	9,985,000	5.00%
2017	6,485,000	4.00%	2028	10,485,000	5.00%
2018	6,745,000	4.00%	2029	11,010,000	5.00%
2019	7,015,000	3.00%	2030	11,560,000	5.00%
2020	7,225,000	5.00%	2031	12,135,000	5.00%
2021	7,585,000	5.00%	2032	12,745,000	4.00%
2022	7,965,000	5.00%	2033	13,255,000	5.00%
2023	8,365,000	5.00%	2034	13,915,000	5.00%
2024	8,780,000	3.15%	2039	80,740,000	5.00%
2025	9,055,000	5.00%	2044	103,050,000	5.00%

(d) Each Series 2014 Bond authenticated prior to the first Interest Payment Date on such Series 2014 Bond shall bear interest from the Date of Issuance, and following the first Interest Payment Date interest shall accrue as set forth in the next paragraph except that it as shown by the records of the Trustee, interest on such Series 2014 Bond shall be in default, any Series 2014 Bond issued in exchange for or upon the registration of transfer of such Series 2014 Bond shall bear interest from the date to which interest has been paid in full on such Series 2014 Bond or, if no interest has been paid on such Series 2014 Bond, the Date of Issuance. Each Series 2014 Bond shall bear interest on overdue principal and, to the extent permitted by law, on overdue premium, if any, and interest at the rate borne by such Series 2014 Bond on the date on which such principal, premium or interest came due and payable.

(e) Interest on the Series 2014 Bonds shall be payable on each Interest Payment Date, computed upon the basis of a 360-day year consisting of twelve 30-day months. No interest shall accrue on any Series 2014 Bond after the Maturity Date thereof (*provided*, the payment at maturity is paid or provided for in accordance with the provisions of the Indenture).

(f) The principal of and interest on the Series 2014 Bonds shall be payable in any coin or currency of the United States of America which, at the respective dates of payment of such Series 2014 Bonds, is legal tender for the payment of public and private debts.

(g) The principal of the Series 2014 Bonds shall be payable at the designated corporate trust office of the Trustee or, at the option of the Registered Owners, at the

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designated corporate trust office of any Paying Agent named in such Series 2014 Bonds, upon presentation and surrender of such Series 2014 Bonds.

(h) Payment of interest on Series 2014 Bonds shall be paid by check mailed on the Interest Payment Date to the persons appearing on the Bond Register as the Registered Owners of such Series 2014 Bonds as of the close of business of the Trustee on the Record Date at the addresses of such Registered Owners as they appear on the Bond Register, or at such other addresses as are furnished to the Trustee in writing by the Registered Owners not later than the Record Date. Payment of interest on any Series 2014 Bond shall be made to the Registered Owner of \$1,000,000 or more in aggregate principal amount of Series 2014 Bonds as of the close of business of the Trustee on the Record Date for a particular Interest Payment Date by wire transfer to such Registered Owner on such Interest Payment Date upon written notice from such Registered Owner containing the wire transfer address within the United States to which such Registered Owner wishes to have such wire directed, which written notice is received not later than the Business Day next preceding the Record Date.

(i) The Series 2014 Bonds shall bear interest from and including the Date of Issuance, until payment of the principal or redemption price of such Series 2014 Bonds shall have been made or provided for in accordance with the provisions of this Eighth Supplemental Indenture, whether at the Maturity Date or otherwise.

Section 2.02. Execution; Limited Obligations. The Series 2014 Bonds shall be executed on behalf of the City with the official manual or facsimile signature of the Mayor of the City and attested with the official manual or facsimile signature of its City Clerk or Deputy City Clerk, and shall have affixed, impressed, imprinted or otherwise reproduced on such Series 2014 Bonds the corporate seal of the City or a facsimile of such seal. The Series 2014 Bonds are issued pursuant to and in full compliance with the Constitution and laws of the State, and pursuant to the Series 2014 Bond Ordinance. The Series 2014 Bonds, the Section 2.08 Obligations and the Section 2.09 Obligations are not general obligations of the City, but are limited obligations payable solely from the Trust Estate, including Second Lien Bond Revenues, amounts on deposit in the Second Lien Bonds Account and the 2014 Construction Account, and shall be a valid claim of the respective Registered Owners of the Series 2014 Bonds only against the Trust Estate, including amounts on deposit 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) and the 2014 Construction Account and other moneys held by the Trustee or otherwise pledged therefor, which amounts are by this Eighth Supplemental Indenture pledged. assigned and otherwise held as security for the equal and ratable payment of the Series 2014 Bonds, the Section 2.08 Obligations and the Section 2.09 Obligations, and shall be used for no other purpose than to pay the principal of, premium, if any, and interest on the Series 2014 Bonds, the Section 2.08 Obligations and the Section 2.09 Obligations, except as may be otherwise expressly authorized in the Indenture or in this Eighth Supplemental Indenture. Neither the Series 2014 Bonds, the Section 2.08 Obligations nor the Section 2.09 Obligations shall constitute an indebtedness of the City or a loan of credit of the City within the meaning of any constitutional or statutory limitation, and neither the faith and credit nor the taxing power of the City, the State or any political subdivision of the State is pledged to the payment of the principal of premium, if any, or the interest on the Series 2014 Bonds, the Section 2.08 Obligations or the Section 2.09 Obligations, or other costs incident to the Series 2014 Bonds, the Section 2.08 Obligations or the Section 2.09 Obligations. In case any officer whose signature or a facsimile of whose signature shall appear on the Series 2014 Bonds shall cease to be such officer before the delivery of such Series 2014 Bonds, such signature or such facsimile shall nevertheless be valid and sufficient for all purposes, as if such officer had remained in office until delivery.

**Section 2.03. Authentication**. No Series 2014 Bond shall be valid or obligatory for any purpose or be entitled to any security or benefit under this Eighth Supplemental Indenture unless and until such certificate of authentication in substantially the form attached to this Indenture as part of *Exhibit A* shall have been duly executed by the Trustee, and such executed certificate of the Trustee, upon any such Series 2014 Bond shall be conclusive evidence that such Series 2014 Bond has been authenticated and delivered under this Eighth Supplemental Indenture. The Trustee's certificate of authentication on any Series 2014 Bond shall be deemed to have been executed by it if (i) signed by an authorized signatory of the Trustee, but it shall not be necessary that the same signatory sign the certificates of authentication on all of the Series 2014 Bonds issued under this Eighth Supplemental Indenture and (ii) the date of authentication on such Series 2014 Bond is inserted in the place provided for such date in the certificate of authentication.

**Section 2.04. Form of Series 2014 Bonds; Temporary Series 2014 Bonds**. The Series 2014 Bonds issued under this Eighth Supplemental Indenture shall be substantially in the form attached to this Indenture as *Exhibit A*, with such appropriate variations, omissions and insertions as are permitted of required by this Eighth Supplemental Indenture.

Pending preparation of definitive Series 2014 Bonds, or by agreement with the purchasers of such Series 2014 Bonds, the City may issue and, upon its request, the Trustee shall authenticate, in lieu of definitive Series 2014 Bonds, one or more temporary printed or typewritten Bonds in Authorized Denominations of substantially the tenor recited above. Upon request of the City, the Trustee shall authenticate definitive Series 2014 Bonds in exchange for and upon surrender of an equal principal amount of temporary Series 2014 Bonds. Until so exchanged, temporary Series 2014 Bonds shall have the same rights, remedies and security under this Eighth Supplemental Indenture as definitive Series 2014 Bonds.

Section 2.05. Delivery of Series 2014 Bonds. Upon the execution and delivery of this Eighth Supplemental Indenture, the City shall execute and deliver to the Trustee, and the Trustee shall authenticate, the Series 2014 Bonds and deliver them to the purchasers as may be directed by the City as provided in this Section.

Prior to the delivery by the Trustee of the Series 2014 Bonds there shall be filed with the Trustee:

(i) a copy, duly certified by the City Clerk or Deputy City Clerk of the City, of the Series 2014 Bond Ordinance;

(ii) original executed counterparts of the Indenture and this Eighth Supplemental Indenture;

(iii) a Counsel's Opinion or Opinions to the effect that (A) the City had the right and power to adopt the Series 2014 Bond Ordinance; (B) the Series 2014 Bond Ordinance has been duly and lawfully adopted by the City Council, is in full force and effect and is valid and binding upon the City and enforceable in accordance with its terms (except as limited by any applicable bankruptcy liquidation, reorganization, insolvency or other similar laws and by general principles of equity in the event equitable remedies are sought); (C) the Indenture and this Eighth Supplemental Indenture have

been duly and lawfully authorized by all necessary action on the part of the City, have been duly and lawfully executed by authorized officers of the City, are in full force and effect and are valid and binding upon the City and enforceable in accordance with their terms (except as limited by any applicable bankruptcy, liquidation, reorganization. insolvency or other similar laws and by general principles of equity in the event equitable remedies are sought); (D) the Series 2014 Bond Ordinance, the Indenture and this Eighth Supplemental Indenture create the valid pledge of the Trust Estate, including Second Lien Bond Revenues and moneys and securities held 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) under the Series 2014 Bond Ordinance, the Indenture and this Eighth Supplemental Indenture for the benefit and security of the Series 2014 Bonds; subject to application of such moneys and securities in the manner provided in the Indenture and this Eighth Supplemental Indenture; (E) upon the execution, authentication and delivery of the Indenture and this Eighth Supplemental Indenture, the Series 2014 Bonds will have been, duly and validly authorized and issued in accordance with the Constitution and laws of the State, the Series 2014 Bond Ordinance, the Indenture and this Eighth Supplemental Indenture and (F) any required approval for the issuance of the Series 2014 Bonds has been obtained;

(iv) a written order as to the delivery of the Series 2014 Bonds, signed by the Authorized Officer and stating (A) the identity of the purchasers, the aggregate purchase price and the date and place of delivery; and (B) that no Event of Default has occurred and is continuing under the Indenture or this Eighth Supplemental Indenture; and

(v) a Certificate of the Chief Financial Officer stating that the conditions of Section 2.06 of the Master Indenture have been met.

Section 2.06. Mutilated, Lost, Stolen or Destroyed Series 2014 Bonds. In the event a Series 2014 Bond is mutilated, lost, stolen or destroyed, the City may execute and the Trustee may authenticate a new Series 2014 Bond of like date, maturity, interest rate and denomination as the Series 2014 Bond mutilated, lost, stolen or destroyed; provided that, in the case of any mutilated Series 2014 Bond, such mutilated Series 2014 Bond shall first be surrendered to the Trustee, and in the case of any lost, stolen or destroyed Series 2014 Bond, there shall be first furnished to the City and the Trustee evidence of such loss, theft or destruction satisfactory to the City and the Trustee, together with indemnity satisfactory to them. In the event any such 2014 Second Lien Bond has matured, instead of issuing a substitute Series 2014 Bond the City may pay the same without surrender of such 2014 Second Lien Bond. The City and the Trustee evidence of such lien Bond. The City and the Trustee may charge the Registered Owner of such Series 2014 Bond with their reasonable fees and expenses in this connection. All Series 2014 Bonds so surrendered to the City. Upon the date of final maturity or redemption of all of the Series 2014 Bonds, the Trustee shall destroy any inventory of unissued certificates.

All duplicate Series 2014 Bonds issued and authenticated pursuant to this Section shall constitute original, contractual obligations of the City (whether or not, in the case of the first paragraph of this Section, lost, stolen or destroyed Series 2014 Bonds be at any time found by anyone), and shall be entitled to equal and proportionate rights and benefits under this Eighth Supplemental Indenture as all other Outstanding Series 2014 Bonds issued under this Eighth Supplemental Indenture.

All Series 2014 Bonds shall be owned upon the express condition that the foregoing provisions, to the extent permitted by law, are exclusive with respect to the replacement or payment of mutilated, destroyed, lost, stolen or purchased Series 2014 Bonds, and shall preclude any and all other rights or remedies.

Section 2.07. Transfer and Exchange of Series 2014 Bonds; Persons Treated as Owners. (a) Subject to the limitations contained in subsection (c) of this Section, upon surrender for registration of transfer of any Series 2014 Bond at the principal corporate trust office of the Trustee, duly endorsed by, or accompanied by a written instrument or instruments of transfer in form satisfactory to the Trustee and duly executed by the Bondholder or such Bondholder's attorney duly authorized in writing, the City shall execute, and the Trustee shall authenticate and deliver, in the name of the transferee or transferees a new Series 2014 Bond or Bonds of like date and tenor in Authorized Denominations of the same Maturity Date and interest rate for the aggregate principal amount which the Registered Owner is entitled to receive bearing numbers not contemporaneously Outstanding. Subject to the limitations contained in subsection (c) of this Section, Series 2014 Bonds may be exchanged at such times at such designated corporate trust office of the Trustee upon surrender of such Series 2014 Bond together with an assignment duly executed by the Registered Owner of such Series 2014 Bonds or such Registered Owner's attorney in such form and with guarantee of signature as shall be satisfactory to the Trustee for an equal aggregate principal amount of Series 2014 Bonds of like date and tenor of any Authorized Denomination as the Series 2014 Bonds surrendered for exchange bearing numbers not contemporaneously Outstanding. The execution by the City of any Series 2014 Bond of any Authorized Denomination shall constitute full and due authorization of such Authorized Denomination, and the Trustee shall thereby be authorized to authenticate and deliver such registered Series 2014 Bond.

(b) No service charge shall be imposed upon the Registered Owners for any exchange or transfer of Series 2014 Bonds. The City and the Trustee may, however, require payment by the person requesting an exchange or transfer of Series 2014 Bonds of a sum sufficient to cover any tax, fee or other governmental charge that may be imposed in relation to such exchange or transfer, except in the case of the issuance of one or more Series 2014 Bonds for the unredeemed portion of a Series 2014 Bond surrendered for redemption in part.

(c) The Trustee shall not be required to transfer or exchange any Series 2014 Bond during the period commencing on the Record Date next preceding any Interest Payment Date of such Series 2014 Bond and ending on such Interest Payment Date, or to transfer or exchange such Series 2014 Bond after the mailing of notice calling such Series 2014 Bond for redemption has been made as provided in this Eighth Supplemental Indenture or during the period of 15 days next preceding the giving of notice of redemption of Series 2014 Bonds of the same Maturity Date and interest rate.

(d) Series 2014 Bonds delivered upon any registration of transfer or exchange as provided in this Section 2.07 or as provided in Section 2.08 hereof shall be valid limited obligations of the City, evidencing the same debt as the Series 2014 Bonds surrendered, shall be secured by the Indenture and shall be entitled to all of the security and benefits of this Eighth Supplemental Indenture to the same extent as the Series 2014 Bond surrendered.

(e) The City, the Trustee and any Paying Agent may treat the Registered Owner of any Series 2014 Bond as the absolute owner of such Series 2014 Bond for all purposes, whether or not such Series 2014 Bond shall be overdue, and shall not be bound by any notice to the contrary. All payments of or on account of the principal of, premium, if any, and interest on any such Series 2014 Bond as provided in this Eighth Supplemental Indenture shall be made only to or upon the written order of the Registered Owner of such Series 2014 Bond or such Registered Owner's legal representative, but such registration may be changed as provided in this Eighth Supplemental Indenture. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Series 2014 Bond to the extent of the sum or sums so paid.

**Section 2.08. Cancellation**. Any Series 2014 Bond surrendered for the purpose of payment or retirement, or for exchange, transfer or replacement, shall be canceled upon surrender of such Series 2014 Bond to the Trustee or any Paying Agent. If the City shall acquire any of the Series 2014 Bonds, the City shall deliver such Series 2014 Bonds to the Trustee for cancellation and the Trustee shall cancel the same. Any such Series 2014 Bonds canceled by any Paying Agent other than the Trustee shall be promptly transmitted by such Paying Agent to the Trustee. Certification of Series 2014 Bonds canceled by the Trustee and 2014 Second Lien Bonds canceled by a Paying Agent other than the City. Canceled Series 2014 Bonds may be destroyed by the Trustee unless instructions to the contrary are received from the City. Upon the date of final maturity or redemption of all Series 2014 Bonds, the Trustee shall destroy any inventory of unissued certificates.

Section 2.09. Book-Entry Provisions. The provisions of this Section shall apply as long as the Series 2014 Bonds are maintained in book-entry form with DTC or another Securities Depository, any provisions of this Eighth Supplemental Indenture to the contrary notwithstanding.

(a) Payments of the principal of and interest on the Series 2014 Bonds shall be made to the Securities Depository, or its nominee, as the Registered Owner of the Series 2014 Bonds, in same day funds on each date on which the principal of, premium; if any, and interest on the Series 2014 Bonds is due as set forth in this Eighth Supplemental Indenture and the Series 2014 Bonds. Such payments shall be made to the offices of the Securities Depository specified by the Securities Depository to the City and the Trustee in writing. Without notice to or the consent of the beneficial owners of the Series 2014 Bonds, the City and the Securities Depository may agree in writing to make payments of principal and interest in a manner different from that set forth herein. If such different manner of payment is agreed upon, the City shall give the Trustee written notice thereof, and the Trustee shall make payments with respect to the Series 2014 Bonds in the manner specified in such notice as set forth herein. Neither the City nor the Trustee shall have any obligation with respect to the transfer or crediting of the principal of, premium, if any, and interest on the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds to Participants or the beneficial owners of the Series 2014 Bonds or their nominees.

(b) The Registered Owners of the Series 2014 Bonds have no right to the appointment or retention of a Securities Depository for the Series 2014 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 Series 2014 Bonds 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 Series 2014 Bonds, the City may (or, in the case of clause (ii) above, the City shall) cause the Trustee to authenticate and deliver Series 2014 Bond certificates. The City shall have no obligation to make any investigation to determine the occurrence of any events that would permit the City to make any determination described in this paragraph.

If, following a determination or event specified in paragraph (b) above, the City (c)discontinues the maintenance of the Series 2014 Bonds in book-entry form with the then current Securities Depository, the City will issue replacement Series 2014 Bonds to the replacement Securities Depository, if any, or, if no replacement Securities Depository is selected for the Series 2014 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 Series 2014 Bonds shown on the records of such Participant. Replacement Series 2014 Bonds shall be in fully registered form and in Authorized Denominations, be payable as to interest on the Interest Payment Dates of such Series 2014 Bonds 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 Series 2014 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 Series 2014 Bonds are payable only upon presentation and surrender of such replacement Series 2014 Bond or Bonds at the principal corporate trust office of the Trustee.

(d) The Securities Depository and its Participants, and the beneficial owners of the 2014 Second Lien Bonds, by their acceptance of the Series 2014 Bonds, agree that the City and the Trustee shall not have liability for the failure of such Securities Depository to perform its obligations to the Participants and the beneficial owners of the Series 2014 Bonds, nor shall the City or the Trustee be liable for the failure of any Participant or other nominee of the beneficial owners to perform any obligation of the Participant to a beneficial owner of the 2014 Second Lien Bonds.

(e) As long as Cede & Co. is the Registered Owner of the Series 2014 Bonds, as nominee of DTC, references herein to the Registered Owners of the Series 2014 Bonds shall mean Cede & Co. and shall not mean the beneficial owners of the Series 2014 Bonds.

(f) As long as Cede & Co. is the Registered Owner of the Series 2014 Bonds:

(i) selection of Series 2014 Bonds to be redeemed upon partial redemption or presentation of such Series 2014 Bonds to the Trustee upon partial redemption shall be deemed made when the right to exercise ownership rights in such Series 2014 Bonds through DTC or DTC's Participants is transferred by DTC on its books; and

(ii) DTC may present notices, approvals, waivers or other communications required or permitted to be made by Registered Owners under this Eighth Supplemental Indenture on a fractionalized basis on behalf of some or all of those persons entitled to exercise ownership rights in the Series 2014 Bonds through DTC or its Participants.

# ARTICLE III

#### **REDEMPTION OF SERIES 2014 BONDS**

Section 3.01. Optional Redemption. The Series 2014 Bonds maturing on or after November 1, 2025 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, 2024, 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 2014 Bond, together with accrued interest to the date fixed for redemption.

# Section 3.02. Mandatory Sinking Fund Redemption.

(a) The Series 2014 Bonds due on November 1, 2039 and November 1, 2044 (collectively, the *"Term Bonds"*) are subject to mandatory sinking fund redemption prior to maturity in part, selected as provided in Section 3.04, at a redemption price of [100 percent] of the outstanding principal amount of such Series 2014 Bonds to be so redeemed, on November 1 of the years and in the amounts shown below, plus accrued interest to the redemption date, as set forth below:

Series 2014 Bonds due November 1, 2039		Series 2014 Bonds due November 1, 2044	
Year	Principal <u>Amount</u>	Year	Principal <u>Amount</u>
2035	\$14,610,000	2040	\$18,650,000
2036	15,345,000	2041	19,580,000
2037	16,110,000	2042	20,560,000
2038	16,915,000	2043	21,590,000
2039*	17,760,000	2044*	22,670,000
*Stated maturity		*Stated maturity	

(b) In lieu of redeeming the Term Bonds pursuant to the mandatory sinking fund redemption provisions described above, on or before the 60<sup>th</sup> day next preceding any mandatory sinking fund redemption date for such Term Bonds, the Trustee may, at the written direction of the Authorized Officer, use such funds available under the Indenture to purchase Term Bonds in the open market at a price not exceeding par plus accrued interest.

On or before the 60<sup>th</sup> day next preceding any mandatory sinking fund redemption date for the Term Bonds (or such shorter period as may be acceptable to the Trustee), the City may, at its option, (i) deliver to the Trustee for cancellation, Term Bonds or portions thereof in Authorized Denominations subject to mandatory sinking fund redemption or (ii) receive a credit in respect of its mandatory sinking fund redemption obligation for Term Bonds or portions thereof in Authorized Denominations which prior to said date have been redeemed (otherwise than through the operation of such mandatory sinking fund redemption) and canceled by the Trustee and not theretofore applied as a credit against any mandatory sinking fund redemption obligation. Each Term Bond or portion thereof subject to mandatory sinking fund redemption so delivered or previously redeemed will be credited against future mandatory sinking fund redemption obligations on Term Bonds in such order as the City designates, or if no such designation is made, in chronological order, the principal amount of such Term Bonds to be redeemed by operation of such mandatory redemption to be accordingly reduced.

# Section 3.03. Redemption Terms; Notice of Redemption.

(a) Series 2014 Bonds may be called for redemption by the Trustee pursuant to Section 3.01 hereof upon receipt by the Trustee at least 45 days prior to the redemption date (or such shorter period as shall be acceptable to the Trustee) of a written request of the City requesting such redemption. Term Bonds shall be called for redemption by the Trustee pursuant to Section 3.02 hereof without further request or direction from the City or any other party.

(b) Unless waived by any owner of Series 2014 Bonds to be redeemed, notice of the call for any optional or mandatory redemption pursuant to Section 3.01 or 3.02 hereof 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 2014 Bond or Bonds 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, but the failure to mail any such notice or any defect therein as to any Series 2014 Bond to be redeemed. Any notice of redemption mailed as provided in this Section shall be conclusively presumed to have been given whether or not actually received by the addressee.

All notices of redemption shall specify, at a minimum: (i) the series name and (c) designation and certificate numbers of Series 2014 Bonds being redeemed, (ii) the CUSIP numbers of the Series 2014 Bonds being redeemed, (iii) the principal amount of Series 2014 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 2014 Bonds being redeemed, (vii) the interest rate and maturity date of the Series 2014 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 which may be contacted with regard to such notice. With respect to an optional redemption of any Series 2014 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 2014 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 2014 Bonds and the Trustee shall 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 2014 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 2014 Bonds, the City shall deposit with the Trustee an amount of money sufficient to pay the redemption price of all Series 2014 Bonds or portions thereof which are to be redeemed on that date.

(d) Notice of redemption having been given as aforesaid, the Series 2014 Bonds, or portions thereof, so to be redeemed shall, on the redemption date (unless the redemption has been canceled as described in Section 3.03(c) hereof), 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 2014 Bonds, or portions thereof, shall cease to bear interest. Upon surrender of such Series 2014 Bonds for redemption in accordance with said notice, such Series 2014 Bonds shall be paid by the Trustee at the redemption price. Installments of interest due on or prior to the redemption date shall be payable as herein provided for payment of interest. Upon surrender for any partial redemption of any Series 2014 Bonds of

the same interest rate and maturity in the amount of the unpaid principal. If any Series 2014 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 Bond, or portion thereof, so called for redemption.

Section 3.04. Selection of Series 2014 Bonds for Redemption. In the event of the redemption of fewer than all the Series 2014 Bonds of the same interest rate and maturity, the aggregate principal amount thereof to be redeemed shall be in an Authorized Denomination, and the Trustee shall assign to each Series 2014 Bond of such interest rate and maturity a distinctive number for each minimum Authorized Denomination of such Bond and shall select by lot from the numbers so assigned as many numbers as, at such minimum Authorized Denomination for each number, shall equal the principal amount of such Series 2014 Bonds to be redeemed. The Series 2014 Bonds to be redeemed shall be those to which were assigned numbers so selected; provided that only so much of the principal amount of each Series 2014 Bonds hall 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 2014 Bonds of a single interest rate and maturity, the particular Series 2014 Bonds or portions thereof to be redeemed shall be selected not more than 60 days prior to the redemption date by the Trustee.

# **ARTICLE IV**

#### **REVENUES AND FUNDS**

Section 4.01. Source of Payment of Series 2014 Bonds. The Series 2014 Bonds, the Section 2.08 Obligations and the Section 2.09 Obligations are not general obligations of the City but are limited obligations as described in Section 2.02 hereof and as provided in this Eighth Supplemental Indenture and in the Indenture.

Section 4.02. Creation of Accounts and Subaccounts in 2014 Second Lien Project Bonds Subaccount. (a) Moneys on deposit in the 2014 Second Lien Project Bonds Subaccount, and in each Account established in it as provided below, shall be held in trust by the Trustee for the sole and exclusive benefit of the Registered Owners of the Series 2014 Bonds.

(b) There are by this Eighth Supplemental Indenture created by the City and ordered established with the Trustee separate Accounts within the 2014 Second Lien Project Bonds Subaccount, designated as follows:

(i) Costs of Issuance Account: an Account to be designated the "Series 2014 Bonds, Costs of Issuance Account" (the "Costs of Issuance Account");

(ii) Program Fee Account: an Account to be designated the "Series 2014 Bonds, Program Fee Account" (the "*Program Fee Account*"); and

(iii) Principal and Interest Account: an Account to be designated the "Series 2014 Bonds, Principal and Interest Account" (the *"Principal and Interest Account"*);

Section 4.03. Application of Series 2014 Bond Proceeds. The proceeds received by the City from the sale of the Series 2014 Bonds in the amount of \$400,871,091.92 (consisting of the aggregate principal amount of the Series 2014 Bonds, plus net premium of \$34,835,570.10

and less the Underwriters' discount of \$1,889,478.18), shall be deposited with the Trustee and applied as follows:

(i) the Trustee shall deposit into the Costs of Issuance Account the amount of \$871,091.92 and shall apply such amount to payment of Costs of Issuance of the Series 2014 Bonds, as provided in Section 4.06 hereof;

(ii) the Trustee shall deposit proceeds of the Series 2014 Bonds in the amount \$400,000,000.00 in the 2014 Construction Account held pursuant to the Depository Agreement for application pursuant to Section 4.08 hereof.

Section 4.04. Deposits into 2014 Second Lien Project Bonds Subaccount and Accounts. On May 1 and November 1 of each year, commencing May 1, 2015 (each such date referred to in this Eighth Supplemental Indenture as the "Deposit Date"), there shall be deposited into the 2014 Second Lien Project Bonds Subaccount from amounts on deposit 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) 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 Section 4.03(d) of Part B of the Series 2014 Bond Ordinance on or before the Business Day next preceding each such May 1 or November 1, respectively (such aggregate amount with respect to any Deposit Date being referred to in this Eighth Supplemental Indenture as the "Series 2014 Deposit Requirement"):

(a) for deposit into the Principal and Interest Account, an amount equal to the Principal and Interest Account Requirement; and

(b) 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 semiannual 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 2014 Deposit Requirement, there shall be deposited into the 2014 Second Lien Project Bonds Subaccount any other moneys received by the Trustee under and pursuant to the Indenture or this Eighth Supplemental Indenture, when accompanied by directions from the person depositing such moneys that such moneys are to be paid into the 2014 Second Lien Project Bonds Subaccount or to one or more Accounts in that Subaccount.

Upon calculation by the Trustee of each Series 2014 Deposit Requirement under this Section, the Trustee shall notify the City of the Series 2014 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.

Section 4.05. Use of Moneys in the Principal and Interest Account. Moneys in the Principal and Interest Account shall be used for the payment of the principal of, premium, if any, and interest on the Series 2014 Bonds, for the redemption of Series 2014 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 2014 Bonds (including the optional redemption of Series 2014 Bonds pursuant to Section 3.01 hereof and not otherwise provided for; and with respect to payments made pursuant to Section 2.08 Obligations and Section 2.09 Obligations), shall be derived from moneys held in the Principal and Interest Account, ratably, without preference or priority of any kind, except that net payments required to be made by the City from Gross Revenues to a swap provider pursuant to a swap agreement authorized under the Indenture that does not satisfy the requirements for qualification as a Qualified Second Lien Swap Agreement shall be made only from amounts available after the payment of all Second Lien Bonds and termination and other non-scheduled payments made with respect to Section 2.09 Obligations shall be paid on a subordinate basis.

Section 4.06. Use of Moneys in the Costs of Issuance Account and Program Fee Account. Moneys deposited into the Costs of Issuance Account pursuant to Section 4.03(i) shall be used for the payment of Costs of Issuance of the Series 2014 Bonds as directed in a certificate of the City filed with the Trustee. If after the earliest to occur of (i) payment of all Costs of Issuance as specified in a certificate of the City filed with the Trustee and (ii) March 17, 2015, there shall be any balance remaining on the Costs of Issuance Account, such balance shall be transferred to the Program Fee Account. Moneys deposited into the Program Fee Account pursuant to Section 4.04(b) shall be used for the payment of Program Fees payable by the City to third parties with respect to the Series 2014 Bonds as set forth in a certificate of the City filed with the Trustee.

#### Section 4.07. Use of Moneys in the Capitalized Interest Account. [Reserved]

Section 4.08. Use of Moneys in the 2014 Construction Account. Except as otherwise provided in the Series 2014 Bond Ordinance and this Eighth Supplemental Indenture, and subject to the provisions of and limitations contained in the Tax Regulatory Agreement, moneys on deposit in the 2014 Construction Account shall be disbursed and applied to pay, or to reimburse the payment of, Project Costs related to the Series 2014 Current Projects.

**Section 4.09. Tax Covenants.** The City covenants to take any action required by the provisions of the Code and within its power to take in order to preserve the exclusion of interest on the Series 2014 Bonds from gross income for federal income tax purposes, including, but not limited to, the provisions of Section 148 of the Code relating to "arbitrage bonds."

The City further covenants to comply with the provisions of the Tax Regulatory Agreement relating to the Series 2014 Bonds, including, but not limited to, those provisions relating to the status of the Series 2014 Bonds as "private activity bonds" under Section 141 of the Code.

Section 4.10. Non-presentment of Bonds. In the event any Series 2014 Bond shall not be presented for payment when the principal of such Series 2014 Bond becomes due, whether at maturity, at the date fixed for redemption or otherwise, if moneys sufficient to pay such Series 2014 Bond shall have been made available to the Trustee for the benefit of the Registered Owner of such Series 2014 Bond, subject to the provisions of the immediately following paragraph, all liability of the City to the Registered Owner of such Series 2014 Bond for the payment of such Series 2014 Bond shall immediately cease; determine and be completely discharged, and thereupon it shall be the duty of the Trustee to hold such moneys, without for interest on such monies; for the benefit of the Registered Owner of such Series 2014 Bond who shall thereafter be restricted exclusively to such moneys, for any claim of whatever nature on his or her part under the Indenture or on, or with respect to, such Series 2014 Bond. Any moneys so deposited with and held by the Trustee not so applied to the payment of Series 2014 Bonds within two years after the date on which the same shall have become due shall be repaid by the Trustee to the City upon the City's written request, and thereafter the Registered Owners of such Series 2014 Bonds shall be entitled to look only to the City for payment, and then only to the extent of the amount so repaid, and all liability of the Trustee with respect to such moneys shall thereupon cease, and the City shall not be liable for any interest on such monies and shall not be regarded as a trustee of such moneys. The obligation of the Trustee under this Section to pay any such funds to the City shall be subject, however, to any provisions of law applicable to the Trustee or to such funds providing other requirements for disposition of unclaimed property.

Section 4.11. Moneys Held in Trust. All moneys required to be deposited with or paid to the Trustee for the account of any Fund or Account referred to in any provision of this Eighth Supplemental Indenture shall be held by the Trustee in trust as provided in Section 8.03 of the Indenture, and shall, while held by the Trustee, constitute part of the Trust Estate and be subject to the lien or security interest created by this Eighth Supplemental Indenture.

# **ARTICLE V**

#### INVESTMENT OF MONEYS

**Section 5.01. Investment of Moneys.** Moneys held in the funds, accounts and subaccounts established under this Eighth Supplemental Indenture, including moneys held for payment of Series 2014 Bonds not presented for payment as described in Section 4.10 hereof, shall be invested and reinvested in Permitted Investments in accordance with the provisions governing investments contained in the Indenture; *provided, however*, that moneys in the Principal and Interest Account representing principal of or interest on the Series 2014 Bonds shall only be invested in Governmental Obligations scheduled to mature on the earlier of (i) (A) 30 days from the date of investment (in the case of amounts representing principal of the Series 2014 Bonds) or (B) six months from the date of investment (in the case of amounts representing interest payable on the Series 2014 Bonds) or (ii) the date upon which such moneys will be required to be used in accordance with this Eighth Supplemental Indenture. All such investments shall be held by or under the control of the Trustee and shall be deemed at all times part of the fund, account or subaccount for which they were made.

# ARTICLE VI

# DISCHARGE OF LIEN

Section 6.01. Defeasance. If the City shall pay to the Registered Owners of the Series 2014 Bonds, or provide for the payment of, the principal, premium, if any, and interest to become due on the Series 2014 Bonds, then this Eighth Supplemental Indenture shall be fully discharged and satisfied upon the satisfaction and discharge of this Eighth Supplemental Indenture, the Trustee shall, upon the request of the City, execute and deliver to the City all such instruments as may be desirable to evidence such discharge and satisfaction, and all fiduciaries shall pay over or deliver to the City all funds, accounts and other moneys .or securities held by them pursuant to this Eighth Supplemental Indenture which are not required for the payment or redemption of the Series 2014 Bonds.

If the City shall pay and discharge a portion of the Series 2014 Bonds as provided above, including any Series in full, such portion shall cease to be entitled to any lien, benefit or security under the Indenture. The liability of the City with respect to such Series 2014 Bonds shall continue, but the Registered Owners of the Series 2014 Bonds so defeased shall thereafter be entitled to payment (to the exclusion of all other Bondholders) only out of the moneys or Governmental Obligations described in clause (a) of the definition of such term deposited with the Trustee under Article IX of the Indenture.

The provisions of this Section 6.01 are subject in all respects to the provisions of Sections 9.01 and 9.02 of the Master Indenture.

# ARTICLE VII

#### REMEDIES

The provisions of Article VII of the Indenture shall be applicable to any Event of Default which shall have occurred and be continuing under this Eighth Supplemental Indenture.

Under no circumstance may the Trustee declare the principal of or interest on the Series 2014 Bonds to be due and payable prior to the Maturity Date following the occurrence of an Event of Default under the Indenture or this Eighth Supplemental Indenture.

#### ARTICLE VIII

#### TRUSTEE AND PAYING AGENT

#### Section 8.01. Acceptance of Trusts.

The Trustee accepts the trusts imposed upon it by this Eighth Supplemental (a) Indenture, and agrees to perform said trusts, but only upon and subject to the express terms and conditions set forth in this Eighth Supplemental Indenture and in the Master Indenture. Except as otherwise expressly set forth in this Eighth Supplemental Indenture, the Trustee assumes no duties, responsibilities or liabilities by reason of its execution of this Eighth Supplemental Indenture other than as set forth in the Master Indenture and this Eighth Supplemental Indenture, and this Eighth Supplemental Indenture is executed and accepted by the Trustee subject to all the terms and conditions of its acceptance of the trust under the Indenture, as fully as if said terms and conditions were set forth at length in this Eighth Notwithstanding the provisions of Section 8.04 or 8.05 of the Supplemental Indenture. Indenture, the Trustee shall have no lien or security interest in and to amounts in the Principal and Interest Account for the purpose of paying the fees or expenses of the Trustee or any Paying Agent. Notwithstanding any provision of the Indenture to the contrary, the Trustee may not resign or be removed until a successor Trustee shall have been appointed as provided in the Master indenture.

(b) The Trustee may appoint a Trustee's Agent with power to act on its behalf and subject to its direction in the authentication, registration and delivery of Series 2014 Bonds of any Series in connection with transfers and exchanges hereunder, as fully to all intents and purposes as though such Trustee's Agent had been expressly authorized by this Eighth Supplemental Indenture to authenticate, register and deliver such Series 2014 Bonds. The foregoing notwithstanding, the Trustee need not appoint a Trustee's Agent for as long as the Trustee shall have an office in New York, New York capable of handling the duties of Trustee's Agent hereunder. Any Trustee's Agent appointed pursuant to this Section shall evidence its acceptance by a certificate filed with the Trustee and the City. For all purposes of this Eighth

Supplemental Indenture, the authentication, registration and delivery of Series 2014 Bonds by the Trustee or any Trustee's Agent pursuant to this Section shall be deemed to be the authentication, registration and delivery of such Series 2014 Bonds "by or to the Trustee." Such Trustee's Agent shall at all times be a commercial bank having an office in New York, New York, and shall at all times be a corporation organized and doing business under the laws of the United States or of any state with combined capital and surplus of at least \$15,000,000 and authorized under such laws to exercise corporate trust powers and subject to supervision or examination by Federal or state authority. If such corporation publishes reports of condition at least annually pursuant to law or the requirements of such authority, then for the purposes of this Section the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. Any Trustee's Agent appointed hereunder shall also be a Paying Agent for purposes of this Eighth Supplemental Indenture

Section 8.02. Dealing in Series 2014 Bonds. The Trustee, in its individual capacity, may buy, sell, own, hold and deal in the Series 2014 Bonds, and may join in any action which the Registered Owner of any Series 2014 Bond may be entitled to take with like effect as if it did not act in any capacity under this Eighth Supplemental Indenture. The Trustee, in its individual capacity, either as principal or agent, may also engage in or be interested in any financial or other transaction with the City, and may act as depositary, trustee or agent for any committee or body of the Registered Owners of the Series 2014 Bonds secured by this Eighth Supplemental Indenture or other obligations of the City as freely as if it did not act in any capacity under this Eighth Supplemental Indenture.

# Section 8.03. Paying Agent.

(a) The Trustee is hereby appointed Paying Agent for the Series 2014 Bonds. The City may at any time or from time to time appoint one or more other Paying Agents having the qualifications set forth in subsection (c) below for a successor Paying Agent.

(b) The Trustee hereby accepts the duties and obligations imposed upon it as Paying Agent by this Eighth Supplemental Indenture. Each other Paying Agent shall signify its acceptance of the duties and obligations imposed upon it by this Eighth Supplemental Indenture by executing and delivering to the City and to the Trustee a written acceptance thereof.

Any Paying Agent may at any time resign and be discharged of the duties and (c) obligations imposed upon it by this Eighth Supplemental Indenture by giving at least 60 days' written notice to the City and the Trustee, and such resignation shall take effect upon the day specified in such notice but only if a successor shall have been appointed as provided herein. Any Paying Agent appointed by the City may be removed at any time by an instrument signed by the Authorized Officer and filed with such Paying Agent and the Trustee. The Trustee may at any time terminate the agency of any Paying Agent appointed by it by giving written notice of such termination to such Paying Agent and the City. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Paying Agent shall cease to be eligible under this Section, the Trustee shall promptly appoint a successor Paving Agent shall give written notice of such appointment to the City and shall mail notice of such appointment to all Owners of Series 2014 Bonds. Any successor Paying Agent shall be appointed by the City and shall be a bank or trust company organized under the laws of any state of the United States or a national banking association; having capital stock and surplus aggregating at least \$15,000,000, or shall be a wholly-owned subsidiary of such an entity,

willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by this Eighth Supplemental Indenture.

(d) In the event of the resignation or removal of any Paying Agent, such Paying Agent shall pay over, assign and deliver any moneys held by it as Paying Agent to its successor, or if there be no successor, to the Trustee and shall be subject to audit of all of its books, records and accounts with respect to the Bonds.

# **ARTICLE IX**

#### SUPPLEMENTAL INDENTURES

Section 9.01. Supplemental Indentures. This Eighth Supplemental Indenture may be supplemented and amended in the manner set forth in Articles V and VI, respectively, of the Indenture.

Additionally, this Eighth 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 this Eighth Supplemental Indenture, the Master Indenture or the Series 2014 Bond Ordinance, for any one or more of the following purposes:

(a) to provide for certificated Series 2014 Bonds; and

(b) to secure or maintain ratings from any Rating Agency in the highest longterm debt rating category of such Rating Agency which are available for the Series 2014 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 Series 2014 Bonds as provided in the Indenture or otherwise adversely affect the Registered Owners of such Series 2014 Bonds under the Indenture.

# **ARTICLE X**

#### MISCELLANEOUS

Section 10.01. Eighth Supplemental Indenture as Part of Indenture. This Eighth Supplemental Indenture shall be construed in connection with, and as a part of, the Indenture, and all terms, conditions and covenants contained in the Indenture, except as provided in the Indenture or as modified or supplemented in this Eighth Supplemental Indenture or the Series 2014 Bond Ordinance and shall apply and be deemed to be for the equal benefit, security and protection of the Bondholders.

**Section 10.02. Severability.** If any provision of this Eighth Supplemental Indenture shall be held or deemed to be, or shall, in fact, be, illegal, inoperative or unenforceable, the same shall not affect any other provision or provisions contained in this Eighth Supplemental Indenture or render the same invalid, inoperative or unenforceable to any extent whatever.

Section 10.03. Payments Due on Saturdays, Sundays and Holidays. If the date for making any payment, or the last date for the performance of any act or the exercise of any right, as provided in this Eighth Supplemental Indenture, shall not be a Business Day, such payment may be made, act performed or right exercised on the next Business Day with the same force

and effect as if done on the nominal date provided in this Eighth Supplemental Indenture, and no interest shall accrue for the period after such nominal date.

Section 10.04. Counterparts. This Eighth Supplemental Indenture may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 10.05. Rules of Interpretation. Unless expressly indicated otherwise, references to Sections or Articles are to be construed as references to Sections or Articles of this instrument as originally executed.

Section 10.06. Captions. The captions and headings in this Eighth Supplemental Indenture are for convenience only and in no way define, limit or describe the scope or intent of any provisions or Sections of this Eighth Supplemental Indenture.

IN WITNESS WHEREOF, City has caused these presents to be executed in its name and with its official seal affixed with this Eighth Supplemental Indenture and attested by its duly authorized officials; and to evidence its acceptance of the trusts created by this Eighth Supplemental Indenture, the Trustee has caused these presents to be executed in its corporate name and with its corporate seal affixed with this Eighth Supplemental Indenture and attested by its duly authorized officers, as of the date first above written.

# **CITY OF CHICAGO**

Bv: Chief Financial Officer

[SEAL]

Attest:

City Clerk

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee

Bv

Signatory

[SEAL]

Attest:

B١

Authorized Signatory

**EIGHTH SUPPLEMENTAL INDENTURE** 

Exhibit A Form of Series 2014 Bond

#### UNITED STATES OF AMERICA

#### STATE OF ILLINOIS

#### **CITY OF CHICAGO**

#### SECOND LIEN WATER REVENUE BONDS

#### **PROJECT SERIES 2014**

Number R-\_\_\_

\$\_\_\_\_\_ CUSIP **ORIGINAL ISSUE DATE** MATURITY DATE INTEREST RATE November 1, 20\_\_\_ \_\_\_\_% \_\_\_\_\_, 2014 167736\_\_\_\_ Cede & Co. **REGISTERED OWNER:** 

PRINCIPAL AMOUNT:

Dollars

The City of Chicago (the "City"), a municipal corporation and home rule unit of local government duly organized and existing under the laws of the State of Illinois, for value received, hereby promises to pay (but only out of the sources provided below) to the Registered Owner identified above, or registered assigns, on the Maturity Date specified above upon presentation and surrender of this Series 2014 Bond, the Principal Amount specified above, and to pay (but only out of the sources provided below) interest on the balance of said Principal Amount from time to time remaining unpaid from and including the original issue date specified above, or from and including the most recent Interest Payment Date (as defined in the Eighth Supplemental Indenture, as such term is defined below) with respect to which interest has been paid or duly provided for, until payment of said Principal Amount has been made or duly provided for.

The Series 2014 Bonds are limited obligations of the City and shall not constitute an indebtedness of the City or a loan of credit thereof within the meaning of any Constitutional or statutory provision or limitation as to indebtedness. The Series 2014 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 City, the State of Illinois or any political subdivision of the State of Illinois is pledged to the payment of the principal of the Series 2014 Bonds, or the interest or any premium on the Series 2014 Bonds. The Series 2014 Bonds are payable solely from the Trust Estate (as defined in the Eighth Supplemental Indenture) pledged to such payment under the Indenture and certain other monies held by or on behalf of the Trustee.

The principal of and premium, if any, on this Series 2014 Bond shall be payable at the designated corporate trust office of the Trustee or upon presentation and surrender of this Series 2014 Bond.

Interest on this Series 2014 Bond shall be paid by check mailed on the Interest Payment Date to the person appearing on the Bond Register as the Registered Owner of this Series 2014 Bond as of the close of business of the Trustee on the Record Date at the address of such Registered Owners as it appears on the Bond Register or at such other address as is furnished to the Trustee in writing by such Registered Owner not later than the Record Date. Payment of interest on this Series 2014 Bond shall be made to a Registered Owner of One Million Dollars (\$1,000,000) or more in aggregate principal amount of Series 2014 Bonds as of the close of business of the Trustee on the Record Date for a particular Interest Payment Date by wire transfer to such Registered Owner on such Interest Payment Date upon written notice from such Registered Owner containing the wire transfer address within the United States to which such Registered Owner wishes to have such wire directed, which written notice is received not later than the Business Day next preceding the Record Date.

Interest accrued on this Series 2014 Bond shall be paid in arrears on each Interest Payment Date. Interest on this Series 2014 Bond shall be computed upon the basis of a three hundred sixty (360) day year consisting of twelve (12) thirty (30) day months.

*General.* This Series 2014 Bond is one of an authorized series of bonds limited in aggregate principal amount to \$367,925,000 (the "Series 2014 Bonds") issued pursuant to, under authority of and in full compliance with the Constitution and laws of the State of Illinois, particularly Article VII, Section 6(a) of the 1970 Constitution of the State of Illinois and an ordinance of the City Council of the City, and executed under a Master Indenture of Trust Securing Second Lien Water Revenue Bonds, dated as of December 15, 1999, as heretofore supplemented and as amended by Amendment Number 1 to Master Indenture, dated as of August 1, 2004 (the "Master Indenture"), and as supplemented by a Eighth Supplemental Indenture, dated as of September 1, 2014 (the "Eighth Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), from the City to The Bank of New York Mellon Trust Company, N.A., Chicago, Illinois, as successor trustee (the "Trustee"), for the purpose of (i) paying Series 2014 Project Costs, and (ii) paying Costs of Issuance of the Series 2014 Bonds.

The Series 2014 Bonds and the interest on them are payable from Second Lien Bond Revenues (as defined in the Indenture) deposited into the 2014 Second Lien Project Bonds Subaccount and pledged to the payment of the Series 2014 Bonds under the Indenture and certain other monies held by or on behalf of the Trustee and from any other monies held by the Trustee under the Indenture for such purpose.

As provided in the Indenture, additional bonds may be issued from time to time pursuant to supplemental indentures in one or more series, in various principal amounts, may mature at different times, may bear interest at different rates and may otherwise vary as provided in the Master Indenture. The aggregate principal amount of bonds that may be issued pursuant to the Indenture is not limited, except as provided in the Indenture and ordinances authorizing those additional bonds, and all bonds issued and to be issued pursuant to the Indenture, including the Series 2014 Bonds, are and will be equally secured by the pledges and covenants made in the Series 2014 Bonds, except as otherwise provided or permitted in the Master Indenture.

Copies of the Indenture are on file at the principal corporate trust office of the Trustee, and reference to the Indenture and any and all supplements to it and modifications and amendments of it is made for a description of the pledge and covenants securing the Series 2014 Bonds, the nature, extent and manner of enforcement of such pledge, the rights and

remedies of the Registered Owners of the Series 2014 Bonds and the limitations on such rights and remedies.

The Series 2014 Bonds are subject to optional and mandatory sinking fund redemption prior to maturity as provided in the Eighth Supplemental Indenture.

*Limited Obligation.* The Series 2014 Bonds are issued pursuant to an ordinance adopted by the City Council of the City, which ordinance authorizes the execution and delivery of the Indenture. The Series 2014 Bonds are limited obligations of the City payable solely from the Trust Estate pledged therefor under the Indenture.

No recourse shall be had for the payment of the principal of premium, if any, or interest on any of the Series 2014 Bonds or for any claim based on the Series 2014 Bonds or upon any obligation, covenant or agreement in the Indenture contained, against any past, present or future officer, employee or agent, or member of the City Council, of the City, or any successor to the City, as such, either directly or through the City, or any successor to the City, under any rule of law or equity, statute or constitution or by the enforcement of any assessment or penalty or otherwise, and all such liability of any such officer, employee or agent, or member of the City Council, as such, is hereby expressly waived and released as a condition of and in consideration for the execution of the Indenture and the issuance of any of the Series 2014 Bonds.

*Registration.* This Series 2014 Bond is transferable by the Registered Owner of this Series 2014 Bond in person or by such Registered Owner's attorney duly authorized in writing at the designated corporate trust office of the Trustee, but only in the manner and subject to the limitations provided in the Indenture.

*Defeasance.* Provision for payment of all or any portion of the Series 2014 Bonds may be made, and the Indenture may be discharged, prior to payment of the Series 2014 Bonds in the manner provided in the Indenture.

*Miscellaneous.* The Registered Owner of this Series 2014 Bond shall have no right to enforce the provisions of the Indenture or to institute action to enforce the covenants, the Indenture, or to take any action with respect to any event of default under the Indenture, or to institute, appear in or defend any suit or other proceedings with respect to the Indenture, except as provided in the Indenture.

IT IS CERTIFIED, RECITED AND DECLARED that all acts and conditions required to be performed precedent to and in the execution and delivery of the Indenture and the issuance of this Series 2014 Bond have been performed in due time, form and manner as required by law, and that the issuance of this Series 2014 Bond and the series of which it forms a part does not exceed or violate any constitutional or statutory limitation.

This Series 2014 Bond shall not be valid or become obligatory for any purpose or be entitled to any security or benefit under the Indenture unless and until the certificate of authentication hereon shall have been duly executed by the Trustee.

IN WITNESS WHEREOF, the City of Chicago has caused this Series 2014 Bond to be executed in its name by the manual or facsimile signature of its Mayor and the manual or facsimile of its corporate seal to be printed on this Series 2014 Bond and attested by the manual or facsimile signature of its City Clerk.

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CITY OF CHICAGO

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By: \_\_\_\_\_ Mayor

Attest:

City Clerk

# **CERTIFICATE OF AUTHENTICATION**

This Series 2014 Bond is one of the Series 2014 Bonds described in the withinmentioned Indenture.

Authentication Date: \_\_\_\_\_

The Bank of New York Mellon Trust Company, N.A., as Trustee

By: \_\_\_\_\_ Authorized Signatory

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#### ASSIGNMENT

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

Ten. Com. -- as tenants in common
Ten. Ent. -- as tenants by the entireties
Jt. Ten. -- as joint tenants with right of survivorship and not as tenants in common

Unif. Gift Min. Act		Custodian	
	(Cust.)		(Minor)

under Uniform Gifts to Minors Act

(State)

Additional abbreviations may also be used, though not in the above list.

For Value Received, The undersigned sells, assigns and transfers unto

(Name and Address of Assignee)

this Series 2014 Bond of the City of Chicago and does hereby irrevocably constitute and appoint \_\_\_\_\_\_, attorney to transfer said Series 2014 Bond on the books kept for registration thereof, with full power of substitution in the premises.

Dated:	
Signature:	
Signature G	uaranteed:

Notice: The signature to this assignment must correspond with the name as it appears upon the face of this Series 2014 Bond in every particular, without alteration or enlargement or any change whatever.