



# Office of the City Clerk

City Hall  
121 N. LaSalle St.  
Room 107  
Chicago, IL 60602  
[www.chicityclerk.com](http://www.chicityclerk.com)

## Legislation Text

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File #: F2014-91, Version: 1

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Department of Finance  
CITY OF CHICAGO

September 23, 2012

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

RE: City of Chicago, Illinois  
Second Lien Wastewater Transmission Revenue Bonds,  
Project Series 2014  
\$292,405,000

Dear Ms. Mendoza:

Attached is the Determination Certificate which is required to be filed with your office pursuant to Section 3.5(G (i)) of the ordinance authorizing the issuance of Wastewater Transmission Revenue Bonds, Project and Refunding Series 2014 ordinance, which was passed by the City Council on April 30th, 2014.

Please direct this filing to the City Council.

Chief Financial Officer

121 NORTH LASALLE STREET, ROOM 107A, CHICAGO, ILLINOIS 60602-1288

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CITY OF CHICAGO

\$292,405,000

**Second Lien Wastewater Transmission Revenue Project Bonds,  
Series 2014**

City Council City of Chicago 121  
North LaSalle Street Chicago, Illinois  
60602

**DETERMINATION CERTIFICATE**

An ordinance adopted by the City Council of the City of Chicago (the "City") on April 30, 2014 (the "2014 Bond Ordinance"), authorized the issuance of not to exceed \$475,000,000 aggregate principal amount of Wastewater Transmission Revenue Bonds, Project and Refunding Series 2014 (the "Series 2014 Bonds"), of the City, of which amount not to exceed \$375,000,000 were authorized for Project Costs and not to exceed \$100,000,000 were authorized for Refunding Purposes.. The 2014 Bond Ordinance authorized the Chief Financial Officer of the City or, if the Chief Financial Officer so determines and designates, the City Comptroller of the City (the "Authorized Officer") to (a) determine that the City will issue the Series 2014 Bonds as Senior Lien Bonds or as Second Lien Bonds in one or more Series for one or more of the purposes specified in the 2014 Bond Ordinance, (b) determine various terms and provisions of the Series 2014 Bonds within limitations established by the 2014 Bond Ordinance, (c) execute on behalf of the City one or more bond purchase agreements for the Series 2014 Bonds with an underwriter or group of underwriters or purchasers to be selected and designated by the Authorized Officer, (d) approve the form and execute and deliver on behalf of the City an indenture pursuant to which the Series 2014 Bonds will be issued, a bond purchase agreement or bond purchase agreements providing for the terms and terms of sale of the Series 2014 Bonds, and a continuing disclosure undertaking with respect to the Series 2014 Bonds, and (e) take such other actions as are necessary to cause the Series 2014 Bonds to be issued and delivered. The 2014 Bond Ordinance provides for the Authorized Officer to execute a Determination Certificate setting forth the various determinations made by him with respect to the Series 2014 Bonds. The Authorized Officer is to file the Determination Certificate in the Office of the City Clerk of the City, addressed to the City Council.

I am the duly qualified and serving Chief Financial Officer of the City and an Authorized Officer within the meaning of the 2014 Bond Ordinance. I make and file this Determination Certificate in accordance with the 2014 Bond Ordinance. All terms used in this Determination Certificate and defined in the 2014 Bond Ordinance or the Series 2014 Trust Indenture (defined below) shall have the meanings ascribed to them in the 2014 Bond Ordinance or the Series 2014 Trust Indenture.

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

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

1. The City has received an offer from Merrill Lynch, Pierce, Fenner & Smith, Incorporated; Samuel A. Ramirez & Co., Inc.; Mesirow Financial Inc.; The William Capital Group, L.P.; BNY Mellon Capital Markets, LLC; Estrada Hinojosa & Company, Inc.; Harvestons Securities, Inc.; Loop Capital Markets, LLC; The Northern Trust Company; Drexel Hamilton, LLC; Piper Jaffray & Co.; Podesta & Co.; and Stife), Nicolaus & Company, Incorporated (collectively, the "Underwriters") to purchase \$292,405,000 principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 of the City (the "Bonds"), pursuant to a Bond Purchase Agreement, dated September 17, 2014, between the City and the Underwriters, a copy of which is attached as Exhibit A to this Determination Certificate (the "Bond Purchase Agreement"). The Bond Purchase Agreement is in substantially the form previously used for similar financings of the City and is consistent with the 2014 Bond Ordinance. The purchase price of the Bonds specified in the Bond Purchase Agreement, \$320,691,049.97 (reflecting the aggregate principal amount plus a net original issue premium of \$29,792,629.95 less an underwriters' discount of \$1,506,579.98), which results in a purchase price that is not less than 98% of the original principal amount of the Bonds, which is within the limit provided in the 2014 Bond Ordinance. Selling the Bonds to the Underwriters upon the terms provided in the Bond Purchase Agreement is in the best interests of the City.

a) The Chairman of the Committee on Finance of the City Council has concurred in the acceptance by the City of the Bond Purchase Agreement, as being within the authority granted by the 2014 Bond Ordinance.

b) The terms of the Bonds as specified in this Determination Certificate and the Series 2014 Trust Indenture approved by this Determination Certificate provide for (i) aggregate maturity amounts not greater than those allowed for Project Costs by the 2014 Bond Ordinance, (ii) interest rates not greater than that allowed by the 2014 Bond Ordinance, (iii) a net amount received by the City not less than the amount required by the 2014 Bond Ordinance, (iv) redemption terms which are within the limits specified in the 2014 Bond Ordinance, (v) a determination of the amount of money to be borrowed for Project Costs, and (vi) the lien status of the Bonds, all as provided in the 2014 Bond Ordinance. Any changes made by this Determination Certificate to the terms of the Bonds thus will result in the Bonds having substantially the same terms as provided in the 2014 Bond Ordinance.

c) The interest rates or yields for the Bonds set forth in this Determination Certificate are in my judgment the best rates at which the Bonds can be sold on the market under current circumstances. The interest rates for the Bonds do not exceed 15% per year, the maximum interest rate set forth in the 2014 Bond Ordinance.

d) Prior to the issuance of the Bonds, the City enacted increases in the rates of the Sewer System pursuant to an ordinance adopted by the City Council on November 2, 2011 which rate increases went into effect on January 1, 2012, January 1, 2013 and January 1, 2014. An additional increase will go into effect January 1, 2015. To the extent permitted by the requirements

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of the Series 1998 Indenture, the Series 2001 Indenture, the Series 2004B Indenture, the Series 2006 Indenture, the Series 2008A Indenture and the Series 2012 Indenture, I have adjusted Net Revenues Available for Bonds for 2014 and 2015 to reflect such rate increases.

(e) The Bonds will be issued pursuant to a Trust Indenture, dated as of September 1, 2014 (the "Series 2014 Trust Indenture") from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee"), which is attached as Exhibit B to this Determination Certificate. The Series 2014 Trust Indenture is in substantially the form previously used for similar financings of the City. The Trust Indenture contains only such changes and revisions as are consistent with the purposes and intent of the 2014 Bond Ordinance, including such changes and revisions as are necessary to reflect the terms and provisions of the Bonds, and I approve such changes. The Series 2014 Trust Indenture includes such covenants with respect to the imposition of Sewer System rates, the issuance of Second Lien Parity Bonds, the application of funds in the Sewer Revenue Fund and the applicable Accounts and other matters relating to the Bonds and the security for them, including the lien status of the Bonds, as I deem necessary in connection with the sale of the Bonds. Such covenants are not inconsistent with the terms of the 2014 Bond Ordinance.

g) The issuance of the Bonds with the terms set forth in this Determination Certificate will comply with the requirements of the indentures for the Outstanding Second Lien Bonds for the issuance of additional Second Lien Parity Bonds:

i) all funds required to be transferred to the principal and interest accounts and the debt service reserve accounts in the revenue funds established for the Outstanding Second Lien Bonds have been transferred in full up to the date of this Determination Certificate; and

ii) as shown on Exhibit C, Net Revenues Available for Bonds for the last completed Fiscal Year ended December 31, 2013 (as shown by the audit of an independent certified public accountant), equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the Bonds, computed on a pro forma basis assuming the issuance of the Bonds and the application of the proceeds of the Bonds as provided in the Series 2014 Trust Indenture and this Determination Certification.

h) The amount that will be needed by the City to pay the costs of acquiring and constructing projects constituting Project Purposes during the three year period following the issuance and delivery of the Bonds, taking into account moneys that will be available from other sources (including investment earnings on proceeds of sale of the Bonds during the period before they are applied to pay such costs) to pay such costs, is not less than \$292,405,000.

(i) This Determination Certificate is consistent with the terms of sale of the Bonds in the Bond Purchase Agreement.

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#### **Bond Terms.**

(a) The Bonds shall be Second Lien Bonds as that term is defined in the 2014 Bond Ordinance.

b) The Bonds shall be designated "Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014."

c) The Bonds shall be issued for the purposes of (i) financing certain capital improvements to and extensions of the Sewer System (as defined below) and (ii) paying a portion of the Costs of Issuance of the 2014 Second Lien Bonds.

d) The aggregate principal amount of the Bonds shall be \$292,405,000. All of the Bonds shall be issued for Project Costs. None of the Bonds shall be issued for Refunding Purposes or to make deposits into the Bond Debt Service Reserve Account or any Debt Service Account for any series of Outstanding Second Lien Bonds.

e) The Bonds shall be dated as of the date they are issued and delivered. The Bonds shall be issued as serial bonds and term bonds subject to mandatory sinking fund redemption as set forth in subsections (i) and (j) below but shall not be issued as capital appreciation bonds or variable rate bonds. The Bonds shall be issued initially in the form of a single fully registered Bond for each maturity. The Bonds shall be in Authorized Denominations as provided in the Series 2014 Trust Indenture.

f) The Bonds shall mature on January 1 of each of the following years and bear interest at the following interest rates per annum:

<u>Year</u>	<u>Principal</u>	<u>Interest Rate</u>	<u>Year</u>	<u>Principal</u>	<u>Interest Rate</u>
2016	\$4,720,000	3.00%	2026	\$7,560,000	5.00%
2017	4,915,000	5.00%	2027	7,945,000	5.00%
2018	5,170,000	5.00%	2028	8,355,000	5.00%
2019	5,435,000	5.00%	2029	8,780,000	5.00%
2020	5,710,000	5.00%	2030	9,230,000	5.00%
2021	5,945,000	3.00%	2031	9,705,000	5.00%
2022	6,190,000	5.00%	2032	10,205,000	5.00%
2023	6,505,000	5.00%	2033	10,725,000	5.00%
2024	6,840,000	5.00%	2034	11,275,000	5.00%
2025	7,190,000	5.00%	2039	65,675,000	5.00%
			2044	84,330,000	5.00%

Interest on the 2014 Second Lien Bonds shall be payable on January 1 and July 1 of each year, commencing January 1, 2015.

(g) The Bonds shall be numbered from R-1 upward.

(h) The Bonds maturing on or after January 1, 2025, are subject to redemption prior to maturity at the option of the City, on or after January 1, 2024, as a whole or in part, at any time,

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and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

(i) The Bonds maturing on January 1, 2039, are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>
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2035	\$11,855,000	
2036	12,465,000	
2037	13,100,000	
2038	13,775,000	2039*
14,480,000		

\*Final Maturity

(j) The Bonds maturing on January 1, 2044, are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<b><u>Year</u>Principal Amount</b>	
2040	\$15,220,000
2041	16,005,000
2042	16,835,000
2043	17,685,000
2043	2044*18,595,000

\*Final Maturity

**Section 3. Amounts to be Borrowed.**

(a) The amount to be borrowed through the issuance and sale of the Bonds to pay Project Costs (as defined in the 2014 Bond Ordinance) is \$292,405,000.

(b) The foregoing amount does not include Costs of Issuance of the Bonds.

**Section 4. Selection of Trustee.**

Amalgamated Bank of Chicago is selected to serve as Trustee under the Series 2014 Trust Indenture.

**Section 5. Selection of Book Entry Depository.**

The Depository Trust Company, New York, New York, is selected to serve as book entry depository under the Series 2014 Trust Indenture.

**Section 6. Bond Purchase Agreement.**

**The Bond Purchase Agreement is approved and executed by me on behalf of the City. Section**

**7. Continuing Disclosure Undertaking.**

The Continuing Disclosure Undertaking is approved and executed by me on behalf of the City.

**Section 8. Preliminary Official Statement; Official Statement.**

a) The distribution of the Preliminary Official Statement, dated September 4, 2014, to prospective purchasers of the Bonds is approved and ratified.

b) The final Official Statement, dated September 17, 2014, attached to this Determination Certificate as Exhibit D, its execution on behalf of the City and its distribution to purchasers of the Bonds, are authorized and approved.

**Section 9. Disposition of Proceeds.**

As provided in the 2014 Bond Ordinance, on behalf of the City, I determine that the proceeds received upon the sale of the Bonds shall be applied as follows: \$320,691,049.97 shall be deposited in the Construction Account: 2014 Second Lien Bonds and used to pay Project Costs and a portion of Costs of Issuance of the Bonds as described in the 2014 Bond Ordinance.

*[Signature Page Follows]*

Dated April 23, 2014

Scott,  
Financial Officer City of Chicago

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[Determination Certificate)

**EXHIBIT A**

**BOND PURCHASE AGREEMENT**

**[Attached]**



## BOND PURCHASE AGREEMENT

\$292,405,000 CITY OF CHICAGO Second Lien  
Wastewater Transmission Revenue Project Bonds,  
Series 2014

September 17, 2014

City of Chicago  
Office of the Chief Financial Officer 121 North LaSalle  
Street, Suite 700 Chicago, Illinois 60602

The undersigned Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "Representative"), on behalf of itself and the other Underwriters, as listed in Appendix I (the "Underwriters"), hereby offers to enter into this Bond Purchase Agreement (the "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"), for the purchase by the Underwriters, and sale by the City, of all but not less than all of the City's Bonds specified below. This offer is made subject to the acceptance by the City on or before 12:00 P.M., Chicago time on the date hereof, and upon such acceptance this Agreement shall be in full force and effect in accordance with its terms and shall be binding on the City and the Underwriters.

Terms used but not defined in this Agreement are defined in the Official Statement (as herein defined).

1. Agreement to Sell and Purchase. Upon the terms and conditions and based upon and in reliance upon the representations, warranties and covenants herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the City and the City hereby agrees to sell to the Underwriters, \$292,405,000 aggregate principal amount of the City's Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"), at the purchase price of \$320,691,049.97 (reflecting the aggregate principal amount plus a net original issue premium of \$29,792,629.95 less an underwriters' discount of \$1,506,579.98).

The Bonds shall: (a) be dated as of their date of delivery, (b) have the maturities and shall bear interest at the rates per annum set forth in Exhibit B hereto and (c) have the redemption features and the further terms set forth in Exhibit B hereto and in the Official Statement of the City, dated the date hereof, 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 hereof and the date upon which the Bonds are delivered for the Underwriters'

account with The Depository Trust Company, New York, New York ("Z)TC"), the term "Official Statement" shall refer to the Official Statement, as so amended).

2. The Ordinance and the Indenture. The Bonds will be issued and secured under and have such terms and conditions as are provided in the ordinance adopted by the City Council of the City on April 30, 2014

(the "Ordinance"), and a Trust Indenture dated as of September 1, 2014 (the "Indenture"), from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee") and the Determination Certificate, dated as of September 23, 2014.

3. *Public Offering Price.* The Underwriters agree to make a bona fide public offering of the Bonds at a price not in excess of the initial offering price or prices or yields not less than the yields set forth in Exhibit B. It shall be a condition to the obligation of the City to sell and deliver the Bonds to the Underwriters, and to the obligation of the Underwriters to purchase and to pay for the Bonds, that the entire principal amount of the Bonds to be sold pursuant to Section 1 hereof shall be sold and delivered to, and purchased and paid for by the Underwriters at the Closing (hereinafter defined). Subsequent to such initial public offering, the Underwriters reserve the right to change such initial public offering prices as the Underwriters deem necessary or desirable, in their sole discretion, in connection with the marketing of the Bonds, and may offer and sell the Bonds to certain dealers, unit investment trusts and money market funds, certain of which may be sponsored or managed by one or more of the Underwriters at prices lower than the public offering prices or yields greater than the yields set forth therein. The Representative shall provide to the City a certificate setting forth the offering prices of the Bonds in substantially the form set forth on Exhibit A.

4. *The Official Statement.* The City ratifies and consents to the distribution and use by the Underwriters, prior to the date hereof, of the Preliminary Official Statement of the City dated September 4, 2014 relating to the Bonds (the "Preliminary Official Statement"). For purposes of Rule 15c2-12 {"Rule 15c2-12"} of the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Preliminary Official Statement is "deemed final" by the City as of its date except for the omission of such information as is permitted by Rule 15c2-12. As soon as practicable, but not more than seven (7) business days after the City's acceptance hereof, and in any event not later than two (2) business days before the Closing Date (as hereinafter defined), the City shall deliver, or cause to be delivered, to the Representative six copies of the Official Statement, signed on behalf of the City by its Chief Financial Officer, and the Official Statement so delivered shall be "final" for purposes of Rule 15c2-12. The Official Statement shall be in substantially the same form as the Preliminary Official Statement and, other than information previously permitted to have been omitted by Rule 15c2-12 and information which the City is required to include to comply with rules of the SEC, the City shall only make such other additions, deletions and revisions in the Official Statement which are mutually agreed upon by the City and the Representative. The City hereby agrees to deliver to the Underwriters an electronic copy of the Official Statement in a form that permits the Underwriters to satisfy their obligations under the rules and regulations of the Municipal Securities Rulemaking Board (the "MSRB") and the SEC. The City shall provide, or cause to be provided, at its expense, to the Underwriters as soon as practicable, but not more than seven (7) business days after the City's

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acceptance of this Agreement and in time which, in the Representative's opinion, is sufficient to accompany any confirmation that requests payment from any customer, copies of the Official Statement in such quantity which, in the Representative's opinion, is sufficient to comply with the rules of the SEC and the 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.

If on or prior to the Closing or within 25 days after the "end of the underwriting period" any event known to the City 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 made 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 the light of the circumstances under which they were made, not misleading. For purposes of this Agreement, the term "end of the underwriting period" shall be the later of the date of Closing or the date on which an Underwriter no longer retains an 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 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 90 days after the date of Closing.

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 ("EMMA") system for municipal securities disclosure or through any other electronic format or system then prescribed by the MSRB or the SEC. The Representative shall notify the City when the Underwriters are no longer obligated to deliver to potential customers the Official Statement.

5. Representations and Warranties of the City. 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.

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- b) *The City Council of the City has: (i) duly adopted the Ordinance, which remains in full force and effect, (ii) duly authorized the use of the Preliminary Official Statement prior to the date hereof in connection with the public offering and sale of the Bonds and (iii) duly authorized and approved the execution and delivery of (A) the Bonds, (B) the Indenture, (C) this Agreement, (D) the General Tax Certificate (the "Tax Certificate"), and (E) a continuing disclosure undertaking pursuant to the provisions of Section (b)(5) of Rule 15c2-12 (the "Undertaking").*
- c) The City has full legal right, power and authority: (i) to adopt the Ordinance; (ii) to execute and deliver this Agreement, the Indenture, the Tax Certificate and the Undertaking; (iii) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance, the Indenture and this Agreement; and (iv) to pay the Bonds from the sources pledged under the Ordinance and the Indenture for their payment.
- d) The adoption of the Ordinance and compliance with the respective provisions thereof do not, and the execution and delivery of this Agreement, the Indenture, the Bonds, the Tax Certificate and the Undertaking 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 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 subject.

- e) This Agreement, the Ordinance and the Official Statement have been, and the Indenture, the Tax Certificate, the Undertaking and the Bonds (when delivered and paid for at the Closing) shall be, duly authorized, executed, delivered and (in the case of the Bonds) authenticated by the Trustee and issued by the City. When delivered and paid for at the Closing, the Bonds shall be entitled to the benefits and the security of, and shall be subject to the terms and conditions set forth in, the Ordinance and the Indenture.
- 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 this Agreement, the Ordinance, the Indenture, the Tax Certificate and the Bonds have been, or will be, obtained or made.
- g) Between the date of this Agreement and the Closing, the Sewer System shall not have suffered any material adverse change in its condition, financial or otherwise.

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(h) The financial statements contained in Appendix A of the Official Statement fairly present the financial position and results of operations of the City's Sewer System, including the City's Sewer Revenue Fund, as of the dates and for the periods therein stated, 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.

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

(j) The Indenture, this Agreement, and the Tax Certificate, when duly executed and delivered by the parties thereto, as appropriate, will constitute the 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) When delivered to the Representative and paid for by the Underwriters at the Closing in accordance with the provisions of this Agreement, the Bonds will be duly authorized, executed and delivered and will constitute validly issued and outstanding limited 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).

- (1) 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 affect (i) the validity or enforceability of the Bonds, the Ordinance, the Indenture, the Tax Certificate, this Agreement, or the Undertaking, or (ii) the excludability from federal income taxation of the interest on the Bonds.
- (m) 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 Internal Revenue Code of 1986, as amended.

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

6. Continuing Disclosure. In order to assist the Underwriters in complying with Rule 15c2-12, 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. Additional Covenants of the City. 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 offering 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 7(a) shall require the City to consent to general service of process in any state or jurisdiction other than the State of Illinois.
- b) The City shall apply the proceeds of the Bonds in accordance with the Ordinance and the Indenture.

8. Closing. Subject to the conditions set forth in this Agreement, the closing (the "Closing") of the sale of the Bonds by the City and the purchase of the Bonds by the Underwriters, shall take place at approximately 9:30 a.m., Chicago time, on September 23, 2014, at the offices of Schiff Hardin LLP, Chicago, Illinois (or at such other time, date and place as the City and the Representative mutually agree), and in connection therewith:

a) At the Closing, the City shall deliver or cause to be delivered to DTC, as securities depository, or to the Trustee, as DTC's FAST Agent, for the account of the Underwriters, a single certificate for each maturity of the Bonds, representing the total principal amount of such Bonds of such maturity, registered in the name of Cede & Co., as nominee for DTC.

b) Upon delivery of the Bonds to DTC or the Trustee, as FAST Agent, at the Closing, the City will deliver to the Representative the Closing Documents as set forth in Section 9(d). The Representative will accept delivery of the Bonds and pay the purchase price therefor at the Closing in accordance with Section 8(c).

c) The Underwriters agree at Closing to deliver a federal funds check or make a federal funds wire transfer or otherwise confirm deposit of federal funds to the City's account at a bank it specifies, in an amount equal to the purchase price of the Bonds.

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9. Reliance and Further Conditions of the Underwriters. The Underwriters have entered into this Agreement in reliance upon the representations, warranties and agreements of the City herein and the performance by the City of its obligations hereunder, both as of the date hereof and as of the date of the Closing. The Underwriters' obligations under this Agreement are and shall be subject to the following further conditions:

- a. At the time of the Closing, the Ordinance and the Indenture shall be in full force and effect and the Ordinance, the Indenture and the Official Statement shall not have been amended, modified or supplemented except as may have been agreed to with respect to the Official Statement pursuant to Section 5 hereof, and the City shall have duly adopted and there shall be in full force and effect such resolutions and ordinances as, in the opinion of Schiff Hardin LLP, and Hardwick Law Firm, LLC (herein collectively "Co-Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby and thereby.
- b. At the time of the Closing, evidence shall be provided that Moody's, Investors Service has assigned to the Bonds a rating of at least "A3," Standard & Poor's Rating Services has assigned to the Bonds a rating of at least "AA-," Fitch Ratings has assigned to the Bonds a rating of at least "AA," and Kroll Bond Rating Agency has assigned to the Bonds a rating of at least "AA-" and such ratings shall not have been qualified or lowered on or prior to Closing if such qualification or lowering, in the Representative's opinion, adversely affects the market price or marketability of the Bonds.
- c. The Underwriters shall have the right to cancel their obligations to purchase the Bonds and have the further right to terminate this Agreement, without liability therefor, by written notice to the City from the Representative, if, between the date hereof and the Closing:
  - i. legislation shall be introduced in or enacted by the Congress of the United States, or adopted by either house thereof or shall have been recommended to the Congress or otherwise endorsed for passage (by press release, public statement, or other form of notice) by the President of the United States, the Treasury Department of the United States, the Internal Revenue Service or by the chairman or ranking minority member of the Senate Finance Committee or of the House Committee on Ways and Means 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 thereof 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 opinion, does or will materially adversely affect

the market price or marketability of the Bonds;

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legislation shall have been enacted by the Congress of the United States to become effective on or prior to the Closing, or a decision of a court of the United States shall be rendered, or a stop order, ruling, regulation or proposed regulation by or on behalf of the SEC or other agency having jurisdiction over the subject matter shall be issued or made, to the effect that the issuance, sale and delivery of the Bonds, or any similar obligations of any public body of the general character of the Bonds, is in violation of, or has the effect of requiring the contemplated offering, sale and distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or would require the qualification of the Ordinance or the Indenture under the Trust Indenture Act of 1939, as amended, or with the purpose or effect of otherwise prohibiting the issuance, sale or delivery of the Bonds as contemplated hereby or by the Official Statement or of obligations of the general character of the Bonds;

there shall have occurred any event which in the Representative's 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 either (1) 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 5 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 or (2) such amendment or supplement to the Official Statement materially adversely affects the market price or marketability of the Bonds;

there shall have occurred, or any notice shall have been given, that the ratings of the City's sewer system obligations shall be, or will be, downgraded or suspended, or placed on Credit Watch by Standard & Poor's or placed on Ratings Under Review by Moody's or Rating Watch by Fitch or on Rating Watch by Kroll, which, in the Representative's reasonable opinion, materially adversely affects the market price or marketability of the Bonds;

there shall have occurred or any notice shall have been given of any intended downgrading (including a review), suspension, withdrawal, or negative change in credit watch status by any national rating service to any of the City's obligations, which, in the Representative's reasonable opinion, materially adversely affects the market price or marketability of the Bonds;

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vi. there shall be in force a general suspension of trading on The New York Stock Exchange, Inc. or any other national securities exchanges, or minimum or maximum prices for trading shall have been fixed and be in force, or maximum ranges for prices for securities shall have been required and be in force on The New York Stock Exchange, Inc. or any other national securities exchange, whether by virtue of a determination by such Exchange or by order of the SEC or any other governmental authority having jurisdiction;

- vii. a general banking moratorium shall have been declared by either federal, Illinois or New York authorities having jurisdiction and be in force;
- viii. a material disruption in securities settlement, payment or clearance services in the United States shall have occurred or a material disruption of the municipal securities market shall have occurred;
- ix. any legislation, ordinance, rule or regulation shall be enacted by, any governmental body, department or agency in the State of Illinois, or a decision by any court of competent jurisdiction within the State of Illinois shall be rendered which, in the reasonable opinion of the Representative, would have a material adverse effect on the market price or marketability of the Bonds;
- x. a war involving the United States, an outbreak or escalation of or adverse development in hostilities 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;
- xi. there shall be any proceeding or threatened proceeding by the SEC 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
- xii. 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.

At the Closing, the Underwriters shall receive each of the following documents:

the approving opinions, dated the date of the Closing, of Co-Bond Counsel, substantially in the form attached to the Official Statement as Appendix D;

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the supplemental opinions, dated the date of the Closing and addressed to the Representative on behalf of the Underwriters and to the City, of Co-Bond Counsel, substantially in the form attached hereto as Exhibit C;

an opinion of the Corporation Counsel for the City, dated the date of the Closing and addressed to the Representative on behalf of the Underwriters substantially in the form attached hereto as Exhibit D;

An opinion, dated the date of the Closing and addressed to the Underwriters of, Katten Muchin Rosenman LLP, Chicago, Illinois, as Underwriters' Counsel to the Underwriters (the "Underwriters' Counser) to the effect that:



A) The Bonds constitute exempted securities within the meaning of the Securities Act of 1933, as amended, and it is not necessary, in connection with the public offering and sale of the Bonds, to register any of the Bonds under said Securities Act or to qualify the Ordinance or the Indenture under the Trust Indenture Act of 1939, as amended;

B) The Undertaking complies with the requirements of paragraph (b)(5) of Rule 15c2-12;

C) The conditions precedent to the Underwriters' purchase and sale of the Bonds contained in this Agreement have been satisfied or waived; and

D) Based upon their participation in the preparation of the Preliminary Official Statement and the Official Statement as Underwriters' Counsel and their participation at conferences at which the Preliminary Official Statement and the Official Statement were discussed, but without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, the Underwriters' Counsel have no reason to believe that the Preliminary Official Statement as of its date or the Official Statement, as of its date and as of the date of Closing, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; provided that no belief or opinion need be stated regarding (i) any financial, forecast, technical and statistical statements and data included in the Preliminary Official Statement and the Official Statement, including, but not limited to APPENDIX D, (ii) the statements and information set forth under the captions "Official Statement Summary," "Independent Auditors," and "Tax Matters" in the Preliminary Official Statement and the Official Statement, (iii) the statements and information set forth in APPENDICES A, D and E to the Preliminary Official Statement and the Official Statement, and (iv) any information supplied by or relating to DTC or the DTC Book-Entry System;

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v. A negative assurance letter, dated the date of the Closing and addressed to the City and to the Representative on behalf of the Underwriters, of Chapman and Cutler LLP, special disclosure counsel to the City, with respect to the information in APPENDIX E to the Official Statement, substantially in the form attached hereto as Exhibit E;

vi. an opinion, dated the date of the Closing and addressed to the City and to the Representative on behalf of the Underwriters, of Burke, Warren, MacKay & Serritella, P.C. and Quintairos, Prieto, Wood & Boyer, P.A., as co-disclosure counsel ("Co-Disclosure Counsel"), to the effect that (A) the Bonds are exempt from registration pursuant to the Securities Act of 1933, as amended, and it is not necessary in connection with the public offering and sale of the Bonds to register any security under the Securities Act of 1933, as amended 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 paragraph (b)(5) of Rule 15c2-12 in effect as of the date of the Closing

and (C) nothing has come to their attention which would lead them to believe that the Official Statement and the Appendices thereto (excluding the financial statements and other financial and statistical data contained in the Official Statement, including Appendix A and E and the descriptions DTC and the DTC Book-Entry System, as to which no view is expressed), contains an untrue statement of a material fact or omits to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading;

- vii. a copy, duly certified by the City, of the Ordinance, as passed by the City Council and approved by the Mayor;
- viii. a certificate, dated the date of the Closing, executed on behalf of the City by its City Chief Financial Officer or its City Comptroller satisfactory to the Representative and in form and substance satisfactory to Underwriters' Counsel, to the effect that (A) the representations and warranties of the City herein are correct in all material respects as of the date of the Closing; and (B) the financial statements of the Sewer System included as APPENDIX A to the Official Statement as of December 31, 2013 fairly represents the receipts, expenditures, assets, liabilities and cash balances of such amounts as of the dates and for the periods therein set forth and (C) except as disclosed in the Official Statement, since December 31, 2013, no materially adverse change has occurred, or any development involving a prospective material change, in the financial position or results of operations of the Sewer System and the Sewer System has not incurred since December 31, 2013, any material liabilities other than in the ordinary course of business or as set forth in or contemplated by the Official Statement;

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- ix. a certificate or certificates acceptable to the City and the Representative dated the date of Closing, to the effect that Amalgamated Bank of Chicago, Chicago, Illinois, has full legal right, power and authority to act as Trustee under the Indenture and has executed and delivered the Indenture and authenticated the bonds;
  - x. a copy of an agreement between the City and DTC relating to the safekeeping and book-entry form of the Bonds;
  - xi. a fully executed counterpart or conformed copy of the Tax Certificate;
  - xii. a fully executed counterpart or conformed copy of the Undertaking;
  - xiii. a fully executed counterpart or conformed copy of the Indenture; and
  - xiv. evidence to the satisfaction of the Representative that all conditions to the issuance and delivery of the Bonds have been fulfilled.
- e. All of the opinions, letters, certificates, instruments and other documents mentioned above or elsewhere in this Agreement will be deemed to be in compliance with the provisions hereof if, but only if, they are in form and substance satisfactory to the Representative, in its reasonable

judgment.

- f. Payment for the Bonds and acceptance of the delivery of the Bonds by the Representative on behalf of the Underwriters shall evidence conclusively compliance by the City, or the waiver thereof by the Underwriters, of all conditions required hereunder for the Closing. If the City is unable to satisfy the conditions to the Underwriters' obligations contained in this Agreement, or if the Underwriters' obligations shall be terminated for any reason permitted by this Agreement, this Agreement shall terminate and neither the City nor the Underwriters shall have any further obligation hereunder.

10. Use of Documents. The City hereby authorizes the Underwriters to use, in connection with the public offering and sale of the Bonds, this Agreement, the Preliminary Official Statement, the Official Statement, the Ordinance and the Indenture, and the information contained herein and therein.

11. Expenses. The Underwriters shall be under no obligation to pay, and the City shall pay, any and all expenses incident to the performance of the City's obligations hereunder, including but not limited to: (a) the cost of the preparation and printing or other reproduction of the Ordinance, the Indenture, the Preliminary Official Statement and the Official Statement, as well as the cost of shipping the Preliminary Official Statement and the Official Statement; (b) the cost of the preparation and printing of the Bonds; (c) the fees and disbursements of Co-Bond Counsel, Co-Disclosure Counsel and Special Disclosure Counsel; (d) the fees of the financial advisor; (e) the fees and disbursements of any experts or consultants retained by the City, (f) the fees of the Trustee and (g) the fees for the municipal bond ratings on the Bonds. The Underwriters will pay the expenses incurred by them or any of them in connection with their

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public offering and distribution of the Bonds, including, but not limited to, the CUSIP Service Bureau charges, the fees and expenses of Underwriters' Counsel and advertising expenses directly incurred by the Underwriters.

12. Notices. Any notice or other communication to be given to the City under this Agreement shall be given by delivering the same in writing at the address set forth above, and any such notice or other communication to be given to the Underwriters shall be given by delivering the same in writing to:

Bank of America Merrill Lynch 540 West Madison  
Street Chicago, IL 60661

13. No Third Party Beneficiaries. Survival. Etc. This Agreement is made solely for the benefit of the City and the Underwriters (including the successors or assigns of any Underwriter), and no other person, partnership, association or corporation shall acquire or have any right hereunder or by virtue hereof. All of the representations and agreements by the City in this Agreement shall remain operative and in full force and effect regardless of any investigations made by or on behalf of the Underwriters and shall survive the delivery of and payment for the Bonds.

14. Approval: Representations and Warranties of the Underwriters.

a) The Representative represents and warrants to the City that the Underwriters have heretofore authorized the Representative to execute any document on behalf of, or exercise any authority of and otherwise to act for, them in all matters under or pertaining to this Agreement. 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 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 the 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. The approval of the Underwriters when required hereunder or the determination of their satisfaction as to any document referred to herein shall be in writing signed by the Representative and delivered to the City; provided, however, that payment for the Bonds and acceptance of the Bonds by the Underwriters shall constitute acknowledgement by the Representative and the Underwriters of such approval and satisfaction.

b) 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

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Bureau of Industry and Security of the U.S. Department of Commerce, the Directorate of Defense Trade Controls of 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 and the Debarred 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.

Attached hereto as Exhibit F. is a form Representation Letter to be provided by each Underwriter to the City and the Representative at or before Closing.

(c) This Agreement has been duly authorized, executed and delivered by the Representative on behalf of the Underwriters and, assuming the due authorization, execution and delivery by the City, is the legal, valid and binding obligation of the Underwriters enforceable in accordance with its 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).

15. Successors and Assigns. This Agreement will inure to the benefit of and be binding upon the parties and their successors and assigns, and will not confer any rights upon any other person. The terms "successors" and "assigns" shall not include any purchaser of any Bond or Bonds from the Underwriters merely because of such purchase.

16. Enforceability. If any provision of this Agreement 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 invalid, inoperative or unenforceable in any other case or circumstances, or of rendering any other provision or provisions of this Agreement invalid, inoperative or unenforceable to any extent whatsoever.

17. Cooperation with City Inspector General. 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. Pursuant to Section 2-56-090 of the Municipal Code of Chicago, 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

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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 Agreement. 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 Agreement, 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 Agreement.

18. No Advisory or Fiduciary Role by Underwriters: Acknowledgements of the City. The City acknowledges and agrees to the following: (1) the primary role of the Representative and Underwriters is to purchase securities, for resale to investors, in an arm's length commercial transaction between the City and the Underwriters in which the Representative is acting solely as a principal and that the Representative and Underwriters have financial and other interests that differ from those of the City; (2) the Representative and Underwriters are not acting as a municipal advisor, financial advisor or fiduciary to the City and 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 (irrespective of whether the Representative and Underwriters have provided other services or are currently providing other services to the City on other matters); (3) the only obligations the Representative or Underwriters have to the City with respect to the transaction contemplated hereby are expressly set forth in this Agreement and (4) the City has consulted its own financial and/or municipal, legal, accounting, tax, financial and other advisors, as applicable, to the extent it has deemed appropriate. The City engaged (a) A.C. Advisory, Inc. to perform certain professional services in the capacity as financial advisor to the City for this transaction, (b) Burke, Warren, Mackay & Serritella, P.C. and Quintairos, Prieto, Wood & Boyer, P.A. as Co-Disclosure Counsel to the City, and (c) Chapman and Cutler LLP as Special Disclosure Counsel to the City with respect to pension disclosure matters.

19. - Qualification of Securities. The City will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Representative may reasonably request to

qualify 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 Representative may designate and to provide for the continuance of such qualification;

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provided, however, that the City will not be required to qualify as a foreign corporation or to file any general or special consents to service of process under the laws of any state.

20. Entire Agreement. This Agreement, together with any contemporaneous written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Bonds, represents the entire agreement between the City and the Underwriters with respect to the preparation of the Official Statement, and the conduct of the offering, and the purchase and sale of the Bonds.

21. Counterparts. This Agreement may be executed in several counterparts, each of which shall be regarded as the original and all of which shall constitute one and the same document.

[The Execution Page Follows]

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Very truly yours,

Merrill Lynch, Pierce, Fenner & Smith Incorporated

/Author/zed Officer of Merrill Lynch, Merce,Vjj£fmer & Smith Incorporated

The foregoing is hereby accepted as of the date first written above:

CITY OF CHICAGO

l(o)sA. Scott Chief Financial Officer

*i*

Edward M. Burke Chairman, Committee on Finance, Chicago City Council

Execution Page

**APPENDIX I**

**UNDERWRITERS**

Merrill Lynch, Pierce, Fenner & Smith Incorporated Mesirow Financial, Inc. Samuel A. Ramirez & Co., Inc.  
BNY Mellon Capital Markets, LLC  
Drexel Hamilton, LLC Estrada Hinojosa & Company, Inc. Harvestons Securities Inc. Loop Capital  
Markets LLC Northern Trust Securities, Inc. Piper Jaffray & Co. Podesta & Co. Stifel, Nicolaus &  
Company, Incorporated The Williams Capital Group, L.P.

**EXHIBIT A**

**Form of Issue price Certificate**

**Underwriters' Certificate**

**Re: City of Chicago (the "Issuer")  
\$292,405,000 Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the  
"Bonds")**

Defined terms used in this certificate have the respective meanings set forth in Exhibit A to the Issuer's General Tax Certificate relating to the Bonds described above (the "General Tax Certificate").

**A. Initial Offering Prices**

Merrill Lynch, Pierce, Fenner & Smith Incorporated, as the representative (the "Representative") of itself and Samuel A. Ramirez & Co., Inc.; Mesirow Financial, Inc.; The William Capital Group, L.P.; BNY Mellon Capital Markets, LLC; Estrada Hinojosa & Company, Inc.; Harvestons Securities, Inc.; Loop Capital Markets, LLC; and Northern Trust Securities, Inc., the underwriters of the Bonds (the "Underwriters"), based upon information available to the Representative certifies that:

i) Based on our assessment of the then prevailing market conditions, the Underwriters reasonably expected when they agreed to purchase the Bonds (the "Sale Date") that the first prices at which at least 10% of each maturity of the Bonds would be sold by the Underwriters to the general public (excluding bond houses, brokers or similar persons or organizations acting in the capacity of underwriters or wholesalers) (the "Public") would be prices not higher than, or, in the case of obligations sold on a yield basis, at yields not lower than, those listed for each maturity on Schedule I to this Certificate (the "Initial Offering Prices").

ii) All of the Bonds have actually been offered to the Public in a bona fide public offering at prices not higher than, or, in the case of obligations sold on a yield basis, at yields not lower than, the Initial Offering Prices.

iii) The first price, or yield in the case of obligations sold on a yield basis, at which ten percent (10%) of each maturity of the Bonds has been sold to the Public was at a price not higher than, or, in the case of obligations sold on a yield basis, at a yield not lower than, the Initial Offering Prices.

iv) The Underwriters had no reason to believe that any of the Initial Offering Prices of the Bonds exceeded the expected fair market value of the Bonds as of the Sale Date.

**B. Calculations and Information for the Form 8038-G**

(i) We have been asked to calculate the weighted average maturity of the Bonds in the following manner: divide (a) the sum of the products determined by taking the Initial Offering Price of each maturity times the number of years from the date of this Certificate to the

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date of such maturity (treating the mandatory redemption of bonds as a maturity), by (b) the aggregate of the Initial



Offering Prices of the Bonds. Based solely on the above calculations, the weighted average maturity of the Bonds is 18.5036 years.

(ii) We have calculated the Bond Yield for the Bonds to be 3.572775%. The Bond Yield is equal to the discount rate that produces the same present value when used in computing (i) the present value of all the payments paid and to be paid in connection with the Bonds and (ii) the aggregate of the Initial Offering Prices of the Bonds.

In calculating the Yield on the Bonds, on the advice of Co-Bond Counsel, we applied a special rule to any Bond subject to optional redemption that was issued at an Initial Offering Price that exceeds its stated redemption price at maturity by more than an amount equal to (i) one-fourth of one percent, multiplied by (ii) the product of (A) the stated redemption price of such Bond at maturity and (B) the number of complete years to the first optional redemption date of the Bonds. We treated each such Bond as if it were redeemed at its stated redemption price on the optional redemption date that produces the lowest Yield on the Bonds. The following Bonds are subject to this special rule:

**Series 2014 Bonds**

<b><u>(January 1)</u></b>	<b><u>Maturity Amount</u></b>	<b><u>Principal Rate</u></b>	<b><u>Interest</u></b>
2025	7,190,000	5.00%	
2026	7,560,000	5.00%	
2027	7,945,000	5.00%	
2028	8,355,000	5.00%	
2029	8,780,000	5.00%	
2030	9,230,000	5.00%	
2031	9,705,000	5.00%	
2032	10,205,000	5.00%	
2033	10,725,000	5.00%	
2034	11,275,000	5.00%	
2034	2039	65,675,000	5.00%
2034	2044	84,330,000	5.00%

The lowest Yield on the Bonds results from treating the Bonds identified above as redeemed on January 1, 2024.

**(iii) The CUSIP number for the final maturity of the Bonds is 167727 VK.9 C. Compensation**

The Underwriters have not received and will not receive any compensation for services or reimbursement of expenses related to the issuance and sale of the Bonds other than the Underwriters' Discount in the amount of \$1,506,579.98.

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**D. Miscellaneous**

It is understood by the undersigned that the certifications contained in this certificate are made by the Representative on behalf of the Underwriters and will be relied upon by the Issuer with respect to certain representations included in the General Tax Certificate and by Co-Bond Counsel in rendering their respective opinions that the Bonds are tax-exempt under Section 103 of the Internal Revenue Code of 1986, as amended.

The undersigned is certifying only as to facts in existence on the date of this certificate. Nothing in this certificate represents the undersigned's interpretation of any laws or regulations; in particular the regulations under the Internal Revenue Code of 1986, or the application of any laws or regulations to these facts. The certifications contained in this certificate are not necessarily based on personal knowledge, but may instead be based on either inquiry deemed adequate by the undersigned or institutional knowledge (or both) regarding the matters set forth in this certificate. Although certain information furnished in this certificate has been derived from other purchasers, bond houses and brokers and cannot be independently verified by us, we have no reason to believe it to be untrue in any material respect.

Dated: September [ ], 2014

Merrill Lynch, Pierce, Fenner & Smith Incorporated, as  
representative of the Underwriters

By: Its:

**EXHIBIT B**

**Series 2014 Bonds**

Principal Amount: \$292,405,000

September 23, 2014

Maturity Schedule:

**Maturity (January 1)**

2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034									

**Principal Amount**

\$ 4,720,000	4,915,000	5,170,000	5,435,000	5,710,000	5,945,000	6,190,000	6,505,000	6,840,000	7,190,000	7,560,000			
7,945,000	8,355,000	8,780,000	9,230,000	9,705,000	10,205,000	10,725,000	11,275,000						

**Interest Rate**

3.00%	5.00%	5.00%	5.00%	5.00%	3.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
5.00%	5.00%															

**Price**

103.295	109.818	112.878	115.011	115.969	104.720	116.598	115.900	116.167					
115.03	114.166												
113.308	112.458	111.868	111.365	110.699	110.284	109.872	109.544						

**Yield**

0.400%	0.640%	0.990%	1.370%	1.810%	2.190%	2.490%	2.830%	2.990%	3.120%	3.220%	3.320%	3.420%	3.490%
3.550%	3.630%	3.680%	3.730%	3.770%									

**CUSIP**

167727 UP9 167727 UQ7 167727 UR5 167727 US3 167727 UT1 167727 UU8 167727 UV6 167727 UW4 167727 UX2

167727 UYO 167727 UZ7 167727 VA1 167727 VB9 167727 VC7 167727 VD5 167727 VE3 167727VFO 167727 VG8  
167727 VH6

\$65,675,000 5.00% Term Bonds due January 1, 2039, Price 108.727t, Yield 3.870%,CUSIP.i 67727 VJ2

\$84,330,000 5.00% Term Bonds due January 1, 2044, Price 108.322|, Yield 3.920%,CUS1P: 167727 VK9

t Priced to the January 1, 2024 call.

#### B-1

Optional Redemption: The Bonds maturing on and after January 1, 2025, are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2024, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

Mandatory Redemption: The Bonds due January 1, 2039 and January 1, 2044 are subject to mandatory sinking fund redemption on January 1 in each of the following years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

Term Bond Due January 1, 2039

Term Bond Due January 1,2044

Principal Amount

2035 2036 2037 2038 2039\*

\$11,855,000 12,465,000 13,100,000 13,775,000 14,480,000

2040 2041 2042 2043 2044\*

\$15,220,000 16,005,000 16,825,000 17,685,000 18,595,000

Denotes Final Maturity

I

### **EXHIBIT C**

### **FORM OF SUPPLEMENTAL OPINION OF CO-BOND COUNSEL**

[Date of Closing]

City of Chicago  
City Hall  
121 North LaSalle Street Chicago, Illinois  
60602

The Underwriters Listed  
*on Annex I*

Amalgamated Bank of Chicago, as trustee under the Trust  
Indenture defined below One West Monroe Street Chicago,  
Illinois 60603

We have acted as co-bond counsel in connection with the issuance and delivery by the City of Chicago (the "City") of the City's \$292,405,000 Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"). The Bonds are authorized by an Ordinance adopted by the City Council of the City on April 30, 2014 (the "Bond Ordinance") and are being issued today under and pursuant to the Bond Ordinance, a Determination Certificate of the Chief Financial Officer of the City pursuant to the Bond Ordinance establishing certain terms of the Bonds and filed with the City Clerk pursuant to the Bond Ordinance (the "Determination Certificate"), and a Trust Indenture, dated as of September 1, 2014 (the "Trust Indenture"), from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee"), providing for the issuance of the Bonds. We rendered our separate approving opinion today as co-bond counsel as to the validity of the Bonds. Capitalized terms used but not defined in this letter have the meanings ascribed to them in our separate approving opinion as co-bond counsel.

The following opinion is based upon the same examination of the record of proceedings and accompanying certificates, and is subject to the same limitations, as described in our separate approving opinion as co-bond counsel described above. In addition to the items described in our separate approving opinion as co-bond counsel, the record of proceedings also includes executed copies of the Bond Purchase Agreement, dated September 17, 2014 (the "Bond Purchase Agreement"), between the City and the underwriters listed on Exhibit A (the "Underwriters"), and of the Official Statement, dated September 17, 2014, of the City relating to the Bonds (the "Official Statement"). We are furnishing this opinion pursuant to Section 9 (d)(ii) of the Bond Purchase Agreement.

Based upon our examination as described in our separate opinion as co-bond counsel, we are further of the opinion as follows:

1. The Bonds are exempt from registration under the Securities Act of 1933, as amended, and the Trust Indenture is exempt from qualification under the Trust Indenture Act of 1939, as amended. It is not necessary, in connection with the initial public offering and sale of the Bonds in the manner contemplated in the Bond Purchase Agreement, to register any securities under the Securities Act or to qualify the Bond Ordinance or the Trust Indenture under the Trust Indenture Act.

2. We have reviewed the statements in the Official Statement on its covers, under the captions "Official Statement Summary," "Introduction," "The Bonds" (other than information under the subcaption "Book-Entry System"), and "Security FOR THE BONDS," and in Appendices B, C and D and, insofar as those statements purport to summarize certain provisions of the Bonds, the Bond Ordinance, the Determination Certificate and the Trust Indenture, such statements present a fair and accurate summary of those provisions. The statements in the Official Statement in the first paragraph on its cover, under the caption "Official Statement Summary - Tax Exemption," under the caption "Tax Matters," and in Appendix D, insofar as such statements constitute conclusions of law or summarize our legal opinions, present a fair and accurate summary of such conclusions or opinions.

3. The execution and delivery on behalf of the City of the Bond Purchase Agreement has been duly authorized by the City. The Bond Purchase Agreement is a binding contractual obligation of the City in accordance with its terms if it is a valid and binding obligation of the Underwriters (as to which we express no opinion). The Continuing Disclosure Undertaking has been duly authorized, executed and delivered by the City and is a binding contractual obligation of the City in accordance with its terms.

Except as stated in paragraph 2 of this letter, we have not undertaken to determine independently the accuracy or completeness of the Official Statement. However, we state that during our participation in the authorization and issuance of the Bonds as co-bond counsel (which included participation in conferences with the City and the underwriters and their respective counsel concerning the Official Statement), nothing has come to our attention which has caused us to believe that the Official Statement (except for statements under the captions "Introduction-Sewer System," "Introduction - Retirement Funds," "Introduction -Other Post-Employment Benefits," "The Bonds-Book-Entry System," "Outstanding Debt and Annual Debt Service," "The Wastewater Transmission System," "Financial Operations," "Litigation," "Financial Advisors" and in Appendix A - "City of Chicago, Illinois Sewer Fund Basic Financial Statements" and Appendix E - "Retirement Funds" and the financial and statistical data in the Official Statement, as to which we express no view), as of its date or as of the date of this letter, contained or contains an untrue statement of a material fact or omitted or omits a material fact necessary to make the statements in it, in light of the circumstances under which they were made, not misleading.

The enforceability of provisions of the Bond Purchase Agreement and the Continuing Disclosure Undertaking may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights. Enforcement of provisions of the Bond Purchase Agreement or the Continuing Disclosure Undertaking by an equitable or similar

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remedy is subject to general principles of law or equity governing such a remedy, including the exercise of judicial discretion whether to grant any particular form of relief. The enforceability of the indemnification provisions of the Bond Purchase Agreement may be limited by federal or state securities laws.

This opinion is based upon facts known or certified to us and laws in effect on its date and speaks as of that date. The opinions stated in this letter are expressions of professional judgment based upon such facts and law and are not a guaranty of a result. We have not undertaken any obligation to revise or supplement this opinion to reflect any facts or circumstances that may come to our attention after the date of this opinion or any changes in law that may occur after that date.

The opinions rendered and assurances given in this letter are solely for the benefit of the persons to whom this letter is addressed in connection with the issuance and delivery of the Bonds and may not be

relied upon by other persons or for any other purpose without our express prior written consent.

Very respectfully yours,

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*Annex I*

Merrill Lynch, Pierce, Fenner & Smith,  
Incorporated  
540 W. Madison St.  
Chicago, IL 60661

Samuel A. Ramirez & Co., Inc. 120 North LaSalle Street, Suite 1110 Chicago, Illinois 60602

Drexel Hamilton, LLC 30 South Wacker Drive Chicago, Illinois 60606

Harvestons Securities, Inc. 8301 E. Prentice Ave., Suite 305 Greenwood Village, Colorado 80111

Northern Trust Securities, Inc. 50 S. LaSalle St. Chicago, IL 60603

Mesirow Financial, Inc. 353 N Clark St. Chicago, IL 60654

BNY Mellon Capital Markets, LLC 2 N. LaSalle, Suite 1020 Chicago, Illinois 60602

Estrada Hinojosa & Company, Inc. 161 N. Clark Street, Suite 4700 Chicago, IL 60601

Loop Capital Markets LLC  
111 West Jackson Boulevard, Suite 1901  
Chicago, Illinois 60604

Piper Jaffray & Co.  
1747 Pennsylvania Ave. NW, Suite 210 Washington DC 20006

Podesta & Co.  
208 S. LaSalle Street, Suite 1460 Chicago, Illinois 60604  
Stifel, Nicolaus & Company, Incorporated 70 W. Madison, Suite 2400 Chicago, Illinois 60602

The Williams Capital Group, L.P. 650 Fifth Avenue, 11th Floor New York, NY 10019

#### **EXHIBIT D**

#### **FORM OF OPINION OF CORPORATION COUNSEL**

[Date of Closing]

Amalgamated Bank of Chicago, as Trustee One West Monroe  
Street Chicago, Illinois 60603

Merrill Lynch, Pierce, Fenner & Smith Incorporated 540 West Madison  
Street Chicago, IL 60661  
on behalf of the Underwriters named in the  
Bond Purchase Agreement (as defined herein)

Ladies and Gentlemen:

I am the Corporation Counsel of the City of Chicago (the "City"). In connection with the issuance by the City of \$292,405,000 aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"), I have caused to be examined a certified copy of the record of proceedings of the City Council of the City (the "City Council") pertaining to the adoption by the City Council on April 30, 2014, of an ordinance pursuant to which the Bonds are being issued (the "Ordinance"). Unless otherwise defined herein, capitalized terms defined in the Bond Purchase Agreement are used with the same meaning herein.

In addition to the Ordinance, I have caused to be examined final and/or executed copies of the following documents:

- i) the Official Statement;

- ii) *that certain Trust Indenture dated as of September 1, 2014, from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee") in connection with the Bonds (the "Indenture");*
- iii) *that certain Bond Purchase Agreement dated September 17, 2014 (the "Bond Purchase Agreement"), between the City and the Underwriters referred to therein (the "Underwriters");*
- iv) the Undertaking;
- iv) the Tax Certificate; and
- v) such other documents and records as were deemed necessary to enable me to

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render this opinion. Based on the foregoing, I am of the  
opinion that:

1. The City is a municipal corporation and home rule unit of local government, organized and existing under the laws of the State of Illinois.
2. The City has duly authorized, approved and executed the Official Statement.
3. The City Council has (a) duly passed the Ordinance, which has not been amended, modified, supplemented or repealed and is in full force and effect; and (b) duly authorized and approved the execution and delivery of the Bonds, the Official Statement, the Bond Purchase Agreement, the Indenture, the Undertaking, and the Tax Certificate. Assuming due execution and delivery by the other parties thereto, as applicable, the Bond Purchase Agreement, the Indenture, the Determination Certificate, the Undertaking and the Tax Certificate (collectively, the "City Documents") constitute valid and legal obligations of the City enforceable in accordance with their respective terms, except as enforcement may be limited by (i) applicable bankruptcy, insolvency or other laws affecting the rights or remedies of creditors generally of entities similar to the City, and (ii) the discretion of the courts in granting equitable or similar remedies.
4. The City has full legal right, power and authority to: (a) enter into and to execute the City Documents; and (b) issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance and the Indenture. To my knowledge, the passage of the Ordinance and compliance with its provisions do not violate any applicable law or administrative regulation of the State of Illinois or of any department, division, agency or instrumentality thereof or of the United States of America, or any applicable judgment or decree to which the City is subject and do not conflict in a material manner with or constitute a material breach of or a material default under any agreement or other instrument to which the City is a party or is otherwise subject.
5. To my knowledge, the City has obtained all approvals, consents and orders (except, if any, with respect to state "blue sky" laws) of 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 City Documents which the City could reasonably obtain as of the date hereof.
6. No litigation is pending or, to my knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of



the Bonds, or contesting (a) the validity or enforceability of the City Documents, (b) the completeness or accuracy of the Official Statement or (c) the power of the City or its authority with respect to the City Documents.

7. Nothing has come to my attention which would lead me to believe that the Official Statement contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that I express no opinion or belief

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regarding any description of DTC, information under the captions "THE BONDS - Book-Entry Only System," "TAX MATTERS," "UNDERWRITING," information under the heading "Information Concerning Offering Restrictions in Certain Jurisdictions Outside the United States," information sourced in Appendix A to sources other than the City or departments thereof and any information in or omitted from the Official Statement relating to DTC, any information furnished by the Underwriters for use in the Official Statement, the financial statements in Appendix A and all other financial and statistical data contained in the Official Statement, including the Appendices thereto.

No opinion is expressed as to any "blue sky" or other securities laws or as to the laws regarding taxation of any state, or the United States, or any disclosure or compliance related thereto.

The statements contained herein are made in an official capacity and not personally and no personal responsibility shall derive from them. Further, the only opinions that are expressed are the opinions specifically set forth herein, and no opinion is implied or should be inferred as to any other matter or transaction.

No one other than you shall be entitled to rely on this opinion.

Very truly yours,

Stephen R. Patton Corporation Counsel

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**EXHIBIT E**

**FORM OF LETTER OF SPECIAL DISCLOSURE COUNSEL**

[Date of Closing]

City of Chicago  
121 North LaSalle Street, Suite 700 Chicago, Illinois  
60602

*Re: \$292,405,000 City of Second Lien Wastewater Transmission Revenue Project Bonds,  
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 Official Statement dated September 17, 2014 (the "Official Statement") 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, the Firemen'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 Bond Purchase Agreement dated September 17, 2014, between the City and Merrill Lynch, Pierce, Fenner & Smith Incorporated, 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.

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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, 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 above-mentioned 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 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 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.

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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 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,

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**EXHIBIT F**

**FORM REPRESENTATION LETTER FROM UNDERWRITERS**

, 2014

City of Chicago  
Office of Chief Financial Officer 121 North LaSalle  
Street, Suite 700 Chicago, Illinois 60602 Attn: Chief  
Financial Officer

Merrill Lynch, Pierce, Fenner & Smith Incorporated 540 West Madison  
Street Chicago, IL 60661

As a member of the Group of Underwriters expected to be named in a Bond Purchase Agreement (the "Purchase Agreement") between the City of Chicago (the "City") and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative (the "Representative") of the underwriters named therein (each an "Underwriter") relating to the City of Chicago Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"), the undersigned Underwriter severally represents to the City and the Representative with respect to itself that:

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 Directorate of Defense Trade Controls of 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 and the Debarred 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 Underwriter agrees 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 issuance of the Bonds, that Underwriter shall be deemed to have withdrawn from the Group of Underwriters under the Negotiated AAU Wire related to the Bonds.

3) The undersigned Underwriter hereby represents (i) it is duly registered under the 1934 Act (as defined in the Purchase Agreement) as a broker/dealer or municipal securities

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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 the Bonds for sale. The undersigned Underwriter further understands and agrees that it is required to and will comply with the provisions of Chapter 2-56 and 2-156 of the Municipal Code of Chicago as described under Section 17 of the Purchase Agreement.

(4) The undersigned Underwriter (except for the Representative) has and does authorize the Representative to act as Representative of the Underwriter and to execute any document on behalf of, or exercise any authority of and otherwise to act for, it in all matters under or pertaining to the Purchase Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned has caused this Representation Letter in connection with the City of Chicago Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 to be executed by its duly authorized representative as of the date written above.

NAME OF UNDERWRITER

By:

Its:

**EXHIBIT B**

SERTES 2014 TRUST INDENTURE

[Attached]

**Trust Indenture**

dated as of September 1, 2014 from

City of Chicago to

Amalgamated Bank of Chicago, as Trustee

Securing

**\$292,405,000 City of Chicago Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014  
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## Trust Indenture

This Trust Indenture, dated as of September 1, 2014 (this "Indenture"), is from the City of Chicago (the "City"), a municipal corporation and home rule unit of local government organized and existing under the Constitution and laws of the State of Illinois, to Amalgamated Bank of Chicago, an Illinois banking corporation with trust powers having its Principal Office (as defined below) in the City of Chicago, Illinois, as trustee (said corporation, and any successor or successors as trustee under this Indenture, are referred to in this Indenture as the "Trustee").

### RECITALS

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 (the "Constitution"), and is a "home rule unit" under Section 6 (a) of Article VII of the Constitution.

The City has constructed and is maintaining and operating the Sewer System (as defined below) to meet the needs of the City's inhabitants and other users of the Sewer System. The Sewer System is operated under the supervision and control of the Department of Water Management of the City.

Pursuant to such authority, the City has previously issued and may in the future issue its Senior Lien Bonds (as defined below) for any lawful purpose of the Sewer System, including refunding Outstanding Senior Lien Bonds (as defined below) or obligations payable from revenues of the Sewer System on a basis subordinate to the Senior Lien Bonds (including Second Lien Bonds (as defined below) and Subordinate Lien Obligations (as defined below)) or for paying costs of issuance. The City has previously issued its Outstanding Series 1998 Senior Lien Bonds (as defined below, the "Outstanding Senior Lien Bonds").

Pursuant to such authority, the City has previously issued and may in the future issue its Second Lien Bonds (as defined below) for any lawful purpose of the Sewer System, including refunding Outstanding Senior Lien Bonds and Outstanding Second Lien Bonds (as defined below) or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds (including Subordinate Lien Obligations) or for paying costs of issuance. The City has previously issued its Outstanding Series 2001 Second Lien Bonds, Outstanding Series 2004B Second Lien Bonds, Outstanding Series 2006 Second Lien Bonds, Outstanding Series 2008 Second Lien Bonds, Outstanding Series 2010 Second Lien Bonds and Outstanding Series 2012 Second Lien Bonds (each as defined below and collectively, the "Outstanding Second Lien Bonds" and, collectively with the Outstanding Senior Lien Bonds, the "Outstanding Bonds") with a claim for payment solely from Second Lien Bond Revenues (as defined below) of the Sewer System.

The City has determined to finance certain Project Costs, as defined below. The estimated amount of Project Costs is in excess of \$320,000,000.

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 Second

Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "2014 Second Lien Bonds"). The 2014 Second Lien Bonds are being issued for the purposes of (i) financing certain capital improvements to and extensions of the Sewer System (as defined below) and (ii) paying the Costs of Issuance (as defined below) of the 2014 Second Lien Bonds.

Pursuant to the Series 2014 Bond Ordinance, the City has authorized the issuance and sale of the 2014 Second Lien Bonds in an aggregate principal amount of not to exceed \$375,000,000 for Project Costs. The aggregate amount of the 2014 Second Lien Bonds allocable to Project Costs does not exceed the amount authorized by the Series 2014 Bond Ordinance to be issued for Project Costs.

The 2014 Second Lien Bonds will have a claim for payment solely from Second Lien Bond Revenues (as defined below) and the other sources pledged under this Indenture and shall be valid claims of their registered owners only against the funds and assets and other money held by the Trustee with respect to the 2014 Second Lien Bonds and, together with other Second Lien Bonds, against Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts (as defined below).

The execution and delivery of the 2014 Second Lien Bonds and this Indenture have in all respects been duly authorized. All things necessary to make the 2014 Second Lien Bonds, when executed by the City and authenticated by the Trustee, the valid and binding legal obligations of the City and to make this Indenture a valid and binding agreement, have been done.

#### Granting Clause

The City, in consideration of the premises and the acceptance by the Trustee of the trusts created by this Indenture and of the purchase and acceptance of the 2014 Second Lien Bonds by their Owners, and of the sum of one dollar lawful money of the United States of America, duly paid by the Trustee to the City at or before the execution and delivery of these presents, and for other good and valuable consideration, the receipt of which is acknowledged, in order to secure the payment of the principal of and interest on the 2014 Second Lien 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 Indenture and in the 2014 Second Lien Bonds, assigns and grants a security interest in and to the following (the "Trust Estate") 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 in this Indenture:

#### Granting Clause First

All right, title and interest of the City in and to the Second Lien Bond Revenues and the amounts on deposit in the Second Lien Construction Accounts; provided that the pledge and assignment of such Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts shall rank *pari passu* with any pledge and assignment made by the City to secure the Outstanding Series 2001 Second Lien Bonds, the Outstanding Series 2004B Second Lien Bonds, the Outstanding Series 2006 Second Lien Bonds, the Outstanding Series 2008 Second Lien Bonds, the Outstanding Series 2010 Second Lien Bonds and the Outstanding Series 2012 Second Lien Bonds and any Second Lien Parity Bonds (as defined below), in the manner and to the extent described in Section 2.2.

### Granting Clause Second

All moneys and securities from time to time held by the Trustee under the terms of this Indenture, except for moneys deposited with or paid to the Trustee and held in trust under this Indenture for the redemption of 2014 Second Lien Bonds, notice of the redemption of which, or irrevocable instruction to give such notice, has been duly given, and moneys held in a rebate account.

### Granting Clause Third

Any and all other property, rights and interest 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 hereto, as and for additional security hereunder by the City or by any other person on its behalf or with its written consent to the Trustee, and the Trustee is authorized to receive any and all property, rights and interests at any time and all times and to hold and apply the same subject to the terms of this 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 Indenture for the equal and proportionate benefit, security and protection of all present and future owners of the 2014 Second Lien Bonds 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 the 2014 Second Lien Bonds and this Indenture;

Provided that if the City, its successors or assigns, shall well and truly pay, or cause to be paid, the principal of, redemption premium, if any, and interest due or to become due on the 2014 Second Lien Bonds, at the times and in the manner set forth in the 2014 Second Lien Bonds, according to the true intent and meaning of this Indenture, and shall cause the payments to be made on the 2014 Second Lien Bonds as required under Article IV of this Indenture, or shall provide, as permitted by this Indenture, for the payment of the 2014 Second Lien Bonds and shall well and truly cause to be kept, performed and observed all of its covenants and conditions pursuant to the terms of this Indenture, and shall pay or cause to be paid to the Trustee all sums of money due or to become due to it in accordance with the terms and provisions of this Indenture, then upon the final payment thereof this Indenture and the rights granted by this Indenture shall cease, determine and be void; otherwise this Indenture shall remain in full force and effect; and it is expressly declared, that all 2014 Second Lien Bonds issued and secured hereunder are to be issued, authenticated and delivered and all said property, rights and interests and any other amounts assigned and pledged by this Indenture are to be dealt with and disposed of under, upon and subject to the terms, conditions, stipulations, covenants, agreements, trusts, uses and purposes as expressed in this Indenture, and the City has agreed and covenanted, and agrees and covenants, with the Trustee and with the respective Owners of the 2014 Second Lien Bonds, as follows:

## DEFINITIONS; CONSTRUCTION

Section 1.1. Definitions. Terms defined in the Series 2014 Bond Ordinance and not otherwise defined herein are used with the same meanings in this Indenture, unless the context clearly requires otherwise. The terms defined in this Section shall, for all purposes of this Indenture, have the meanings specified in this Section, unless the context clearly requires otherwise.

"Aggregate Second 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, an amount of money equal to the aggregate of the amounts of Annual Second Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Second Lien Bonds of all series.

"Aggregate 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, an amount of money equal to the aggregate of the amounts of Annual Senior Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Senior Lien Bonds of all series.

"Annual Second 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 for Second Lien Bonds 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 Second Lien Bonds 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 Second Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds will after said date of computation cease to be Outstanding by-reason, but only by reason, of the payment when due and application in accordance with the ordinances and trust indentures creating such series of Second Lien Bonds of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Second Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Second Lien Bonds, the interest payable on such Second Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Second Lien Bonds and the amount received by the City pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds. Amounts deposited in the Principal and

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Interest Account pursuant to Section 4.5 of this Indenture, or similar provisions in any trust indenture or ordinance securing Second Lien Bonds, and capitalized or funded interest from proceeds of Second Lien Bonds and used only to pay interest on such Second Lien Bonds, shall be credited against Annual Second Lien Debt Service.

"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 for Senior Lien Bonds 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 Senior Lien Bonds 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 Senior Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that Senior Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Senior Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Senior Lien Bonds and the amount received by the City pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds.

"Authorized Denomination" means \$5,000 and any integral multiple of \$5,000.

"Authorized Officer" means the Chief Financial Officer of the City, or if the Chief Financial Officer so determines and designates, the City Comptroller.

"Beneficial Owner" means the owner of a beneficial interest in 2014 Second Lien Bonds registered in the name of Cede & Co., as nominee of DTC (or a successor securities depository or nominee for either of them).

"Bond Counsel" means one or more firms of nationally recognized bond counsel designated by the Corporation Counsel of the City.

"Bond Debt Service Reserve Account" means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2014 Bond Ordinance.

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"Bondholder" or "Owner" means the person in whose name any 2014 Second Lien Bond is registered on the registration books of the City kept by the Trustee.

"Business Day" means any day of the year on which banks located in the city in which is

located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

"Chief Financial Officer" means the person designated by the Mayor as the City's Chief Financial Officer, or if no such designation has been made or if such position is vacant, the City Comptroller of the City.

"City" means the City of Chicago.

"City Comptroller" means the City Comptroller of the City.

"City Council" means the City Council of the City, the governing body of the City.

"Code" means the Internal Revenue Code of 1986, as amended. References to any section, subsection or other subdivision of the Code include regulations promulgated under the Code and in force with respect to such section, subsection or other subdivision.

"Construction Account: 2014 Second Lien Bonds" means the separate account of that name in the Sewer Revenue Fund established pursuant to Section 4.1 of the Series 2014 Bond Ordinance.

"Construction Accounts" means the Second Lien Construction Accounts and any similar accounts established for Outstanding Senior Lien Bonds.

"Costs of Issuance" means all fees and costs incurred by the City relating to the issuance of the 2014 Second Lien Bonds, including, without limitation, printing costs, the Trustee's initial fees and charges, financial advisory fees, engineering fees, legal fees, accounting fees, and the cost of any related services with respect to the 2014 Second Lien Bonds.

"Defeasance Obligations" means (i) cash, (ii) Certificates, Notes, and Bonds (including State and Local Government Series) issued by the U.S. Treasury (the "Treasury"), (iii) direct obligations of the Treasury which have been stripped by the Treasury itself, CATS, TIGRS and similar securities, (iv) pre-refunded municipal bonds rated "Aaa" by Moody's and "AAA" by S&P; provided, that if the issue is only rated by S&P, then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or "AAA" rated pre-refunded municipals, (v) the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form, (vi) obligations issued by the following agencies which are backed by the full faith and credit of the U.S.: U.S. Export-Import Bank (Eximbank) (direct obligations or fully guaranteed certificates of beneficial ownership), Farmers Home Administration (FmHA) (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financings), U.S. Department of Housing and Urban Development (HUD) (Project Notes, Local Authority Bonds, New

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Communities Debentures - U.S. government guaranteed debentures), and U.S. Public Housing Notes and Bonds - U.S. government guaranteed public housing notes and bonds, or (vii) obligations issued by the following agencies that are not backed by the full faith and credit of the U.S.: Federal Home Loan Mortgage Corp. (FHLMC) debt obligations, Farm Credit System (formerly: Federal Land Banks, Federal Intermediate

Credit Banks, and Banks for Cooperatives) debt obligations, Federal Home Loan Banks (FHL Banks) debt obligations, Fannie Mae debt obligations, Financing Corp. (FICO) debt obligations, Resolution Funding Corp. (REFCORP) debt obligations, and U.S. Agency for International Development (U.S. A.I.D.) Guaranteed notes); provided that Defeasance Obligations described in (iii) and (vi) above shall not be used without the consent of S&P if the City seeks to have the defeasance escrow rated by S&P.

"Determination Certificate" means the Certificate of the Authorized Officer with respect to the 2014 Second Lien Bonds of one or more series filed with the office of the City Clerk, addressed to the City Council as provided in Section 3.5(g) of the Series 2014 Bond Ordinance.

"DTC" means The Depository Trust Company, New York, New York, its successors and assigns.

"Federal Subsidies" means (a) the direct payments by the Treasury Department to the City of a portion of the interest payable by the City on the 201 OB Second Lien Bonds and (b) 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.

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

"Government Obligations" means securities that are obligations described in clauses (a) and (b) of the definition of the term "Permitted Investments".

"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 Sewer System, including without limitation (a) charges imposed for sewer service and usage, (b) charges imposed for inspections and permits for connection to the Sewer System, (c) grants (excluding grants received for capital projects) and (d) Investment Earnings. Gross Revenues do not include Federal Subsidies.

"Indenture" means this Trust Indenture as amended or supplemented in accordance with the terms of this Indenture.

"Interest Payment Date" means January 1 and July 1 of each year, commencing January 1, 2015.

"Interest Rate Hedge Agreement" means an interest rate exchange, hedge or similar agreement entered into in order to hedge or manage the interest payable on all or a

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portion of any series of Outstanding Senior Lien Bonds or of Outstanding Second Lien Bonds, which agreement may include, without limitation, an interest rate swap, a forward or futures contract or an option (e.g., a call, put, cap, floor or collar) and which agreement does not constitute an obligation to repay money borrowed, credit extended or the equivalent thereof. Obligations of the City under an Interest Rate Hedge Agreement shall not constitute indebtedness of the City for which its full faith and credit are pledged or for any other purpose.

"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 Sewer Revenue Fund (other than the rebate accounts established and held for the Senior Lien Bonds and Second Lien Bonds) described in Section 2.1 of the Series 2014 Bond Ordinance. Investment Earnings do not include interest or earnings on investments of moneys on deposit in any Senior Lien Construction Account, Second Lien Construction Account or Subordinate Lien Construction Account.

"Moody's" means Moody's Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

"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 Sewer Rate Stabilization Account as provided in Section 2.2 of the Series 2014 Bond Ordinance (other than amounts transferred to that Account upon the issuance of any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account.

"Notice by Mail" means a written notice mailed by first class mail, postage prepaid, to Bondholders at their addresses as shown on the registration books kept pursuant to Section 2.10 of this Indenture.

"Operation and Maintenance Costs" means all expenses reasonably incurred by the City in connection with the operation, maintenance, renewal, replacement and repair of the Sewer System that under generally accepted accounting principles are properly chargeable to the Sewer 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 Interest Rate Hedge Agreements, trustee's and paying agents' fees and all incidental expenses, but excluding any provision for depreciation or for interest on Senior Lien Bonds, Second Lien Bonds or other obligations for borrowed money payable from the Net Revenues Available for Bonds.

"Opinion of Bond Counsel" means a written opinion of Bond Counsel.

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"Outstanding" means, when used with reference to any series or subseries of Second Lien Bonds, all of such obligations that are outstanding and unpaid, provided that such term does not include:

- a) Second Lien Bonds canceled at or prior to such date or delivered to or acquired by the trustee or paying agent for such Second Lien Bonds at or prior to such date for cancellation;
- b) matured or redeemed Second Lien Bonds which have not been presented for payment in



accordance with the provisions of the trust indenture or ordinance authorizing such series of Second Lien Bonds and for the payment of which the City has deposited funds with the trustee or paying agent for such Second Lien Bonds;

c) Second Lien Bonds for which the City has provided for payment by depositing in an irrevocable trust or escrow, cash or Defeasance Obligations, in each case, the maturing principal of and interest on which will be sufficient 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;

d) Second Lien Bonds in lieu of or in exchange or substitution for which other Second Lien Bonds shall have been authenticated and delivered pursuant to the trust indenture or ordinance authorizing such series of Second Lien Bonds; and

e) Second Lien Bonds owned by the City.

When used with respect to Senior Lien Bonds, "Outstanding" shall have the meaning ascribed to such term in the respective Senior Lien Bond Ordinances.

"Permitted Investments" means any of the following:

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

b) trust receipts or other certificates of ownership evidencing an ownership interest in the principal of or interest on, or both principal of and interest on, obligations described in clause (a) of this definition, which obligations are held in trust by a bank described in clause (d) of this definition, provided that such bank holds such obligations separate and segregated from all other funds and accounts of the City and of such bank and that a perfected first security interest under the Illinois Uniform Commercial Code, or under book entry procedures prescribed at 31 C.F.R. 306.0 et seq. or 31 C.F.R. 350.0 et seq. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of this Indenture), has been created in such obligations for the benefit of the applicable account in the Sewer Revenue 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 2014 Second Lien Bonds or other obligations that are payable from Net Revenues Available for Bonds;

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c) obligations of Fannie Mae, Federal Home Loan Mortgage Corporation or of any agency or instrumentality of the United States of America now existing or created after the issuance and delivery of the 2014 Second Lien Bonds, including but not limited to 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 \$100,000,000 or (ii) by certificates of deposit that are continuously and fully insured by any agency of the United States of America, or an insurer that, at the time of issuance of the policy securing such deposits, has

been assigned a credit rating on its long-term unsecured debt within one of the two highest rating categories, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, from at least two Rating Agencies;

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

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

h) repurchase agreements and investment agreements with any bank, trust company, national banking association (which may include the Trustee), 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 (if not rated by at least two Rating Agencies, then a rating by one Rating Agency shall be sufficient), or if such institution is not so rated, that the agreement is secured by such

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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 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 categories by numerical modifier or otherwise as rated by a Rating Agency and maintaining such rating during the term of such investment;

(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; and

(l) Defeasance Obligations to the extent not included in (a) through (k) above.

"Principal and Interest Account" means the "City of Chicago Wastewater Transmission Revenue Project Bonds Series 2014 Second Lien Bonds Principal and Interest Account" in the 2014 Second Lien Bonds Revenue Fund as described in Section 4.3(b) of this Indenture.

"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 application in accordance with the Senior Lien Bond Ordinance 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 this 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

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(b) as of any particular date of computation and with respect to Second Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Second Lien Bonds of said series 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 this Indenture, with respect to the 2014 Second Lien Bonds, or the ordinance or trust indenture creating any other series of Second Lien Bonds, 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 this Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.

"Principal Office" means, with respect to the Trustee, its principal office in Chicago, Illinois.

"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 Costs of Issuance.

"Projects" means the program of improvement, extension and rehabilitation of the Sewer System consisting of the construction and acquisition of flood relief sewers, the rehabilitation and replacement of existing sewers, the expansion of operational facilities, the provision of any and all necessary facilities, services and equipment to protect and enhance the safety, integrity and security of the Sewer System.

"Rating Agency" means any nationally recognized securities rating agency.

"Record Date" means June 15 and December 15 of each year.

"S&P" means Standard & Poor's, a division of The McGraw Hill Companies, Inc., a corporation organized and existing under the laws of the State of New York, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

"Second Lien Bond Revenues" means any Net Revenues Available for Bonds deposited into the Second Lien Bonds Account pursuant to (i) the ordinances authorizing the Outstanding Second Lien Bonds, (ii) the Series 2014 Bond Ordinance, and (iii) the ordinances authorizing any Second Lien Parity Bonds.

"Second Lien Bonds" means the Series 2001 Second Lien Bonds, the Series 2004B Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, and the 2014 Second Lien Bonds and all Second Lien Parity Bonds.

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"Second Lien Bonds Account" means the separate account of that name established in the Sewer Revenue Fund as provided in Section 2.2 of the Series 2014 Bond Ordinance.

"Second Lien Bonds Subaccount" means the 2014 Second Lien Bonds Subaccount established in the Second Lien Bonds Account by Section 2.2(d) of the Series 2014 Bond Ordinance.

"Second Lien Construction Accounts" means (i) the Construction Account: 2014 Second Lien Bonds and the various accounts established for construction purposes by the Series 2001 Bond Ordinance, the Series 2004 Bond Ordinance, the Series 2006 Bond Ordinance, the Series 2008 Bond Ordinance, the Series 2010 Bond Ordinance, the Series 2012 Bond Ordinance or the ordinances authorizing any Second Lien Parity Bonds and (ii) any account established to pay costs of issuance of Second Lien Bonds.

"Second Lien Parity Bonds" means obligations, other than the Series 2001 Second Lien Bonds, the Series 2004B Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds and the Series 2014 Second Lien Bonds, which are payable from Second Lien Bond Revenues on an equal and ratable basis with all other Outstanding Second Lien Bonds.

"Senior Lien Bond Ordinances" means, to the extent applicable, Parts A and D of the Series

1998 Bond Ordinance and the ordinances of the City authorizing the issuance of Senior Lien Parity Bonds.

"Senior Lien Bonds" means the Series 1998 Senior Lien Bonds, and all Senior Lien Parity Bonds issued and outstanding pursuant to the Senior Lien Bond Ordinances.

"Senior Lien Parity Bonds" means obligations, other than the Series 1998 Senior Lien Bonds, that are payable from Net Revenues Available for Bonds on an equal and ratable basis with all other Outstanding Senior Lien Bonds.

"Series 1998 Bond Ordinance" means the ordinance passed by the City Council on December 10, 1997, as amended by the City Council on February 5, 1998, authorizing the issuance of the Series 1998 Senior Lien Bonds.

"Series 1998 Senior Lien Bonds" means the Wastewater Transmission Revenue Bonds, Refunding Series 1998A, of the City authorized by and issued pursuant to the Series 1998 Bond Ordinance.

"Series 2001 Bond Ordinance" means the ordinance passed by the City Council on March 7, 2001, authorizing the issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Indenture" means the Trust Indenture dated as of December 1, 2001 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2001 Second Lien Bonds.

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"Series 2001 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2001, of the City authorized pursuant to the Series 2001 Bond Ordinance and issued pursuant to the Series 2001 Indenture.

"Series 2004 Bond Ordinance" means the Ordinance passed by the City Council on May 26, 2004, authorizing the issuance of the Series 2004B Second Lien Bonds.

"Series 2004B Indenture" means the Trust Indenture, dated as of July 1, 2004, from the City to Amalgamated Bank of Chicago, as Trustee, securing the Series 2004B Second Lien Bonds.

"Series 2004B Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2004B, of the City authorized pursuant to the Series 2004 Bond Ordinance and issued pursuant to the Series 2004B Indenture.

"Series 2006 Bond Ordinance" means the Ordinance passed by the City Council on October 4, 2006, authorizing the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Indenture" means the Trust Indenture dated as of November 1, 2006 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2006, of the City authorized pursuant to the Series 2006 Bond Ordinance and issued pursuant to the Series 2006 Indenture, consisting of the \$60,000,000 in original aggregate principal amount of Second Lien

Wastewater Transmission Revenue Bonds, Series 2006A and \$95,030,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2006B.

"Series 2008 Bond Ordinance" means the Ordinance passed by the City Council on May 14, 2008, authorizing the issuance of the Series 2008 Second Lien Bonds.

"Series 2008A Indenture" means the Trust Indenture dated as of November 1, 2008 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008A Second Lien Bonds.

"Series 2008C Indenture" means the Amended and Restated Trust Indenture dated as of December 1, 2011, as amended March 1, 2012, from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008C Second Lien Bonds, amending and restating the original Trust Indenture, dated as of October 1, 2008, from the City to Amalgamated Bank of Chicago, as trustee.

"Series 2008 Second Lien Bonds" means the Series 2008A Second Lien Bonds and the Series 2008C Second Lien Bonds.

"Series 2008A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2008A, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008A Indenture, consisting of the

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\$167,635,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008A.

"Series 2008C Second Lien Bonds" means the Second Lien Wastewater Transmission Variable Rate Revenue Refunding Bonds, Series 2008C, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008C Indenture, consisting of the \$332,230,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008C.

"Series 2010 Bond Ordinance" means the Ordinance passed by the City Council on July 28, 2010, authorizing the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Indenture" means the Trust Indenture dated as of November 1, 2010 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Second Lien Bonds" means the Series 201 OA Second Lien Bonds and the Series 2010B Second Lien Bonds.

"Series 201 OA Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt), of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$25,865,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt).

"Series 2010B Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue

Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment), of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$250,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment).

"Series 2012 Bond Ordinance" means the ordinance passed by the City Council on May 9, 2012, authorizing the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Indenture" means the Trust Indenture dated as of September 1, 2012 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012, of the City authorized pursuant to the Series 2012 Bond Ordinance and issued pursuant to the Series 2012 Indenture, consisting of the \$276,470,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012.

"Sewer Rate Stabilization Account" means the separate account of that name previously established by the City in the Sewer Revenue Fund and described in Section 2.2 of the Series 2014 Bond Ordinance.

"Sewer Revenue Fund" means the separate fund designated the "Sewer Revenue Fund of the City of Chicago" previously established by the City pursuant to the Municipal Code and described in Section 2.1 of the Series 2014 Bond Ordinance.

"Sewer 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 sewer and wastewater transmissions and any and all further extensions, improvements and additions to the Sewer System.

"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 a Senior Lien Bond Ordinance 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 on such future date of a Senior Lien Bond; and

b) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series, the amount required by this Indenture with respect to 2014 Second Lien Bonds, or the amounts required by any ordinance or trust indenture creating any other series of Second Lien Bonds, 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 on such future date of a Second Lien Bond.

"State" means the State of Illinois.

"Subordinate Lien Obligations" means obligations that are payable from sums, amounts, funds or monies which are deposited to the Subordinate Lien Obligations Account pursuant to Section 2.2(e) of the Series 2014 Bond Ordinance.

"Supplemental Indenture" means any indenture modifying, altering, amending, supplementing or confirming this Indenture duly entered into in accordance with the terms of this Indenture.

"Trustee" means Amalgamated Bank of Chicago, as Trustee under this Indenture, and its successors and assigns.

"2014 Second Lien Bonds Revenue Fund" means the "City of Chicago Wastewater Transmission Revenue Bonds Series 2014 Second Lien Bond Revenue Fund" created by Section 4.3(a).

"2014 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014, authorized by the 2014 Bond Ordinance and issued under this Indenture.

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"Undertaking" means the City's Continuing Disclosure Undertaking related to the 2014 Second Lien Bonds, as amended from time to time, if required by law.

"Variable Rate Bonds" means any Second Lien Bonds or Senior Lien Bonds the interest rate on which is not established at the time they are issued at a single numerical rate for their entire term.

Section 1.2. Construction. This Indenture, except when the context by clear implication shall otherwise require, shall be construed and applied as follows:

a) All words and terms importing the singular number shall where the context requires, import the plural number and vice versa.

b) Pronouns include both singular and plural and cover all genders.

c) Headings of sections and other subdivisions in this Indenture are solely for convenience of reference, do not constitute a part of this Indenture and shall not affect the meaning, construction or effect of this Indenture.

d) Unless expressly indicated otherwise, references to articles, sections or other subdivisions of this Indenture shall be construed as references to articles, sections or other subdivisions of this Indenture as originally executed.

e) References to articles, sections or other subdivisions refer to the articles, sections or other subdivisions of this Indenture unless a different document is specifically identified.

## ARTICLE II

### THE 2014 SECOND LIEN BONDS

#### Section 2.1. Authorization of 2014 Second Lien Bonds; Purposes.

a) No 2014 Second Lien Bonds may be issued under the provisions of this Indenture except in



accordance with this Article. The 2014 Second Lien Bonds are being issued in the aggregate principal amount of \$292,405,000.

b) The 2014 Second Lien Bonds are being issued for the purposes of (i) financing certain capital improvements to and extensions of the Sewer System (as defined below) and (ii) paying the Costs of Issuance of the 2014 Second Lien Bonds.

**Section 2.2. Nature of Obligations; Source of Payment; Pledge of Second Lien Bond Revenues and Certain Other Moneys; Subordination to Senior Lien Bonds.**

(a) The 2014 Second Lien Bonds are legal, valid and binding limited obligations of the City having a claim for payment of principal and interest solely from the moneys and securities held by the Trustee under the provisions of this Indenture and, together with any other Second Lien Bonds Outstanding, from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts. The 2014 Second Lien Bonds and the interest on them do not constitute an indebtedness of

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the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City.

b) To secure the payment of the principal of and interest on, the 2014 Second Lien Bonds, the City pledges, assigns and grants to the Trustee a lien on and security interest in all funds and accounts held by the Trustee under this Indenture, and, together with any other Second Lien Bonds Outstanding, in the Second Lien Bond Revenues and the amounts on deposit in the Second Lien Construction Accounts, subject to the provisions of this Indenture requiring or permitting the payment, setting apart or appropriation of such amounts, or to the purposes and on the terms, conditions, priorities and order set forth in or provided under this Indenture. This pledge, assignment and grant of a lien and security interest is valid and binding from and after the date of issuance of any 2014 Second Lien Bonds under this Indenture without any further physical delivery or further act; and is valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the City, irrespective of whether such parties have notice of such pledge, assignment and grant of a lien.

c) The claim of the 2014 Second Lien Bonds to Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Outstanding Senior Lien Bonds.

Section 2.3. General Terms of 2014 Second Lien Bonds. The 2014 Second Lien Bonds shall be designated "City of Chicago Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014".

The 2014 Second Lien Bonds shall mature on January 1 of each of the following years and bear interest at the following interest rates per annum:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Rate (%)</u>	<u>Principal Interest Year</u>	<u>Amount</u>	<u>Rate (%)</u>
2016	\$4,720,000	3.00	2027	\$ 7,945,000	5.00
2017	4,915,000	5.00	2028	8,355,000	5.00
2018	5,170,000	5.00	2029	8,780,000	5.00

2019	5,435,000	5.00	20309,230,0005.00
2020	5,710,000	5.00	20319,705,0005.00
2021	5,945,000	3.00	203210,205,0005.00
2022	6,190,000	5.00	203310,725,0005.00
2023	6,505,000	5.00	203411,275,0005.00
2024	6,840,000	5.00	203965,675,0005.00
2025	7,190,000	5.00	204484,330,0005.00
2026	7,560,000	5.00	

Interest on the 2014 Second Lien Bonds shall be payable on January 1 and July 1 of each year, commencing January 1, 2015.

Section 2.4. Conditions Precedent to Issuance and Delivery of the 2014 Second Lien Bonds. Upon the execution and delivery of this Indenture, 2014 Second Lien Bonds shall

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be executed by the City and delivered to the Trustee and thereupon shall be authenticated by the Trustee and delivered to the Initial Purchasers, but only following the receipt by the Trustee of:

- a) A copy of the Series 2014 Bond Ordinance certified by the City Clerk of the City;
- b) an executed original of the Determination Certificate authorizing the execution and delivery of this Indenture and the issuance and sale of the 2014 Second Lien Bonds;
- c) an original executed counterpart of this Indenture;
- d) a certificate signed by the Authorized Officer delivered pursuant to Section 2.2(d) of the Series 2014 Bond Ordinance specifying the amounts of Net Revenues Available for Bonds to be deposited by the City in the Second Lien Bonds Account and transferred to the 2014 Second Lien Bonds Revenue Fund on the Business Day preceding each January 1 and July 1, commencing on the Business Day preceding July 1, 2015, which amounts shall be sufficient to pay the principal of and interest on the 2014 Second Lien Bonds coming due on each such January 1 and July 1;
- e) an Opinion of Counsel to the effect that (i) this Indenture has been duly and lawfully authorized by all necessary action on the part of the City, has been duly and lawfully executed by authorized officers of the City, is in full force and effect and is valid and binding upon the City and enforceable in accordance with its terms; (ii) this Indenture creates the valid pledge of Second Lien Bond Revenues and moneys and securities which it purports to create; and (iii) upon the execution, authentication and delivery of the 2014 Second Lien Bonds, the 2014 Second Lien 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 and this Indenture;
- (t) a written authorization as to the authentication and delivery of the 2014 Second Lien Bonds, signed by the Authorized Officer; and

- (g) such further documents and moneys as are required by the terms of this Indenture and the Series

## 2014 Bond Ordinance.

Section 2.5. Application of Proceeds of 2014 Second Lien Bonds. The proceeds of the sale of the 2014 Second Lien Bonds shall be used and deposited as follows: \$320,691,049.97 of the proceeds shall be deposited in the Construction Account: 2014 Second Lien Bonds and used to pay for certain capital improvements to and extensions of the Sewer System and the Costs of Issuance of the 2014 Second Lien Bonds as described in the Series 2014 Bond Ordinance.

### **Section 2.6. Form, Payment and Dating of 2014 Second Lien Bonds; Authorized Denominations.**

(a) The 2014 Second Lien Bonds and the certificate of authentication to be executed on the 2014 Second Lien Bonds by the Trustee shall be in substantially the form set forth in Exhibit A to this Indenture, with necessary or appropriate variations, omissions and insertions as permitted or required by this Indenture.

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b) The 2014 Second Lien Bonds shall be issuable only as fully registered bonds in Authorized Denominations. 2014 Second Lien Bonds shall be numbered R-1 consecutively upwards and shall contain an appropriate prefix to such numbers to identify the series of such 2014 Second Lien Bonds.

c) The principal and redemption price of each 2014 Second Lien Bond shall be payable upon surrender of such 2014 Second Lien Bond at the Principal Office of the Trustee. Payments of principal of the 2014 Second Lien Bonds shall be payable in clearinghouse funds except as provided in Section 2.13 below. Such payments shall be made to the Owner of the 2014 Second Lien Bond so surrendered, as shown on the registration books maintained by the Trustee on the applicable Record Date.

d) Each 2014 Second Lien Bond shall bear interest, be payable as to interest and be dated as follows:

i) Each 2014 Second Lien Bond shall bear interest (at the applicable rate per year set forth in Section 2.3 of this Indenture) from its date or from and including the most recent Interest Payment Date with respect to which interest has been paid or duly provided for. The 2014 Second Lien Bonds shall be dated as of the Interest Payment Date next preceding their date of authentication, unless such date of authentication is an Interest Payment Date, in which case the 2014 Second Lien Bonds shall be dated as of such Interest Payment Date, or unless such 2014 Second Lien Bonds are authenticated prior to the first Interest Payment Date, in which event the 2014 Second Lien Bonds shall be dated as of their date of issue.

ii) Subject to the provisions of subparagraph (iii) below, the interest due on any such 2014 Second Lien Bond on any Interest Payment Date shall be paid to the Owner of such 2014 Second Lien Bond as shown on the registration books kept by the Trustee on the applicable Record Date. The amount of interest so payable on any Interest Payment Date shall be computed by the Trustee on the basis of a 360-day year of twelve 30-day months.

iii) If the available funds under this Indenture are insufficient on any Interest Payment Date to pay the interest then due, the regular applicable Record Date shall no longer be applicable with respect to such 2014 Second Lien Bonds. If sufficient funds for the payment of such overdue interest

shall thereafter become available, the Trustee immediately shall establish a special interest payment date for the payment of the overdue interest and a special record date (which shall be a Business Day) for determining the Bondholders entitled to such payments. Notice of each date so established shall be mailed by the Trustee to each such Bondholder at least 10 days prior to the special record date, but not more than 30 days prior to the special interest payment date. The overdue interest shall be paid on the special interest payment date to such Bondholders as shown on the registration books kept by the Trustee as of the close of business on the special record date.

iv) All payments of interest on the 2014 Second Lien Bonds shall be paid to the persons entitled to such payments pursuant to Section 2.6(d)(ii) or (iii) above by the Trustee on the Interest Payment Date or special interest payment date, as applicable,

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(A) upon request of any Owner of such 2014 Second Lien Bonds in the principal amount of \$1,000,000 or more, by federal funds wire on the Interest Payment Date to any address in the continental United States, if such Owner provides the Trustee with written notice of such wire transfer address at least 15 days prior to the applicable Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless or until changed or revoked by subsequent notice), or (B) if no instructions are given as aforesaid, by clearinghouse funds check or draft mailed on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or such other address as has been furnished to the Trustee in writing by such person.

Section 2.7. Execution of 2014 Second Lien Bonds. Each of the 2014 Second Lien Bonds shall be executed on behalf of the City by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of its City Clerk or Deputy City Clerk, and the corporate seal of the City shall be impressed, printed or lithographed on each 2014 Second Lien Bond. The 2014 Second Lien Bonds bearing the manual or facsimile signatures of individuals who were at the time of the execution of this Indenture the proper officers of the City shall bind the City notwithstanding that such individuals shall cease to hold such offices prior to the registration, authentication or delivery of such 2014 Second Lien Bonds or shall not have held such offices at the dated date of such 2014 Second Lien Bonds.

Section 2.8. Delivery and Registration. No 2014 Second Lien Bond shall be entitled to any right or benefit under this Indenture, or be valid or obligatory for any purpose, unless there appears on such 2014 Second Lien Bond a certificate of authentication substantially in the form provided in Exhibit A to this Indenture, executed by the Trustee by manual signature, and such certificate upon any such 2014 Second Lien Bond shall be conclusive evidence that such 2014 Second Lien Bond has been duly authenticated, registered and delivered.

Section 2.9. Lost, Destroyed, Improperly Canceled or Undelivered 2014 Second Lien Bonds. If any 2014 Second Lien Bond, whether in temporary or definitive form, is lost (whether by reason of theft or otherwise), destroyed (whether by mutilation, damage or otherwise) or improperly canceled, the Trustee may authenticate a new 2014 Second Lien Bond of the same series, date and denomination and bearing a number not contemporaneously outstanding; provided that (a) in the case of any mutilated 2014 Second Lien Bond, such mutilated 2014 Second Lien Bond shall first be surrendered to the Trustee and (b) in the case of any lost 2014 Second Lien Bond or 2014 Second Lien Bond destroyed in whole, there shall be first furnished to the Trustee evidence of such loss or destruction, together with indemnification of the City and the Trustee,

satisfactory to each of them. If any lost, destroyed or improperly canceled 2014 Second Lien Bond shall have matured or is about to mature, instead of issuing a substitute 2014 Second Lien Bond, the Trustee shall pay the same without surrender of such 2014 Second Lien Bond if there shall be first furnished to the Trustee evidence of such loss, destruction or cancellation, together with indemnification of the City and the Trustee, satisfactory to each of them. Upon the issuance of any substitute 2014 Second Lien Bond, the Trustee may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation to such issuance. The Trustee may charge the Bondholder reasonable fees and expenses in connection with any transaction described in this Section 2.9, except for improper cancellation by the Trustee.

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All 2014 Second Lien Bonds shall be owned upon the express condition that, to the extent permitted by law, the foregoing provisions are exclusive with respect to the replacement or payment of lost, destroyed or improperly canceled 2014 Second Lien Bonds, notwithstanding any law or statute now existing or enacted after the date of this Indenture.

Section 2.10. Transfer, Registration and Exchange of 2014 Second Lien Bonds. The Trustee shall maintain and keep, at its Principal Office, books for the registration and transfer of 2014 Second Lien Bonds, which at all reasonable times shall be open for inspection by the City.

The transfer of any 2014 Second Lien Bond shall be registered upon the books of the Trustee at the written request of the Bondholder or its attorney duly authorized in writing, upon surrender of such 2014 Second Lien Bond at the Principal Office of the Trustee, together with a written instrument of transfer satisfactory to the Trustee duly executed by the Bondholder or its attorney duly authorized in writing.

The City and the Trustee may deem and treat the Bondholder as the absolute owner of such 2014 Second Lien Bond, whether such 2014 Second Lien Bond shall be overdue or not, for the purpose of receiving payment of, or on account of, the principal of and interest on, such 2014 Second Lien Bond and for all other purposes, and neither the City nor the Trustee shall be affected by any notice to the contrary. All such payments so made to any such Bondholder shall be valid and effectual to satisfy and discharge the liability upon such 2014 Second Lien Bond to the extent of the sum or sums so paid.

Any 2014 Second Lien Bond, upon surrender of such 2014 Second Lien Bond at the Principal Office of the Trustee, together with an assignment executed by the Owner or its duly authorized agent, may, at the option of the Bondholder, be exchanged for an equal aggregate principal amount of 2014 Second Lien Bond or 2014 Second Lien Bonds of any Authorized Denomination of the same series, interest rate and maturity as the 2014 Second Lien Bond being surrendered.

In all cases in which the privilege of exchanging 2014 Second Lien Bonds or registering the transfer of 2014 Second Lien Bonds is exercised, the City shall execute and the Trustee shall authenticate and deliver 2014 Second Lien Bonds in accordance with the provisions of this Indenture. For every such exchange or registration of transfer of 2014 Second Lien Bonds, whether temporary or definitive, the Trustee may make a charge in an amount sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, which sum or sums shall be paid by the person requesting such exchange or registration of transfer as a condition precedent to the exercise of the privilege of making such exchange or registration of transfer.

Neither the Trustee nor the City shall be required to register the transfer of any 2014 Second Lien Bond

during the 15 days next preceding an interest payment date or, in the case of a proposed redemption of 2014 Second Lien Bonds, 2014 Second Lien Bonds after they have been selected by the Trustee for redemption.

Section 2.11. Temporary 2014 Second Lien Bonds. Pending the preparation of definitive 2014 Second Lien Bonds, the City may execute and the Trustee shall authenticate and deliver temporary 2014 Second Lien Bonds. Temporary 2014 Second Lien Bonds may be

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issuable as 2014 Second Lien Bonds of the applicable series and of any Authorized Denomination and substantially in the form of the definitive 2014 Second Lien Bonds of such series but with omissions, insertions and variations as may be appropriate for temporary 2014 Second Lien Bonds of such series, all as may be approved by the City, as evidenced by the execution and delivery of such 2014 Second Lien Bonds. Temporary 2014 Second Lien Bonds may contain such reference to any provisions of this Indenture as may be appropriate. Every temporary 2014 Second Lien Bond shall be executed by the City and be authenticated by the Trustee upon the same conditions and in substantially the same manner, and with like effect, as the definitive 2014 Second Lien Bonds. As promptly as practicable the City shall execute and shall furnish definitive 2014 Second Lien Bonds and thereupon temporary 2014 Second Lien Bonds may be surrendered in exchange therefor without charge at the Principal Office of the Trustee, and the Trustee shall authenticate and deliver in exchange for such temporary 2014 Second Lien Bonds the same aggregate principal amount of definitive 2014 Second Lien Bonds of the applicable series and in Authorized Denominations. Until so exchanged the temporary 2014 Second Lien Bonds shall be entitled to the same benefits under this Indenture as definitive 2014 Second Lien Bonds.

Section 2.12. Cancellation of 2014 Second Lien Bonds. All 2014 Second Lien Bonds which shall have been surrendered to the Trustee for payment and all 2014 Second Lien Bonds which shall have been surrendered to the Trustee for exchange or registration of transfer, shall be canceled by the Trustee and cremated or otherwise destroyed, and counterparts of a certificate of destruction evidencing such cremation or other destruction shall be furnished by the Trustee to the City. The Trustee shall furnish to the City a certificate evidencing any such cancellation and specifying such 2014 Second Lien Bonds by series and number.

### **Section 2.13. Book-Entry Provisions.**

a) Except as provided in paragraph (c) below, the Owner of all of the 2014 Second Lien Bonds shall be DTC, and the 2014 Second Lien Bonds shall be registered in the name of Cede & Co., as nominee for DTC. Payment of interest for any 2014 Second Lien Bond registered in the name of Cede & Co. shall be made by wire transfer of immediately available funds to the account of Cede & Co. on the applicable Interest Payment Date for the 2014 Second Lien Bonds at the address indicated for Cede & Co. in the registration books of the City kept by the Trustee.

b) The Trustee and the City may treat DTC (or its nominee) as the sole and exclusive Owner of such 2014 Second Lien Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on such 2014 Second Lien Bonds, selecting such 2014 Second Lien Bonds or portions of such 2014 Second Lien Bonds to be redeemed, giving any notice permitted or required to be given to Bondholders under this Indenture, registering the transfer of such 2014 Second Lien Bonds, obtaining any consent or other action to be taken by Bondholders and for all other purposes whatsoever, and neither the Trustee nor the City shall be affected by any notice to the contrary. Except as otherwise provided in paragraph (c) below, no Beneficial Owner shall receive an authenticated 2014 Second Lien Bond certificate. Upon

delivery by DTC to the Trustee of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions of this Indenture with respect to transfers of 2014 Second Lien Bonds, the words "Cede & Co." in this Indenture shall refer to such new nominee of DTC.

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c) If the Owner of all the 2014 Second Lien Bonds shall be DTC and the City determines to discontinue DTC's book-entry system, the City may notify DTC and the Trustee, whereupon DTC will notify its participating organizations (the "Participants") of the availability through DTC of certificated 2014 Second Lien Bonds and such Participants may utilize DTC's withdrawal procedure to withdraw the 2014 Second Lien Bonds from DTC. If a Participant utilizes this process, the Trustee shall issue, transfer and exchange such 2014 Second Lien Bond certificates as requested by DTC in the appropriate series and amounts in accordance with the provisions of this Indenture. DTC may determine to discontinue providing its services with respect to all, but not less than all, of the 2014 Second Lien Bonds at any time by giving written notice to the City and the Trustee and discharging its responsibilities with respect to this Indenture under applicable law. Under such circumstances (if there is no successor securities depository), the City and the Trustee shall be obligated (at the sole cost and expense of the City) to make available for delivery 2014 Second Lien Bond certificates as described in this Indenture. Whenever DTC requests the City and the Trustee to do so, the City will direct the Trustee (at the sole cost and expense of the City) to cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing 2014 Second Lien Bonds to any Participant having 2014 Second Lien Bonds credited to its DTC account or (ii) to arrange for another securities depository to maintain custody of certificates evidencing such 2014 Second Lien Bonds.

d) So long as any 2014 Second Lien Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal or redemption price of and interest on such 2014 Second Lien Bond and all notices with respect to such 2014 Second Lien Bond shall be made and given, respectively, to DTC or its nominee as provided in the City's representation letter to DTC.

e) In connection with any notice or other communication to be provided to Bondholders pursuant to this Indenture by the City or the Trustee, or by the Trustee with respect to any consent or other action to be taken by Bondholders, the City or the Trustee, as the case may be, shall establish a record date for such consent or other action and give DTC notice of such record date not less than 15 calendar days in advance of such record date to the extent possible. Such notice to DTC or its nominee shall be given only when DTC is the sole Bondholder.

f) Neither the City nor the Trustee shall have any responsibility or obligation to the Participants or the Beneficial Owners with respect to (i) the accuracy of any records maintained by DTC or any Participant; (ii) the payment by DTC or any Participant of any amount due to any Beneficial Owner in respect of the principal or redemption price of or interest on the 2014 Second Lien Bonds; (iii) the delivery by DTC or any Participant of any notice to any Beneficial Owner which is required or permitted under the terms of this Indenture to be given to Bondholders; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the 2014 Second Lien Bonds; or (v) any consent given or other action taken by DTC as Bondholder.

g) As long as Cede & Co. is the registered owner of the 2014 Second Lien Bonds, as nominee of DTC, references in this Indenture to the Bondholders of the 2014 Second Lien Bonds or Owners of the 2014 Second Lien Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the 2014 Second Lien

Bonds.

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(h) So long as DTC is the registered owner of the 2014 Second Lien Bonds:

i) selection of 2014 Second Lien Bonds of a series to be redeemed upon partial redemption and presentation of 2014 Second Lien Bonds of such series to the Trustee upon partial redemption, shall be deemed made when the right to exercise ownership rights in such 2014 Second Lien 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 Bondholders under this Indenture on a fractionalized basis on behalf of some or all of those persons entitled to exercise ownership rights in the 2014 Second Lien Bonds through DTC or its Participants.

### **ARTICLE III**

#### **REDEMPTION OF THE 2014 SECOND LIEN BONDS**

Section 3.1. Terms of Redemption. The 2014 Second Lien Bonds shall be subject to redemption in advance of their maturity as provided in this Article.

a) Optional Redemption. The 2014 Second Lien Bonds maturing on and after January 1, 2025 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2024, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

b) Mandatory Sinking Fund Redemption. The two term 2014 Second Lien Bonds maturing on January 1, 2039 and January 1, 2044, respectively, are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:



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**Term Bond Maturing January 1, 2039**

**Principal Amount**

2035	2036	2037	2038	2039*
\$11,855,000	12,465,000	13,100,000	13,775,000	14,480,000

\*Final Maturity

**Term Bond Maturing January 1, 2044**

**Principal Amount**

2040	2041	2042	2043	2044*
\$15,220,000	16,005,000	16,825,000	17,685,000	18,595,000

\*Final Maturity

Section 3.2. Redemption at the Election or Direction of the City. In the case of any redemption of 2014 Second Lien Bonds at the election or direction of the City, the City shall give written notice to the Trustee of its election or direction so to redeem, of the date fixed for such redemption and of the principal amounts of the 2014 Second Lien Bonds of each maturity to be redeemed. Such notice shall be given at least 45 days prior to the specified redemption date (or such shorter period as shall be acceptable to the Trustee). If notice of redemption has been given as provided in Section 3.5, there shall be paid on or prior to the specified redemption date to the Trustee an amount in cash or Government Obligations maturing on or before the specified redemption date which, together with other moneys, if any, available for the purpose and held by the Trustee, will be sufficient to redeem all of the 2014 Second Lien Bonds to be redeemed on the specified redemption date at their redemption price plus interest accrued and unpaid to the date fixed for redemption. Such cash and Government Obligations shall be held in a separate, segregated account for the benefit of the Owners of the 2014 Second Lien Bonds so called for redemption.

**Section 3.3. Redemption Otherwise Than at City's Election or Direction.**

Whenever by the terms of this Indenture the Trustee is required or authorized to redeem 2014 Second Lien Bonds otherwise than at the election or direction of the City, the Trustee shall select the 2014 Second Lien Bonds to be redeemed, give the notice of redemption and pay the redemption price, plus interest accrued and unpaid to the date fixed for redemption, in accordance with the terms of this Article III.

Section 3.4. Selection of 2014 Second Lien Bonds to Be Redeemed. If less than all of the 2014 Second Lien Bonds of like maturity shall be called for prior redemption, the

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particular 2014 Second Lien Bonds or portion of 2014 Second Lien Bonds to be redeemed shall be selected at random by the Trustee in such manner as the Trustee in its discretion may deem fair and appropriate; provided, that the portion of any 2014 Second Lien Bond of a denomination of more than the minimum Authorized Denomination shall be in the principal amount of an Authorized Denomination and that, in selecting portions of

such 2014 Second Lien Bonds for redemption, the Trustee shall treat each such 2014 Second Lien Bond as representing that number of 2014 Second Lien Bonds of the minimum Authorized Denomination which is obtained by dividing the principal amount of such 2014 Second Lien Bond to be redeemed in part by the minimum Authorized Denomination. If all 2014 Second Lien Bonds of any Series are held in book-entry only form, the particular 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds of such Series to be redeemed shall be selected by the securities depository for such Series of 2014 Second Lien Bonds in such manner as such securities depository shall determine.

Section 3.5. Notice of Redemption. When the Trustee shall receive notice from the City of its election or direction to redeem 2014 Second Lien Bonds pursuant to Section 3.2, and when redemption of 2014 Second Lien Bonds is authorized or required pursuant to Section 3.3, the Trustee shall give notice, in the name of the City, of the redemption of such 2014 Second Lien Bonds. Notice of redemption shall specify the Series, maturities and CUSIP numbers of the 2014 Second Lien Bonds to be redeemed, the date fixed for redemption and the place or places where amounts due upon such date fixed for redemption will be payable (which shall be the Principal Office of the Trustee) and, if less than all of the 2014 Second Lien Bonds of any like maturity are to be redeemed, the letters and numbers or other distinguishing marks of such 2014 Second Lien Bonds so to be redeemed. In the case of 2014 Second Lien Bonds to be redeemed in part only, such notice shall also specify the respective portions of the principal amount of such 2014 Second Lien Bonds to be redeemed. Such notice shall further state that on such date there shall become due and payable the redemption price of each 2014 Second Lien Bond to be redeemed, or the redemption price of the specified portions of the principal of such 2014 Second Lien Bonds in the case of 2014 Second Lien Bonds to be redeemed in part only, together with interest accrued to the date fixed for redemption, and that from and after such date interest shall cease to accrue and be payable. Such notice shall either (i) state that the redemption is conditioned on there being on deposit in the Principal and Interest Account on the date fixed for redemption sufficient moneys to pay the redemption price of the 2014 Second Lien Bonds to be redeemed or (ii) in the case of notices provided in connection with optional redemption, be sent only if sufficient moneys to pay the redemption price of the 2014 Second Lien Bonds to be redeemed is on deposit in the Principal and Interest Account on the date fixed for redemption. The Trustee shall mail copies of such notice by first-class mail, postage prepaid, not more than 60 and not less than 30 days before the date fixed for redemption, to the Owners of the 2014 Second Lien Bonds to be redeemed at their addresses as shown on the registration books of the City maintained by the Trustee. Failure to give notice of redemption by mail to any particular Owner, or any defect in such notice, shall not affect the validity of any proceedings for the redemption of Bonds for which such notice has been properly given.

Section 3.6. Payment of Redeemed 2014 Second Lien Bonds. Notice having been given in the manner provided in Section 3.5, the 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds so called for redemption shall become due and payable on the date fixed for redemption at the redemption price, plus interest accrued and unpaid to such date, and, upon presentation and surrender of such 2014 Second Lien Bonds at any place specified in such

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notice, such 2014 Second Lien Bonds, or portions of 2014 Second Lien Bonds, shall be paid at the redemption price, plus interest accrued and unpaid to such date. If there shall be called for redemption less than all of a 2014 Second Lien Bond, the City shall execute and the Trustee shall authenticate and deliver, upon the surrender of such 2014 Second Lien Bond, without charge to the Owner, for the unredeemed balance of the principal amount of the 2014 Second Lien Bond so surrendered, fully registered 2014 Second Lien Bonds of like maturity in any Authorized Denominations. If, on the date fixed for redemption, moneys for the

redemption of all the 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds of any like maturity to be redeemed, together with interest to such date, shall be held by the Trustee so as to be available on said date and if notice of redemption shall have been given as provided in Section 3.5, then, from and after the date fixed for redemption, interest on the 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds of such maturity so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the date fixed for redemption, such 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

Section 3.7. Adjustment of Sinking Fund Payments. If through optional redemption the City redeems less than all the 2014 Second Lien Bonds of like maturity with respect to which Sinking Fund Payments have been established, the principal amount so redeemed shall be credited against the unsatisfied balance of future Sinking Fund Payments or the final maturity amount established with respect to such 2014 Second Lien Bonds, in such amount and against such Sinking Fund Payments or final maturity amount as shall be determined by the City in a Certificate of an Authorized Officer filed with the Trustee prior to the mailing of the notice of redemption of such 2014 Second Lien Bonds or, in the absence of such determination, shall be credited against the unsatisfied balance of the applicable Sinking Fund Payments in inverse order of their payment dates.

## **ARTICLE IV REVENUES AND**

### **FUNDS**

Section 4.1. Source of Payment of 2014 Second Lien Bonds. The 2014 Second Lien Bonds are not general obligations of the City but are limited obligations as described in Section 2.2 and as provided in the Series 2014 Bond Ordinance and this Indenture.

#### **Section 4.2. Amounts on Deposit to be Held in Trust.**

a) The amounts on deposit in the funds and accounts created by this Indenture shall be held by the Trustee for the sole and exclusive benefit of the 2014 Second Lien Bonds and shall be applied, used and withdrawn only for the purposes authorized in this Indenture.

b) The City will cause all moneys and securities held in the funds and accounts created by the Senior Lien Bond Ordinances to be applied, used and withdrawn solely for the purposes authorized in those ordinances.

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#### **Section 4.3. Creation of the 2014 Second Lien Bonds Revenue Fund and the Account In It.**

a) There is by this Indenture created by the City and established with the Trustee a separate and segregated trust fund to be designated as the "City of Chicago Wastewater Transmission Revenue Project Bonds Series 2014 Second Lien Bonds Revenue Fund" (the "2014 Second Lien Bonds Revenue Fund").

b) Within the 2014 Second Lien Bonds Revenue Fund, there is by this Indenture created by the City and established with the Trustee a separate and segregated trust fund to be designated as the "City of Chicago Wastewater Transmission Revenue Project Bonds Series 2014 Second Lien Bonds Principal and Interest Account" (the "Principal and Interest Account").

Section 4.4. Deposit of 2014 Second Lien Bond Revenues. On the Business Day immediately preceding each January 1 and July 1, commencing January 1, 2015, the Authorized Officer shall withdraw from the 2014 Second Lien Bonds Subaccount of the Second Lien Bonds Account, and transfer to the Trustee for deposit into the 2014 Second Lien Bonds Revenue Fund, the amounts required to be on deposit in the Principal and Interest Account as specified in the certificate delivered pursuant to Section 2.4(d). Upon receipt of such amounts, the Trustee shall deposit the same in the accounts of the 2014 Second Lien Bonds Revenue Fund. The Trustee shall be accountable only for moneys actually so received. Such certificate of the Authorized Officer, or any subsequent or supplemental certificate, shall be revised or supplemented from time to time whenever necessary to reflect changes in the deposit requirements relating to the 2014 Second Lien Bonds Revenue Fund as a result of the prepayment of 2014 Second Lien Bonds.

#### **Section 4.5. Administration of the Account in the 2014 Second Lien Bonds Revenue Fund.**

a) Administration of the Principal and Interest Account. Moneys on deposit in the Principal and Interest Account shall be held by the Trustee for the sole and exclusive benefit of the 2014 Second Lien Bonds and shall be used for the purpose of paying the principal of and interest on such 2014 Second Lien Bonds as it becomes due. Any earnings on amounts held in the Principal and Interest Account shall be credited to that account.

b) Investment of Moneys in the 2014 Second Lien Bonds Revenue Fund. Pending the use of moneys held in an account of the 2014 Second Lien Bonds Revenue Fund, the Trustee shall invest such moneys in Permitted Investments upon the written direction of the Authorized Officer or any person designated to sign on behalf of the Authorized Officer.

#### **Section 4.6. 2014 Second Lien Bonds Not Presented for Payment.**

(a) If any 2014 Second Lien Bonds shall not be presented for payment when the principal of such 2014 Second Lien Bonds becomes due under this Indenture or otherwise, if moneys sufficient to pay such 2014 Second Lien Bonds are held by the Trustee for the benefit of the Owners of such 2014 Second Lien Bonds, the Trustee shall segregate and hold such moneys in a trust account separate and apart from the other funds and accounts held under this Indenture,

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without liability for interest on such moneys, for the benefit of such Bondholders who shall (except as provided in the following paragraph) thereafter be restricted exclusively to such fund or funds for the satisfaction of any claim of whatever nature under such 2014 Second Lien Bond and this Indenture. Any such moneys shall be invested in general obligations of, or obligations the principal of and interest on which are fully guaranteed as to timely payment by, the United States of America, which obligations shall mature not later than the date or dates on which such funds will be needed for the purposes for which such funds were deposited, and in any event, not later than 31 days from the date of such investment.

(b) Any moneys which the Trustee shall segregate and hold in trust for the payment of the principal of or interest on any 2014 Second Lien Bond and which shall remain unclaimed for two years after such principal or interest has become due and payable shall, upon the City's written request to the Trustee, be paid to the City. After the payment of such unclaimed moneys to the City, the Owner of such 2014 Second Lien Bond shall thereafter look only to the City for the payment of such 2014 Second Lien Bonds, unless an abandoned property law designates another person, and all liability of the Trustee with respect to such moneys shall thereupon cease.

## **ARTICLE V GENERAL**

### **COVENANTS OF THE CITY**

Section 5.1. Equality of 2014 Second Lien Bonds. Each 2014 Second Lien Bond authorized under this Indenture shall be on a parity and rank equally without preference, priority or distinction over any other 2014 Second Lien Bond as to security, regardless of the time or times of their issue, and the provisions, covenants and agreements set forth in this Indenture to be performed by and on behalf of the City shall be for the equal benefit, protection and security of the Owners of any and all 2014 Second Lien Bonds. The City covenants that it will not issue any obligations with a claim for payment or secured by the Second Lien Bond Revenues or, except as otherwise provided in Section 5.5 of this Indenture, any other moneys pledged under this Indenture having priority over or, except for Second Lien Parity Bonds, being on a parity with the 2014 Second Lien Bonds.

Section 5.2. Punctual Payment. The City covenants that it will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on all 2014 Second Lien Bonds in strict conformity with the terms of such 2014 Second Lien Bonds and of this Indenture, and that it will faithfully observe and perform all the conditions, covenants and requirements of the Series 2014 Bond Ordinance, this Indenture, and of the 2014 Second Lien Bonds issued under them.

Section 5.3. Maintenance and Continued Operation of Sewer System. The City will maintain the Sewer 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 Sewer System required by the Constitution and laws of the State.

So long as the 2014 Second Lien Bonds are Outstanding, the City will continue to operate the Sewer System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of this Indenture.

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Section 5.4. Rate Covenant. The City will establish, maintain and collect at all times fees, charges and rates for the use and service of the Sewer System sufficient at all times to (a) pay Operation and Maintenance Costs and (b) produce (i) Net Revenues Available for Bonds sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues Available for Bonds shall each Fiscal Year at least equal one hundred fifteen percent of the

sum required to pay promptly when due the debt service for the Fiscal Year on all Senior Lien Bonds then Outstanding, (ii) Second Lien Bond Revenues sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Second Lien Bonds then Outstanding from time to time and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds, (iii) amounts sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Subordinate Lien Obligations then Outstanding from time to time and to establish and maintain the debt service account for the Subordinate Lien Obligations as may be covenanted in the ordinances authorizing the issuance of Subordinate Lien Obligations, which amounts shall each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and (iv) amounts sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Line of Credit Notes and all Commercial Paper Notes (as defined in the Series 2014 Bond Ordinance) then Outstanding from time to time and to establish and maintain the debt service account for the Line of Credit Notes and/or Commercial Paper Notes as may be covenanted in the contracts governing the issuance of Line of Credit Notes and/or Commercial Paper Notes. The fees, charges and rates shall not be reduced while any 2014 Second Lien Bonds are Outstanding below the level necessary to ensure compliance with the covenants of this Section 5.4.

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 prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant and the Director of the Office of the Budget and Management of the City and the Authorized Officer shall recommend appropriate action to the City Council to comply with this rate covenant.

#### **Section 5.5. Issuance of Second Lien Parity Bonds.**

(a) As long as there are any Outstanding 2014 Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Sewer System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds, upon compliance with the following conditions:

(i) the funds required to be transferred to the Principal and Interest Account shall have been transferred in full up to the date of delivery of such Second Lien Parity Bonds; and

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(ii) 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 and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming 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. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

1) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Sewer 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

2) any such adjustment shall be evidenced by a certificate of the Authorized Officer.

For purposes of calculating the adjustment described in this paragraph (ii), any rate increase enacted by the City and scheduled to take effect in a future Fiscal Year may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for that and each succeeding Fiscal Year.

If during the first six months of a Fiscal Year, an audit of the Sewer System for the preceding Fiscal Year by an independent certified public accountant is not available, the conditions of paragraph (ii) above shall be deemed to have been satisfied if both (A) Net Revenues Available for Bonds for the second preceding Fiscal Year (as shown by the audit of an independent certified public accountant), adjusted as described in this paragraph (ii) above, and (B) Net Revenues Available for Bonds for the preceding Fiscal Year (as estimated by the Authorized Officer), adjusted as described in this paragraph (ii) above, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming 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.

(b) The City may issue Second Lien Parity Bonds without complying with either of the requirements of paragraph (a)(ii) of this Section 5.5:

(i) to pay, redeem or refund Senior Lien Bonds or Second Lien Bonds if in the judgment of the City there will be no money available to make payments of interest on or principal of those Senior Lien Bonds or Second Lien Bonds (at maturity or on Sinking Fund Payments dates) as such amounts become due; and

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

(c) Other obligations, including Subordinate Lien Obligations, may be issued payable from Net Revenues Available for Bonds on a basis subordinate to the Second Lien Bonds.

Section 5.6. Covenant Against Pledge of Second Lien Bond Revenues. The City shall not hereafter issue any bonds, notes, or other evidences of indebtedness secured by the pledge contained in Section 2.2 of this Indenture, other than Second Lien Parity Bonds, and shall not create or cause to be created any lien or

charge on Net Revenues Available for Bonds, or on any amounts pledged for the benefit of Owners of 2014 Second Lien Bonds under this Indenture, other than the pledge contained in Section 2.2 of this Indenture, provided that neither this Section nor any other provision of this Indenture shall prevent the City from (a) issuing Senior Lien Bonds, (b) issuing bonds, notes or other evidences of indebtedness payable out of, or secured by a pledge of, Net Revenues Available for Bonds to be derived on and after such date as the pledge contained in Section 2.2 of this Indenture shall be discharged and satisfied as provided in Section 8.1, or (c) issuing bonds, notes or other evidences of indebtedness which are payable out of, or secured by, or to which are pledged amounts which may be withdrawn from or secured by the Second Lien Bonds Account so long as such pledge is expressly junior and subordinate to the pledge contained in Section 2.2 of this Indenture.

Section 5.7. Repairs, Replacements, Additions, Betterments. The City from time to time will make all necessary and proper repairs, replacements, additions and betterments to the Sewer System so that the Sewer 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 Sewer System shall be at all times fully maintained.

Section 5.8. Control and Operation of Sewer System. The City will establish such rules and regulations for the control and operation of the Sewer System as are necessary for the safe, lawful, efficient and economical operation of the Sewer System.

Section 5.9. Indenture to Constitute Contract. In consideration of the purchase and acceptance of the 2014 Second Lien Bonds by the Owners from time to time of such 2014 Second Lien Bonds, the provisions of this Indenture shall constitute a contract among the City, the Trustee and the Owners from time to time of the 2014 Second Lien Bonds.

Section 5.10. Performance of Covenants; Authority. The City shall faithfully perform at all times to the extent applicable to the City any and all covenants, undertakings, stipulations and provisions contained in the Series 2014 Bond Ordinance, this Indenture, in any and every 2014 Second Lien Bond executed, authenticated and delivered under this Indenture, and in all proceedings pertaining to this Indenture.

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#### **Section 5.11. Arbitrage and Tax Exemption Covenants.**

a) The City will not direct or permit any action which (or fail to take any action the failure of which) would cause any 2014 Second Lien Bond to be an "arbitrage bond" within the meaning of the Code, as amended from time to time and as applicable to the 2014 Second Lien Bonds.

b) The covenants and agreements of the City set forth in this Section 5.11 shall apply as long as any of the 2014 Second Lien Bonds continue to bear interest (whether or not they are Outstanding Bonds within the meaning of this Indenture) and shall also apply after the 2014 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 of this Section 5.11.

c) The City (i) 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 the 2014 Second Lien Bonds will not be or become subject to federal income taxation under present law, and (ii) 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 the 2014 Second Lien Bonds will not be or become includable in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

d) The City will, without limitation, (i) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the 2014 Second Lien Bonds and other amounts, and (ii) timely rebate to the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the Sewer Revenue Fund, all as shall be necessary to comply with this Section. The City shall also make or cause to be made identifiable investments of amounts allocable to the 2014 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 Sewer Revenue Fund that shall be subject so to be rebated and those amounts from time to time shall be held by the City in a rebate account for the 2014 Second Lien Bonds 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 Sewer Revenue Fund and its accounts and sub-accounts established by this Indenture may be applied, and, for purposes of computing the balance in the Sewer Revenue Fund and such various accounts shall be disregarded.

e) 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 this Indenture and will not make compliance with those covenants impossible: (i) defease any 2014 Second Lien Bonds; (ii) sell, lease or otherwise dispose of any material portion of the Sewer System; (iii) enter into or amend any short-term or long-term contract for sewer service by the City other than pursuant to general rates charged to the general public; or (iv) enter into or amend any contract or arrangement for persons other than its employees to manage the Sewer System.

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(1) The provisions of this Section 5.11 shall not be interpreted to impose upon the City any obligation to redeem or to purchase any 2014 Second Lien Bonds other than with proceeds or other amounts available under this Indenture.

Section 5.12. Registered Owner Remedy. Any Owner of a 2014 Second Lien Bond may proceed by civil action to compel performance of all duties required by this Indenture, including the establishment and collection of sufficient fees, charges and rates for services supplied by the Sewer System, and the application of Gross Revenues as provided by this Indenture.

### **ARTICLE VI APPOINTMENT AND**

#### **DUTIES OF TRUSTEE**

Section 6.1. Appointment of Trustee. The City appoints Amalgamated Bank of Chicago, Chicago, Illinois, as Trustee, for the purposes and upon the express terms and conditions set forth in this Indenture. The acceptance by the Trustee of its appointment shall be evidenced by its execution and delivery of this Indenture, which shall constitute a representation and warranty by the Trustee that the Trustee is duly authorized to accept its appointment as Trustee and perform its duties as Trustee under this Indenture. The City by its delivery and

the Bondholders by their acceptance of delivery of any of the 2014 Second Lien Bonds agree to the terms set forth in this Indenture.

Section 6.2. No Responsibility for Recitals. The recitals, statements and representations contained in this Indenture or in the 2014 Second Lien Bonds, except for the Trustee's authentication upon the 2014 Second Lien Bonds, shall be taken" and construed as made by and on the part of the City, and not by the Trustee, and the Trustee does not assume, and shall not have, any responsibility or obligation for the correctness of this Indenture. Nothing contained in this Section 6.2 shall limit the responsibilities of the Trustee expressly set forth in this Indenture.

### **Section 6.3. Limitations on Liability of Trustee.**

a) The Trustee may execute any of the trusts or powers of this Indenture and perform the duties required under this Indenture by or through attorneys, agents or receivers, and shall be entitled to, and may rely upon, written advice of counsel concerning all matters of trust and duty under this Indenture, and the Trustee shall not be answerable for the negligence or misconduct of any such attorney or agent selected by it with reasonable care.

b) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.

c) The Trustee shall not be answerable for the exercise of any discretion or power under this Indenture or for anything whatsoever in connection with the trust created by this Indenture, except only for its own negligence or bad faith.

d) The Trustee shall not be accountable for the use or application of the proceeds of any of the 2014 Second Lien Bonds issued under this Indenture.

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Section 6.4. Compensation, Expenses and Advances. The Trustee shall be entitled to reasonable compensation for its services rendered under this Indenture (not limited by any provision of law in regard to the compensation of the Trustee of an express trust) and to reimbursement for its actual out-of-pocket expenses (including the reasonable compensation and the expenses and disbursements of its agents and counsel) reasonably incurred in connection therewith except for such expenses incurred as a result of its negligence or bad faith. The City shall have the right to contest in good faith any fees or expenses of the Trustee without creating a default under this Indenture.

Section 6.5. Good Faith Reliance. The Trustee in the absence of bad faith on its part shall be protected and shall incur no liability in acting upon any resolution, notice, telegram, request, consent, waiver, certificate, statement, affidavit, voucher, bond, requisition or other paper or document or telephonic notice (where authorized by this Indenture) which it shall believe to be genuine and to have been passed or signed by the proper board, body or person or to have been prepared and furnished pursuant to any of the provisions of this Indenture, or upon the written opinion of any attorney, engineer, accountant or other expert, and the Trustee shall be under no duty to make any investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements; provided that the Trustee shall not be so protected if the Trustee has actual knowledge with respect to such matters to the contrary.

The Trustee shall not be bound to recognize any person as an Owner of 2014 Second Lien Bonds or to take any action at the request of such person unless satisfactory evidence of the ownership of such 2014 Second Lien Bond shall be furnished to the Trustee.

Any request or direction of the City as provided in this Indenture shall be sufficiently, evidenced by, and the Trustee may conclusively rely upon, a written instrument from the City signed by the Authorized Officer or any person designated to sign on behalf of the Authorized Officer. As to any fact or circumstance concerning which the Trustee requests verification, the Trustee may conclusively rely upon a certificate signed by the Authorized Officer or any person designated to sign on behalf of the Authorized Officer.

Section 6.6. Dealings in 2014 Second Lien Bonds and with City. The Trustee may buy, sell, own, hold and deal in any of the 2014 Second Lien Bonds issued under this Indenture for its own account or that of any other person, and may join in any action which any Bondholder may be entitled to take with like effect as if it did not act in any capacity under this Indenture. The Trustee, either as principal or agent, also may engage in or be interested in any financial or other transaction with the City and may act as depository, trustee or agent for any committee or body of Bondholders secured by this Indenture or other obligations of the City as freely as if it did not act in any capacity under this Indenture.

Section 6.7. Resignation of Trustee. The Trustee may resign and be discharged of the trusts created by this Indenture by executing an instrument in writing resigning such trusts and specifying the date when such resignation shall take effect, and filing the same with the City, not fewer than 45 days before the date specified in such instrument when such resignation shall take effect, and by giving Notice by Mail of such resignation, not fewer than 21 days prior to such resignation date, to the Owners of Outstanding 2014 Second Lien Bonds. Such resignation shall take effect on the day specified in such instrument and notice, but only if a successor Trustee

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shall have been appointed and shall have accepted the duties of the Trustee set forth as in this Indenture. If the successor Trustee shall not have been appointed within a period of 90 days following the giving of such notice, then the Trustee shall be authorized to petition any court of competent jurisdiction to appoint a successor Trustee as provided in Section 6.11 of this Indenture.

Section 6.8. Removal of Trustee. The Trustee may be removed by the City at any time by filing with the Trustee an instrument or instruments in writing executed by the City, appointing a successor. Such removal shall be effective 30 days (or such longer period as may be set forth in such instrument) after delivery of the instrument; provided that no such removal shall be effective until the successor Trustee appointed under this Indenture shall execute, acknowledge and deliver to the City an instrument accepting such appointment under this Indenture.

Section 6.9. Appointment of Successor Trustee. If at any time the Trustee shall be removed, or be dissolved, or if its property or affairs shall be taken under the control of any state or federal court or administrative body because of insolvency or bankruptcy, or for any other reason, and if the Trustee shall resign, then a vacancy shall immediately and ipso facto exist in the office of the Trustee and a successor may be appointed by the City. After any appointment by the City, it shall cause notice of such appointment to be given to the predecessor Trustee and the successor Trustee, and shall cause Notice by Mail to be given to all

Bondholders. No such appointment shall be effective until the successor Trustee shall have accepted such appointment.

Section 6.10. Qualifications of Successor Trustee. Every successor Trustee shall be a commercial bank with trust powers or a trust company (a) duly organized under the laws of the United States or any state or territory of the United States, (b) authorized under such laws to perform all the duties imposed upon it by this Indenture and the laws of the State, (c) capable of meeting its obligations under this Indenture, (d) subject to supervision or examination by Federal or state authority, and (e) with combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually pursuant to law or the requirements of such authority, then for the purposes of this Section 6.10 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.

Section 6.11. Judicial Appointment of Successor Trustee. If the Trustee resigns and no appointment of a successor Trustee is made pursuant to the foregoing provisions of this Indenture prior to the date specified in the notice of resignation as the date when such resignation is to take effect, the retiring Trustee may immediately apply to a court of competent jurisdiction for the appointment of a successor Trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee meeting the qualifications set forth in Section 6.10 of this Indenture.

Section 6.12. Acceptance of Trusts by Successor Trustee. In order to evidence the acceptance of the position of Trustee under this Indenture, any successor Trustee appointed under this Indenture shall execute, acknowledge and deliver to the City an instrument accepting such appointment under this Indenture, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become duly vested with all the estates, property, rights, powers, trusts, duties and obligations of its predecessor in the trust under this Indenture, with like

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effect as if originally named Trustee in this Indenture. Upon request of such Trustee, such predecessor Trustee and the City shall execute and deliver an instrument transferring to such successor Trustee all the estates, property, rights, powers and trusts under this Indenture of such predecessor Trustee and, subject to the provisions of Section 6.4 of this Indenture, such predecessor Trustee shall pay over and deliver to the successor Trustee all moneys and other assets at the time held by it under this Indenture.

Section 6.13. Successor by Merger or Consolidation. Any corporation into which any Trustee under this Indenture may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which any Trustee under this Indenture shall be a party, or any company to which all or substantially all of the corporate trust business of the Trustee may be sold or transferred, shall be the successor Trustee under this Indenture, without the execution or filing of any paper or any further act on the part of the parties to this Indenture, anything in this Indenture to the contrary notwithstanding.

Section 6.14. Standard of Care; Action by Trustee. Notwithstanding any other provisions of this Indenture, the Trustee shall exercise such of the rights and powers vested in it by this Indenture and use the same degree of skill and care in its exercise as a prudent person would use and exercise under the circumstances in the conduct of his or her own affairs; provided that the Trustee shall be under no obligation to take any action in respect of the execution or enforcement of any of the trusts created by this Indenture, or to institute, appear in or defend any suit or other proceeding in connection with such execution or enforcement,

unless requested in writing so to do by Bondholders of at least a majority in aggregate principal amount of the 2014 Second Lien Bonds then Outstanding, and, if in its opinion such action may tend to involve it in expense or liability, unless furnished from time to time as often as it may require, with security and indemnity satisfactory to it; but the foregoing provision is intended only for the protection of the Trustee.

Except as otherwise provided in this Indenture, the Trustee need perform only those duties that are specifically set forth in this Indenture and no others. Nothing in this Section 6.14 shall permit the Trustee to delay the exercise of any mandatory power or direction under this Indenture.

Section 6.15. Duties of the Trustee. The Trustee covenants and agrees:

a) to keep such books and records as shall be consistent with prudent industry practice, and to make such books and records available for inspection by the City at all reasonable times; and

b) to provide such information and reports to the Authorized Officer as shall be reasonably requested by the Authorized Officer.

## ARTICLE VII AMENDMENTS TO

### THIS INDENTURE

Section 7.1. Limitations on Amendments to this Indenture. This Indenture shall not be modified or amended in any respect subsequent to the issuance of the 2014 Second Lien

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Bonds except as provided in and in accordance with and subject to the provisions of this Article VII.

#### Section 7.2. Amendments Without Bondholder Consent.

a) The City and the Trustee may, from time to time and at any time, without the consent of or notice to the Bondholders, amend this Indenture as follows:

i) to cure any formal defect, omission, inconsistency or ambiguity in this Indenture;

ii) to provide limitations and restrictions in addition to the limitations and restrictions contained in this Indenture on, the issuance of Second Lien Parity Bonds or other evidences of indebtedness;

iii) to grant to or confer or impose upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, authority, security, liabilities or duties which may lawfully be granted, conferred or imposed and which are not contrary to or inconsistent with this Indenture as to heretofore in effect, provided that no such additional liabilities or duties shall be imposed upon the Trustee without its consent;

iv) to add to the covenants and agreements of, and limitations and restrictions upon the City in this Indenture, other covenants, agreements, limitations and restrictions to be observed by the City which are not contrary to or inconsistent with this Indenture;

v) to confirm, as further assurance, any pledge under, and the subjection to any claim, lien or pledge created or to be created by, this Indenture, or of any moneys, securities or funds;

vi) to authorize a different denomination or denominations of the 2014 Second Lien Bonds and to make correlative amendments and modifications to this Indenture regarding exchangeability of 2014 Second Lien Bonds of different denominations and similar amendments and modifications of a technical nature;

vii) to comply with any applicable requirements of the Trust Indenture Act of 1939, as from time to time amended; or

viii) to modify, alter, amend or supplement this Indenture in any other respect which is not materially adverse to the Bondholders and which does not involve a change described in clause (i), (ii) or (iii) of Section 7.3(a) of this Indenture and which, in the judgment of the Trustee (which may rely upon an Opinion of Bond Counsel), is not to the material prejudice of the Trustee.

b) Before the City and the Trustee shall amend this Indenture pursuant to this Section 7.2, there shall have been delivered to the Trustee an Opinion of Bond Counsel stating that such amendment is authorized or permitted by this Indenture, complies with the terms of this Indenture, will, upon the adoption of this Indenture, be valid and binding upon the City in accordance with its terms and will not adversely affect the exclusion of interest on any 2014

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Second Lien Bonds from the gross income of the owners of 2014 Second Lien Bonds for federal income tax purposes under the Code, and the Trustee may rely conclusively upon such opinion as to such matters.

### **Section 7.3. Amendments with Bondholder Consent.**

a) Except for any amendment adopted pursuant to Section 7.2 of this Indenture, subject to the terms and provisions contained in this Section and not otherwise, the City and the Trustee may, from time to time, with the consent of Bondholders of more than 50 percent in aggregate principal amount of the 2014 Second Lien Bonds then Outstanding (excluding therefrom any 2014 Second Lien Bonds then owned by the City), enter into any Supplemental Indenture deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any of the terms or provisions contained in this Indenture; provided that, unless approved in writing by the Owners of all the 2014 Second Lien Bonds then Outstanding, nothing in this Indenture shall permit, or be construed as permitting: (i) a change in the times, amounts or currency of payment of the principal of or interest on any Outstanding 2014 Second Lien Bond, or a reduction in the principal amount of any Outstanding 2014 Second Lien Bond or the rate of interest on such 2014 Second Lien Bonds, or (ii) a preference or priority of any 2014 Second Lien Bond or 2014 Second Lien Bonds over any other 2014 Second Lien Bond or 2014 Second Lien Bonds, or (iii) a reduction in the aggregate principal amount of 2014 Second Lien Bonds, the consent of the Owners of which is required for any such amendment.

b) If at any time the City shall propose to enter into any Supplemental Indenture for any of the purposes of the Section, the Trustee shall cause Notice by Mail of the proposed Supplemental Indenture to be given to all Bondholders owning Outstanding 2014 Second Lien Bonds. Such notice shall briefly set forth the

nature of the proposed Supplemental Indenture and shall state that a copy of this Indenture is on file at the Principal Office of the Trustee for inspection by all Bondholders.

c) Within six months after the date of the first mailing of such notice, the City and the Trustee may enter into such Supplemental Indenture in substantially the form described in such notice, but only if there shall have first been delivered to the Trustee (i) the required consents, in writing, of the Bondholders, and (ii) an Opinion of Bond Counsel stating that such Supplemental Indenture is authorized or permitted by this Indenture, complies with the terms of this Indenture and, upon the execution and delivery of this Indenture, will be valid and binding upon the City in accordance with its terms and will not adversely affect the exclusion of interest on any 2014 Second Lien Bonds entitled to such exclusion from the gross income of the owners of the 2014 Second Lien Bonds for federal income tax purposes under the Code. The Trustee may rely conclusively upon such opinion as to such matters.

d) If Owners of not less than the percentage of 2014 Second Lien Bonds required by this Section shall have consented to and approved the execution and delivery of a Supplemental Indenture as provided in this Indenture, no Bondholder shall have any right to object to the execution and delivery of such Supplemental Indenture, or to object to any of the terms and provisions contained in such Supplemental Indenture or the operation of such Supplemental Indenture, or in any manner question the propriety of the execution and delivery of such Supplemental Indenture, or to enjoin or restrain the City or the Trustee from executing and

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delivering the same or from taking any action pursuant to the provisions of such Supplemental Indenture.

(e) The Trustee shall give notice of any proposed amendment or supplement entered into pursuant to this Section 7.3 at least 15 days in advance of the effectiveness of such amendment or supplement directly to any Rating Agency having a rating in effect with respect to the Series 2014 Second Lien Bonds at an address as shall be provided to the City for such notice.

Section 7.4. Effect of Supplemental Indenture. Upon the execution and delivery of any Supplemental Indenture pursuant to the provisions of this Indenture, this Indenture shall be and be deemed to be, modified and amended in accordance therewith, and the respective rights, duties and obligations under this Indenture of the City, the Trustee and all Bondholders owning 2014 Second Lien Bonds then Outstanding shall thereafter be determined, exercised and enforced under this Indenture subject in all respects to such modifications and amendments.

## ARTICLE VIII

### MISCELLANEOUS

#### Section 8.1. Defeasance.

a) If the City shall pay or cause to be paid to the Owners of all Outstanding 2014 Second Lien Bonds, the principal or and interest to become due on the 2014 Second Lien Bonds, at the times and in the manner stipulated in the 2014 Second Lien Bonds and in this Indenture, then the pledge of any moneys, securities, funds and property pledged by this Indenture and all other rights granted by this Indenture shall be discharged and satisfied. In such event, 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 the Trustee shall

pay over or deliver all moneys or securities held by it pursuant to this Indenture which are not required for the payment or redemption of 2014 Second Lien Bonds theretofore surrendered for such payment or redemption. If the City shall pay or cause to be paid, or there shall otherwise be paid, to the Owners of any Outstanding 2014 Second Lien Bonds the principal of, redemption premium, if any, and interest due or to become due on such 2014 Second Lien Bonds, at the times and in the manner stipulated in the 2014 Second Lien Bonds and in this Indenture, such 2014 Second Lien Bonds shall cease to be entitled to any benefit or security under this Indenture and all covenants, agreements and obligations of the City to the Owners of such 2014 Second Lien Bonds shall thereupon cease, terminate and become void and be discharged and satisfied.

b) Outstanding 2014 Second Lien Bonds shall, prior to the maturity or redemption date of such 2014 Second Lien Bonds, be deemed to have been paid as meant and with the effect expressed in paragraph (a) of this Section if: (i) in case any of said 2014 Second Lien Bonds are to be redeemed on any date prior to their maturity, the City shall have given to the Trustee or an escrow agent in form satisfactory to it irrevocable instructions to give as provided in Article III notice of redemption on said date of such notice, (ii) there shall have been deposited with or held by the Trustee or any escrow agent either moneys in an amount which shall be sufficient, or noncallable, nonprepayable Defeasance Obligations the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with or held by the Trustee or escrow agent at the same time, shall be sufficient to pay when due the principal

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of, redemption premium, if any, and interest due and to become due on said 2014 Second Lien Bonds on and prior to the maturity date or redemption date of such 2014 Second Lien Bonds, as the case may be, as certified by an independent certified public accountant acceptable to the Trustee, provided that such certification may be made by the Trustee, escrow agent or an investment banking firm in connection with a current refunding, and (iii) if any 2014 Second Lien Bonds do not mature and are not by their terms subject to redemption within the next succeeding 60 days, the City shall have given the Trustee or escrow agent in form satisfactory to it irrevocable instructions to provide Notice by Mail, as soon as practicable, to the Owners of such 2014 Second Lien Bonds that the deposit required by clause (ii) above has been made with the Trustee or escrow agent and that said 2014 Second Lien Bonds are deemed to have been paid in accordance with this Section and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal of, redemption premium, if any, and interest on said 2014 Second Lien Bonds. Neither Defeasance Obligations nor moneys deposited with the Trustee or escrow agent pursuant to this Section nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of, redemption premium, if any, and interest on said 2014 Second Lien Bonds, and such 2014 Second Lien Bonds not so defeased shall have no right to such moneys and Defeasance Obligations; but any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Trustee or escrow agent, if not then needed for such purpose, shall to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal of, redemption premium, if any, and interest to become due on said 2014 Second Lien Bonds on and prior to such redemption date or maturity date of such 2014 Second Lien Bonds, as the case may be, and interest earned from such reinvestments shall be paid over to the City free and clear of any trust, lien or pledge.

(c) Nothing in this Indenture shall prohibit any deposit of Defeasance Obligations, as provided in paragraph (b) above, from being subject to a subsequent sale of such Defeasance Obligations and reinvestment of all or a portion of the proceeds of that sale in Defeasance Obligations which, together with money to remain so held in trust with the Trustee or escrow agent, shall be sufficient to provide for the payment of the principal of and interest on any 2014 Second Lien Bonds deemed to have been paid as provided in paragraph (b) above.



Amounts held by the Trustee or escrow agent in excess of the amounts needed so to provide for the payment of such 2014 Second Lien Bonds may be subject to withdrawal by the City for deposit in the Sewer Revenue Fund.

Section 8.2. Parties in Interest. Except as otherwise specifically provided in this Indenture, nothing in this Indenture expressed or implied is intended or shall be construed to confer upon or to give or grant to any person, or entity other than the City, the Trustee, and the Bondholders any right, remedy or claim under or by reason of this Indenture, or as any covenant, condition or stipulation of this Indenture, and all covenants, stipulations, promises, and agreements in this Indenture contained by and on behalf of the City shall be for the sole and exclusive benefit of the City, the Trustee and the Bondholders.

Section 8.3. Severability. If any one or more of the provisions of this Indenture or of the 2014 Second Lien Bonds issued under this Indenture shall, for any reason be held to be illegal or invalid, such illegality or invalidity shall not affect any other provisions of this

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Indenture or such 2014 Second Lien Bonds, and this Indenture and such 2014 Second Lien Bonds shall be construed and enforced as if such illegal or invalid provision or provisions had not been contained in this Indenture or such 2014 Second Lien Bonds.

Section 8.4. No Personal Liability of Officials of City. No covenant or agreement contained in the 2014 Second Lien Bonds or in this Indenture shall be deemed to be the covenant or agreement of any official, officer, agent or employee of the City in his or her individual capacity, and neither the members of the City Council nor any official executing the 2014 Second Lien Bonds shall be liable personally on the 2014 Second Lien Bonds or this Indenture, or be subject to any personal liability or accountability by reason of the issuance of the 2014 Second Lien Bonds or the execution and delivery of the 2014 Second Lien Bonds or this Indenture.

Section 8.5. Counterparts. This Indenture may be executed in any number of counterparts, each of which, when so executed and delivered, shall be an original; but such counterparts shall together constitute but one and the same Indenture.

Section 8.6. Governing Law. The laws of the State shall govern the construction and enforcement of this Indenture and of all 2014 Second Lien Bonds issued under this Indenture.

Section 8.7. Notices. Except as otherwise provided in this Indenture, all notices, certificates, requests, requisitions or other communications by the City or the Trustee pursuant to this Indenture shall be in writing and shall be sufficiently given and shall be deemed given when sent by facsimile, followed by hard copy mailed by first class mail, postage prepaid, addressed as follows: if to the City, at the City Hall, Department of Finance, 121 North LaSalle Street, 7th Floor, Chicago, Illinois 60602, Attention: Chief Financial Officer; and if to the Trustee, at One West Monroe Street, Chicago, Illinois 60603, Attention: Corporate Trust Department. Any of the foregoing may, by notice given under this Indenture to each of the others, designate any further or different addresses to which subsequent notices, certificates, requests or other communications shall be sent under this Indenture, including without limitation, telephonic, facsimile or other similar forms of notice.

Section 8.8. Business Days.and Times. If the date for making any payment or the last date for performance of any act or the exercising of any right, as provided in this Indenture, shall not be a Business Day, such payment may be made or act performed or right exercised on the next succeeding Business Day, with

the same force and effect as if done on the nominal date provided in this Indenture, and no interest shall accrue for the period after such nominal date.

Section 8.9. Partial Validity. If any section, paragraph, clause or provision of this Indenture shall be held invalid, the invalidity of such section, paragraph, clause or provisions shall not affect any of the other provisions of this Indenture.

Section 8.10. Subject to Bond Ordinance. Each trust indenture for each series of the Outstanding Second Lien Bonds is subject to the bond ordinance authorizing such series. This Indenture is subject to the Series 2014 Bond Ordinance.

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In Witness Whereof, the City of Chicago has caused this Indenture to be executed by its Chief Financial Officer, attested by its City Clerk or its Deputy City Clerk and its corporate seal to be affixed to this Indenture; and the Trustee has caused this Indenture to be executed by one of its Authorized Officers, all as of the day and year first above written.

City of Chicago

Lois A. Scott Chief Financial  
Officer

[Seal]

Attest:

Susana A. Mendoza City Clerk

[Indenture]

Amalgamated Bank of Chicago,  
as Trustee

Title:

[Indenture]

## EXHIBIT A

### Form of 2014 Second Lien Bonds

A. Forms Generally. The 2014 Second Lien Bonds, the Certificate of Authentication and the Form of Assignment to be printed on each of the 2014 Second Lien Bonds shall be substantially in the forms set forth in this Exhibit A with such appropriate insertions, omissions, substitutions, series designations, and other variations as are permitted or required by this Indenture and may have such letters, numbers or other marks of identification (including identifying numbers and letters of the Committee on Uniform Securities Identification Procedures of the American Bankers Association) and such legends and endorsements (including any reproduction of an Opinion of Bond Counsel) thereon as may, consistently herewith, be established by the City or determined by the officers executing such 2014 Second Lien Bonds as evidenced by their execution of this Indenture.

The definitive 2014 Second Lien Bonds shall be printed, lithographed, typewritten or engraved, produced by any combination of these methods, or produced in any other similar manner, all as determined by the officers executing such 2014 Second Lien Bonds as evidenced by their execution of this Indenture, but any temporary 2014 Second Lien Bond may be typewritten or photocopied or otherwise reproduced.

B. Form of 2014 Second Lien Bonds. The Form of the 2014 Second Lien Bonds shall be substantially as follows:

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Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the issuer or its agent for registration of transfer, exchange, or payment, and any certificate issued is registered in the name of Cede & Co. or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co.

OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE, OR OTHER USE OF THIS CERTIFICATE FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER OF THIS CERTIFICATE, CEDE & CO., HAS AN INTEREST IN THIS CERTIFICATE.

Registered No. R-  
CUSIPNo. 167727  
Principal Amount

\$

**United States of America State of Illinois City of Chicago Second  
Lien Wastewater Transmission Revenue Bond,  
Series 2014**

**Maturity Date: January 1, 20 Interest Rate: %**  
Dated: September 23, 2014 Owner: Cede & Co.

The City of Chicago (the "City") by this bond acknowledges itself to owe and, for value received, by this bond promises to pay to the Owner (named above) or registered assigns (such Owner or assigns being referred to in this 2014 Second Lien Bond as the Bondholder), on the Maturity Date (identified above), upon the presentation and surrender of this bond as set forth below, the Principal Amount (stated above) and interest on said Principal Amount from and including the most recent Interest Payment Date (as described 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, at the interest rate specified above, computed on the basis of a 360-day year consisting of twelve 30-day months, payable on January 1 and July 1 of each year, commencing

January 1, 2015. The principal and redemption price of this bond is payable at the principal corporate trust office of Amalgamated Bank of Chicago, in the City of Chicago, Illinois, or its successors or assigns, as Trustee (the "Trustee"). The interest so payable on any Interest Payment Date will, subject to certain exceptions provided in the Indenture, be paid to the person in whose name this bond is registered at the close of business on the applicable Record Date (the December 15 preceding each January 1 and the June 15 preceding each July 1) preceding such Interest Payment Date. Interest on this bond is payable by the Trustee in the manner provided in the Indenture.

This bond is one of the duly authorized series of Second Lien Wastewater Transmission Revenue Bonds of the City of Chicago designated as the "Second Lien Wastewater

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Transmission Revenue Project Bonds, Series 2014" (the "2014 Second Lien Bonds"), issued under and pursuant to the City's powers as a home rule unit under Article VII of the Illinois Constitution of 1970, an ordinance duly adopted by the City Council of the City on April 30, 2014, and a Trust Indenture, dated as of September 1, 2014, from the City to the Trustee (the "Indenture"), for the purposes of (i) financing certain capital improvements to and extensions of the wastewater transmission system of the City (the "Sewer System") and (ii) paying the Costs of Issuance of the 2014 Second Lien Bonds.

Any term used but not defined in this 2014 Second Lien Bond shall be defined as provided in the Indenture.

The 2014 Second Lien Bonds are legal, valid and binding limited obligations of the City having a claim for payment of principal and interest solely from certain moneys and securities held by the Trustee under the provisions of the Indenture and, together with any other Second Lien Bonds Outstanding, from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts, and are valid claims of their owners only against the moneys and securities held by the Trustee with respect to the 2014 Second Lien Bonds and against Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts, all on an equal and ratable basis with any Second Lien Bonds which may be issued and Outstanding from time to time. The 2014 Second Lien Bonds and the interest on them do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City.

Bondholders must surrender 2014 Second Lien Bonds to the Trustee to collect principal. All payments of interest on the 2014 Second Lien Bonds shall be paid by the Trustee to Bondholders of record as shown on the registration books kept by the Trustee on the applicable Record Date. Such interest shall be paid on the Interest Payment Date or special interest payment date, as applicable, by clearinghouse funds check or draft mailed (or under certain circumstances, by wire transfer of immediately available funds made) on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or at such other address as has been furnished to the Trustee in writing by such person. Principal and interest will be paid in money of the United States that at the time of payment is legal tender for payment of public and private debts. If any payment on any 2014 Second Lien Bonds is due on a day other than a Business Day, it will be made on the next Business Day, and no interest will accrue as a result. Business Day means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

The 2014 Second Lien Bonds are issuable in fully registered form without coupons in Authorized Denominations. A Bondholder may transfer or exchange 2014 Second Lien Bonds in accordance with the Indenture. The Trustee may exchange 2014 Second Lien Bonds in accordance with the Indenture. The Trustee may require a Bondholder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The 2014 Second Lien Bonds may be exchanged for other 2014 Second Lien Bonds at the Principal Office of the Trustee upon the terms set forth in the Indenture.

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The registered Bondholder of this 2014 Second Lien Bond shall be treated as the owner of this 2014 Second Lien Bond for all purposes.

The 2014 Second Lien Bonds maturing on and after January 1, 2025 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2024, as a whole or in part and, if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date. The two term 2014 Second Lien Bonds maturing on January 1, 2039 and January 1, 2044, respectively, are subject to mandatory sinking fund redemption on January 1 of the years and in the amounts provided in the Indenture.

Under the Indenture, the Trustee is required to mail copies of notice of any redemption, containing the information specified in the Indenture, by first-class mail, postage prepaid, not more than 60 and not less than 30 days before the date fixed for redemption, to the owners of the 2014 Second Lien Bonds to be redeemed at their addresses as shown on the registration books of the City maintained by the Trustee. Failure to give notice of redemption by mail to any particular owner, or any defect in such notice, shall not affect the validity of any proceedings for the redemption of 2014 Second Lien Bonds for which such notice has been properly given.

If, on the date fixed for redemption, moneys for the redemption of all the 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds to be redeemed, together with interest to the redemption date, are held by the Trustee so as to be available on said date and if notice of redemption has been given as provided in the Indenture, then, from and after the date fixed for redemption, interest on the 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds to be redeemed so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the date fixed for redemption, such 2014 Second Lien Bonds or portions of 2014 Second Lien Bonds shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

If moneys for the payment of principal or interest remains unclaimed for two years, the Trustee will, upon the request of the City, pay such moneys to or for the account of the City. Thereafter, Bondholders entitled to such moneys must look only to the City and not to the Trustee for payment.

Subject to certain exceptions, the Indenture may be amended or supplemented, with the consent of the holders of more than 50 percent in aggregate principal amount of the 2014 Second Lien Bonds Outstanding. Without the consent of any Bondholder, the City and the Trustee may enter into amendments or supplements to the Indenture as provided in the Indenture to, among other purposes, cure any ambiguity, omission, formal defect or inconsistency, or to make any change that does not materially adversely affect the

rights of any Bondholder.

Provision for payment of all or any portion of the 2014 Second Lien Bonds may be made, and the Indenture may be discharged, prior to payment of the 2014 Second Lien Bonds in the manner provided in the Indenture.

A-4

Any registered owner of a 2014 Second Lien Bond may proceed by civil action to compel performance of all duties required by the Indenture. The Trustee may refuse to enforce the Indenture or the 2014 Second Lien Bonds unless it receives indemnity satisfactory to it.

An official, officer, agent or employee, as such, of the City shall not have any liability for any obligations of the City under the 2014 Second Lien Bonds or the Indenture or for any claim based on such obligations or their creation. Each Bondholder by accepting a 2014 Second Lien Bond waives and releases all such liability. The waiver and release are part of the consideration for the issue of the 2014 Second Lien Bonds.

This 2014 Second Lien Bond shall not be valid until the Trustee executes the certificate of authentication on this 2014 Second Lien Bond.

It is certified, recited and declared that all acts, conditions and things required by the Constitution and laws of the State to exist, to have happened and to have been performed, precedent to and in the execution and delivery of the Indenture and the issuance of this bond, do exist, have happened and have been performed in regular and due form and time as required by law.



A-5

In Witness Whereof, the City of Chicago has caused the seal of the City to be impressed or reproduced on this Bond and this Bond to be signed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk or the Deputy City Clerk.

City of Chicago

Rahm I. Emanuel Mayor

[Seal]

Attest:

Susana A. Mendoza City Clerk

Dated: September , 2014

A-6

**CERTIFICATE OF AUTHENTICATION**

This is to certify that this 2014 Second Lien Bond is one of the 2014 Second Lien Bonds described in the within-mentioned Indenture.

**Amalgamated Bank of Chicago,**  
as Trustee

By: \_\_\_\_\_ :  
Authorized Officer

Date:

A-7  
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:

UNIF GIFT MIN ACT-

TEN COM --TENANT

JT TEN

as tenants in common Custodian

as tenants by the entireties

as joint tenants with right of survivorship and not as tenants in Act common

(Cust) (Minor)

under Uniform Gifts to Minors

(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 Bond of the City

of Chicago and irrevocably constitutes and appoints

to transfer said 2014 Second Lien Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated:

Signature:

Signature Guaranteed:

Notice: The signature to this assignment must correspond with the name as it appears upon the face of this Bond in every particular, without alteration or enlargement or any change whatever.

CH2U506I6M.9

A-8

### EXHIBIT C PARITY BOND ISSUANCE TEST

[Evidence of Compliance is Attached]

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*He Bonds are offered when, as and if issued, and accepted by the Underwriters, subject to delivery of separate approving legal opinions by Schiff Hardin LLP, Chicago, Illinois, and Ilardwick. Law Firm, LLC, 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, Warren, MacKay & Serritella, P.C., Chicago, Illinois, and QuinMiro, Prieto, Wood. & Bayer, P.A., 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 upon for the Underwriters by Katten, Muchin Roseman LLP, Chicago, Illinois, Underwriters' Counsel. It is expected that, the Bonds will, be available for delivery through, the facilities of DTC on or about September 23, 2014.*

Mesirow Financial, Inc BNY Mellon Capital Markets, LLC Harvestons Securities, Inc. Piper Jaffray

Dated: September 17, 2014

BofA Merrill Lynch

Drexel Hamilton, LLC Loop Capital Markets Podesta & Co. The Williams Capital Group, L.P.

Ramirez & Co., Inc. Estrada Hinojosa & Company, Inc. The Northern Trust Company Stifel

**MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS  
AND CUSIP NUMBERS**

**\$292,405,000**

**Second Lien Wastewater Transmission Revenue Project Bonds,  
Series 2014**

**Maturity (January 1)**

2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2030	2031	2032	2033	2034									

**Principal Amount**

\$ 4,720,000	4,915,000	5,170,000	5,435,000	5,710,000	5,945,000	6,190,000	6,505,000	6,840,000	7,190,000	7,560,000			
7,945,000	8,355,000	8,780,000	9,230,000	9,705,000	10,205,000	10,725,000	11,275,000						

**Interest Rate**

3.00%
5.00
5.00
5.00
5.00
3.00
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**Price**

103.295% 109.818 1 12.878 115.011 115.969 104.720 116.598 115.900 116.167  
115.03 If 114.166f 113.308t 112.458-1-111.8681" 111.365+ 110.699t 110.284t 109.872t 109.544t

**Yield**

0.40%  
0.64  
0.99  
1.37  
1.81  
2.19  
2.49  
2.83  
2.99  
3.12  
3.22  
3.32  
3.42  
3.49  
3.55  
3.63  
3.68  
3.73  
3.77

**CUSIP**

167727UP9  
167727UQ7  
167727UR5  
167727US3  
167727UT1  
167727UU8  
167727UV6  
167727UW4  
167727UX2  
167727UY0  
167727UZ7  
167727VA1  
167727VB9  
167727VC7  
167727VD5  
167727VE3  
167727VF0  
167727VG8  
167727VH6

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 Bonds and neither the City nor the Underwriters make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions, including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Bonds.

t Priced to January 1, 2024 call date.

## **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**

Schiff Hardin LLP Chicago, Illinois

Hardwick Law Firm, LLC Chicago, Illinois

**FINANCIAL ADVISOR**

A.C. Advisory, Inc. Chicago, Illinois

This Official Statement is being used in connection with the sale of the Bonds and may not be reproduced or used, in whole or in part, for any other purpose. Certain information contained in this Official Statement has been obtained by the City from DTC and other sources that are deemed to be reliable. No representation or warranty is made, however, by the City or the Underwriters as to the accuracy or completeness of such information. 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. 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, sales representative 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 it describes and, if given or made, such other information or representation must not be relied upon as having been authorized by the City or the Underwriters. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of the Bonds.

Any statements made in this Official Statement, including the Appendices, involving matters of opinion, projection or estimate, 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 or projections 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 the underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or expected.

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 the Bonds in any jurisdiction in which it is unlawful to make such offer, solicitation or sale.

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

**CERTAIN PERSONS PARTICIPATING IN THIS OFFERING MAY ENGAGE IN TRANSACTIONS THAT MAINTAIN OR OTHERWISE AFFECT THE PRICE OF THE BONDS. SPECIFICALLY, IN CONNECTION WITH THE OFFERING, THE UNDERWRITERS MAY OVER-ALLOT, AND MAY BID FOR AND PURCHASE, THE BONDS IN THE OPEN MARKET. THE PRICES AND OTHER TERMS RESPECTING THE OFFERING AND SALE OF THE BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE BONDS ARE RELEASED FOR SALE, AND THE BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE BONDS INTO INVESTMENT ACCOUNTS.**

## OFFICIAL STATEMENT SUMMARY

*This Summary does not constitute a part of the Official Statement for the issuance and sale by the City of Chicago of its Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 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 Bonds	\$292,405,000 Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014. The Bonds will be dated the date of their delivery and mature in the principal amounts and on the dates as set forth on the inside cover of the Official Statement. See "THE BONDS."
Payment of Interest	The Bonds will bear interest from their dated date until paid, payable semiannually on each January 1 and July 1, commencing January 1, 2015. The Bonds will bear interest at the rates per year as set forth on the inside cover of the Official Statement. Interest on the Bonds is computed on the basis of a 360-day year consisting of twelve 30-day months. See "THE BONDS-General."
Redemption	<p>The Bonds maturing on and after January 1, 2025 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2024, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in denominations of \$5,000 or integral multiples thereof, at a price of par plus accrued interest to the redemption date. See "THE BONDS."</p> <p>The Bonds due January 1, 2039 are subject to mandatory redemption, in part, on January 1 in each of the years 2035 through 2038, and the Bonds due January 1, 2044 are subject to mandatory redemption, in part, on January 1 in each of the years 2040 through 2043. All such Bonds shall be redeemed from mandatory Sinking Fund Payments at a redemption price equal to the principal amount to be redeemed. See "THE BONDS."</p>
Ratings	The Bonds are rated "A3" (negative outlook) by Moody's, "AA-" (stable outlook) by S&P, "AA" (stable outlook) by Fitch Ratings, Inc., and "AA-" (stable outlook) by Kroll Bond Rating Agency, Inc. See "RATINGS."
Security for the Bonds	The Bonds, together with any other Second Lien Bonds, are limited obligations of the City payable solely from the Second Lien Bond Revenues derived by the City from its ownership and operation of the Sewer System. The Bonds are secured by and payable from certain moneys and securities held by the Trustee under the Indenture. The claim of the Bonds to Net Revenues Available for Bonds under the Indenture is junior and subordinate to the claim of the City's Senior Lien Bonds and any Senior Lien Parity Bonds. The Bonds are not secured by a lien on or security interest in the physical assets of the Sewer System. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness, and neither the full faith and credit nor 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 Bonds. See "SECURITY FOR THE BONDS - General" and "Flow of Funds." "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE" and APPENDIX C - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Source of Payment; Pledge of Second Lien Bond Revenues."
Rate Covenant	<p>The City covenants in the Series 2014 Bond Ordinance and the Indenture to establish, maintain and collect at all times fees, charges and rates for the services provided by the Sewer System sufficient (a) to pay the Operation and Maintenance Costs of the Sewer System and (b) to produce:</p> <ol style="list-style-type: none"><li>Net Revenues Available for Bonds in each Fiscal Year sufficient to pay 115 percent of debt service requirements on the Senior Lien Bonds outstanding for such Fiscal Year and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in the ordinances authorizing the issuance of Senior Bonds,</li><li>Second Lien Bond Revenues in each Fiscal Year sufficient to pay 100 percent of debt service requirements on the Second Lien Bonds outstanding for such Fiscal Year and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds,</li><li>amounts in each Fiscal Year sufficient to pay 115 percent of debt service requirements on the Subordinate Lien Obligations outstanding for such Fiscal Year and to establish and maintain the Subordinate Lien Obligations Account as may be</li></ol>

covenanted in the ordinances authorizing the issuance of Subordinate Lien Obligations, and

- (iv) amounts in each fiscal Year sufficient to pay 100 percent of debt service requirements on the Short Term Obligations (as defined in the Series 2014 Bond Ordinance) outstanding for such Fiscal Year and to establish and maintain the Short Term Obligations debt service account as may be covenanted in the contracts governing the issuance of Short Term Obligations.

See ■•SECURITY FOR THE BONDS - Second Lien Rate Covenant/ and APPENDIX C -"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Additional Second Lien Parity Bonds."

The City will conduct an annual review of sewer service 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 Sewer 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. See "FINANCIAL OPERATIONS - Annual Budget Review and Implementation of Annual Budget" and "SECURITY FOR THE BONDS - Second Lien Rate Covenant."

Limited Obligation

The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from the Trust Estate (as defined in the 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 Bonds. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. The Bonds are not secured by a lien on or security interest in the physical assets of the Wastewater Transmission System, including those financed with proceeds of the Bonds. See "SECURITY FOR THE BONDS" in the Official Statement.

Flow of Funds

The City maintains the Sewer Revenue Fund as a separate fund of the City and a trust fund to, among other things, carry out the provisions of the ordinances authorizing obligations payable from the revenues of the Sewer System. Gross Revenues of the Sewer System are credited as they are collected to the Sewer Revenue Fund, which is held by a depository bank which is currently not the depository for the City's General Fund. The Sewer Revenue Fund is used only as provided in the Series 2014 Bond Ordinance and in the ordinances authorizing obligations payable from the revenues of the Sewer System for (a) paying Operation and Maintenance Costs, (b) paying the principal of, redemption premium, if any, and interest on (or purchasing) Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations and Short Term Obligations and (c) establishing and maintaining (for the purposes specified in related ordinances) the Senior Lien Bonds Construction Accounts, the accounts in the Sewer Revenue Fund established in the Series 2014 Bond Ordinance (described in "SECURITY FOR THE BONDS - Flow of Funds") 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 and Short Term Obligations. 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 Sewer System. Funds in the Accounts in the Sewer Revenue Fund established in the Series 2014 Bond Ordinance must be invested in Permitted Investments. All amounts in the Bond Debt Service Reserve Account and each Senior Lien Rebate Account must be invested in Permitted Investments that are held separate and distinct from those of any other Funds or Account. Investments shall be scheduled to mature before needed for the respective purposes of each of such accounts. All investment earnings on any such Accounts so invested must be credited to the Sewer Revenue Fund and shall be considered Gross Revenues, except that earnings on the investment of amounts on deposit in the Senior Lien Rebate Accounts 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. See "SECURITY FOR THE BONDS - Flow of Funds," and "-Cash and Investments" in the Official Statement.

Authority for Issuance

The Bonds have been authorized and are being issued pursuant to the "home rule" powers of the City under the Illinois Constitution of 1970 and an ordinance adopted by the City Council of the City on April 30, 2014 and pursuant to a Trust Indenture dated as of September 1, 2014. See "INTRODUCTION" in the Official Statement.

Sewer System

The Sewer System consists of approximately 4.600 miles of sewers, ranging in size from six inches to over 21 feet in diameter, and one sewage lift station. The Sewer System provides sewage and drainage collection and conveyance for a service area of roughly 230 square miles inhabited by approximately 2.7 million people. The City's Department of Water Management does not operate any sewage treatment facilities. The Sewer System collects and transmits wastewater to the treatment facilities of an independent governmental body, the Metropolitan Water Reclamation District of Greater Chicago. See "THE WASTEWATER TRANSMISSION SYSTEM."

Sewer System Rates	<p>Sewer System rates are set by the City Council. No regulation by any administrative agency applies to the Sewer System rates. The Sewer System rates for metered accounts are a percentage of the Water System rates, which in turn 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. Because the Sewer System rates are calculated as a percentage of the Water System rates, Sewer System rates also increase when Water System rates increase. See "SECURITY 1 - OR THE BONDS - Sewer System Rates." Beginning January 1, 2012, the Water System rates set for that year represented a 25% increase over the rates for the previous year and Sewer System rates increased to 89% of 2012 Water System rates from 86% the previous year; Water System rates in 2013 represented a 15% increase over the previous year and Sewer System rates increased to 92% of 2013 Water System rates; and Water System rates in 2014 represented a 15% increase over the previous year and Sewer System rates increased to 96% of 2014 Water System rates. 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, and Sewer System rates are set to increase to 100% of Water System rates and are scheduled to remain at 100% of Water System rates. 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. Subject to applicable rate covenants, the City Council may take action at any time to alter the then-current schedule of water or sewer rates. See "FINANCIAL OPERATIONS" in the Official Statement.</p>
Use of Bond Proceeds	<p>Proceeds from the sale of the Bonds will be used to (i) pay costs of the Series 2014 Current Projects</p> <p>and (ii) pay Costs of Issuance of the Bonds. See "USE OF BOND PROCEEDS."</p>
Trustee	<p>Amalgamated Bank of Chicago, Chicago, Illinois, as trustee.</p>
Tax Matters	<p>Subject to compliance by the City with certain covenants, in the separate opinions of Co-Bond Counsel, under present law, interest on the Bonds is excludable from the gross income of their owners for federal income tax purposes, is not included as an item of tax preference in computing the federal alternative minimum tax on individuals and corporations, but will be taken into account</p> <p>in computing an adjustment used in determining the federal alternative minimum tax for certain corporations. Interest on the Bonds is not exempt from present Illinois income taxes. See "TAX MATTERS"</p>
Delivery and Clearance	<p>The Bonds are expected to be available for delivery through DTC on or about September 23, 2014.</p>
Legal Matters	<p>Certain legal matters will be passed upon for the parties to the financing as set forth on the cover page of the Official Statement.</p>
Retirement Funds	<p>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 Sewer Revenue Fund's share thereof) are 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 Sewer System operating revenues from scheduled sewer rate increases are expected to more than offset increases in retirement costs allocable to the Sewer Revenue Fund. See "FINANCIAL OPERATIONS - Historical and Projected Operations."</p> <p>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."</p>

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## OFFICIAL STATEMENT

### **\$292,405,000 CITY OF CHICAGO SECOND LIEN WASTEWATER TRANSMISSION REVENUE PROJECT BONDS, SERIES 2014**

## INTRODUCTION

This Official Statement, including the cover page, inside cover page, and the Appendices, sets forth certain information in connection with the sale of \$292,405,000 Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"), of the City of Chicago (the "City"), which are to be issued pursuant to the Series 2014 Bond Ordinance. All capitalized terms used in this Official Statement and not otherwise defined herein have the meanings provided in APPENDIX B - "GLOSSARY OF CERTAIN TERMS."

### **Purposes**



The proceeds from the sale of the Bonds will be used to (i) finance certain capital improvements to and extensions of the wastewater transmission system of the City (the "Sewer System") and (ii) pay Costs of Issuance of the Bonds. See "USE OF BOND PROCEEDS."

### **Authorization**

The Bonds are being issued pursuant to the constitutional home rule powers of the City. The Bonds were authorized under an ordinance adopted by the City Council on April 30, 2014 (the "Series 2014 Bond Ordinance"). The Bonds are being issued under a Trust Indenture, dated as of September 1, 2014 (the "Indenture"), from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee").

### **Security for the Bonds**

The Bonds are limited obligations of the City having a claim for payment of principal and interest solely from the Second Lien Bond Revenues derived by the City from its ownership and operation of the Sewer System, all on an equal and ratable basis with any other Second Lien Bonds. The Bonds are secured by and payable from certain moneys and securities held by the Trustee under the Indenture. The Bonds, together with any other Second Lien Bonds, are also secured by and payable from any amounts on deposit in the Second Lien Construction Accounts. The claim of the Bonds to the Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Senior Lien Bonds and any Senior Lien Parity Bonds. See "SECURITY FOR THE BONDS - General" and "- Flow of Funds," "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE" and APPENDIX C - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Source of Payment; Pledge of Second Lien Bond Revenues."

**The Bonds are not secured by a lien on or security interest in the physical assets of the Sewer System. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness, and neither the full**

**faith and credit nor 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 Bonds.**

### **Redemption**

The Bonds are subject to redemption prior to maturity as described under the caption "THE BONDS - Redemption."

### **Rate Covenant**

In the Series 2014 Bond Ordinance and the Indenture, the City covenanted, among other things, for the benefit of the Owners of the Bonds, to establish, maintain and collect at all times fees, charges and rates for the services provided by the Sewer System sufficient at all times to (a) pay Operation and Maintenance Costs and (b) produce:

- i) Net Revenues Available for Bonds sufficient to pay the principal of and interest on all Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues Available for Bonds must each Fiscal Year at least equal 115 percent of the sum required to pay promptly when due the debt service for the Fiscal Year on all Senior Lien Bonds then Outstanding,

- ii) Second Lien Bond Revenues sufficient to pay the principal of and interest on all Second Lien Bonds then Outstanding from time to time and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds,
- iii) amounts sufficient to pay the principal of and interest on all Subordinate Lien Obligations then Outstanding from time to time and to establish and maintain the Subordinate Lien Obligations Account for the Subordinate Lien Obligations as may be covenanted in the ordinances authorizing the issuance of Subordinate Lien Obligations, which amounts must each Fiscal Year at least equal 115 percent of the sum required to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and
- iv) amounts sufficient to pay the principal of and interest on all Short Term Obligations then Outstanding from time to time and to establish and maintain the debt service account for the Short Term Obligations as may be covenanted in the contracts governing the issuance of Short Term Obligations.

The Indenture provides that these fees, charges and rates may not be reduced while any 20i4 Second Lien Bonds are Outstanding below the level necessary to ensure compliance with the foregoing covenant. See "SECURITY FOR THE BONDS - Second Lien Rate Covenant," and APPENDIX C - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Additional Second Lien Parity Bonds." See "FINANCIAL OPERATIONS- Annual Budget Review and Implementation of Annual Budget" and "SECURITY FOR THE BONDS - Second Lien Rate Covenant." The City will conduct an annual review of the sewer service rates so that any necessary adjustments in such rates can be made to meet the revenue needs of the Sewer Revenue Fund,

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including an analysis of the projected Operation and Maintenance Costs as well as the level of Gross Revenues needed to comply with the foregoing rate covenant and other factors.

### **Sewer System Rates**

Provided that the Rate Covenant is satisfied, the City Council has authority to make other adjustments to sewer service rates. No regulation by any administrative agency applies to the Sewer System rates. The Sewer System rates for metered accounts are a percentage of the Water System rates, which in turn 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. Because the Sewer System rates are calculated as a percentage of the Water System rates, Sewer System rates also increase when Water System rates increase. See "SECURITY FOR THE BONDS -Sewer System Rates." Beginning January 1, 2012, the Water System rates set for that year represented a 25% increase over the rates for the previous year and Sewer System rates increased to 89% of 2012 Water System rates from 86% the previous year; Water System rates in 2013 represented a 15% increase over the previous year and Sewer System rates increased to 92% of 2013 Water System rates; and Water System rates in 2014 represented a 15% increase over the previous year and Sewer System rates increased to 96% of 2014 Water System rates. 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, and Sewer System rates are set to increase to 100% of Water System rates from 96% for the previous year and are scheduled to remain at 100% of Water System rates. 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 I. Any such annual increase, however, shall be capped at 105% of the previous year's rate. Subject to applicable rate covenants, the City Council may take action at any time to alter the then-current schedule of water or sewer rates. See "FINANCIAL OPERATIONS."

## **Sewer System**

The Sewer System consists of approximately 4,600 miles of sewers, ranging in size from six inches to over 21 feet in diameter, and one sewage lift station. The City's Department of Water Management (the "Department") does not operate any sewage treatment facilities. The Sewer System collects and transmits wastewater to the treatment facilities of an independent governmental body, the Metropolitan Water Reclamation District of Greater Chicago (the "Water Reclamation District"). See "THE WASTEWATER TRANSMISSION SYSTEM."

## **THE BONDS**

### **General**

The Bonds will be dated the date of their delivery and will bear interest from that date until paid, payable semiannually on each January 1 and July 1, commencing January 1, 2015. The Bonds will bear interest at the rates per year, and mature in the principal amounts on January 1 in each year, as set forth on the inside cover of this Official Statement. Interest on the Bonds is computed on the basis of a 360-day year consisting of twelve 30-day months. The Bonds will be issued in denominations of \$5,000 or integral multiples thereof. The Bonds are subject to redemption prior to maturity, as described below under the heading "-Redemption."

### **3**

Principal of and interest on the Bonds will be paid by the Trustee. If any payment on any Bonds is due on a day other than a Business Day, it will be made on the next Business Day, and no interest will accrue as a result.

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

### **Redemption**

**Optional Redemption.** The Bonds maturing on and after January 1, 2025 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2024, as a whole or in part, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

#### *Mandatory Sinking Fund Redemption.*

The Bonds maturing on January 1, 2039 (the "2039 Term Bonds") are subject to mandatory redemption, in part, from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>	
2035	\$11,855,000	
2036	12,465,000	
2037	13,100,000	
2038		13,775,000
		2039*

14,480,000

- Stated Maturity

The Bonds maturing on January 1, 2044 (the "2044 Term Bonds") are subject to mandatory redemption, in part, from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>	
2040	\$15,220,000	
2041	16,005,000	
2042	16,825,000	
2043		17,685,000
2044	18,595,000	2044*

- Stated Maturity

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If the City redeems Bonds of a maturity, identified above as subject to mandatory redemption, pursuant to optional redemption or purchases such Bonds and cancels the same, then an amount equal to the principal amount of the Bonds of such maturity so redeemed or purchased shall be deducted from the mandatory redemption requirements as provided for such Bonds of such maturity in such order as the Authorized Officer shall determine or, in the absence of such determination, shall be credited against the unsatisfied balance of the applicable Sinking Fund Payments in inverse order of their payment dates.

### General Redemption Procedures

Notice of redemption shall be given by the Trustee by mail, not fewer than 30 days nor more than 60 days prior to the date fixed for redemption, to the Owner of each Bond to be redeemed at the address shown on the registration books of the City kept by the Trustee. Each such redemption notice shall specify: (i) the Bonds to be redeemed by maturity and CUSIP number; (ii) the redemption date; (iii) the place where amounts due upon such redemption will be payable (which shall be the Principal Office of the Trustee); (iv) if fewer than all of the Bonds of any maturity are to be redeemed, the specific Bonds to be redeemed, identified by letters, numbers or other distinguishing marks, and the principal amounts of such Bonds to be redeemed; and (v) that from and after the redemption date, such Bonds shall cease to bear interest. Redemption notice provided in connection with optional redemption may state that the redemption is conditioned on there being on deposit in the Principal and Interest Account on the date fixed for redemption sufficient moneys to pay the redemption price of the Bonds to be redeemed. Such notice may set forth any additional information relating to such redemption as shall be deemed necessary or appropriate by the Trustee.

Failure to duly give notice of redemption by mail to any particular Bondholder, or any defect in such notice, shall not affect the validity of any proceedings for the redemption of Bonds for which such notice has been properly given.

Any Bonds, or portions of Bonds, which have been duly selected for redemption shall be deemed to be paid and shall cease to bear interest on the specified redemption date, if moneys sufficient to pay such Bonds are held by the Trustee for the benefit of the Bondholders.

### Selection of Bonds for Redemption

In the event of the redemption of fewer than all the 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

Bond of such maturity and interest rate 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, equals the principal amount of such Bonds to be redeemed. The Bonds to be redeemed shall be those which were assigned numbers so selected; provided that only so much of the principal amount of each 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 Bonds of a single maturity and interest rate, the particular 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 or its nominee is the registered owner of the Bonds, if fewer than all of the Bonds of any maturity and interest rate are called for redemption, the particular Bonds or portions of Bonds of such maturity and interest rate will

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be selected by lot by DTC in such manner as DTC may determine. See "THE BONDS - Book-Entry Only System."

### **Bond Registration and Transfers**

For a description of the procedure to transfer ownership of a Bond while in the book-entry only system, see "- Book-Entry Only System" below. Subject to the limitations described below, the Bonds are transferable upon surrender thereof at the Principal 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 authorized agent duly authorized in writing. Any Bond, upon surrender of such Bond at the Principal Office of the Trustee, may, at the option of the Bondholder, be exchanged for an equal aggregate principal amount of Bonds of any Authorized Denomination bearing interest at the same interest rate and maturity as the Bond being surrendered. The Trustee may charge a fee sufficient to cover any tax, fee or other governmental charge in connection with any exchange or transfer of any Bond.

### **Book-Entry Only System**

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

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Bonds. The Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for each maturity of the Bonds in the aggregate principal amount thereof set forth herein, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing

Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission (the "SEC"). More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com) <<http://www.dtcc.com>>.

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Purchases of the Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of the Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Trustee and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If fewer than all of the Bonds of a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and interest payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held

for the accounts of

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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, distributions, and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the City or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, certificates for the Bonds are required to be printed and delivered.

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

*Additional Information*

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

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

The City is entitled to treat Owners as absolute owners of the Bonds for the purpose of paying principal, interest and redemption price.

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

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

During any period in which the Bonds are not registered in the name of DTC or its nominee, the principal of all Bonds and the Redemption Price, if any, of all 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 Bonds. Interest on the Bonds payable on any Interest Payment Date shall be payable by check mailed by the Trustee to the registered owners of the Bonds at their addresses as shown on the registration books of the City maintained by the Trustee. The interest

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payable on the Bonds on each Interest Payment Date will be paid to the persons in whose names the 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 Bonds, all payments of interest on all 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 Bond shall be payable in clearinghouse funds upon surrender of such Bond at the Principal Office of the Trustee. The Bonds may be transferred or exchanged for the same total principal amount of Bonds of the same maturity of other 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 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 Bond during the 15 days next preceding an Interest Payment Date or, in the case of a proposed redemption of the Bonds, after the selection by the Trustee of such Bonds for redemption. In the event any Bond is mutilated, lost, stolen or destroyed, the City shall execute and the Trustee shall authenticate a new Bond upon satisfaction of the provisions of the Indenture.

### **USE OF BOND PROCEEDS**

#### **Series 2014 Current Projects**

The City plans to use the Bond proceeds to fund various programs and projects for the Sewer System (the "Series 2014 Current Projects"). Such programs and projects, and the amounts allocated to each, are estimates and are subject to change. See "THE WASTEWATER TRANSMISSION SYSTEM - Capital Improvement Program."

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

The proceeds from the sale of the Bonds will be used to (i) pay costs of the Series 2014 Current Projects and (ii) pay Costs of Issuance of the Bonds. The following table sets forth the estimated application of the proceeds of the Bonds:

<b>Sources of Funds</b>	
Principal Amount of Bonds	\$292,405,000
<u>Offering Premium</u>	<u>29,792,630</u>
Total Sources of Funds	\$322,197,630
 <b>Use of Funds</b>	
Project Costs	\$320,000,000
Costs of Issuance (including	
<u>Underwriters' discount)</u>	<u>2,197,630</u>
<u>Total Uses of Funds</u>	<u>\$322,197,630</u>

### **SECURITY FOR THE BONDS**

#### **General**

The Bonds are limited obligations of the City and do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provisions or limitations as to indebtedness, and

have no claim to be paid from taxes of the City. As described below, the Bonds, together with the Outstanding Second Lien Bonds, including any Second Lien Parity Bonds issued from time to time in the future, are secured by a pledge of Second Lien Bond Revenues that are derived from the Net Revenues Available for Bonds (as defined below) in the City's Sewer Revenue Fund, which claim is junior and subordinate to the claim of the Outstanding Senior Lien Bonds and any Senior Lien Parity Bonds. See "Flow of Funds - The Second Lien Bonds Account," below.



"Net Revenues Available for Bonds" means that portion of Net Revenues remaining in any period, minus any amounts deposited during that period in the Sewer Rate Stabilization Account as provided in the Series 2014 Bond Ordinance (other than amounts transferred to that Account from amounts received upon the issuance of any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account. "Net Revenues" means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs.

### **Pledge of Second Lien Bond Revenues**

The Bonds are payable on a parity basis as to Second Lien Bond Revenues with all other Outstanding Second Lien Bonds, including any Second Lien Parity Bonds issued from time to time in the future. Second Lien Bond Revenues consist of all Net Revenues Available for Bonds deposited into the Second Lien Bonds Account pursuant to the Series 2014 Bond Ordinance and the ordinances authorizing each prior series of Outstanding Second Lien Bonds and each series of Outstanding Second Lien Parity Bonds. On the Business Day immediately preceding each January 1 and July 1, the Authorized Officer is required to transfer to the Trustee for deposit into the Second Lien Bonds Account the amounts required by the Indenture and any ordinance authorizing the issuance of Second Lien Bonds. Pursuant to the Indenture, such Second Lien Bond Revenues are pledged to the payment of the principal of and interest on the Bonds and all other Outstanding Second Lien Bonds, without priority or distinction of one series of Second Lien Bonds over any other series of Second Lien Bonds. See "Flow of Funds - The Second Lien Bonds Account," below.

### **Pledge of Amounts in Second Lien Construction Accounts**

The Bonds, together with any other Outstanding Second Lien Bonds, are also secured by and payable from any amounts on deposit in the Second Lien Construction Accounts.

### **Flow of Funds**

The City maintains the Sewer Revenue Fund as a separate fund of the City to, among other things, carry out the provisions of the ordinances authorizing the Senior Lien Bonds, the Second Lien Bonds and any Subordinate Lien Obligations. All Gross Revenues of the Sewer System are credited as they are collected to the Sewer Revenue Fund, which is held by a depository bank which is currently not the depository for the City's General Fund. Amounts in the Sewer Revenue Fund, after paying Operation and Maintenance Costs, are required to be deposited in the following accounts in the following order of priority:

1. The Bond Principal and Interest Account is used to pay principal of, redemption premium, if any, and interest on the Outstanding Senior Lien Bonds and amounts owed on Interest Rate Hedge Agreements for 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 shall be deposited into this Account.

2. The Bond Debt Service Reserve Account is used to pay principal of, redemption premium, if any, and interest on the Outstanding Senior Lien Bonds as the same become due at any time when there are insufficient funds available for such purpose in the Bond Principal and Interest Account (after any available amounts in the Sewer Rate Stabilization Account have first been applied to that purpose, excluding amounts in excess of the Bond Debt Service

Reserve Requirement for Outstanding Senior Lien Bonds), except to the extent required to be credited to the Senior Lien Rebate Accounts. The Bond Debt Service Reserve Requirement for Outstanding Senior Lien Bonds is currently met by one municipal bond debt service reserve fund policy, as shown in the table below. The City is required to deposit funds from the Sewer Revenue Fund into the Bond Debt Service Reserve Account to repay any draws made under that policy.

3. The Senior Lien Rebate Accounts are used to make required rebates of arbitrage to the United States with respect to any Senior Lien Bonds.

4. The Second Lien Bonds Account is used to pay the principal of and interest on the Bonds and any other Outstanding Second Lien Bonds. The City also is required to make deposits in the Second Lien Bonds Account to meet other payment obligations under the Indenture and any ordinance or indenture authorizing Outstanding Second Lien Bonds. The City will make debt service and other deposits as required by the Indenture and by any ordinance or indenture authorizing Outstanding Second Lien Bonds. Moneys deposited in the Second Lien Bonds Account shall be transferred by the Authorized Officer on the date so deposited to the Trustee and the trustee or paying agent for each series of Second Lien Bonds in order to satisfy the debt service and other payment obligations, including with respect to Interest Rate Hedge Agreements, under the Indenture and any ordinance or indenture authorizing such Outstanding Second Lien Bonds. Moneys on deposit in the Second Lien Bonds Account shall be applied without priority as to any particular series of Outstanding Second Lien Bonds.

The City has established Debt Service Reserve Accounts for certain series of Outstanding Second Lien Bonds. Each Debt Service Reserve Account secures only the Series of Outstanding Second Lien Bonds for which it was established. The Debt Service Reserve Requirement for those Series of Outstanding Second Lien Bonds is currently met by three separate municipal bond debt service reserve fund policies and by a cash deposit, as shown in the table below.

5. The Subordinate Lien Obligations Account is used to make debt service payments and other required deposits with respect to any outstanding Subordinate Lien Obligations. The City is obligated to make required debt service and other deposits in the Subordinate Lien Obligations Account on the Business Day immediately preceding each January 1 and July 1. Moneys on deposit in the Subordinate Lien Obligations Account shall be applied without priority to any subaccounts established in the Subordinate Lien Obligations Account, as directed by a certificate of the Authorized Officer.

6. The Sewer Rate Stabilization Account is used at the City's discretion, in any year, to pay any expenses of or obligations of the Sewer System, including, without limitation, Operation and Maintenance Costs, deposits in the Bond Principal and Interest Account, deposits in the Bond 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

Bond Principal and Interest Account and the Bond 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 Bond Principal and Interest Account, the Bond Debt Service Reserve Account or the Second Lien Bonds Account), the costs of any Interest Rate Hedge Agreements or other similar arrangement or any costs of repairs, replacements, renewals, improvements, equipment or extensions to the Sewer System. The Sewer Rate Stabilization Account must be used to make all required deposits to the Bond Principal and Interest Account and the Bond 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 Bond Principal and Interest Account, the Bond Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account or the Subordinate Lien Obligations Account may be transferred to the Sewer Rate Stabilization Account at any time upon the direction of the Authorized Officer. For more information concerning the Sewer Rate Stabilization

Account, see "FINANCIAL OPERATIONS- Historical and Projected Operations."

The following chart demonstrates the flow of funds from the Sewer Revenue Fund pursuant to the Indenture as described above.

Trustee  
Held Accounts

The City maintains the Sewer Revenue Fund as a separate fund of the City and a trust fund to, among other things, carry out the provisions of the ordinances authorizing obligations payable from the revenues of the Sewer System. Gross Revenues of the Sewer System are credited as they are collected to the Sewer Revenue Fund. The Sewer Revenue Fund is used only as provided in the Series 2014 Bond Ordinance and in the ordinances authorizing obligations payable from the revenues of the Sewer System for (a) paying Operation and Maintenance Costs, (b) paying the principal of, redemption premium, if any, and interest on (or purchasing) Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations and Short Term Obligations and (c) establishing and maintaining (for the purposes specified in related ordinances) the Senior Lien Bonds Construction Accounts, the accounts in the Sewer Revenue Fund established in the Series 2014 Bond Ordinance and all other reserve funds or

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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 and Short Term Obligations. 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 Sewer System. Funds in the Accounts in the Sewer Revenue Fund established in the Series 2014 Bond Ordinance must be invested in Permitted Investments. All amounts in the Bond Debt Service Reserve Account and each Senior Lien Rebate Account must be invested in Permitted Investments that are held separate and distinct from those of any other Funds or Account. Investments shall be scheduled to mature before needed for the respective purposes of each of such accounts. All investment earnings on any such Accounts so invested must be credited to the Sewer Revenue Fund and shall be considered Gross Revenues, except that earnings on the investment of amounts on deposit in the Senior Lien Rebate Accounts 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.

Debt Service Reserves' <sup>1)</sup><<sup>2)</sup> Senior Lien  
Bonds

<u>Series</u>	<u>Debt Service Reserve Provider</u>	<u>Amount</u>
1998A	National Public Finance Guarantee <sup>0]</sup>	\$6,180,894

## Second Lien Bonds

<u>Series</u>	<u>Debt Service Reserve Provider</u>	<u>Amount</u>
2001	National Public Finance Guarantee\$ 6,872,706	
2004B	National Public Finance Guarantee <sup>(3)</sup>	6,192,500
2006	National Public Finance Guarantee <sup>(4)</sup>	11,761,418
2008A	Cash	11,715,475
2008C	No Debt Service Reserve Account	
2010	No Debt Service Reserve Account	
2012	No Debt Service Reserve Account	
2014	No Debt Service Reserve Account	

<sup>(1)</sup> Debt service reserves are available only for the respective series of bonds for which they were established. No debt service reserve will be established or available for the Bonds.

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

<sup>(3)</sup> Formerly known as MBIA.

<sup>(4)</sup> Formerly known as FGIC.

### Payment of Debt Service on the Bonds.

The Indenture establishes the 2014 Second Lien Bonds Revenue Fund to be held and administered by the Trustee. Under the Indenture, the Authorized Officer is required on the Business Day preceding each January 1 and July 1 to transfer to the Trustee for deposit in the 2014 Second Lien Bonds Revenue Fund the amounts required to be deposited in such account from amounts on deposit in the Second Lien Bonds Account. The Indenture establishes a Principal and Interest Account within the 2014 Second Lien Bonds Revenue Fund. Moneys on deposit in the Principal and Interest Account will be held by the Trustee for the sole and exclusive benefit of the Bonds and used for the purpose of paying the principal of and interest on such Bonds as it becomes due.

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### Second Lien Rate Covenant

In the Series 2014 Bond Ordinance and the Indenture, the City covenanted for the benefit of the Owners of the Bonds, to establish, maintain and collect at all times fees, charges and rates for the services provided by the Sewer System sufficient at all times to (a) pay Operation and Maintenance Costs and (b) produce (i) Net Revenues Available for Bonds sufficient to pay the principal of and interest on all Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues Available for Bonds must each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due the debt service for the Fiscal Year on all Senior Lien Bonds then Outstanding, (ii) Second Lien Bond Revenues sufficient to pay the principal of and interest on all Second Lien Bonds then Outstanding from time to time and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds, (iii) amounts sufficient to pay the principal of and interest on all Subordinate Lien Obligations then Outstanding from time to time and to establish and maintain the Subordinate Lien Obligations Account for the Subordinate Lien Obligations as may be covenanted in the ordinances authorizing the issuance of Subordinate Lien Obligations, which amounts must each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and (iv) amounts sufficient to pay the principal of and interest on all Short Term Obligations then Outstanding from time to time and to establish and maintain the debt service account for the Short Term Obligations as may be covenanted in the contracts governing the issuance of Short Term Obligations. The

Indenture provides that these fees, charges and rates may not be reduced while any 2014 Second Lien Bonds are Outstanding below the level necessary to ensure compliance with the foregoing covenant.

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 will prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant and the Director of the Office of Budget and Management of the City (the "Budget Director") and the Authorized Officer shall recommend appropriate action to the City Council to comply with this rate covenant, which may include rate increases or expenditure reductions.

### **Additional Second Lien Parity Bonds**

Additional Second Lien Parity Bonds may be issued, as provided in the Indenture, for any lawful purpose of the Sewer System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds or Subordinate Lien Obligations, in each case upon compliance with certain conditions set forth in the Indenture. See APPENDIX C- "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE -Additional Second Lien Parity Bonds."

### **Additional Information**

For an additional description of the requirements that must be satisfied for the City to issue Second Lien Parity Bonds and other terms of the Indenture, see APPENDIX C - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

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### **Deficiencies and Excesses**

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

### **Cash and Investments**

Any cash or investments in the Bond Debt Service Reserve Account and Senior Lien Rebate Account shall be held pursuant to depository agreements in separate bank accounts and in separately identifiable investments as described below under the heading "- Investment of Funds." The remainder of all amounts in the Sewer Revenue Fund, including amounts for payment of debt service on the Bonds and any Senior Lien Parity Bonds and Second Lien Parity Bonds prior to their deposit in the Bond Principal and Interest Account or the Second Lien Bonds Account, is deposited in bank accounts and invested on a pooled basis with a variety of other funds of the City, including the General Fund. The City has maintained these pooled accounts so as to meet obligations of the Sewer Revenue Fund in a timely fashion. Notwithstanding the foregoing, such cash, cash equivalents or investments may only be expended for lawful purposes of the Sewer System.

The investment of City funds is governed by the City's Municipal Code, which provides that neither the City Comptroller nor the City Treasurer has the authority, without City Council approval, to ". . . (i) invest in arrangements whose returns are linked to or derived from the performance of some underlying asset such as bonds, currencies or commodities or (ii) borrow against or otherwise obligate City investments for the purpose of investment." See APPENDIX A - "CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, STATISTICAL DATA, AND INDEPENDENT AUDITORS' REPORT - Notes (1) and (2)." In the Series 2014 Bond Ordinance, the City Council granted such approval in connection with the plan of financing for the Bonds. In accordance with the requirements of the Public Funds Investment Act adopted by the State, the City Council has adopted a Statement of Investment Policy and Guidelines for the purpose of establishing written cash management and investment guidelines to be followed by the Office of the City Treasurer in the investment of City funds in accordance with the Municipal Code.

### Investment of Funds

Funds in the accounts described above under the heading "Flow of Funds" and in the accounts established under the Indenture are required to be invested in Permitted Investments upon the direction of the Authorized Officer. Investments must be scheduled to mature before needed for the respective purposes of each of such accounts. All Investment Earnings on any such accounts so invested are

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credited to the Sewer Revenue Fund and are considered Gross Revenues; provided, however, 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 will be retained in the respective Senior Lien Rebate Accounts, except to the extent no longer required for rebate purposes.

### 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 the issuance of the Bonds, the outstanding indebtedness of the Sewer System consists of \$35,168,423 aggregate principal amount of Senior Lien Bonds, \$1,541,690,000 aggregate principal amount of Second Lien Bonds and a certain amount of Subordinate Lien Obligations as described below.

The City has entered into loan agreements with the Illinois Environmental Protection Agency (the "IEPA") as shown in the following table, to fund Sewer System projects; each loan constitutes a Subordinate Lien Obligation. Subordinate Lien Obligations, including the IEPA loans, have a claim to payments from amounts in the Sewer Revenue Fund that is subordinate to the claim of the Bonds.

#### IEPA Sewer Fund Loans Outstanding'<sup>1</sup>

		<u>Amount of Loan Outstanding</u>		
<u>Rate (%)</u>	<u>(Dollars in Thousands)</u>	<u>Loan</u>	<u>Final Maturity Date</u>	<u>Interest</u>
1	August 28,2027	2.50		\$ 1.172

2	June 21,2031	0.00 13,388
3	December 30,2032	1.25 17,812
4	<u>March 20,2033</u>	<u>1.25 17.564</u>

Total Outstanding Principal Balance<sup>12)</sup> \$49,936

1) Outstanding principal amounts as of December 31, 2013.

2) This total does not include a pending fifth IEPA loan in the maximum amount of \$15,000,000 with an interest rate of 2.295% and an estimated maturity date of 2034, which the City expects to close prior to December 31, 2014. Until disbursement of the loan is finalized, the exact amount of the loan, the debt service schedule, and the maturity date are not set.

The Series 2012 Bond Ordinance authorized the issuance from time to time of Sewer System Commercial Paper Notes and Sewer System Line of Credit Notes for the purposes of financing or refinancing capital improvements to the Sewer System or providing funds to meet the cash flow needs of the Sewer System, among others. The maximum aggregate principal amount of all Sewer System Commercial Paper Notes and Sewer System Line of Credit Notes outstanding at any one time may not exceed \$150,000,000, without further authorization from the City Council. The claim of any Sewer System Commercial Paper Notes or Sewer System Line of Credit Notes for payment from moneys in the Sewer Revenue Fund is subordinate to the claim of the Bonds. The City currently has no program in place for the issuance of Sewer System Commercial Paper Notes or Sewer System Line of Credit Notes pursuant to this authorization.

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### Direct Purchase

On December 14, 2011, the City restructured its outstanding \$332,230,000 Second Lien Wastewater Transmission Variable Rate Revenue Refunding Bonds, Series 2008C (the "Series 2008C Bonds"), which were divided into three sub-series and sold to three different direct purchasers. As restructured, the Series 2008C Bonds have the following terms:

#### Series 2008C Bond Terms

Subseries	Aggregate Principal Amount Outstanding	Mandatory Tender Date	Bond Maturity Date	Interest Mode	Index Interest Rate	Direct Purchaser	Rating Threshc
							FitchMooS&P
2008C-1	\$116,115,000	12/01/14	1/1/2039	Index Rate	A percentage based on the LIBOR Index	PNC Bank, National Association	BBBaa2BBB
2008C-2	\$116,115,000	12/01/14	1/1/2039	Index Rate	A percentage based on the LIBOR Index	U.S. Bank National Association	BBBaa2BBB
2008C-3	\$100,000,000	12/01/14	1/1/2039	Index Rate	A percentage based on the LIBOR Index	Wells Fargo Bank. National Association	BBBaa2BBB

(1) An underlying rating for the related debt below what is shown in the chart in the "Ratings Threshold" column would constitute an event of default under the agreements with the related banks

Each subseries will mature on January 1, 2039 and is subject to optional and mandatory redemption, as well as mandatory tender for purchase on December 1, 2014. The City is currently in discussions with the purchasers and expects to extend the mandatory tender date of the Series 2008C Bonds prior to December 1, 2014.

### Swaps

The City entered into the interest rate swaps set forth in the following table as a means of limiting, reducing or

^ " A counterparty may terminate its related interest rate swap if the City rating for its indebtedness secured by Net Revenues Available for Bonds falls below the rating listed in the column "City ATI: Level" by Moody's or Standard and Poor's



## OUTSTANDING ANNUAL DEBT SERVICE

The debt service of the Senior Lien Bonds as of August 1, 2014 (prior to the issuance of the Bonds), and for the Second Lien Bonds after issuance of the Bonds, is as shown below:

Fiscal Year

Ended December 31

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039  
2040 2041 2042 2043 2044 Total<sup>11</sup>

Outstanding Second Lien Bonds<sup>11)(12)</sup>

Outstanding Senior Lien Bonds

\$ 10,525,000 13,655,000 13,720,000 13,670,000 13,695,000 595,000 24,680,000 24,680,000 24,680,000

98,973,083 98,949,133 98,978,818 99,024,395 99,060,046 88,962,242 85,873,042 85,855,885 85,958,649 85,971,164  
99,173,642 75,008,344 75,027,811 75,019,593 84,522,508 84,415,971 84,083,625 83,958,109 83,465,789 83,121,809 82,589,172  
81,957,753 72,390,376 71,780,936 59,728,716 46,885,893 17,108,750 17,092,500

\$139,900,000 \$2,204,937.754

Principal

\$ 4,720,000 4,915,000 5,170,000 5,435,000 5,710,000 5,945,000 6,190,000 6,505,000 6,840,000 7,190,000 7,560,000 7,945,000 8,355,000  
8,780,000 9,230,000 9,705,000 10,205,000 10,725,000 11,275,000 11,855,000 12,465,000 13,100,000 13,775,000 14,480,000 15,220,000  
16,005,000 16,825,000 17,685,000 18,595,000 \$292,405,000

2014 Bonds

Interest

11,125,367 14,336,150 14,142,475 13,890,350 13,625,225 13,346,600 13,114,675 12,870,750 12,553,375 12,219,750 11,869,000 11,500,250  
11,112,625 10,705,125 10,276,750 9,826,500 9,353,125 8,855,375 8,332,125 7,782,125 7,203,875 6,595,875 5,956,750 5,284,875 4,578,500  
3,836,000 3,055,375 2,234,625 1,371,875 464,875

Total

\$ 11,125,367 19,056,150 19,057,475 19,060,350 19,060,225 19,056,600 19,059,675 19,060,750 19,058,375 19,059,750 19,059,000 19,060,250  
19,057,625 19,060,125 19,056,750 19,056,500 19,058,125 19,060,375 19,057,125 19,057,125 19,058,875 19,060,875 19,056,750 19,059,875  
19,058,500 19,056,000 19,060,375 19,059,625 19,056,875 19,059,875

Total Second Lien Debt Service

\$ 110,098,450 118,005,283 118,036,293 118,084,745 118,120,271 108,018,842 104,932,717 104,916,635 105,017,024 105,030,914 118,232,642  
94,068,594 94,085,436 94,079,718 103,579,258 103,472,471 103,141,750 103,018,484 102,522,914 102,178,934 101,648,047 101,018,628  
91,447,126 90,840,811 78,787,216 65,941,893 36,169,125 36,152,125 19,056,875 19,059,875

Total Debt Service Requirements<sup>1)(1)</sup>

\$ 110,098,450 118,005,283 118,036,293 118,084,745 118,120,271 118,543,842 118,587,717 118,636,635 118,687,024 118,725,914 118,827,642  
118,748,594 118,765,436 118,759,718 103,579,258 103,472,471 103,141,750 103,018,484 102,522,914 102,178,934 101,648,047 101,018,628  
91,447,126 90,840,811 78,787,216 65,941,893 36,169,125 36,152,125 19,056,875 19,059,875

- (1) Debt service on the Series 2008C Bonds is calculated based on the swap rate of 3.886%  
(2) Interest for each year includes the full amount of interest payable on the City's Series 2010B Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U.S. Treasury (3) Subordinate Lien  
Obligations are not included in this outstanding debt service table Totals may not add due to rounding

## THE WASTEWATER TRANSMISSION SYSTEM

### General

The Sewer System provides sewage and drainage collection and conveyance for a service area of roughly 230 square miles inhabited by approximately 2.7 million people.

The Sewer System was designed and constructed as a combined system to provide for collection and conveyance of both sanitary sewage and storm water run-off in common sewer conduits. The Sewer System is not responsible for, and does not include any facilities for, the treatment or disposal of sewage. It is limited to collecting and conveying wastewater to the interceptor sewers of the Water Reclamation District, an independent government entity with exclusive responsibility for sewage treatment, sewage disposal and flood control in the City and neighboring suburbs. The Water Reclamation District is charged with providing and managing the facilities for the collection (through a network of approximately 536 miles of intercepting sewers and force mains), treatment and subsequent disposal of sewage from the City and surrounding areas. The Water Reclamation District finances its operations primarily through the imposition of an ad valorem tax in the area that it serves.

The City is solely responsible for the Sewer System except with respect to direct connections to rivers and waterways, in which case approval must be obtained from the Water Reclamation District or the U.S. Army Corps of Engineers, and direct connections to the Water Reclamation District, in which case approval must be obtained from the Water Reclamation District.

There are no significant areas of the City without sewer service and, except for a very limited number of industrial users who have direct connections to the Water Reclamation District's interceptors, connection to the Sewer System is the only feasible means of wastewater disposal for nearly all City users. By regulation of the Department, all sewer work performed within the City or connecting to the Sewer System or to the City's waterways, whether on public or private property, is subject to approval by the Department.

The following table shows the population of the City for the past five decades:

<u>Year</u>	<u>Sewer System Service Area Population</u>
1970	3,369,357
1980	3,005,072
1990	2,783,726
2000	2,896,016
2010	2,695,598

Source: U.S. Census Bureau.

## **Organization and Staffing**

The Department is an executive department of the City with responsibility for the operation, maintenance, repair, improvement and extension of the City's Water and Sewer Systems. Separate funds are maintained for the water and sewer payments made to the Department.

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The chief administrator of the Department is the Commissioner, who is appointed by the Mayor with the approval of the City Council. Under the direction of the Commissioner, the Department is organized into five bureaus and the Commissioner's office as follows:

**Commissioner's Office:** The office is responsible for the oversight and management of general and project-specific initiatives for the other bureaus. This bureau also includes security and safety.

**Administrative Support:** This bureau is responsible for the collection and dissemination of all financial information, procurement and contract administration, personnel, labor relations, information technology and payroll.

**Operations and Distribution:** This bureau is responsible for the maintenance, repair and installation of water and sewer mains and appurtenances, including valves, fire hydrants, manholes, catch basins and valve basins.

**Water Supply:** This bureau is responsible for the treatment, purification, pumping and monitoring the quality and purity of the water supply.

**Engineering Services:** This bureau is responsible for providing engineering and inspection support for the planning, design, expansion, rehabilitation, operating, monitoring and inspection of the Water and Sewer Systems.

**Meter Service:** This bureau is responsible for water meter installation, reading and repair.

The employment level of the Department as of December 31, 2013 consisted of 1,511 Water Fund employees and 593 Sewer Fund employees. This represents the total number of employees on the Department's payroll and excludes leaves of absences and duty disability. The Department includes employees with professional qualifications in the fields of engineering, law, science, construction management, public sector management and financial management, as well as skilled technical personnel. Most of the Department's employees are covered by collective bargaining agreements that expire on June 30, 2017.

The City maintains a self-insurance program, including casualty coverage, general liability coverage and workers' compensation for the Department. The City also maintains replacement-cost property insurance that covers the Sewer Revenue Fund's major facilities.

## **Description of Physical Facilities**

The Sewer System consists of approximately 4,600 miles of sewers, ranging in size from six inches to over 21 feet in diameter, and one sewage lift station. The tables below provide a profile of the transmission facilities of the Sewer System by size, age and length:

### **Wastewater Transmission and Collection Facilities**

#### **Percent of System**

6-36.. 36-84  
 84 and larger  
 Total  
3,732 527 279  
 M3J  
 82.2% 11.6 6.2 100.0%

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Years Placed in Service	Length (in miles)	Percent of System
2010-2013	48 1.1%	
2000-2010	88 2.0	
1990-2000	181 4.0	
1980-1990	106 2.4	
1960-1980	64114.3	
1940-1960	337 7.5	
1920-1940	91920.6	
1900-1920	1,12324.3	
<u>Prior to 1900</u>	<u>1,14323.8</u>	
Total	4.586	100.0%

These wastewater collection and transmission facilities primarily operate as a gravity system. However, one lift station serving lower elevations in the Hegewisch service area is incorporated in the Sewer System because gravity flow is not feasible in that service area. The lift station was completed in 1982 and is fully automated. The lift station is in excellent condition and is designed to handle the combined run-off for the existing drainage area.

### Capital Improvement Program

The City, through the Department, continually improves and rehabilitates the Sewer System. To provide for future additions to the Sewer System, replacement of facilities and rehabilitation of existing facilities, the Department has prepared a projected capital improvement program covering a ten-year period from 2012 to 2021 (the "Capital Improvement Program"). The Capital Improvement Program is currently on schedule and within budget. Over its ten-year period, the Capital Improvement Program is projected to replace 250 miles of sewer mains, line 490 miles of sewer main, line 140,000 sewer structures, and create 9,000 jobs. These figures, which are approximate and subject to change, reflect the Department's proposed expenditures for capital improvements over the course of the Capital Improvement Program. Actual expenditures are subject to annual approval of the City of Chicago Office of Budget and Management.

The City replaced 17 miles of sewer main in 2012, an additional 17 miles of sewer main in 2013, and expects to replace an additional 21 miles of sewer main in 2014, an additional 22 miles in 2015, and an additional 22 miles in 2016. The ongoing projects of the Department will insure continued economic and reliable delivery of sewer services. The Department may revise the list of specific improvements and revise cost allocations among improvements, as well as make substitutions to meet current needs and to provide for the efficient operation of the Sewer System. Under the Capital Improvement Program, it is expected that approximately 25 percent of the 2015 and 2016 projects will be funded from net revenues of the Sewer System with the remainder funded from the sale of indebtedness of the Sewer System.

The Sewer System's planned expenditures for the 2014-2018 portion of the Capital Improvement Program are summarized in the table below. The information presented in the table reflects the Department's expected allocations of resources to various projects, but does not necessarily represent an expectation of actual cash expenditures for these projects, which are subject to annual approval of the City of Chicago Office of Budget and Management. The primary sources of funds to undertake these projects are expected to be proceeds from contemplated debt issuances, including the sale of the Bonds, as well as funding from current sewer revenue (also referred to as "pay-go"). See "FINANCIAL

## OPERATIONS - Historical and Projected Operations."

**22**2014-2018 Capital Improvement Program  
Expenditures

Planned Capital Improvement Program	
<u>Year</u>	<u>(dollars in thousands)</u>
2014	\$ 291,600
2015	277,200
2016	288,700
2017	358,700
2018	<u>355,300</u>
Total	\$1,571,500

The primary capital expenditures for the Sewer System by the Department will be for flood abatement, sewer replacement and lining and auxiliary outlet sewers. The City 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 Sewer System. Of the approximately 4,600 miles of sewers in the City, approximately 1,143 miles were built before 1900, and approximately 2,042 miles were built between 1900 and 1940. Recent evaluation of the Sewer System suggests that construction of storm relief sewers can enhance the overall performance of the Sewer System by replacing the hydraulically undersized, old sewers. These sewers are expensive to construct but have a life expectancy in excess of 150 years and will benefit large geographical areas of the City, especially as population density and paved areas continue to increase.

\$320 million of proceeds from the Bonds will be used for capital projects of the Sewer System, including projects included within the Capital Improvement Program (the "Series 2014 Current Projects").

The Department believes that the current Capital Improvement Program is adequate to maintain the Sewer System and reduce costs through improvements to the Sewer System where such improvements are feasible.

The Series 2014 Bond Ordinance also authorizes the City to issue, from time to time, Subordinate Lien Obligations to pay for certain improvements to the Sewer System. The Subordinate Lien Obligations have a claim for payment from the revenues of the Sewer Revenue Fund that is subordinate to the lien of all Senior Lien Bonds and all Second Lien Bonds, including the Bonds.

## USEPA

In 1975, the Water Reclamation District began the construction of its "Deep Tunnel" project to address combined sewer overflows ("CSOs") in the metropolitan Chicago area. Tunnel systems have been completed. Final completion of the reservoirs is expected to be in 2023.

In 2004, the United States Environmental Protection Agency ("USEPA") requested information from the Department concerning the City's compliance with regulatory requirements under the Clean Water Act pertaining to CSOs in Chicago area waterways. Overflows may occur when the combined flow of storm water run-off and sanitary sewage exceeds the capacity of the Sewer System and the sewage collection and treatment facilities of the Water Reclamation District.

The City provided a comprehensive response to the USEPA's request in February 2005 describing its compliance with applicable CSO requirements. Since 2008, the USEPA has requested additional information specifically pertaining to CSOs (control of floatables) from the City, but has not required any additional remedial action to be taken by the City or indicated an intention to pursue an enforcement action against the City. The Department has requested that the USEPA issue a new NPDES Permit before December 31, 2014. To date, no enforcement proceedings against the City have been instituted by the USEPA, and the Department does not currently anticipate that such a proceeding would be filed.

#### **FINANCIAL OPERATIONS**

Revenues from sewer service charges provide funds for the operation, maintenance and debt service of the Sewer System. The Sewer Revenue Fund receives no share of any state or local property or income taxes.

Sewer service rates are set by ordinance. 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. The current charge for sewer service is an amount equal to 96 percent of the gross amount charged for water service, whether such water service is metered or nonmetered, which will increase to 100 percent, effective January 1, 2015.

Historical rates are shown in the following table. Further, water rates will be automatically adjusted as a function of the Consumer Price Index after 2015. Because the sewer rate is a percentage of the water rate, sewer rates will also increase as a function of the Consumer Price Index.

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## Recent Sewer Service Rates

Effective Date

January 1, 2005  
**January 1, 2006**  
 January 1, 2007  
 January 1, 2008  
 January 1, 2009  
 January 1, 2010  
**January 1, 2011**  
**January 1, 2012**  
 January 1, 2013  
**January 1, 2014**  
 January 1, 2015

Gross Water Rate Per 1,000 Gallons

\$1.33 1.33 1.33 1.53 1.76 2.01 2.01 2.51 2.88 3.31 3.81

Sewer RatePercentage of Water Bill

83% 83% 83% 84% 85% 86% 86% 89% 92% 96% 100%

## Sewer Rate Comparisons

The Sewer System's rates compare favorably to those of sewer systems of other major cities in the United States. The following chart compares the Sewer 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 Sewer System's 2013 and 2014 rates to the 2013 rates of the other cities.

Sewer Rate Comparison (as of March 2013)<sup>(1)</sup>

\$90

I \$80

o in

tC \$70 8

V, \$60 8

CJ

■2- \$50 E

S. \$40

o, o, o

£ \$30

\$20 - \$10 \$0

\*■ v>v \*° A. 0

/;/////////>'. /

Source: City of Chicago. Department of Water Management \* Indicates Great Lakes Region.

(1) For Chicago, Kvanston and Cleveland, sewer charge covers sewer system only For all other cities, sewer charges cover sewer system

and wastewater treatment

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## Sewer Accounts

As of December 31, 2013, the Sewer System supplied 431,792 accounts, net of 62,393 exempt accounts. The number of nonmetered accounts exceeds the number of metered accounts because all single-family and two-family dwellings within the City were serviced as nonmetered accounts prior to 1982. Pursuant to an ordinance adopted in 1982, all new water accounts, regardless of character, and all new services to existing water accounts are required to be metered. Senior citizens age 65 and older who reside in their own single-family residences with a separate water meter or water charge may apply for an exemption from payment of the sewer service charge. Senior citizens age 65 and older living in condominiums are eligible to apply for an annual rebate of \$50 on sewer service charges.

The following table reflects the total accounts of the Sewer System, nonmetered and metered, net of exempt accounts, for the years 2009 through 2013.

Water System and Sewer System Accounts					
Year Ended Non- December 31			<u>Water Accounts</u>		<u>Sewer Accounts</u>
	metered	Metered	Total	Exempt Total	
2009	318,088	179,649	497,737	64,965	432,772
2010	314,002	183,618	497,620	65,450	432,170
2011	304,519	192,304	496,823	65,903	430,920
2012	290,863	205,097	495,960	61,502	434,458
2013	273,426	220,759	494,185	62,393	431,792

During 2013, residential accounts represented approximately 67.2 percent of Sewer System revenues and industrial and commercial accounts represented approximately 24.3 percent of such revenues. The remaining 8.5 percent of revenues were derived from governmental and not-for-profit organizations. During the same period, residential non-metered accounts were approximately 30 percent of Sewer System revenues and residential metered accounts were approximately 70 percent of such revenues. There are no large industrial or commercial users that account for more than five percent of Sewer System revenues. The five largest accounts of the Sewer System are shown on the following table.

## Fiscal Year 2013 Five Largest Sewer Accounts by Revenue

Customer	Revenue (dollars in thousands)
City of Chicago Department of Aviation	\$ 2,165
Chicago Park District - Lincoln Park	1,418
Chicago Park District - Humboldt Park	1,393
Cook County Sheriff 1,141	
Chicago Park District - Calumet Park	635
Total of Top 5	\$ 6,752
% of Sewer Sales 2.4%	
Total Billed Sewer Fees"	\$276,339

Source: City of Chicago, Department of Water Management

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



## Collections and Delinquencies

The Department of Finance follows the same collection strategy for collecting sewer accounts as it does for water accounts. The Department of Finance bills large industrial 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 sewer 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 and sewer service charges due and owing with respect to such property have been paid in full.

The amount of annual net sewer charges and cash collected from current and prior years' billings are included in the table below. During the five-year period ended December 31, 2013, total sewer charges collected averaged approximately 95.2 percent of aggregate net sewer charges.

### Annual Net Sewer Charges

<u>Year</u>	<u>Net Sewer Charges<sup>1</sup></u>	<u>Cash Collected During Year for Current and Prior Years' Charges<sup>2</sup></u>	<u>Percentage of Charges Collected</u>
2009	\$ 176,773	\$ 164,903	93.29
2010	198,568	190,551	95.96
2011	191,713	185,159	96.58
2012	260,417	240,556	92.37
2013	276,339	269,732	97.61
Total	\$1.103.810	\$1.050.901	95.21

1) Dollars in thousands.

2) Actual amounts billed during calendar year: differs from Sewer Fund Basic Financial Statements which include charges accrued for calendar year regardless of year in which billed.

3) Includes collections for sewer fees and other revenue related to sewer fees.

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### **Sewer System Revenues Not Connected to the State of Illinois**

The State of Illinois is obligated to make payments to the City in instances where it is a user of the Sewer 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 accounts for less than one percent (1%) of the Sewer System's annual operating revenues. No operating revenues from any users of the Sewer System flow through the State of Illinois; all such revenues are paid directly to the City.

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

The Department's annual budget is developed and implemented as part of the City's annual budget and it is based upon an analysis of its historical Operation and Maintenance Costs. If projected Gross Revenues are not sufficient to satisfy the rate covenants contained in the ordinances authorizing the Bonds and Senior Lien Bonds and Second Lien Bonds, as determined by the City pursuant to its annual review of the Sewer System, the Department is required, after consultation with the Budget Director and, when appropriate, a qualified independent consulting engineer, to recommend appropriate action to the City Council to comply with the rate covenants. See "SECURITY FOR THE BONDS - Second Lien Rate Covenant." If necessary, proposed rate increases will be included in the Department's proposed annual budget.

Once the Department has prepared and finalized its proposed annual budget, the Budget Director considers the Department's proposed budget along with the proposed annual budgets recommended and submitted by all of the other departments and agencies whose budgets become part of the City's proposed annual budget. Following the Budget Director's approval, the budgets must be approved by the Mayor, the City Council's Committee on Budget and Governmental Operations and the City Council. After the City Council has approved the proposed annual budget as the City's annual appropriation ordinance, it is forwarded to the Mayor for approval.

Should the Mayor veto the approved annual appropriation ordinance, the City Council may override the veto with a two-thirds vote.

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 as required by the Municipal Code.

During each year, the City 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. During 2013, there were no such restrictions in the Department's quarterly expenditures.

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### **Historical and Projected Operations**

Following are the Sewer Revenue Fund's Statements of Operations, including debt service requirements, as summarized from the audited financial statements of the Sewer Revenue Fund for the years ended December 31, 2009 through December 31, 2013, together with projected financial operations and projected debt service requirements for the years ending December 31, 2014 through December 31, 2016.

The Sewer Revenue Fund's operating revenues for 2013 increased by \$38.4 million compared to prior year operating revenues. This increase of 15.1 percent is primarily due to an increase in water and sewer rates.

The Sewer Revenue Fund's operating expenses before depreciation and amortization for 2013 increased \$8.2 million (7.2 percent) from the year ended 2012 due to an increase in repairs, maintenance and administrative and general expenses.

Operating revenues are projected to increase in 2014 based on an increase in water and sewer rates. Projected operating expenses reflect an annual increase of three percent based on year 2013 amounts.

Water usage in the City, upon which sewer charges are based, is assumed to decrease slightly throughout the projection period due to water conservation efforts. In addition to rate increases, the City could achieve compliance with its rate covenants under the Senior Lien Bond Ordinances and the Indenture in some other manner, including 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 transfers to or from the Sewer Rate Stabilization Account.

The City has prepared the projections discussed herein and summarized in the table 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 inevitably will not materialize and unanticipated events and circumstances may occur. The management of the City has prepared the projected financial information set forth below to present the expected financial performance of the Sewer System.

The accompanying projected 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 projected 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 Sewer System. Accordingly, these projections are not fact and should not be relied on as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on the projected operations of the Sewer 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 projected 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 projected financial information.



Source Actual. City of Chicago, Sewer Fund Basic Financial Statements. Projected. City of Chicago. Department of Water Management " Totals may not add due to rounding

<sup>U1</sup> Projections assume a 3% annual increase in operating expenses based on 2013 figures, annual sewer rate increases based upon water rate increases of 15% in 2014, 15% in 2015, and 2.5% in 2016, with sewer rates equal to % of water rates in 2014 and 100% thereafter, and an annual 2% decrease in water consumption

<sup>B2</sup> Includes IEPA loan debt service and interest on the Series 2008C Second Lien Bonds calculated at 3.886%, which is the rate payable by the City under Interest Rate Hedge Agreements with respect to the Series 2008C Bonds Interest for each year also includes the full amount of interest payable on the City's Series 2010B Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U S Treasury <sup>1,1</sup> Reflects the issuance of the Bonds

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## CITY OF CHICAGO SEWER SYSTEM

### Historical and Projected Financial Operations Debt Service Coverage Calculation (Dollars in Thousands)

Actual

(Year Ended December 31)

Projected <sup>1-1</sup> (Year Ended December 31)

2009

Net Revenues Available for Bonds

Senior Lien Debt Service Requirement Senior Lien Bonds Debt Service Coverage

Total Combined Debt Service Requirement<sup>11</sup> Total Combined Debt Service Coverage

16,777.392x

15,970.470x

\$65.734

15,287.604x

9,231.143x

Source Actual. City of Chicago. Sewer Fund Basic Financial Statements. Projected. City of Chicago. Department of Water Management

The City has entered into interest rate hedge agreements for its Series 2008C Second Lien Bonds. The City pays interest at a fixed rate of 3.886 percent per annum on the Series 2008C Bonds. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE - Swaps", this rate is reflected in the figures in the table with respect to debt service on the Series 2008C Bonds. Debt service also includes IEPA loan debt service. Interest for each year also includes the full amount of interest payable on the City's Series 2010B Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U S Treasury <sup>1-1</sup> Reflects the issuance of the Bonds

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

The Department of Water Management treats the pension costs paid out of the Sewer Revenue 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 Series 2014 Bond Ordinance and the Indenture. See "INTRODUCTION - Rate Covenant." The Department of Water Management expects to continue its current practice of treating pension costs as Operation and Maintenance Costs.

Sewer 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 Sewer System, through the Sewer Revenue Fund, reimburses the City's General Fund for the estimated pension cost applicable to the covered payroll of Sewer System employees. As discussed above, those reimbursements are recorded as Operation and Maintenance Costs of the Sewer Revenue Fund. See APPENDIX A - "CITY OF CHICAGO, ILLINOIS SEWER REVENUE 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." Pension liabilities are not recorded at the fund level for the Sewer Revenue Fund.

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 \$5 million in the Sewer Revenue Fund to reimburse the City for contributions on behalf of Sewer System employees enrolled in MEABF and LABF. As a result of P.A. 98-641, the Sewer System's pension costs, based upon employees allocable to the Sewer System, are expected to increase to approximately \$10 million in budget year 2015 (paid in 2016) and to slightly more than \$12 million in budget year 2016 (paid in 2017). Thereafter, the Sewer 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 Sewer 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 Sewer Revenue Fund in any given year, for employee pension costs allocable to the Sewer Revenue Fund, at any time. For more information on P.A. 98-641, see APPENDIX E - "RETIREMENT FUNDS." Increased Sewer System operating revenues from scheduled sewer rate increases are expected to more than offset such increases in retirement costs allocable to the Sewer Revenue Fund. See "FINANCIAL OPERATIONS - Historical and Projected 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

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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 \$1,693,015 from the Sewer Revenue Fund for Health Plan costs allocable to retirees who are former Sewer System employees. For 2014, the Department of Water Management budgeted \$1,349,767 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 that may materially affect the City's ability to pay the principal of and interest on the Bonds when they become due.

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

## **RATINGS**

The Bonds are rated "A3" (negative outlook) by Moody's, "AA-" (stable outlook) by S&P, "AA" (stable outlook) by Fitch Ratings, Inc., and "AA-" (stable outlook) by Kroll Bond Rating Agency, Inc. Any explanation of the significance of such ratings may be obtained only from the respective Rating Agencies. Certain information and materials concerning the Bonds, the City and the Sewer System were furnished to the Rating Agencies by the City and others. There is no assurance that any of the ratings will be maintained for any given period of time or that any of them may not be raised, lowered or withdrawn entirely by the respective Rating Agency, if, in its judgment, circumstances so warrant. Any change in or withdrawal of any rating may have an adverse effect on the price at which the Bonds may be resold.

## **TAX MATTERS**

### **Federal Income Tax**

Federal tax law contains a number of requirements and restrictions which apply to the 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 with them, and certain other matters. The City has covenanted to comply with all requirements that must be satisfied in order for the interest on the Bonds to be excludable from gross income for federal income tax purposes. Failure to comply with certain of such covenants could cause interest on the Bonds to

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become includable in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Subject to the City's compliance with the above-referenced covenants, under present law, in the separate opinions of Co-Bond Counsel, interest on the Bonds is excludable from the gross income of their owners for federal income tax purposes, and thus will be exempt from present Federal income taxes based on gross income. Interest on the Bonds is not included as an item of tax preference in computing the federal alternative minimum tax for individuals and corporations, but is taken into account in computing an adjustment used in determining the federal alternative minimum tax for certain corporations.

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 the AMTI of a corporation (excluding S Corporations, Regulated Investment Companies, Real Estate Investment Trusts, REMICS and FASITs) 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 all tax exempt interest, including interest on the Bonds.

Ownership of the Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, 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. Co-Bond Counsel will express no opinion with respect to any such collateral consequences with respect to the Bonds. Prospective purchasers of the Bonds should consult with their own tax advisors regarding the collateral consequences arising with respect to the Bonds described in this paragraph.

If a Bond is purchased at any time for a price that is less than the Bond's stated redemption price at maturity, the purchaser will be treated as having purchased a 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 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 Bond. Purchasers should consult their own tax advisors regarding the potential implications of market discount with respect to the Bonds.

An investor may purchase a Bond for a price in excess of its stated principal amount at maturity (such Bond is referred to as a "Premium Bond"). 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 Premium Bond in a manner that takes into account potential call dates and call prices. An investor cannot deduct amortized bond premium relating to a Premium Bond. The amortized bond premium is treated as a reduction in the amount of tax-exempt interest received. As bond premium is amortized, it reduces the investor's basis in the Bond. Investors who purchase a Premium Bond should consult their own tax advisors regarding the amortization of bond premium and

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its effect on the Premium Bond's basis for purposes of computing gain or loss in connection with the sale, exchange, redemption or early retirement of such Premium Bond.

Owners of Bonds who dispose of Bonds prior to their stated maturity (whether by sale, redemption or otherwise), purchase Bonds in the initial public offering, but-at a price different from their issue price, or purchase Bonds subsequent



to the initial public offering should consult their own tax advisors as to the federal, state or local tax consequences of such dispositions or purchases.

#### State and Local Taxes

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

#### Basis of Bond Counsel Opinions

The respective opinions of Co-Bond Counsel to be delivered concurrently with the delivery of the Bonds and the descriptions of the tax law contained in this Official Statement are based on statutes, judicial decisions, regulations, rulings and other official interpretations of law in existence on the date the Bonds are issued. There can be no assurance that such law or those interpretations will not be changed or that new provisions of law will not be enacted or promulgated at any time while the Bonds are outstanding in a manner that would adversely affect the market value or liquidity or the tax treatment of ownership of the Bonds. Co-Bond Counsel have not undertaken to provide advice with respect to any such future changes.

In rendering their opinions on tax exemption, Co-Bond Counsel will receive and rely upon certifications and representations of facts, calculations, estimates and expectations furnished by the City and others which Co-Bond Counsel will not have verified independently.

#### Risk of Audit

The Internal Revenue Service ("IRS") conducts a program of audits of issues of tax-exempt obligations to determine whether, in the view of the IRS, interest on such obligations is properly excluded from the gross income of the owners of such obligations for federal income tax purposes. Whether or not the IRS will decide to audit the Bonds cannot be predicted. If the IRS begins an audit of the Bonds, under current IRS procedures, the IRS will treat the City as the taxpayer subject to the audit and the holders of the Bonds may not have the right to participate in the audit proceedings. The fact that an audit of the Bonds is pending could adversely affect the liquidity or market price of the Bonds until the audit is concluded even if the result of the audit is favorable.

#### Legislation

From time to time, there are legislative proposals pending in the Congress of the United States that, if enacted, could alter or amend the federal tax matters referred to in this section, or adversely affect the market price or liquidity of tax-exempt bonds of the character of the Bonds. In some cases,

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these proposals have included provisions that had a retroactive effective date. It cannot be predicted whether or in what form any such proposal might be introduced in Congress or enacted or whether, if enacted, it would apply to bonds issued prior to enactment. Prospective purchasers of the Bonds should consult their own tax advisers regarding any pending or proposed federal tax legislation. Co-Bond Counsel will express no opinion regarding any pending or proposed federal tax legislation.

## Backup Withholding

Payments of interest on, and proceeds of the sale, redemption or maturity of, tax-exempt obligations, including the Bonds, are in most cases required to be reported to the IRS. Additionally, backup withholding may apply to any such payments to any owner of Bonds who fails to provide an accurate Form W-9 Request for Taxpayer Identification Number, or a substantially identical form, or to any such owner who is notified by the IRS of a failure to report all interest and dividends required to be shown on federal income tax returns. The reporting and backup withholding requirements do not affect the excludability of such interest from gross income for federal tax purposes.

## INDEPENDENT AUDITORS

*The basic financial statements of the City of Chicago. Illinois Sewer Fund as of and for the years ended December 31, 2013 and 2012 and included as APPENDIX A 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 Sewer Fund's adoption of Statement No. 65 of the Governmental Accounting Standards Board (GASB), Items Previously Reported as Assets and Liabilities.*

## CERTAIN LEGAL MATTERS

Legal matters incident to the authorization and issuance of the Bonds are subject to the separate approving opinions of Schiff Hardin LLP, Chicago, Illinois and Hardwick Law Firm, LLC, Chicago, Illinois, Co-Bond Counsel. The proposed forms of their opinions are 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, Warren, MacKay & Serritella, P.C., Chicago, Illinois, and Quintairos, Prieto, Wood & Boyer. P.A., 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 upon for the Underwriters by Katten Muchin Rosenman LLP, Chicago, Illinois, Underwriters' Counsel.

## FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR

The City has engaged A.C. Advisory, Inc. as its financial advisor (the "Financial Advisor") in connection with the issuance and sale of the Bonds. The Financial Advisor has provided advice on the plan of finance and structure of the Bonds and has reviewed certain documents, including this Official Statement, with respect to financial matters. The Financial Advisor has not independently verified the factual information contained in this Official Statement but has relied on the information provided by

the City and other sources. The Financial Advisor is a "municipal advisor" as defined in the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law No. 111-203.

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

## UNDERWRITING

The Underwriters have agreed, subject to certain conditions, to purchase the Bonds at a price equal to \$320,691,049.97 (which represents the aggregate principal amount of the Bonds, less an Underwriters' discount of \$1,506,579.98, plus a reoffering premium of \$29,792,629.95).

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

*The Underwriters have provided the following language for inclusion in this Official Statement:*

The Bonds are being offered for sale to the public at the prices shown on the inside cover page hereof. The Underwriters reserve the right to lower such initial offering prices as they deem necessary in connection with the marketing of the Bonds. The Underwriters may offer and sell the Bonds to certain dealers (including dealers depositing the Bonds into investment trusts) and others at prices lower than the initial public offering price or prices set forth in this Official Statement. The Underwriters reserve the right to join with dealers and other underwriters in offering the Bonds to the public. The obligation of the Underwriters to accept delivery of the Bonds is subject to the terms and conditions set forth in the Bond Purchase Agreement, the approval of legal matters by counsel and other conditions. The Underwriters may over-allot or effect transactions which stabilize or maintain the market price of the Bonds at levels above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

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

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

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The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

BNY Mellon and Pershing LLC, both direct or indirect subsidiaries of The Bank of New York Mellon Corporation, entered into a distribution agreement (the "BNY Mellon Distribution Agreement") that enables Pershing LLC to distribute certain new issue municipal securities underwritten by or allocated to BNY Mellon, including the Series 2014 Bonds. Under the BNY Mellon Distribution Agreement, BNY Mellon will share with Pershing LLC a portion of the fee or commission paid to BNY Mellon.

Loop Capital Markets LLC ("LCM"), one of the Underwriters of the Bonds, has entered into distribution agreements (each a "LCM Distribution Agreement") with each of UBS Financial Services Inc. ("UBSFS") and Deutsche

Bank Securities Inc. ("DBS") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each LCM Distribution Agreement, each of UBSFS and DBS will purchase Bonds from LCM at the original issue prices less a negotiated portion of the selling concession applicable to any Bonds that such firm sells.

Piper Jaffray & Co. and Pershing LLC, a subsidiary of The Bank of New York Mellon Corporation, entered into an agreement (the "Piper Jaffray Distribution Agreement") which enables Pershing LLC to distribute certain new issue municipal securities underwritten by or allocated to Piper Jaffray & Co., including the Bonds. Under the Piper Jaffray Distribution Agreement, Piper Jaffray & Co. will share with Pershing LLC a portion of the fee or commission paid to Piper.

## **SECONDARY MARKET DISCLOSURE**

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

A failure by the City to comply with the Undertaking will not constitute a default under the Bonds or the Series 2014 Bond Ordinance, and Beneficial Owners of the Bonds are limited to the remedies described in the Undertaking. See "-Consequences of Failure of the City to Provide Information" under this caption. A failure by the City to comply with the Undertaking must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Bonds and their market price.

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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, copies of which are available from the City upon request.

### **Annual Financial Information Disclosure**

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

"Annual Financial Information" means financial information and statistical data generally consistent with that contained in this Official Statement under the captions "THE WASTEWATER TRANSMISSION SYSTEM- General," the table captioned "-Sewer System Service Area Population," the table captioned "- 2014-2018 Capital Improvement Program Expenditures," "FINANCIAL OPERATIONS - Recent Sewer Service Rates" (for the previous five years), the table captioned "- Water System and Sewer System Accounts" (with respect to the sewer system accounts for the previous five years), and the five-year historical data in the tables captioned "Annual Net Sewer Charges" and "Historical and Projected Financial Operations."

"Audited Financial Statements" means the audited financial statements of the Sewer Revenue Fund prepared in accordance with generally accepted accounting principles applicable to governmental units as in effect from time to time.

Annual Financial Information exclusive of Audited Financial Statements (commencing with the Audited Financial Statements for the fiscal year ended December 31, 2014) will be provided to the MSRB not more than 210 days after the last day of the Sewer System'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 shall be included, and Audited Financial Statements will be filed when available.

### Reportable Events Disclosure

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

- a) principal and interest payment delinquencies;
- b) non-payment related defaults, if material;
- c) unscheduled draws on debt service reserves reflecting financial difficulties;
- d) unscheduled draws on credit enhancements reflecting financial difficulties;
- e) substitution of credit or liquidity providers, or their failure to perform;

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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 Bonds, or other material events affecting the tax status of the Bonds;

- g) modifications to rights of security holders, if material;
- h) bond calls, if material, and tender offers;
- (i) defeasances;
- (j) release, substitution or sale of property securing repayment of the securities, if material; (k) rating changes;

(l) bankruptcy, insolvency, receivership or similar event of the City (considered to have occurred in the following instances: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if the jurisdiction of the City has been assumed by leaving the City Council and the City's officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City);

(m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the Sewer System, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

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

### **Consequences of Failure of the City to Provide Information**

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

In the event of a failure of the City to comply with any provision of the Undertaking, the Beneficial Owner of any Bond may seek mandamus or specific performance by court order to cause the City to comply with its obligations under the Undertaking. The Undertaking provides that any court action must be initiated in the Circuit Court of Cook County, Illinois. A default under the Undertaking shall not be deemed a default under the Bonds, the Series 2014 Bond Ordinance or the Indenture, 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.

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### **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 the 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 Sewer System or type of business conducted;

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

iii) the amendment or waiver does not materially impair the interests of the Beneficial Owners of the Bonds, as determined by a party unaffiliated with the City (such as the Trustee or Co-Bond Counsel), or by approving vote of the Beneficial Owners of the Bonds pursuant to the terms of the Indenture at the time of the amendment; or

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

### **EMMA**

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

viewed, printed and electronically retransmitted.

### **Termination of Undertaking**

The Undertaking shall be terminated if the City shall no longer have any legal liability for any obligation on or relating to repayment of the Bonds under the Series 2014 Bond Ordinance or the Indenture.

### **Additional Information**

Nothing in the Undertaking will 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 material 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 material Event in addition to that which is specifically required by the Undertaking, the City shall have no obligation under the Undertaking to update such information or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a material Event.

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### **Compliance by the City With Respect to Certain Bond Disclosure Requirements**

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

During the period from 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 the period 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, 2001 A, 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 August 25, 2014.

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

With respect to the City's Outstanding O'Hare International Airport Customer Facility Charge Senior Lien Revenue Bonds, Series 2013, Simply Wheelz, LLC d/b/a Advantage Rent A Car ("Advantage") is an "obligated person" with respect to such bonds. Advantage filed a voluntary bankruptcy petition in the Southern District of Mississippi on November 5, 2013. The City filed a notice with EMMA with respect to this event on December 5, 2013.

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

Ambac provided a municipal bond insurance policy relating to the City's Motor Fuel Tax Revenue Bonds, Series 2003A and Assured Guaranty Corp. provided municipal bond insurance policies relating to the City's Motor Fuel Tax



Revenue Bonds, Series 2008. Event notices with respect to the rating changes taken by the Rating Agencies with respect to these insurers were not filed. The City made filings with EMMA on June 3, 2014 and August 22, 2014 with respect to these rating changes.

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

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**MISCELLANEOUS**

The foregoing summaries or descriptions of provisions of the Series 2014 Bond 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.

The references, excerpts and summaries of all documents referred to herein do not purport to be complete statements of the provisions of such documents, and reference is directed to all such documents for full and complete statements of all matters of fact relating to the Bonds, the security for the payment of the Bonds and the rights and obligations of the Owners thereof.

Any statements made in this Official Statement involving matters of opinion, projection 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 the projections or estimates will be realized. Neither this Official Statement nor any statement that may have been made orally or in writing shall be construed as a contract with the Owners or Beneficial Owners of the Bonds.

**CITY OF CHICAGO**

By: /s/ Lois A. Scott Lois A. Scott Chief  
Financial Officer

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**APPENDIX A**

**CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND  
FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012, STATISTICAL DATA, AND  
INDEPENDENT AUDITORS' REPORT**

**I**

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I

# City of Chicago, Illinois Sewer Fund

Basic Financial Statements as of and for the Years Ended December 31, 2013 and 2012, Statistical Data, and Independent Auditors' Report

**CITY OF CHICAGO, ILLINOIS SEWER FUND**

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## INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying basic financial statements of the Sewer Fund (the "Sewer 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 Sewer 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 Sewer Fund as of December 31, 2013 and 2012, and the results of its operations and its cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Member of  
Deloitte Touche Tohmatsu Limited

### Emphasis-of-Matter

As discussed in Note 1 to the basic financial statements, the basic financial statements referred to above present only the

Sewer 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 for the years then ended 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 basic financial statements, prior year amounts were restated due to the Sewer 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*

June 30, 2014

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

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

### MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the City of Chicago, Illinois (the "City"), Sewer Fund (the "Sewer Fund") financial performance provides an introduction and overview of the Sewer Fund's basic financial activities for the fiscal years ended December 31, 2013 and 2012. Please read this discussion in conjunction with the Sewer 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 \$38.4 million (15.1%) compared to prior-year operating revenues due to an increase in sewer billing rates.
- Operating expenses before depreciation and amortization for 2013 increased \$8.2 million compared to 2012. This increase of 7.24% is primarily due to an increase in repairs, maintenance and administrative and general.
- The Sewer Fund's total net position for 2013 increased by \$75.4 million or 13.5% compared to 2012.
- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by \$634.3 million (net position) at December 31, 2013. Net position comprises \$481.9 million of net investment in capital assets, \$73.9 million of restricted for capital projects, and \$78.5 million of unrestricted.
- Capital asset additions, net, being depreciated for 2013 were \$212.5 million, principally due to completion of sewer construction and rehabilitation projects.

### 2012

- Operating revenues for 2012 increased by \$50.6 million (24.9%) compared to prior-year operating revenues due to changes in sewer billing rates.
- Operating expenses before depreciation and amortization for 2012 remained consistent with 2011.
- The Sewer Fund's total net position for 2012 increased by \$59.9 million or 12.0% compared to 2011.
- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by \$558.9 million (net position) at December 31, 2012. Net position comprises \$448.4 million of net investment in capital assets, \$50.0 million of restricted for capital projects, and \$60.5 million of unrestricted.
- Capital asset additions, net, being depreciated for 2012 were \$246.6 million, principally due to completion of sewer construction and rehabilitation projects.

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## OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

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

The statements of net position present all of the Sewer Fund's assets, deferred outflows, and liabilities using the accrual basis of accounting. The difference between assets, deferred outflows, and liabilities is reported as net position. The increase or decrease in net position may serve as an indicator, over time, whether the Sewer Fund's financial position is improving or deteriorating. However, the consideration of other nonfinancial factors may be necessary in the assessment of overall financial position and health of the Sewer Fund.

The statements of revenues, expenses, and changes in net position present all current fiscal 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 were provided and used by the Sewer Fund's operating, capital financing, and investing activities. These statements are prepared on a cash basis and 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 calculations and includes certain unaudited information related to the Sewer Fund's historical financial and nonfinancial operating results and capital activities.

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## **FINANCIAL ANALYSIS**

At December 31, 2013, the Sewer Fund's financial position continues to be strong with total assets and deferred outflows of \$2,290.8 million, total liabilities of \$1,656.5 million, and net position of \$634.3 million. A comparative condensed summary of the Sewer Fund's net position at December 31, 2013, 2012, and 2011, is as follows:

**(In thousands)**

Current assets Restricted and other assets Utility plant - net Deferred outflows

**2013**



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\$ 167,963 209,566 1,838,328 74,973

---

**Net Position****2012**

\$ 128,442 347,565 1,671,339 116,448

**2011**

\$ 106,166 139,359 1,494,682 123,989

Total assets and deferred outflows

Current liabilities	64,452	64,007	87,203	
Derivative instrument liability	52,705	89,955	91,713	
Long-term and liabilities payable from restricted assets	1,539,360	1,550,428	1,186,362	

Total liabilities

Net position: Net invested in capital assets Restricted for capital projects Unrestricted

1,656,517

481,946 73,858 78,509

1,704,390

448,414 50,014 60,436

1,365,278

448,720 24,610 25,588

\$ 634,313      \$ 558,864      \$ 498,918

**2013**

Current assets increased by \$39.5 million (30.8%) due to an increase in cash and cash equivalents, accounts receivable and due from other funds. Restricted and other assets decreased by \$138.0 million (39.7%) and utility plant - net increased by \$167.0 million (10.0%) due principally to capital activities for sewer construction and rehabilitation projects. Deferred outflows decreased in the amount of \$41.5 million (35.6%) due to changes in the fair value of interest rate swaps. During 2013, the Sewer Fund lined an additional 45.6 miles of sewers.

Current liabilities remained consistent overall with a slight increase of \$0.4 million (0.7%/) which is primarily related to increases related to due to other funds and accrual liabilities with offsetting decrease in unearned revenue. Derivative instrument liability decreased \$37.3 million (41.4%) due to changes in the fair value of interest rate swaps. Long-term and restricted liabilities decreased by \$11.6 million (0.7%).

Net position may serve, over a period of time, as a useful indicator of the Sewer Fund's financial position. As of December 31, 2013, total net position was \$634.3 million, an increase of \$74.5 million (13.5%) from 2012.

**2012**

Current assets increased by \$22.3 million (21.0%) due to an increase in cash and cash equivalents and accounts receivable. Restricted and other assets increased by \$208.2 million (149.4%) and utility plant increased by \$176.7 million

(11.8%) due principally to capital activities for sewer construction and

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rehabilitation projects. Deferred outflows decreased in the amount of \$7.5 million (6.1%) due to changes in the fair value of interest rate swaps. During 2012, the Sewer Fund increased its lining program, lining an additional 51.4 miles of sewers.

The decrease in current liabilities of \$23.2 million (26.6%) is primarily related to the decrease in accounts payable due to the timing of payments and an increase in unearned revenue as related to increased deferred billings, and accrued liabilities as related to an Illinois Environmental Protection Agency (IEPA) loan received during 2012. Derivative instrument liability decreased \$1.8 million (1.9%) due to changes in the fair value of interest rate swaps. Long-term and restricted liabilities increased by \$364.6 million (30.7%) due to debt issuance.

Net position may serve, over a period of time, as a useful indicator of the Sewer Fund's financial position. As of December 31, 2012, total net position was \$558.9 million, an increase of \$59.9 million (12.2%) from 2011.

A summary of revenues, expenses, and changes in net position for the years ended December 31, 2012, 2011, and 2010, is as follows:

Revenues, Expenses, and Changes in Net Position

	2013	2012	2011
Revenues: Operating revenues: Sewer service			
Other operating revenues			
		\$291,110	1,180
		\$ 252,943	969
		\$ 202,323	1,026
Total operating revenues			
Nonoperating revenues Capital grants			
(2,754) 2,500			
867 2,500			
3,198 1,864			
Total revenues			
Expenses: Operating expenses before depreciation			
and amortization Depreciation and amortization Interest expense			
Total expenses			
Change in net position			
Net position - beginning of year, as restated			
Net position - end of year			
		121,794	113,575 113,930
31,280	27,187	25,074	
<u>63,513</u>	<u>56,571</u>	<u>54,991</u>	
<u>216,587</u>	<u>197,333</u>	<u>193,995</u>	
75,449	59,946	14,416	

558,864                      498,918   484,502  
\$634,313                      \$558.864\$498,918

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## 2013

Sewer service revenues for the years ended 2013 and 2012 were \$291.1 million and \$252.9 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2013 and 2012 was \$1.2 and \$0.9 million, respectively. The increase in 2013 sewer service revenue of \$38.2 million (15.1%) is primarily due to an increase in water and sewer rates of 15% and 3%, respectively.

Nonoperating revenues decreased by \$3.6 million compared to 2012 as a result of proceeds from the tax increment financing of \$ 1.5 million and a decrease of investment earnings of \$4.9 million as a result of unrealized losses.

## 2012

Sewer service revenues for the years ended 2012 and 2011 were \$252.9 million and \$202.3 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2012 and 2011 was \$0.9 million and \$1.0 million, respectively. The increase in 2012 sewer service revenue of \$50.6 million (25.0%) is primarily due to an increase in water and sewer rates of 25% and 3%, respectively.

Nonoperating revenues decreased by \$2.3 million primarily as a result a decrease in investment income.

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

(In thousands)	Operating Expenses			
	2013	2012	2011	
Repairs	\$ 38,910	\$ 35,708	\$ 38,805	
General Fund reimbursements	32,144	31,709	29,124	
Maintenance	23,004	21,819	23,655	
Engineering	3,267	3,085	3,544	
<u>Administrative and general</u>	<u>24,469</u>	<u>21,254</u>	<u>18,802</u>	
Operating expenses before depreciation and amortization		121,794	113,575	113,930
<u>Depreciation and amortization</u>	<u>31,280</u>	<u>27,187</u>	<u>25,074</u>	
Total operating expenses	\$ 153,074	\$ 140,762	\$ 139,004	

## 2013

Overall, operating expenses before depreciation and amortization for 2013 increased by \$8.2 million (7.2%) in 2013 due primarily to increases in repairs, maintenance and administrative and general. Depreciation and amortization increased slightly due to an increase in utility plant.

## 2012

Overall, operating expenses before depreciation and amortization for 2012 remained consistent with 2011. Depreciation and amortization increased slightly due to an increase in utility plant.

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A comparative summary of the Sewer Fund's cash flows for the years ended December 31, 2013, 2012, and 2011, is as follows:

### (In thousands)

Cash from activities: Operating  
Capital and related financing Investing

Net change in cash and cash equivalents

Cash and cash equivalents: Beginning of year

End of year

2013

2011

### Cash Flows 2012

	\$ 155,991	\$ 143,573	\$ 81,012
	(264,353)	76,755	(202,867)
(44,232)		64,130	(160,955) (4,359)
88,938			
29,565			

59,373 (126,214)

155,779

\$ 44,706 \$ 88,938 \$ 29,565

## 2013

As of December 31, 2013, the Sewer Fund's cash and cash equivalents of \$44.7 million represented a decrease of \$44.2 million from December 31, 2012, as compared to an increase of \$59.4 million from December 31, 2011 to December 31, 2012, primarily due to construction related activities in 2013. Total cash and cash equivalents at December 31, 2013, were

composed of unrestricted and restricted cash and cash equivalents of \$1.6 million and \$43.1 million, respectively.

## 2012

As of December 31, 2012, the Sewer Fund's cash and cash equivalents of \$88.9 million represented an increase of \$59.4 million from December 31, 2011, as compared to a decrease of \$126.2 million from December 31, 2010 to December 31, 2011, primarily due to positive cash flows from bonds issued in 2012. Total cash and cash equivalents at December 31, 2012, were composed of unrestricted and restricted cash and cash equivalents of \$17.7 million and \$71.2 million, respectively.

## CAPITAL ASSET AND DEBT ADMINISTRATION

### 2013

At the end of 2013 and 2012, the Sewer Fund had net utility plant of \$1,838.3 million and \$1,671.3 million, respectively. During 2013, the Sewer Fund had capital additions being depreciated of \$212.5 million, and completed projects totaling \$33.0 million were transferred from construction in progress to applicable facilities and structures capital accounts.

### 2012

At the end of 2012 and 2011, the Sewer Fund had net utility plant of \$1,671.3 million and \$1,494.7 million, respectively. During 2012, the Sewer Fund had capital additions being depreciated of \$246.6 million, and completed projects totaling \$79.2 million were transferred from construction in progress to applicable facilities and structures capital accounts.

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

(In thousands)	<b>Net Utility Plant at Year-End</b>		
	<b>2013</b>	<b>2012</b>	<b>2011</b>
Utility plant not depreciated:			
Land and land rights	\$ 560	\$ 560	\$ 560
<u>Construction in progress</u>	<u>16,294</u>	<u>33,011</u>	<u>79,210</u>
<u>Total utility plant not depreciated</u>	<u>16,854</u>	<u>33,571</u>	<u>79,770</u>
Utility plant being depreciated:			
Facilities and structures	2,252,341	2,041,833	1,794,330
<u>Furniture and equipment</u>	<u>32,742</u>	<u>30,709</u>	<u>31,630</u>
<u>Total utility plant being depreciated</u>	<u>2,285,083</u>	<u>2,072,542</u>	<u>1,825,960</u>
Less accumulated depreciation:			
Facilities and structures	(442,064)	(413,425)	(388,554)
<u>Furniture and equipment</u>	<u>(21,545)</u>	<u>(21,349)</u>	<u>(22,494)</u>
<u>Total accumulated depreciation</u>	<u>(463,609)</u>	<u>(434,774)</u>	<u>(411,048)</u>
<u>Utility plant being depreciated - net</u>	<u>1,821,474</u>	<u>1,637,768</u>	<u>1,414,912</u>

Utility plant -net \$1,838,328 \$1,671,339 \$ 1,494,682

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

The Sewer Fund's outstanding debt at December 31, 2013, 2012, and 2011, is summarized as follows:

Long-Term Outstanding Debt at Year-End			
	(In thousands)	2013	2012 2011
Revenue bonds	\$1,369,459	\$1,363,774	\$1,112,089
Add interest accretion on Series 1998 capital appreciation bonds	45,272	41,151	37,242
<u>Unamortized net bond discount/premium</u>	<u>34,707</u>	<u>37,701</u>	<u>16,142</u>
<u>Outstanding debt - net</u>	<u>\$1,449,438</u>	<u>\$ 1,442,626</u>	<u>\$1,165,473</u>

The Sewer 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 Ratings	Standard Fitch Services	& Poor's
Senior Lien Wastewater Revenue Bonds	A1	AA-	NR
Second Lien Wastewater Revenue Bonds	A2	A+	AA

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

At December 31, 2013, the Sewer Fund was in compliance with the debt covenants as stated in the Master Trust Indentures. Details regarding the Sewer Fund's long-term debt are 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 Sewer Fund's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the City of Chicago Department of Finance.

CITY FUND	OF	- 10- CHICAGO,	ILLINOIS	SEWER
STATEMENTS OF NET POSITION AS OF DECEMBER 31, 2013 AND 2012 (In thousands)				
ASSETS AND DEFERRED OUTFLOWS				
CURRENT ASSETS				
Cash and cash equivalents (Note 2)	% 1.55X			
Investments (Note 2)	59,470			
Accounts receivable - net of allowance for doubtful accounts			of approximately \$41,111.1' in 2013 and \$30,662 in 2012	7K.735
Due from other City funds	26,927			
Inventories	1,267			
Total current unrestricted assets	167,963			
LONG TERM ASSETS (Notes 2 and 3)				
Cash and cash equivalents (Note 2)	43,14X			
Investments (Note 2)	161,62.1			
Interest receivable	353			
			Total restricted assets	205,124
NONCURRENT ASSETS				
Inher assets	4,442			
Utility plant Land and land improvements Facilities and structures Furniture and equipment Construction in progress Total utility plant				
215,857 74,973				
Less accumulated depreciation Utility plant - net				
Total noncurrent assets				
Total assets DEFERRED OUTFLOWS TOTAL				

17,722 16,952

73,465 I H.H40 1,463

71.216 270.573 X63

560 2.041.K33 30.709 33.011

2,106.113 (434.774)

1,671.339

2,147,346 116.44S

#### LIABILITIES

CURRENLT LIAHILITILS Accounts payable Due lo othei City lunds Unearned revenue Unearned swap up-lroul payment Accrued liabilities

Total current liabilities

LIABILITIES FAVAIH I". FROM RLSTRICIT.D ASSLI Accounts payable Accmed liabilities  
Curtent ponion ol revenue bonds payable iNole 4i Accmed interest payable

Total liabilities payable I null restricted assets

N( )NCUKRFNT LIAHII .ITIF.S Derivative inslnimenl liability Revenue bonds payable (Note 4) - net of premiuin/discounl

Total nonciirrent liabilities

Total llablmes

NhTmsITION Net invesunenl in capital assets Restricted lor capital protects Unrestricted

\*Total net position

4,793 14.925 15.77(1 960 2X.O04

44,344 1X,224 37.929 27.354

127.S5I

S 4.6.39 12.113 19.3X7 999 26.X69

52.94(1 3I.2SI 29.690 24.121

52.705 1.411.509 1,464.214

13K.P32

44X.414 50.014 60.436

X9.955 1.412.936 I.502.X9I

4X1.946 73.X5X 7X.509

12.29(I.X3(I 52.263.794

See notes to basic financial statements

## CITY OF CHICAGO, ILLINOIS SEWER FUND

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

20132012

#### OPERATING REVENUES:

Sewer service

\$291,110 \$252,943

Other

1.180 969



<u>Total operating revenues</u>		<u>292,290</u>	<u>253,912</u>
OPERATING EXPENSES:			
Repairs	38,910	35,708	
General Fund reimbursements	32,144	31,709	
Maintenance	23,004	21,819	
Engineering	3,267	3,085	
<u>Administrative and general</u>	<u>24,469</u>	<u>21,254</u>	
Total operating expenses before depreciation and amortization	121,794	113,575	
<u>Depreciation and amortization</u>	<u>31,280</u>	<u>27,187</u>	
<u>Total operating expenses</u>	<u>153,074</u>	<u>140,762</u>	
<u>OPERATING INCOME</u>	<u>139,216</u>	<u>113,150</u>	
NONOPERATING REVENUE (EXPENSES):			
Investment (loss) income	(4,965)	1,021	
Interest expense	(63,513)	(56,571)	
Other	2,173	(192)	
Interest rate swap income - net (Note 4)	38^	38^	
Total nonoperating expenses - net		(66,267)	(55,704)
<u>CAPITAL GRANTS</u>	<u>2,500</u>	<u>2,500</u>	
CHANGE IN NET POSITION	75,449	59,946	
<u>TOTAL NET POSITION - Beginning of year, as restated (Note 10)</u>	<u>558,864</u>	<u>498,918</u>	
<u>TOTAL NET POSITION - End of year</u>	<u>\$634,313</u>	<u>\$558,864</u>	

See notes to basic financial statements.

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# CITY OF CHICAGO, ILLINOIS SEWER FUND

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

20132012

### CASH FLOWS FROM OPERATING ACTIVITIES:

Received from customers	\$ 270,903	\$ 242,313
Transactions with other City funds	(39,208)	(26,720)

Payments to vendors	(32,455)	(28,740)	
<u>Payments to employees</u>	<u>(43,249)</u>	<u>(43,280)</u>	
<u>Net cash provided by operating activities</u>		<u>155,991</u>	<u>143,573</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Acquisition and construction of capital assets	(210,747)	(149,441)	
Proceeds from issuance of bonds and IEPA loans	35,000	309,487	
Interest paid on revenue bonds	(63,627)	(55,427)	
Proceeds from tax increment financing	1,535		
Payment of bond issuance and discount costs		(1,973)	
Capital grant	2,500	2,500	
Principal paid on bonds and notes	(29,690)	(28,429)	
Other	676	38	
<u>Net cash (used in) provided by capital and related financing activities</u>		<u>(264,353)</u>	<u>76,755</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Sales and purchases of investments - net	66,427	(162,467)	
<u>Investment interest</u>	<u>(2,297.)</u>	<u>1,512</u>	
<u>Net cash provided by (used in) investing activities</u>		<u>64,130</u>	<u>(160,955)</u>
NET CHANGE IN CASH AND CASH EQUIVALENTS	(44,232)	59,373	
<u>CASH AND CASH EQUIVALENTS - Beginning of year</u>	<u>88,938</u>	<u>29,565</u>	
<u>CASH AND CASH EQUIVALENTS - End of year</u>	<u>\$ 44,706</u>	<u>\$ 88,938</u>	

(Continued)

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

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

2013 2012

RECONCILIATION TO CASH AND CASH EQUIVALENTS REPORTED ON  
THE STATEMENTS OF NET POSITION:

Unrestricted	\$ 1,558	\$ 17,722
--------------	----------	-----------

<u>Restricted</u>	<u>43,148</u>	<u>71,216</u>
<u>TOTAL</u>	<u>\$ 44,706</u>	<u>\$ 88,938</u>
RECONCILIATION OF OPERATING INCOME TO CASH FLOWS		
FROM OPERATING ACTIVITIES:		
Operating income	\$ 139,216	\$ 113,150
Adjustments to reconcile:		
Depreciation and amortization	31,280	27,187
Provision for uncollectible accounts	12,460	8,842
Changes in assets and liabilities:		
(Increase) decrease in due from other City funds	(8,086)	4,305
Increase in accounts receivable	(17,730)	(22,658)
Decrease in inventories	196	859
Increase (decrease) in accrued liabilities	1,135	(991)
Increase in accounts payable and due to other City funds	1,177	1,820
(Decrease) increase in unearned revenue	(3,657)	11,059
<u>CASH FLOWS FROM OPERATING ACTIVITIES</u>	<u>\$ 155,991</u>	<u>\$ 143,573</u>

SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS - Property additions in 2013 and 2012 of \$64,452 and \$63,913 respectively, have outstanding accounts payable and accrued liabilities.

See notes to basic financial statements. (Concluded)

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# CITY OF CHICAGO, ILLINOIS SEWER FUND

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 Sewer Fund (the "Sewer Fund") collects and transmits wastewater to the treatment facilities of the Metropolitan Water Reclamation District of Greater Chicago. The Sewer Fund is included in the City of Chicago, Illinois (the "City"), reporting entity as an enterprise fund.

The accompanying basic financial statements present only the Sewer Fund and are not intended to present the financial position of the City or the results of its operations and cash flows.

**Basis of Accounting** - The accounting policies of the Sewer 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 Sewer Fund are reported using the flow of economic resources measurement focus.

The Sewer 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 Sewer Fund has a legally adopted annual budget that is not required to be reported.

**Management's Use of Estimates** - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the 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, the 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.

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The Sewer 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 market value equal to the cost of the repurchase agreement, 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** - The Sewer Fund accounts receivable result from billings and collections for sewer services processed by the Department of Water Management. Management has provided an allowance for amounts recorded at year-end that 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 Sewer 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 first-in, first-out 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 Sewer Fund as assets with an initial cost of more than \$5,000 and an estimated useful life in excess of two years. Such assets are recorded at historical cost if purchased. 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:

Facilities and structures	75 years
Furniture and equipment	5-20 years
Sewer rehabilitation	50 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 consists of assets on which constraints are placed 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.

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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 Sewer Fund enters into interest rate swap agreements to hedge interest rates and cash flows on outstanding 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 and interest income earned on construction bond proceeds are capitalized during construction of those capital projects that are paid for from the bond proceeds and are being amortized over the depreciable life of the related assets on a straight-line basis. Interest expense capitalized for 2013 and 2012 totaled \$6.7 million and \$5.9 million, respectively.

**Capital Grants** - Capital grants are reported as contributed revenue in the statements of revenues, expenses, and changes in net position.

**Revenue Recognition** - Sewer service revenue is billed as a percentage of the City's water billings and is recorded as revenue when the water is consumed by the customers. Of the accounts receivable balances, \$26.8 million and \$19.4 million represent revenue recognized on sewer service that had not yet been billed to customers at December 31, 2013 and 2012, respectively. Unearned revenue represents amounts collected from nonmetered customers prior to usage.

**Revenues and Expenses** - The Sewer 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 Sewer Fund's principal ongoing operations. The principal operating revenues of the Sewer 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.

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**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) have been written off as of January 1, 2012. GASB 65 is effective for the Sewer Fund's financial statements for the fiscal year ended 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 Sewer Fund's financial statements as a result of the implementation of GASB 66.

**Upcoming Accounting Standards** - Other accounting standards that the Sewer 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 Sewer 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 Sewer 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 Sewer 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

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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 Sewer 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 - As of December 31, 2013, the Sewer Fund had the following cash equivalents and investments (in thousands):

		Investment Maturities (in Years)				Fair Value
		Less than 1	1-5	6-10	More than 10	
U.S. agencies	\$		7,500	\$69,017	\$67,847	\$ -
\$144,364						
Certificates of deposits and other short-term		73,305				73,305
Corporate bonds	3,990					11,436
Municipal bonds			4,985		4,985	15,426
Subtotal	\$ 84,795	\$ 85,438	\$67,847	\$ - 238,080		
Share of City's pooled funds	30,376					
Total						\$ 268,456

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As of December 31, 2012, the Sewer Fund had the following cash equivalents and investments (in thousands):

	<u>Investment Maturities (in Years)</u>				Fair Value
	Less than 1	1-5	6-10	More than 10	
U.S. agencies		\$15,909	\$112,952		\$121,258
\$250,119					\$-
Certificates of deposits and other short-term		71,339			71,339
Commercial paper		2,984			2,984
Corporate bonds		11,603			11,603
<u>Municipal bonds</u>		<u>100</u>	<u>7,980</u>	<u>995</u>	<u>9,075</u>
Subtotal	\$ 87,348	\$ 135,519	\$ 122,253	\$ -	345,120
<u>Share of City's pooled funds 18,796</u>					
<u>Total \$363,916</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 Corporation.

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 10 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 that provide collateral of at least 102% 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, as rated by a nationally recognized statistical rating organization maintaining such rating during the term of such investment. A schedule summarizing the Sewer Fund's exposure to credit risk as of December 31, 2013 and 2012, is as follows (in thousands):

**Quality Rating****2013 2012**



Aaa/AAA	\$ 1,476	\$ 8,508
Aa/AA	154,504	258,168
A/A	7,000	7,106
Not rated	<u>75,100</u>	<u>71,338</u>
<u>Total</u>	<u>\$ 238,080</u>	<u>\$ 345,120</u>

The Sewer 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 Treasurer's pooled fund is included in the City's financial statements.

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**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 as of December 31, 2013. Of the bank balance, 99.2% 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.

A schedule summarizing the investments reported in the basic financial statements as of December 31, 2013 and 2012, is as follows (in thousands):

### 2012

Per Note 2: Investments - Sewer Fund Investments - City Treasurer pooled fund

\$ 238,080 30,376

\$345,120 18,796

\$268,456 \$363,916

Per financial statements: Restricted investments Unrestricted investments

Investments included as cash and cash equivalents on the statements of net position

\$ 161,623 59,476

47,357

\$ 270,573 16,952

76,391

\$ 268,456 \$363,916

### RESTRICTED ASSETS AND ACCOUNTS

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

Wastewater Revenue Bonds, Refunding Bonds Series 1993 (the "Senior Lien Bonds") and 1998A Wastewater Capital Appreciation Bonds:

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

Debt Service Resen'e 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 in this account was met by the purchase of surety bonds.

Construction Account - Proceeds of the Senior Lien Bonds were deposited in this account for the purpose of paying construction costs of projects as defined in the ordinance.

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Wastewater Revenue Bonds, Series 2012, 2010, 2008, 2004, 2001, 1998 B (the "Second Lien Bond"), Refunding Sries 2004, and Refunding Series 2006 (the "Second Lien Bonds"):

Bond Principal and Interest Account - No later than the business day immediately preceding January 1 and July 1, an amount to pay principal; redemption premium, if any; and interest on the bonds. The City is also required to make deposits in the Second Lien Bonds' account to meet other payment obligations under the indenture authorizing Second Lien Parity Bonds.

Debt Service Reserve Account - For each series, an amount equal to the least of (i) the highest future 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 in this account was met by the purchase of a surety bond.

Construction Account - Proceeds of the Second Lien Bonds were deposited in this account for the purpose of paying construction cost of projects as defined in the ordinance.

Sewer Rate Stabilization Account - Any net revenues remaining after providing sufficient funds for all required deposits in the bond accounts may be transferred to the Sewer Rate Stabilization Account upon the direction of the Cily to be used for any lawful purpose of ihe Sewer Fund.

For accounts established by ordinances with balances, the amounts as of December 31, 2013 and 2012, are as follows (in thousands):

## **2012**

### **Construction**

Bond principal and interest Sewer rate stabilization

\$ 106,859 65,283 32,629

\$ 258,349 53,811 29,629

\$341,789

At December 31, 2013 and 2012, management was not aware of any instances of noncompliance with the above terms of the ordinances.

## **4. LONG-TERM DEBT**

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

**2013 2012**

\$232,880 Series 1993 Wastewater Transmission Revenue Bonds Refunding issued March 1, 1993, due through 2013; interest at 5.125% to 6.5%	\$ -	\$ 8,760
\$109,998 Series 1998A and B Wastewater Transmission Revenue Bonds issued March 18, 1998, due through 2030; interest at 4.0% to 5.25%	35,168	35,168
\$73,100 Series 2001 Wastewater Transmission Revenue Bonds issued December 6, 2001, due through 2031; interest at 4.0% to 5.5%	65,420	68,570
\$61,925 Series 2004B Wastewater Transmission Revenue Bonds issued July 29, 2004, due through 2016; interest at 3.0% to 5.25%	41,940	45,125
\$155,030 Series 2006A & B Wastewater Transmission Revenue Bonds issued November 1, 2006, due through 2039; Series A interest at 4.0% to 5.0% (4.0% at December 31, 2006); Series B interest at 4.0% to 5.0%	139,240	147,135
\$167,635 Series 2008A Wastewater Transmission Revenue Bonds issued November 5, 2008, due through 2038; interest at 3.5% to 5.5%	157,025	160,110
\$332,230 Series 2008C Wastewater Transmission Revenue Bonds (2004A Refunded) issued October 16, 2008, due through 2039; variable floating interest rate	332,230	332,230
\$275,865 Series 201 OA & B Wastewater Transmission Revenue Bonds issued November 16, 2010, due through 2040; interest at 2.0% to 6.0%	272,030	274,810
\$1,546 Illinois Environmental Protection Agency Loan Agreement signed May 28, 2008, due through 2027; interest at 2.50%	1,172	1,242
\$276,470 Series 2012 Wastewater Transmission Revenue Bonds issued September 13, 2012, due through 2042; interest at 3.0% to 5.0%	276,470	276,470
\$15,000 Illinois Environmental Protection Agency Loan Agreement signed January 20, 2010, due through 2031; interest at 0%	13,388	14,154
\$17,812 Illinois Environmental Protection Agency Loan Agreement signed October 8, 2010, due through 2032; interest at 1.25%	17,812	\$17,564 Illinois Environmental Protection Agency Loan Agreement signed September 22, 2011, due through 2033; interest at 1.25%
	17,564	14,154
Total revenue bonds		1,369,459 1,363,774
Add accretion of Series 1998 Capital Appreciation Bonds	45,272	41,151
Add unamortized net bond (discount/premium)	34,707	37,701
Less current portion (payable from restricted assets)	(37,929)	(29,690)

## Long-term portion

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

## Revenue bonds

Accretion of series 1998 capital  
appreciation bonds Unamortized net  
discount/premium

## Total revenue bonds

**Balance December 31, Additions Reductions 2013**

\$ 35,375    \$(29,690) \$1,369,459

4,121

45,272 34,707

(2,994)

\$ 1,442,626 \$ 39,496 \$ (32,684) \$ 1,449,438 \$

Revenue bonds

Accretion of series 1998 capital

appreciation bonds Unamortized net  
discount/premium

Total revenue bonds

**Balance January 1, 2012**

\$1,112,089

37,242

16,142**Additions Reductions**

\$280,182 \$(28,497)

3,909 29.305

(7,746)**Balance December 31, 2012**

\$ 1,363,774

41,151

37,701**Due within One Year**

\$29,690

Interest expense includes amortization of the loss on bond refunding for 2013 of \$4.2 million and 2012 of \$5.8 million; amortization of net bond discount/premium of \$3.0 million and \$7.7 million, respectively; and accretion of Series 1998 capital appreciation bonds of \$4.1 million and \$3.9 million, respectively.

As defined in the ordinances, net revenues are pledged for the payment of principal and interest on the bonds. The ordinances require that net revenues available for bonds equal 115% of the senior lien debt service requirement and that net revenues available for bonds equal the sum of 100% of the aggregate annual senior lien debt service requirement and 100% of the aggregate annual second lien debt service requirement. The above requirements were met for 2013 and 2012.

Rate Increases - Sewer service rates are set by ordinance. The sewer service charge is established in an amount designed to pay the

costs of Sewer Fund operations and capital improvements, including any related debt service. During 2013 and 2012, the charge for sewer service was increased and was an amount equal to 92% of the gross amount charged for water service, whether such water service is metered or nonmetered. The rate charged for water was increased and was \$21.56 per 1,000 cubic feet and \$18.75 per 1,000 cubic feet during 2013 and 2012, respectively.

Issuance of Debt - On September 22, 2011, a loan agreement was signed with the Illinois Environment Protection Agency to line existing sewer pipes throughout the city. In 2013, the Sewer Fund drew \$17.6 million from this loan agreement. The loan has an interest rate of 1.25%: with maturity dates from March 20, 2014 to March 20, 2033.

On October 8, 2010, a loan agreement was signed with the Illinois Environment Protection Agency to line existing sewer pipes throughout the city. In 2013, the Sewer Fund drew \$17.8 million from this loan agreement. The loan has an interest rate of 1.25% with maturity dates from December 30, 2013 to December 30, 2032.

Following is a schedule of debt service requirements to maturity (in thousands):

Years Ending December 31	Principal	Interest Service	Total Debt
2014	\$ 37,929	\$ 65,229	\$ 103,158
2015	39,237	63,571	102,808
2016	41,094	61,714	102,808
2017	42,977	59,808	102,785
2018	44,860	58,008	102,868
2018	<u>2019-2023</u>	<u>216,964</u>	<u>299,129</u>
2018	<u>2024-2028</u>	<u>230,716</u>	<u>286,872</u>
2018	<u>2029-2033</u>	<u>272,987</u>	<u>164,974</u>
2018	<u>2034-2038</u>	<u>312,060</u>	<u>88,333</u>
2018	<u>2039-2043</u>	<u>130,635</u>	<u>13,815</u>
Total	\$1,369,459	\$1,161,453	\$2,530,912

The Sewer 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, a fixed rate or an index rate as determined from time to time by the City in consultation with the remarketing agent, as applicable. At December 31, 2013, the variable-rate bonds were in the index rate interest mode. For the requirements calculated above, interest on variable-rate debt was calculated at the swap rate in effect at December 31, 2013. The City has entered into continuing covenant agreements with the direct purchase providers, which expire December 1, 2014. In the event the bonds are not successfully remarketed upon expiration, the 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 the potential of rising interest rates, the Sewer Fund has entered into various separate pay-fixed, receive-variable interest rate swaps at a cost less than what the Sewer Fund would have paid to issue fixed-rate debt.

Governmental Activities	Changes in Fair Value Classification	Amount	December 31, 2013 Classification	Amount	Notional
Cash flow hedges - pay-fixed					
interest rate swaps	Deferred outflow of resources	\$ (37.250)	Deferred outflow of resources	\$ 52.705	\$332.230

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Terms, Fair Values, and Credit Risk - The notional amounts of the swaps match the principal amounts of the associated debt. The Sewer 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 Sewer Fund pays the counterparty a fixed payment and receives a variable payment computed according to the London InterBank Offered Rate (LIBOR) and/or the Securities Industry and Financial Markets Association (SIFMA). The terms, including the fair value and credit ratings of the outstanding swaps, as of December 31, 2013, are as follows (in thousands):

Associated Bond Issue

Hedging instruments: Wastewater transmission variable revenue Senes 2008C:

Notional Amount

\$232,560 49,835 49,835

Effective Date

1/3/2011 7/29/2004 7/29/2004

**Terms**

Pay 3.886%; receive 95% LIBOR Pay 3.886%; receive SIFMA Pay 3.886%; receive SIFMA

Fair Values

S (36.187) (8,368) (8.150)

Maturity Date

1/1/2039 1/1/2039 1/1/2039  
Counter-Party Credit Rating

A2/A A2/A Aa3/A+

\$(52.705)

**Fair Value** - As of December 31, 2013 and 2012, the swaps had a negative fair value of \$52.7 million and \$89.9 million, respectively. As per industry convention, the fair values of the Sewer 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 Sewer Fund's swaps had negative values.

**Credit Risk** - The Sewer 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 Sewer 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 Securities Industry and Financial Markets Association (SIFMA) ratios. Credit may create basis risk because the Sewer Fund's bonds may trade differently than the swap index as a result of a credit change in the Sewer Fund. SIFMA ratios (or spreads) may create basis risk if SIFMA swaps of the Sewer Fund's bonds trade higher than the SIFMA 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 Sewer Fund is exposed to basis risk on the swaps if the rate paid on the bonds is higher than the rate received. The Sewer 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.

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**Swap Risk** - The swap exposes the Sewer 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 exemption of municipal debt is eliminated or its value reduced. There have been no tax law changes since the execution of the Sewer Fund's swap transactions.

**Termination Risk** - The risk that the swap 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 - As of December 31, 2013, debt service requirements for the Sewer Fund's outstanding variable-rate debt and net swap payments, assuming current interest rates remain the same, for their term are as follows (in thousands):

Years Ending December 31	Principal	Interest	Swaps - Net Total
2014 2015 2016 2017 2018			
2019-2023 2024-2028 2029-2033 2034-2038 2039-2042			
<u>16,980 17,695 85,205 77,240 56,025 67,170 11,915</u>			
\$ 3,009			
3,009 3,009 2,855 2,695 11,237 7,088 4,743 1,670			
\$ 9,902			
			9,902 9,902 9,395 8,868 36,977 23,324 15,606 5,492
<u>\$ 12,911 12,911 12,911 29,230 29,258 133,419 107,652 76,374 74,332 11,915</u>			
\$ 332,230			

#### UTILITY PLANT

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

Utility plant not depreciated: Lund and land rights Construction in progress

Total utility plant not depreciated

Utility plant being depreciated: Facilities and structures Furniture and equipment

Total utility plant being depreciated

Less accumulated depreciation: Facilities and structures Furniture and equipment

Total accumulated depreciation

Utility plant being depreciated - net

Utility plant - net

Balance January 1, 2013

Disposals and

Additions Transfers

560 33,011

16,294

33,571

16,294

221,941 3,757

225,698

(11,433) (1,724)

(13,157)

2,252,341 32,742

2,285,083



(33.011) (33.011)

2,041,833 30,709  
(413,425) (21,349)

(434,774)

1,637,768  
(28,639) (1,794)

(30,433)

195,265

1,598 1,598 (11,559)

2,072,542

(442,064) (21,545)

(463,609)

1,821,474

S 1,671,339 S211,559 S (44,570) SI .838,328

Balance Disposals

January 1, and

2012

Additions Transfers

Balance December 31, 2012

Utility plant not depreciated: Land and land rights Construction in progress

Total utility plant not depreciated

Utility plant being depreciated: Facilities and structures Furniture and equipment

Total utility plant being depreciated

Less accumulated depreciation: Facilities and structures Furniture and equipment

Total accumulated depreciation

Utility plant being depreciated - net

Utility plant - net

33,011

560 79,210

79,770

(79,210) (79,210)

33,011

S 560 33,011

1,794,330 31,630

1,825,960

257,349 2,895

260,244

(9,846) (3,816)

(13,662)

33,571

2.041,833 30.709  
2.874  
(388.554) (22,494)

(411.048)

1.414.912  
(24,871) (1.729)

(26,600)

233.644

2.072,542  
2.874

(413,425) (21.349)

(434.774)

1.637.768  
(10.788)

S 1.494.682      S266,655      S (89.998)      S 1.671,339

## **PENSION PLANS**

Eligible Sewer 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

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(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 funds 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 these funds 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 Sewer Fund reimburses the City's General Fund for the estimated pension cost applicable to the covered payroll of the Sewer Fund employees. These reimbursements, recorded as expenses of the Sewer Fund, were \$4.9 million and \$4.7 million in 2013 and 2012, respectively. 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' Annuity and Benefit Fund and 1.00 for the Laborers' and Retirement Board Employees' Annuity and Benefit Fund. 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):

Percent of Contribution	Annual Required	Annual Pension Cost	Required Actual Pension Cost	Contributed
Net Pension Obligation (Asset)				
Municipal employees:				
2011	2012	2013		
\$609,491	687,519	812,463		
24.1 %				
21.7				
18.2				
\$462,482	690,823	820,023		
24.0 %				
21.5				
18.1				
\$ 1,469,886	2,008,546	2,672,812		
Laborers:				
2011	2012	2013		
			\$ 57,651	77,858 106,439
22.2 %				
15.2				
10.9				
			\$ 57,259	77,566 106,199
22.3 %				
15.3				
10.9				
\$ (129,712)	(63,707)	31,148		

The pension benefits information pertaining expressly to the Sewer 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 assets or liabilities of these plans. Amounts for the City are recorded within the City's government-wide 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 and \$97.5 million in 2013 and 2012, respectively.

The annuitants who retired prior to July 1, 2005, received a 55% subsidy from the City and the annuitants who retired on or after July 1, 2005, received a 50%, 45%, 40%, and 0% subsidy from the City based on the annuitant's length of actual employment with the City for the gross cost of retiree health care under a court-approved settlement agreement (the "Settlement Agreement"). During 2013 and 2012, the pension funds contributed \$65 for each Medicare-eligible annuitant and \$95 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 Settlement Agreement discussed below.

The City's net expense and the annuitants' contribution indicated above are preliminary and subject to the reconciliation per the Settlement Agreement.

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. Duly 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-as-you-go funding basis. No assets are accumulated or dedicated to funding the retiree Health Plan benefits.

**Annual OPEB Cost and Net OPEB Obligation** - The City's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC) of the employer. The ARC represents a level of funding that if paid on an ongoing basis, is projected to cover the normal cost each year and to amortize any unfunded actuarial liabilities over a period of one year (the remaining years of coverage under the settlement agreement).

The following table shows the components of the City's annual OPEB costs for the year for the Health Plan, the amount actually contributed to the Health Plan, and changes in the City's net OPEB obligation to the Health Plan. The net OPEB obligation is the amount entered upon the City's statements of net position as of year-end as the net liability for the OPEBs. The amount of the annual cost for the Health Plan that is to be recorded in the statements of changes in net position in the City CAFR is the annual OPEB cost (expense) (in thousands).

**2013 Health Plan**

**Annual OPEB Cost and Contributions Made**

**(In thousands)**

**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

Annual OPEB cost Contributions made

Decrease in net OPEB obligation Net OPEB obligation - beginning of year Net OPEB obligation - end of year

134,083 8,614 (25,531)

117,166 139,336

(22,170) 215,361 \$ 193,191

\$ 252,747 3,816 (179,586)

76,977 1 15,961

(38,984) 254,345 \$ 215,361

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The City's annual OPEB cost, the percentage of annual OPEB cost contributed to the Health Plan, and the net OPEB obligation for fiscal years 2013, 2012, and 2011 are as follows (in thousands):

#### **Fiscal Years Ended**

December 31, 2013   December 31, 2012   December 31, 2011

#### **Schedule of Contributions, OPEB Costs, and Net Obligations**

#### **Percentage of Annual OPEB Cost Contributed**

118.9 %  
150.6  
202.4

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**

December 31, 2012   December 31, 2011

#### **Actuarial Value of Assets**

\$ -

#### **Actuarial Accrued Liability (AAL)**

\$997,281 470,952

**Unfunded  
Actuarial  
Accrued  
Liability  
(UAAL)**

\$997,281 470,952

#### **Covered Payroll**

% \$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 Agreement 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 Agreement. 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 Agreement sunset so as to completely phase out in December 2016. The Korshak category is entitled to lifetime benefits.

### Summary of Assumptions and Methods

Item	2013	2012	Health Plan
Actuarial valuation date			
Actuarial cost method			
Amortization method			
Remaining amortization period			
Asset valuation method			
Actuarial assumptions: Investment rate of return	3.00%	3.00%	
Projected salary increases	9.5% initial to 5.0% ultimate		
Healthcare inflation rate			December 31, 2012 Entry Age Normal Level dollar, open 10 years Market value
			December 31, 2011 Projected unit credit Level dollar, closed 1 to 5 years Market value
	1.50%	3.00%	
	10.5% initial to 5% ultimate		

The OPEB information pertaining expressly to the Sewer 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. Amounts for the City are recorded within the City's government-wide financial statements.

## 8. RELATED-PARTY TRANSACTIONS

Included in operating expenses are reimbursements to the General Fund of the City and certain other funds for services provided by other City departments, employee fringe benefits, and certain payments made on behalf of the Sewer Fund. Such reimbursements amounted to \$32.1 million and \$31.7 million in 2013 and 2012, respectively.

## 9. COMMITMENTS AND CONTINGENCIES

The Sewer 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 Sewer Fund.

The Sewer 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.

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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 for claims that have been incurred, but not reported. Changes in the claims liability amount for the years ended December 31, 2013 and 2012, are as follows (in thousands):

**2012**

Balance - January 1

Claims incurred on current and prior-year events Claims paid on current and prior-year events

\$ 15,943    \$ 16,794 13,108 11,919 (12,267) (12,770)

Balance - December 31

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 Sewer Fund are transferred to commercial insurers. Claims have not exceeded the purchased insurance coverage in the past three years.

At December 31, 2013 and 2012, the Sewer Fund entered into contracts with outstanding commitments of approximately \$64.5 million and \$63.9 million, respectively, for construction projects.

**RESTATEMENT DUE TO IMPLEMENTATION OF NEW ACCOUNTING STANDARDS**

As a result of implementing GASB 65, net position was restated at January 1, 2012. With the adoption of GASB 65, the Sewer Fund is reporting deferred loss on debt refunding as deferred outflows and 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):

**Adjustment As Restated**

Statement of financial position: Other assets Deferred outflows

Revenue bonds payable - net of discount Net investment in capital assets

Statement of revenues, expenses, and changes in net position:

Depreciation and amortization Interest expense

Total net position - beginning of year

Statement of cash flows: Reconciliation of operating income to net cash provided by operating activities: Operating income

Depreciation and amortization

11,694 89,955 1,386,443 455,195

27,735 54,601 504,277



112,602 27,735

\$ (6,781) 26,493 26,493 (6,781)

(548) 1.970 (5,359)

548 (548)

4,913 116,448 1,412,936 448,414

27,187 56,571 498,918

\$ 113,150 27,187

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#### 11. SUBSEQUENT EVENT

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

\* \* # # :F< \*

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## STATISTICAL DATA

The statistical data section includes selected financial and operating information, generally presented on a multiyear basis. The statistical section information is presented in five categories: financial trends, revenue capacity, debt capacity, operating information, and demographic and economic information. Schedules in the statistical section are the following:

**Financial Trends** - These schedules contain trend information to help the reader understand how the Sewer Fund's financial performance and well-being have changed over time.

**Revenue Capacity** - These schedules contain information to help the reader assess the Sewer Fund's most significant revenue source, sewer sales.

**Debt Capacity** - These schedules present information to help the reader assess the affordability of the Sewer Fund's current levels of outstanding debt and the Sewer 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 Sewer Fund's financial report relates to the services the Sewer Fund provides and the activities it performs.

**Demographic and Economic Information** - These schedules offer demographic and economic indicators to help the reader understand the environment within which the City's financial activities take place.

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

NET POSITION BY COMPONENT  
FIVE YEARS ENDED DECEMBER 31, 2008-2013  
(In thousands)  
(Unaudited)

	2008	2009	2010	2011	2012	2013
NET POSITION: Net investment in capital						
assets	\$413,481	\$391,248	\$408,564	\$448,720	\$448,414	\$481,946
Restricted for						
capital projects		9,533	11,110	24,610	50,014	73,858
<u>Unrestricted</u>	<u>54,333</u>	<u>52,920</u>	<u>64,828</u>	<u>25,588</u>	<u>60,436</u>	<u>78,509</u>
<u>TOTAL</u>	<u>\$467,814</u>	<u>\$453,701</u>	<u>\$484,502</u>	<u>\$498,918</u>	<u>\$558,864</u>	<u>\$634,313</u>

The Sewer Fund intends to provide ten years of information as it becomes available.

CITY OF CHICAGO, ILLINOIS SEWER  
FUND

CHANGES IN NET POSITION  
FIVE YEARS ENDED DECEMBER 31, 2008-2013  
(In thousands)  
(Unaudited)

2009				
OPERATING INCOME: Operating revenues	Operating expenses	Depreciation and amortization		
160,005	98,487	20,982		
			SI 75.163	109.643 21.878
			\$198,229	113.881 23,775
			\$203,349	113.930 25.074
			\$253,912	113.575 27.187
			\$292,290	121.794 31.280
Total operating income	NONOPERATING EXPENSES			
40,536	(37,849)			
43.642	(57.755)			

60,573 (26,706)

64,345 (51,793)

113,150 (55,704)

139,216 (66,267)

INCOME BEFORE CAPITAL GRANTS

CAPITAL GRANTS CHANGE IN NET POSITION

2,687

(14,113)

72,949 2,500

2,687    \$(14,113)    \$ 37,003    \$ 14,416    \$ 59,946    \$ 75,449

The Sewer Fund intends to provide ten years of information as it becomes available.

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

STATISTICAL DATA  
HISTORICAL FINANCIAL OPERATIONS  
TEN YEARS ENDED DECEMBER 31, 2004-2013  
(In thousands) (Unaudited)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
--	------	------	------	------	------	------	------	------	------	------

OPERATING REVENUES											
Sewer sales	\$142,680	\$141,314	\$134,323	\$137,021	\$158,698	\$173,906	\$197,455	\$202,323	\$252,943	\$291,110	
Other operating revenue	<u>2,308</u>	<u>2,208</u>	<u>2,114</u>	<u>1,660</u>	<u>1,307</u>	<u>1,257</u>	<u>774</u>	<u>1,026</u>	<u>969</u>	<u>1,180</u>	
Total operating revenues		<u>144,988</u>	<u>143,522</u>	<u>136,437</u>	<u>138,681</u>	<u>160,005</u>	<u>175,163</u>	<u>195,229</u>	<u>203,349</u>	<u>253,912</u>	<u>292,290</u>
OPERATING EXPENSES											
Repairs	31,023	33,981	34,770	35,759	37,786	42,110	42,509	38,805	35,708	38,910	
Maintenance	19,315	18,966	18,964	19,034	18,626	24,380	24,075	23,655	21,819	23,004	
Administrative and general	5,605	5,454	6,499	7,796	15,746	14,403	17,179	18,802	21,254	24,469	
General Fund reimbursements	25,272	26,823	22,569	22,973	23,287	25,431	27,065	29,124	31,709	32,144	
Engineering	<u>4,505</u>	<u>3,587</u>	<u>1,213</u>	<u>732</u>	<u>3,042</u>	<u>3,319</u>	<u>3,053</u>	<u>3,544</u>	<u>3,085</u>	<u>3,267</u>	
Total operating expenses		<u>85,720</u>	<u>88,811</u>	<u>84,015</u>	<u>86,294</u>	<u>98,487</u>	<u>109,643</u>	<u>113,881</u>	<u>113,930</u>	<u>113,575</u>	<u>121,794</u>
NONOPERATING											
REVENUES	140	802	1,063	939	817	234	643	2,870	867 (2,754)		
NET REVENUES - As delined	\$ 59,408	\$ 55,513	\$ 53,485	\$ 53,326	\$ 62,335	\$ 65,754	\$ 84,991	\$ 92,289	\$141,204	\$167,742	

Source: City of Chicago Comptroller's Office

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# CITY OF CHICAGO, ILLINOIS SEWER FUND

## STATISTICAL DATA FIVE LARGEST CUSTOMERS (In thousands) (Unaudited)

Department of Aviation Humboldt Park WR Grace and Company Calumet Park  
Pepsi Cola General Bottlers Lincoln Park Northwestern University Columbus Park Cook County Sheriff University of Chicago - HCC University of Illinois at Chicago Hometown

Sales

S 1.230 494 285

2008 2009 Amount of Amount of

Sales

692 541

S 1.331 754 347 270 237

2010 Amount of Sales

\$ 1.744 435

315

258

546

2011

2012

Sales

\$ 1.927 1.179

Amount of    Amount of  
Sales

\$ 1,593 1.842

316

310

745

339

1,428 1,647

2013 Amount of Sales

\$2,165 1,393

635

1,418

1.141

\$4,400

The Sewer Fund intends to provide ten years of information as it becomes available.

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CITY OF CHICAGO, ILLINOIS SEWER FUND

STATISTICAL DATA  
CUSTOMERS BY COMPONENT  
(In thousands) (Unaudited)

	2008	2009	2010	2011	2012	2013			
	Amount of	Amount of	Amount of	Amount of	Amount of	Amount of	Amount of	Amount of	Amount of
	Sales	Sales	Sales	Sales	Sales	Sales	Sales	Sales	Sales
Residential	\$105,072		\$124,600	\$144,145	\$139,598	\$178,399	\$195,542		
Industrial/ commercial	34,363		38,376	44,540	50,915	57,598	74,696		
<u>Governmental</u>	<u>8,931</u>		<u>10,930</u>	<u>9,544</u>	<u>12,836</u>	<u>17,915</u>	<u>22,052</u>		
	\$ 148,366	\$ 173,906	\$ 198,229	\$ 203,349	\$ 253,912	\$ 292,290			

The Sewer Fund intends to provide ten years of information as it becomes available.



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**CITY OF CHICAGO, ILLINOIS SEWER FUND**

STATISTICAL DATA  
RECENT SEWER SERVICE RATES  
(Unaudited)

Gross Water		Rate Per 1,000 Cubic Feet									
Sewer Rate		of Water Bill									
Percent											
January	January	January	January	January	January	January	January	January	January	January	January
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
								9.66	9.95	9.95	9.95
								11.44	13.16	15.00	15.00
								18.75	21.56		
83 %											
83											
83											
83											
84											
85											
86											
86											
89											
92											
								8.02	8.26	8.26	8.26
								9.61	11.18	12.90	12.90
								16.69	19.84		

Source: City of Chicago Department of Water Management.

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**CITY FUND                      OF                      CHICAGO,                      ILLINOIS                      SEWER**

STATISTICAL DATA  
SEWER SYSTEM ACCOUNTS  
TEN YEARS ENDED DECEMBER 31, 2004-2013  
(Unaudited)

Years Ended December 31	Water Accounts			Sewer Accounts
	Non- Metered	Metered	TotalExempt	
2004	324,689	167,545	492,234	54,809
2005	323,740	169,664	493,404	55,797
2006	322,193	171,861	494,054	58,599
2007	320,579	175,256	495,835	61,700
2008	319,205	178,457	497,662	63,929
2009	318,088	179,649	497,737	64,965
2010	314,002	183,618	497,620	65,450
2011	304,519	192,304	496,823	65,903
2012	290,863	205,097	495,960	61,502
2013	273,426	220,759	494,185	62,393

Source: City of Chicago Department of Water Management.

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

### STATISTICAL DATA REVENUE BOND COVERAGE TEN YEARS ENDED DECEMBER 31, 2004-2013 (In thousands) (Unaudited)

Combined Senior Lien and Second Lien Debt Service Calculation

REVENUES AVAILABLE: IOR HONRS Net revenues - as declined Deposits to prior lien accounts Transfer from to sewer rule slahili/aluin account

Net revenues available for homls

prior iji-N debt service keouiri-ment net revenues available for bonds

IJEKTSKVIC:iiKI:UUIKI:MI:NTS Senior lien debt service requirement

Senior lien debt service coverage (115 required)

i )Eii t service requirements

1997 second lien bonds 199K second lien bonds 21K11 second lien bonds 211114A and B second lien bonds 2006A and B second lien bonds 2D(IXA second lien bonds 200XC second lien bonds IEPA Loans  
21111A \* H second lien bonds 2112A & H second lien bonds

Second lien debt service requirement

COMBINED SENIOR AND SECOND LIEN DEBT SERVICE REQUIREMENTS

COMBINED SENIOR AND SECOND LIEN DEBT SERVICE: COVERED: EII DREOUKEDI

SEWER RATE: STABILIZED/ATH)N ACC( >UNT YEAR-END BALANCE)

\$141,204 5.00(1

\$56.91 IX \$55.511 \$49.4X5 \$5.1.126 S 62.1.15 \$65.754 \$74.991 \$92.2X9 S 1.16.2114 \$164.742  
4.19.1 2.X61 4.155 4.1H5 7.107 4.19.1  
2.S79 741 4.1179 1.792 6.69X  
2.X61 2.641 4.190 1.244 16.04X

999 2.7117 4.111 2.04.1 211.1K7 X.759

17.1 74X 4.11)5 '52 1X.947 S.570

2.291  
1.111 KI 2.710 4.20(1 2.05(1 5.505 K.76X 11.5.19 11.792  
17.1 74X 4.11)5 '52 1X.947 S.570

4/ 2/ 11 4,91, 2,04/ 17,555 R, / 1111,32R 242 101  
5,1116 1.XX6 17.101 15,1S4 1 1.517 2,7.12 665 21.0.16  
6.920 2.055 17.44S X,765 1 1,517 4K5 .1X1 19.1.12

\$25.576 \$IX,521 \$19.010 516.7X4 S1fi,753 \$16,777 .(15/170 \$15.2X7 S 9.21

6.92.1  
.2X4

26.910 15,2(11 X.650 2,7X6 X66 21.0.19 17.4X5

99.X6II

\$5X, 112 \$64.141 \$65.754 \$X2.212 S X4.60X S 99.X6II

\$10.629 \$10.629 \$14,629 \$14,629 \$14,629 \$ 14.629 \$25,629 \$25.7111 \$ 29.629 \$ 12.629 "--

Source City of Chicago Comptroller's Office

## CITY OF CHICAGO, ILLINOIS SEWER FUND

STATISTICAL DATA LONG-TERM DEBT  
FIVE YEARS ENDED DECEMBER 31, 2008-2013  
(In thousands) (Unaudited)

	2008	2009	2010	2011	2012	2013
First Lien	\$ 60,815	\$ 48,825		\$ 36,175	\$ 22,820	\$ 8,760
Second Lien	863.234	854.015		1,089,817	1,077,981	1,340.860 1,320.695
<u>Subordinate lien -IEPA loan</u>				<u>11,288</u>	<u>28,308</u>	<u>48,764</u>
Total	\$924,049	\$902,840		\$1,125,992	\$ 1,112,089	\$1,377,928 \$1,369,459

The Sewer Fund intends to provide ten years of information as it becomes available.

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**CITY FUND                      OF                      CHICAGO,                      ILLINOIS                      SEWER**

STATISTICAL DATA  
CAPITAL IMPROVEMENT PROGRAM  
2014-2018  
(In thousands) (Unaudited)

Years	Amount
2014	\$ 291,900
2015	276,500
2016	288,600
2017	358,600
2018	<u>354,400</u>
Total	\$1,570,000

Note: The information presented in the table above reflects the Sewer 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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**CITY FUND OF CHICAGO, ILLINOIS SEWER**

STATISTICAL DATA  
FULL-TIME EQUIVALENT SEWER FUND EMPLOYEES BY FUNCTION  
FIVE YEARS ENDED DECEMBER 31, 2008-2013  
(Unaudited)

Function	2008	2009	2010	2011	2012	2013		
Agency management	5	5	5	5	4	4		
Capital design and construction services	21	21	21	23	23	24		
Engineering services								
Inspection services	18	18	18	18	18	18		
System installation	10	10	9	8	8	8		
System maintenance and evaluations	517	521	521	521	523	523		
Communications and coordination	29	31	27	26	1_7	[6		
		600		606	601	601	593	593

The Sewer Fund intends to provide ten years of information as it becomes available.

Source: City of Chicago's 2013, 2012, 2011, 2010, 2009, and 2008 Program and Budget Summary.

Note: Schedule includes only Department of Water Management employees.

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## CITY OF CHICAGO, ILLINOIS SEWER FUND

STATISTICAL DATA  
OPERATING INDICATORS BY FUNCTION  
(Unaudited)

2012 2013

3,685 3,073

## CITY OF CHICAGO, ILLINOIS SEWER FUND

STATISTICAL DATA  
CAPITAL ASSET STATISTICS BY FUNCTION  
(In miles) (Unaudited)

	2012	2013
Sewers lined	51.4	45.6
New construction	17.4	19.0
<b>CITY OF CHICAGO, ILLINOIS SEWER FUND</b>		

STATISTICAL DATA  
POPULATION OF SERVICE AREA  
LAST FIVE CENSUS PERIODS  
(Unaudited)

Years	Population
1970	3,369,357
1980	3,005,072
1990	2,783,726
2000	2,896,016
2010	2,695,598

Source: U.S. Department of Commerce - Census Bureau.

Source: City Department of Commerce - Census Bureau

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## **CITY OF CHICAGO, ILLINOIS SEWER FUND**

STATISTICAL DATA  
PRINCIPAL EMPLOYERS (NON-GOVERNMENT)

CURRENT YEAR AND NINE YEARS AGO

(Unaudited)

Number of Employees  
2013(1)  
Percentage of



Percentage of  
Total City Rank Employment

Number of Employees

2004(1)

Percentage of  
Total City Rank Employment

J.P. Morgan Chase (2) United Airlines Accenture LLP Northern Trust Corporation Ford Motor Company Jewel Food Stores, Inc. ABM Janitorial Midwest, Inc. Bank of America NT & SA Walgreen's Co. American Airlines SBC Ameritech (3) Target Corporation ABN Amro

8,499 8,199 5,821 5,353 5,103 4,441 3,399 3,392 2,869 2,749

0.78 %

0.75

0.53

0.49

0.47

0.41

0.31

0.31

0.26

0.25

9,437 6,448 3,869 4,659 2,662

3.139

3,985 4,803 2,940 2,923

2 6 4 10

0.89 %

0.61

0.36

0.44

0.25

0.30

0.38 0.45 0.28 0.28

1) Source: City of Chicago. Department of Revenue, Employer's ExpenseTax Return.

2) J.P. Morgan Chase, formerly known as Banc One.

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

# CITY OF CHICAGO, ILLINOIS SEWER FUND

## STATISTICAL DATA POPULATION AND INCOME STATISTICS

(Unaudited)

Median Number of Population (1) Age (2) Households (2)  
Unemployment Per Capita Rate (3) Income (4)

Total Income

2010 2011 2012 2013  
2,695,598 2,695,598 2,695,598 2,695,598  
34.8 33.2 33.2 33.5

-----  
1,045,666 1,048,222 1,054,488 1,062,029  
10.1 9.3 8.9 8.3  
45,957 45,977 48,305 N/A (5)  
\$123,881,597,286 123,935,509,246 130,210,861,390 N/A (5)

Notes:

- 1) Source: U.S. Census Bureau.
- 2) Source: World Business Chicago Website and Environmental System Research Institute data estimates.
- 3) Source: Bureau of Labor Statistics 2013, Unemployment rate for Chicago-Naperville-Illinois Metropolitan Area.
- 4) Source: U.S. Department of Commerce, Bureau of Economic Analysis, Per Capita Personal Income for Chicago-Naperville-Illinois Metropolitan Area (in 2013 dollars).
- 5) N/A means not available at time of publication.

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## APPENDIX B GLOSSARY OF CERTAIN TERMS

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### APPENDIX B

#### GLOSSARY OF CERTAIN TERMS

*The following are definitions of certain terms used in the Series 2014 Bond Ordinance, the Indenture and this Official Statement. This glossary is provided for the convenience of the reader and does not purport to be comprehensive or definitive.*

"Aggregate Second Lien Debt Service" means as of any particular date of computation and with respect to a particular

"Aggregate Second 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, an amount of money equal to the aggregate of the amounts of Annual Second Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Second Lien Bonds of all series.

"Aggregate 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, an amount of money equal to the aggregate of the amounts of Annual Senior Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Senior Lien Bonds of all series.

"Annual Second 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 for Second Lien Bonds 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 Second Lien Bonds 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 Second Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the ordinances and trust indentures creating such series of Second Lien Bonds of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Second Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Second Lien Bonds, the interest payable on such Second Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Second Lien Bonds and the amount received by the City pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds. Amounts deposited in the Principal and Interest Account pursuant to the provisions of the Indenture, or similar provisions in any trust indenture or ordinance securing Second Lien Bonds, and capitalized or funded interest from proceeds of Second Lien Bonds and used only to pay interest on such Second Lien Bonds, shall be credited against Annual Second Lien Debt Service.

"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 for Senior Lien Bonds 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 Senior Lien Bonds 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 Senior Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that

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Senior Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Senior Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Senior Lien Bonds and the amount received by the City pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds.

MINUTES TO THE CITY CLERK'S OFFICE

"Authorized Denomination " means \$5,000 and any integral multiple of \$5,000.

"Authorized Officer" means the Chief Financial Officer of the City, or if the Chief Financial Officer so determines and designates, the City Comptroller.

"Beneficial Owner" means the owner of a beneficial interest in Bonds registered in the name of Cede & Co., as nominee of DTC (or a successor securities depository or nominee for either of them).

"Bond Counsel" means one or more firms of nationally recognized bond counsel designated by the Corporation Counsel of the City.

"Bond Debt Service Reserve Account" means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2014 Bond Ordinance.

"Bond Debt Service Reserve Requirement" means, as of any date of computation, an amount equal to the sum of (i) that amount established in each ordinance authorizing each series of Outstanding Senior Lien Bonds; and (ii) with respect to any series of Senior Lien Parity Bonds, 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 Bond 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 any original issue discount); or (C) 125 percent of the average annual Bond 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.

"Bond 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 Bond Debt Service Requirement for a Fiscal Year includes all appreciated principal payable in that Fiscal Year but does not include the increase in principal that 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. For purposes of computing the interest payable on any Senior Lien Bonds issued as Variable Rate Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with

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respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. In the event the City has entered into an Interest Rate Hedge Agreement with respect to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds shall be deemed to be the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect. If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds.

"Bondholder" or "Owner" means the person in whose name any Bond is registered on the registration books of the City kept by the Trustee.

"Bond Principal and Interest Account" means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2014 Bond Ordinance.

"Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 of the City

Bonds means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 of the City, authorized pursuant to the Series 2014 Bond Ordinance and issued pursuant to the Indenture.

"Business Day" means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

"Chief Financial Officer" means the person designated by the Mayor as the City's Chief Financial Officer, or if no such designation has been made or if such position is vacant, the City Comptroller of the City.

"City" means the City of Chicago.

"City Comptroller" means the City Comptroller of the City.

"City Council" means the City Council of the City, the governing body of the City.

"Code " means the Internal Revenue Code of 1986, as amended. References to any section, subsection or other subdivision of the Code include regulations promulgated under the Code and in force with respect to such section, subsection or other subdivision.

"Construction Account: 2014 Second Lien Bonds" means the separate account of that name in the Sewer Revenue Fund established pursuant to the Series 2014 Bond Ordinance.

"Construction Accounts" means the Second Lien Construction Accounts and any similar accounts established for Outstanding Senior Lien Bonds.

"Costs of Issuance " means all fees and costs incurred by the City relating to the issuance of the Bonds, including, without limitation, printing costs, the Trustee's initial fees and charges, financial advisory fees, engineering fees, legal fees, accounting fees, and the cost of any related services with respect to the Bonds.

"Defeasance Obligations" means (i) cash, (ii) Certificates, Notes, and Bonds (including State and Local Government Series) issued by the U.S. Treasury (the "Treasury"), (iii) direct obligations of the Treasury which have been stripped by the Treasury itself, CATS, TIGRS and similar securities, (iv) pre-refunded municipal bonds rated "Aaa" by Moody's and "AAA" by S&P; provided, that if the issue is only rated by S&P, then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or

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"AAA" rated pre-refunded municipals, (v) the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form, (vi) obligations issued by the following agencies which are backed by the full faith and credit of the U.S.: U.S. Export-Import Bank (Eximbank) (direct obligations or fully guaranteed certificates of beneficial ownership), Farmers Home Administration (FmHA) (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financings), 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, or (vii) obligations issued by the following agencies that are not backed by the full faith and credit of the U.S.: Federal Home Loan Mortgage Corp. (FHLMC) debt obligations, Farm Credit System (formerly: Federal Land Banks, Federal Intermediate Credit Banks, and Banks for Cooperatives) debt obligations, Federal Home Loan Banks (FHL Banks) debt obligations, Fannie Mae debt obligations, Financing Corp. (FICO) debt obligations, Resolution Funding Corp. (REFCORP) debt obligations, and U.S. Agency for International Development (U.S. A.I.D.) Guaranteed notes); provided that Defeasance Obligations described in (iii) and (vi) above shall not be used without the consent of S&P if the City seeks to have the defeasance escrow rated hv S&P.

"Determination Certificate" means the Certificate of the Authorized Officer with respect to the Outstanding Bonds of one or more series filed with the office of the City Clerk, addressed to the City Council as provided in the Series 2014 Bond Ordinance.

"DTC" means The Depository Trust Company, New York, New York, its successors and assigns.

"Federal Subsidies" means (a) the direct payments by the Treasury Department to the City of a portion of the interest payable by the City on the Series 201 OB Second Lien Bonds and (b) 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.

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

"Government Obligations" means securities that are obligations described in clauses (a) and (b) of the definition of the term "Permitted Investments".

"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 Sewer System, including without limitation (a) charges imposed for sewer service and usage, (b) charges imposed for inspections and permits for connection to the Sewer System, (c) grants (excluding grants received for capital projects) and (d) Investment Earnings. Gross Revenues do not include Federal Subsidies.

"Indenture" or "Series 2014 Indenture" means the Trust Indenture from the City to the Trustee, dated as of September 1, 2014, with respect to the Bonds, as amended or supplemented in accordance with the terms thereof, providing for the issuance of the Bonds.

"Interest Payment Date" means January 1 and July 1 of each year, commencing January 1, 2015.

"Interest Rate Hedge Agreement" means an interest rate exchange, hedge or similar agreement, entered into in order to hedge or manage the interest payable on all or a portion of any series of Outstanding Senior Lien Bonds or Outstanding Second Lien Bonds, which agreement may include, without limitation, an interest rate swap, a forward or futures contract or an option (e.g., a call, put, cap, floor or collar) and which agreement does not constitute an obligation to repay money borrowed, credit extended or the equivalent thereof. Obligations of

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the City under an Interest Rate Hedge Agreement shall not constitute indebtedness of the City for which its full faith and credit are pledged or for any other purpose.

"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 Sewer Revenue Fund (other than the rebate accounts established and held for the Senior Lien Bonds and Second Lien Bonds) described in the Series 2014 Bond Ordinance. Investment Earnings do not include interest or earnings on investments of moneys on deposit in any Senior Lien Construction Account, Second Lien Construction Account, or Subordinate Lien Construction Account.

"Moody's " means Moody's Investors Service, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, the term "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

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

**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 Sewer Rate Stabilization Account as provided in the Series 2014 Bond Ordinance (other than amounts transferred to that Account upon the issuance of any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account.

"Notice by Mail" means a written notice mailed by first class mail, postage prepaid, to Bondholders at their addresses as shown on the registration books kept pursuant to the Indenture.

"Operation and Maintenance Costs" means all expenses reasonably incurred by the City in connection with the operation, maintenance, renewal, replacement and repair of the Sewer System that under generally accepted accounting principles are properly chargeable to the Sewer 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 Interest Rate Hedge Agreements, trustee's and paying agents' fees and all incidental expenses, but excluding any provision for depreciation or for interest on Senior Lien Bonds, Second Lien Bonds or other obligations for borrowed money payable from the Net Revenues Available for Bonds.

"Opinion of Bond Counsel" means a written opinion of Bond Counsel.

"Outstanding" means, when used with reference to any series or subseries of Second Lien Bonds, all of such obligations that are outstanding and unpaid, provided that such term does not include:

- a) Second Lien Bonds canceled at or prior to such date or delivered to or acquired by the trustee or paying agent for such Second Lien Bonds at or prior to such date for cancellation;
- b) matured or redeemed Second Lien Bonds which have not been presented for payment in accordance with the provisions of the trust indenture or ordinance authorizing such series of Second Lien Bonds and for the payment of which the City has deposited funds with the trustee or paying agent for such Second Lien Bonds;
- c) Second Lien Bonds for which the City has provided for payment by depositing in an irrevocable trust or escrow, cash or Defeasance Obligations, in each case, the maturing principal of and

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interest on which will be sufficient 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;

d) Second Lien Bonds in lieu of or in exchange or substitution for which other Second Lien Bonds shall have been authenticated and delivered pursuant to the trust indenture or ordinance authorizing such series of Second Lien Bonds; and

- e) Second Lien Bonds owned by the City.

When used with respect to Senior Lien Bonds, "Outstanding" shall have the meaning ascribed to such term in the respective Senior Lien Bond Ordinances.

"Outstanding Second Lien Bonds" means, collectively, the Outstanding Series 2001 Second Lien Bonds, the Outstanding Series 2004B Second Lien Bonds, the Outstanding Series 2006 Second Lien Bonds, the Outstanding Series 2008 Second Lien Bonds, the Outstanding Series 2010 Second Lien Bonds, and the Outstanding Series 2012 Second Lien Bonds.

"Outstanding Senior Lien Bonds" means the Outstanding Series 1998 Senior Lien Bonds.

~~Outstanding Senior Debt Bonds means the Outstanding Series 1970 Senior Debt Bonds.~~

"Permitted Investments" means any of the following:

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

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

c) obligations of Fannie Mae, Federal Home Loan Mortgage Corporation or of any agency or instrumentality of the United States of America now existing or created after the issuance and delivery of the Bonds, including but not limited to the 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 \$100,000,000 or (ii) by certificates of deposit that are continuously and fully insured by any agency of the United States of America, or 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

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

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

h) repurchase agreements and investment agreements with any bank, trust company, national banking



ny, repurchase agreements and investment agreements with any bank, trust company, national banking association (which may include the Trustee), 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 (if not rated by at least two Rating Agencies, then a rating by one Rating Agency shall be sufficient), 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 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 categories by numerical modifier or otherwise as rated by a Rating Agency and maintaining such rating during the term of such investment;

(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; and

(1) Defeasance Obligations to the extent not included in (a) through (k) above.

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"Principal and Interest Account" means the "City of Chicago Wastewater Transmission Revenue Project Bonds Series 2014 Second Lien Bonds Principal and Interest Account" in the 2014 Second Lien Bonds Revenue Fund as described in the Indenture.

"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 application in accordance with the Senior Lien Bond Ordinance 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; and

b) as of any particular date of computation and with respect to Second Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Second Lien Bonds of said series 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 Bonds or the ordinance or

when due and the application in accordance with the Indenture, with respect to the Bonds, or the creation of trust indenture creating any other series of Second Lien Bonds, 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.

"Principal Office" means, with respect to the Trustee, its principal office in Chicago, Illinois.

"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 Costs of Issuance.

"Projects" means the program of improvement, extension and rehabilitation of the Sewer System consisting of the construction and acquisition of flood relief sewers, the rehabilitation and replacement of existing sewers, the expansion of operational facilities, the provision of any and all necessary facilities, services and equipment to protect and enhance the safety, integrity and security of the Sewer System.

"RatingAgency" means any nationally recognized securities rating agency.

"Record Date " means June 15 and December 15 of each year.

"S&P" means Standard & Poors Financial Services LLC, a subsidiary of The McGraw Hill Companies, Inc., a limited liability company organized and existing under the laws of the State of New York, its successors and assigns, and, if such limited liability company shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

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"Second Lien Bond Revenues " means any Net Revenues Available for Bonds deposited into the Second Lien Bonds Account pursuant to (i) the ordinances authorizing the Outstanding Second Lien Bonds, (ii) the Series 2014 Bond Ordinance, and (iii) the ordinances authorizing any Second Lien Parity Bonds.

"Second Lien Bonds " means the Series 2001 Second Lien Bonds, the Series 2004B Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Bonds and all Second Lien Parity Bonds.

"Second Lien Bonds Account" means the separate account of that name established in the Sewer Revenue Fund as provided in the Series 2014 Bond Ordinance.

"Second Lien Bonds Subaccount" means the 2014 Second Lien Bonds Subaccount established in the Second Lien Bonds Account by the Series 2014 Bond Ordinance.

"Second Lien Construction Accounts" means (i) the Construction Account: 2014 Second Lien Bonds and the various accounts established for construction purposes by the Series 2001 Bond Ordinance, the Series 2004 Bond Ordinance, the Series 2006 Bond Ordinance, the Series 2008 Bond Ordinance, the Series 2010 Bond Ordinance, the Series 2012 Bond Ordinance or the ordinances authorizing any Second Lien Parity Bonds and (ii) any account established to pay costs of issuance of Second Lien Bonds.

"Second Lien Parity Bonds" means obligations, other than the Series 2001 Second Lien Bonds, the Series 2004B Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, and the Bonds, which are payable from Second Lien Bond Revenues on an equal and ratable basis with all other Outstanding Second Lien Bonds

"Senior Lien Bond Ordinances " means, to the extent applicable, Parts A and D of the Series 1998 Bond Ordinance and ordinances of the City authorizing the issuance of Senior Lien Parity Bonds.

"Senior Lien Bonds " means the Series 1998 Senior Lien Bonds and all Senior Lien Parity Bonds issued and outstanding pursuant to the Senior Lien Bond Ordinances.

"Senior Lien Parity Bonds" means obligations, other than the Series 1998 Senior Lien Bonds, that are payable from Net Revenues Available for Bonds on an equal and ratable basis with all other Outstanding Senior Lien Bonds.

"Series 1998 Bond Ordinance " means the ordinance passed by the City Council on December 10, 1997, as amended by the City Council on February 5, 1998, authorizing the issuance of the Series 1998 Senior Lien Bonds.

"Series 1998 Senior Lien Bonds" means the Wastewater Transmission Revenue Bonds, Refunding Series 1998A, of the City authorized by and issued pursuant to the Series 1998 Bond Ordinance.

"Series 2001 Bond Ordinance" means the ordinance passed by the City Council on March 7, 2001 authorizing the issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Indenture" means the Trust Indenture dated as of December 1, 2001 from the City to Amalgamated Bank of Chicago, as trustee, providing for issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2001 of the City authorized pursuant to the Series 2001 Bond Ordinance and issued pursuant to the Series 2001 Indenture.

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"Series 2004 Bond Ordinance" means the ordinance passed by the City Council on May 26, 2004, authorizing the issuance of the Series 2004B Second Lien Bonds.

"Series 2004B Indenture" means the Trust Indenture, dated as of July 1, 2004, from the City to Amalgamated Bank of Chicago, as trustee, providing for issuance of the Series 2004B Second Lien Bonds.

"Series 2004B Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2004B authorized by the Series 2004 Bond Ordinance and issued pursuant to the Series 2004B Indenture.

"Series 2006 Bond Ordinance" means the ordinance passed by the City Council on October 4, 2006, authorizing the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Indenture" means the Trust Indenture dated as of November 1, 2006 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2006, of the City, authorized by the Series 2006 Bond Ordinance and issued pursuant to the Series 2006 Indenture, consisting of \$60,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2006A, and \$95,030,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2006B.

"Series 2008 Bond Ordinance" means the Ordinance passed by the City Council on May 14, 2008 authorizing the issuance of the Series 2008 Second Lien Bonds.

"Series 2008 Second Lien Bonds " means the Series 2008A Second Lien Bonds and the Series 2008C Second Lien Bonds

DEFINITIONS.

"Series 2008A Indenture" means the Trust Indenture dated as of November 1, 2008 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008A Second Lien Bonds.

"Series 2008A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2008A, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008A Indenture, consisting of the \$167,635,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008A.

"Series 2008C Indenture" means the Amended and Restated Trust Indenture dated as of December 1, 2011, as amended March 1, 2012, from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008C Second Lien Bonds, amending and restating the original Trust Indenture, dated as of October 1, 2008, from the City to Amalgamated Bank of Chicago, as trustee.

"Series 2008C Second Lien Bonds" means the Second Lien Wastewater Transmission Variable Rate Revenue Refunding Bonds, Series 2008C, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008C Indenture, consisting of the \$332,230,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008C.

"Series 2010 Bond Ordinance" means the Ordinance passed by the City Council on July 28, 2010, authorizing the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Indenture" means the Trust Indenture dated as of November 1, 2010 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2010 Second Lien Bonds.

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"Series 2010 Second Lien Bonds" means the Series 201 OA Second Lien Bonds and the Series 201 OB Second Lien Bonds.

"Series 2010A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt) of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$25,865,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt).

"Series 2010B Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment) of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$250,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment).

"Series 2012 Bond Ordinance" means the ordinance passed by the City Council on May 9, 2012, authorizing the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Indenture" means the Trust Indenture dated as of September 1, 2012 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012, of the City authorized pursuant to the Series 2012 Bond Ordinance and issued pursuant to the Series 2012 Indenture, consisting of the \$276,470,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012.

"Sewer Rate Stabilization Account" means the separate account of that name previously established by the City in the Sewer Revenue Fund and described in the Series 2014 Bond Ordinance.

"Sewer Revenue Fund" means the separate fund designated the "Sewer Revenue Fund of the City of Chicago" previously

"Sewer Revenue Fund" means the separate fund designated the Sewer Revenue Fund of the City of Chicago previously established by the City pursuant to the Municipal Code and described in the Series 2014 Bond Ordinance.

"Sewer 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 sewer and wastewater transmissions and any and all further extensions, improvements and additions to the Sewer System.

"Short Term Obligations" means the Line of Credit Notes and the Commercial Paper Notes authorized by the Series 2014 Bond Ordinance or by ordinances authorizing certain other series of Second Lien Bonds.

"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 a Senior Lien Bond Ordinance 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 on such future date of a Senior Lien Bond; and

b) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series, the amount required by the Indenture with respect to the Bonds, or the amounts required by any ordinance or trust indenture creating any other series of Second Lien Bonds, to

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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 on such future date of a Second Lien Bond.

"State " means the State of Illinois.

"Subordinate Lien Obligation Revenues" means all sums, amounts, funds or moneys which are deposited to the Subordinate Lien Obligations Account as described in the Series 2014 Bond Ordinance.

"Subordinate Lien Obligations" means obligations that are payable from sums, amounts, funds or monies which are deposited to the Subordinate Lien Obligations Account pursuant to Section 2.2(e) of the Series 2014 Bond Ordinance.

"Subordinate Lien Obligations Account" means the separate account of that name established in the Sewer Revenue Fund as provided in the Series 2012 Bond Ordinance and other ordinances authorizing the issuance of Subordinate Lien Obligations.

"Supplemental Indenture" means any indenture modifying, altering, amending, supplementing or confirming the Indenture duly entered into in accordance with the terms of the Indenture.

"Trustee " means Amalgamated Bank of Chicago, as Trustee under the Indenture, and its successors and assigns.

"2014 Second Lien Bonds Revenue Fund" means the "City of Chicago Wastewater Transmission Revenue Bonds Series 2014 Second Lien Bond Revenue Fund" established under and as described in the Indenture.

"Undertaking" means the City's Continuing Disclosure Undertaking related to the Bonds, as amended from time to time, if required by law.

"Variable Rate Bonds" means any Second Lien Bonds or Senior Lien Bonds the interest rate on which is not established at the time they are issued at a single numerical rate for their entire term.

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**APPENDIX C**

**SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE**

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**APPENDIX C**

**SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE**

*The following is a summary of certain provisions of the Indenture not summarized elsewhere in this Official Statement. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to the Indenture, a copy of which is on file with the Trustee.*

**Source of Payment; Pledge of Second Lien Bond Revenues**

The provisions of the Indenture constitute a contract among the City, the Trustee and the Owners of the Bonds. The Bonds are legal, valid and binding limited obligations of the City payable solely from Second Lien Bond Revenues and certain other moneys and securities held by the Trustee under the Indenture. The Bonds, together with any other Second Lien Bonds, also are secured by and payable from any amounts on deposit in the Second Lien Construction Accounts. The Bonds and the interest thereon do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City. The Bonds are secured by a pledge of the Second Lien Bond Revenues and funds and accounts held by the Trustee under the Indenture. The Bonds have a claim for payment from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts on a parity with the claim of any other Second Lien Bonds that may be Outstanding from time to time.

**Additional Second Lien Parity Bonds**

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

- i) the funds required to be transferred to the Principal and Interest Account must have been transferred in full up to the date of the delivery of such Second Lien Parity Bonds; and

up to the date of the delivery of such Second Lien Parity Bonds, and

ii) 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 and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming 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. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

- (1) if prior to the issuance of such Second Lien Parity Bonds, the City has enacted an increase in the rates of the Sewer 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
- (2) any such adjustment shall be evidenced by a certificate of the Authorized Officer.

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For purposes of calculating the adjustment described in this paragraph (ii), any rate increase enacted by the City and scheduled to take effect in a future Fiscal Year may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for that and each succeeding Fiscal Year.

If during the first six months of a Fiscal Year, an audit of the Sewer System for the preceding Fiscal Year by an independent certified public accountant is not available, the conditions of paragraph (ii) above shall be deemed to have been satisfied if both (A) Net Revenues Available for Bonds for the second preceding Fiscal Year (as shown by the audit of an independent certified public accountant), adjusted as described in paragraph (ii) above and (B) Net Revenues Available for Bonds for the preceding Fiscal Year (as estimated by the Authorized Officer), adjusted as described in paragraph (ii) above, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming 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.

b) The City may issue Second Lien Parity Bonds without complying with either of the requirements of paragraph (a)(ii) above:

i) to pay, redeem or refund Senior Lien Bonds or Second Lien Bonds if in the judgment of the City there will be no money available to make payments of interest on or principal of those Senior Lien Bonds or Second Lien Bonds (at maturity or on Sinking Fund Payment dates) as such amounts become due; and

ii) to pay, redeem or refund any Senior Lien Bonds or Second Lien Bonds if the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service after the issuance of the Second Lien Parity Bonds and the payment, redemption or refunding of such Senior Lien Bonds or Second Lien Bonds will not be in excess of the sum of the Aggregate Senior Lien Debt Service or the Aggregate Second Lien

Bonds will not be in excess of the sum of the Aggregate Senior Lien Debt Service of the Aggregate Second Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each Fiscal Year in which there was to be any Aggregate Senior Lien Debt Service or Aggregate Second Lien Debt Service on those prior Outstanding Senior Lien Bonds or Second Lien Bonds.

c) Other obligations, including Subordinate Lien Obligations, 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 agrees in the Indenture not to issue any bonds, notes or other evidences of indebtedness secured by the pledge contained in the Indenture, other than Second Lien Parity Bonds, and not to create or cause to be created any lien or charge on Net Revenues Available for Bonds, or on any amounts pledged for the benefit of Owners of Bonds under the Indenture, other than the pledge contained in the Indenture, provided that the Indenture does not prevent the City from (a) issuing Senior Lien Bonds, (b) issuing bonds, notes or other evidences of indebtedness payable out of, or secured by a pledge of, Net Revenues Available for Bonds to be derived on and after such date as the pledge contained in the Indenture shall be discharged and satisfied as provided in the Indenture, or (c) issuing bonds, notes or other evidences of indebtedness which are payable out of, or secured by, or to which are pledged, amounts which may be withdrawn from or secured by, the Second Lien Bonds Account so long as such pledge is expressly junior and subordinate to the pledge contained in the Indenture.

#### **Punctual Payment**

The City covenants in the Indenture that it will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on all Bonds in strict conformity with the terms of such Bonds and of the

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Indenture, and that it will faithfully observe and perform all the conditions, covenants and requirements of the Series 2014 Bond Ordinance, the Indenture, and of the Bonds issued under them.

#### **Other Covenants**

In addition to the covenants referred to above, the City has covenanted under the Indenture, so long as any of the Bonds are Outstanding, as follows:

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

b) So long as the Bonds are Outstanding, to continue to operate the Sewer System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of the Indenture.

c) Prior to the end of each Fiscal Year, to conduct a review to determine whether it has been and will be in compliance with the requirement described above under the subcaption "SECURITY FOR THE BONDS - Second Lien Rate Covenant" and, whenever this annual review indicates that the projected Gross Revenues will not be sufficient to comply with the rate covenant, to prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant, and the Director of the Office of Budget and Management of the City and the Authorized Officer shall recommend appropriate action to the City Council to comply with the rate covenant. See "FINANCIAL OPERATIONS - Annual Budget Review and Implementation of Annual Budget."

d) To make all necessary and proper repairs, replacements, additions and betterments to the Sewer System so that it may at all times be operated efficiently, economically and properly. When any necessary equipment or facility becomes worn out, destroyed or otherwise is insufficient for proper use, it shall promptly be



equipment or facility becomes worn out, destroyed or otherwise is insufficient for proper use, it shall promptly be replaced so that the value and efficiency of the Sewer System will be at all times fully maintained.

e) To establish such rules and regulations for the control and operation of the Sewer System as are necessary for the safe, lawful, efficient and economical operation of the Sewer System.

f) Not to direct or to permit any action which (or fail to take or to permit any action the failure of which) would cause any Bond to be an "arbitrage bond" within the meaning of the Code, as amended from time to time and as applicable to the Bonds.

So long as any of the Bonds continue to bear interest (whether or not they are Outstanding) and after the 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), the City covenants and agrees to take the following actions:

(1) The City (i) will take all actions that are necessary to be taken (and avoid taking any action that is necessary to avoid being taken) so that interest on the Bonds will not be or become subject to federal income taxation under present law, and (ii) 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 the Bonds will not be or become includable in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

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2) The City will, without limitation, (i) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the Bonds and other amounts, and (ii) timely rebate to the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the Sewer Revenue Fund, all as shall be necessary to comply with the requirements described in (f) above. The City shall also make or cause to be made identifiable investments of amounts allocable to the Bonds as is 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 the accounts of the Sewer Revenue Fund that are subject to rebate and those amounts from time to time shall be held by the City in a rebate account for the Bonds 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 Sewer Revenue Fund and its accounts and sub-accounts established by the Indenture may be applied, and, for purposes of computing the balance in the Sewer Revenue Fund and such various accounts shall be disregarded.

3) 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: (i) defease any Bonds; (ii) sell, lease or otherwise dispose of any material portion of the Sewer System; (iii) enter into or amend any short-term or long-term contract for sewer service by the City other than pursuant to general rates charged to the general public; or (iv) enter into or amend any contract or arrangement for persons other than its employees to manage the Sewer System.

4) The provisions described in paragraphs (1), (2) and (3) above shall not be interpreted to impose upon the City any obligation to redeem or to purchase any Bonds other than with proceeds or other amounts available under the Indenture.

### Remedies

Any Owner of a Bond may proceed by civil action to compel performance of all duties required by the Indenture, including the establishment and collection of sufficient fees, charges and rates for the services supplied by the Sewer

including the establishment and collection of sufficient fees, charges and rates for the services supplied by the Sewer System, and the application of Gross Revenues as provided in the Indenture.

### **Amendments Without Bondholder Consent**

The City and the Trustee, from time to time and at any time, without the consent of or notice to the Bondholders, may amend the Indenture as follows:

- i) to cure any formal defect, omission, inconsistency or ambiguity in the Indenture;
- ii) to provide limitations and restrictions in addition to the limitations and restrictions contained in the Indenture on the issuance of Second Lien Parity Bonds or other evidences of indebtedness;
- iii) to grant to or confer or impose upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, authority, security, liabilities or duties which may lawfully be granted, conferred or imposed and which are not contrary to or inconsistent with the Indenture as heretofore in effect, provided that no such additional liabilities or duties shall be imposed upon the Trustee without its consent;

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iv) to add to the covenants and agreements of, and limitations and restrictions upon the City in the Indenture, other covenants, agreements, limitations and restrictions to be observed by the City which are not contrary to or inconsistent with the Indenture;

v) to confirm, as further assurance, any pledge under, and the subjection to any claim, lien or pledge created or to be created by, the Indenture, or of any moneys, securities or funds;

vi) to authorize a different denomination or denominations of the Bonds and to make correlative amendments and modifications to the Indenture regarding exchangeability of Bonds of different denominations, and similar amendments and modifications of a technical nature;

vii) to comply with any applicable requirements of the Trust Indenture Act of 1939, as from time to time amended; or

viii) to modify, alter, amend or supplement the Indenture in any other respect which is not materially adverse to the Bondholders and which does not otherwise require Bondholder consent as described in "Amendments with Bondholder Consent" below and which, in the judgment of the Trustee (which may rely upon an Opinion of Bond Counsel), is not to the material prejudice of the Trustee.

Before the City and the Trustee may amend the Indenture as described above, there shall be delivered to the Trustee an Opinion of Bond Counsel stating that such amendment (i) is authorized or permitted by the Indenture, (ii) complies with the terms of the Indenture, (iii) upon the adoption of the Indenture, will be valid and binding upon the City in accordance with its terms, and (iv) will not adversely affect the exclusion of interest on any Bonds from the gross income of the owners of Bonds for federal income tax purposes under the Code, and the Trustee may rely conclusively upon such opinion as to such matters.

### **Amendments with Bondholder Consent**

Except for any amendment described above, subject to the terms and provisions described below and not otherwise, the City and the Trustee may, from time to time, with the consent of Bondholders of more than 50 percent in aggregate principal amount of the Bonds then Outstanding (excluding therefrom any Bonds then owned by the City), enter into any Supplemental Indenture deemed necessary or desirable by the City for the purposes of modifying, altering,

enter into any supplemental indenture deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any of the terms or provisions contained in the Indenture; provided that, unless approved in writing by the Owners of all the Bonds then Outstanding, nothing in the Indenture shall permit, or be construed as permitting: (i) a change in the times, amounts or currency of payment of the principal of or interest on any Bond then Outstanding, or a reduction in the principal amount of any Bond then Outstanding, or the rate of interest on such Bonds; or (ii) a preference or priority of any Bond or Bonds over any other Bond or Bonds; or (iii) a reduction in the aggregate principal amount of Bonds, the consent of the Owners of which is required for any such amendment.

### **Defeasance**

If the City pays or causes to be paid to the Owners of all Outstanding Bonds, the principal of and interest to become due on such Bonds, at the times and in the manner stipulated in the Bonds and in the Indenture, then the pledge of any moneys, securities, funds and property pledged by the Indenture and all other rights granted by the Indenture shall be discharged and satisfied. In such event, the Trustee, upon the request of the City, shall execute and deliver to the City all such instruments as are desirable to evidence such discharge and satisfaction, and the Trustee shall pay over or deliver all moneys or securities held by it pursuant to the Indenture which are not required for the payment or redemption of Bonds theretofore surrendered for such payment or redemption. If the City pays or causes to be paid, or there otherwise is paid, to the Owners of any Outstanding Bonds the principal of, redemption premium, if any, and interest due or to become due on such Bonds, at the times and in the manner stipulated in such Bonds and in the Indenture, such Bonds shall cease to

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be entitled to any benefit or security under the Indenture and all covenants, agreements and obligations of the City to the Owners of such Bonds shall thereupon cease, terminate and become void and be discharged and satisfied.

Outstanding Bonds shall, prior to the maturity or redemption date of such Bonds, be deemed to have been paid as meant and with the effect expressed above if: (i) in case any of said Bonds are to be redeemed on any date prior to their maturity, the City shall have given to the Trustee or an escrow agent in form satisfactory to it irrevocable instructions to give notice of redemption as provided in the Indenture on said date of such notice, (ii) there has been deposited with or held by the Trustee or any escrow agent either moneys in an amount which are sufficient, or noncallable, nonprepayable Defeasance Obligations the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with or held by the Trustee or escrow agent at the same time, shall be sufficient to pay when due the principal of, redemption premium, if any, and interest due and to become due on said Bonds on and prior to the maturity date or redemption date of such Bonds, as the case may be, as certified by an independent certified public accountant acceptable to the Trustee, provided that such certification may be made by the Trustee, escrow agent or an investment banking firm in connection with a current refunding, and (iii) if any Bonds do not mature and are not by their terms subject to redemption within the next succeeding 60 days, the City has given the Trustee or escrow agent in form satisfactory to it irrevocable instructions to provide Notice by Mail, as soon as practicable, to the Owners of such Bonds that the deposit required by clause (ii) above has been made with the Trustee or escrow agent and that said Bonds are deemed to have been paid in accordance with the Indenture and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal of, redemption premium, if any, and interest on said Bonds. Neither Defeasance Obligations nor moneys deposited with the Trustee or escrow agent pursuant to the Indenture nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of, redemption premium, if any, the principal of and interest on said Bonds and such Bonds not so defeased shall have no right to such moneys and Defeasance Obligations; but any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Trustee or escrow agent, if not then needed for such purpose, shall to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal of, redemption premium, if any, and interest to become due on said Bonds on and prior to such redemption date or maturity date of such Bonds, as the case may be, and interest earned from such reinvestments shall be paid over to the City free and clear of any trust, lien or pledge.

Nothing in the Indenture shall prohibit any deposit of Defeasance Obligations, as provided above, from being subject to a subsequent sale of such Defeasance Obligations and reinvestment of all or a portion of the proceeds of that

subject to a subsequent sale of such Defeasance Obligations and reinvestment of all or a portion of the proceeds of that sale in Defeasance Obligations which, together with money to remain so held in trust with the Trustee or escrow agent, shall be sufficient to provide for, the payment of the principal of and interest on any Bonds deemed to have been paid as provided above. Amounts held by the Trustee or escrow agent in excess of the amounts needed so to provide for the payment of such Bonds may be subject to withdrawal by the City for deposit in the Sewer Revenue Fund.

### **Payment, Registration and Transfer Provisions**

Details of payments of the Bonds when in the book-entry form and the book-entry only system are described above under the subcaption "THE BONDS - Book-Entry Only System." The following provisions of the Indenture apply to the Bonds upon the discontinuation of the DTC or any other book-entry registration system for the Bonds.

The principal and redemption price of each Bond is payable upon surrender of such Bond at the Principal Office of the Trustee. Payments of principal of the Bonds shall be payable in clearinghouse funds

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except as provided in the Indenture. Such payments shall be made to the Owner of the Bond so surrendered, as shown on the registration books maintained by the Trustee on the applicable Record Date.

All payments of interest on the Bonds shall be paid to the persons entitled to such payments by the Trustee on the Interest Payment Date or special interest payment date, as applicable, (A) upon request of any Owner of such Bonds in the principal amount of \$1,000,000 or more, by federal funds wire on the Interest Payment Date to any address in the continental United States, if such Owner provides the Trustee with written notice of such wire transfer address at least 15 days prior to the applicable Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless or until changed or revoked by subsequent notice), or (B) if no instructions are given as aforesaid, by clearinghouse funds check or draft mailed on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or such other address as has been furnished to the Trustee in writing by such person.

The transfer of any Bond shall be registered upon the books of the Trustee at the written request of the Bondholder or its attorney duly authorized in writing, upon surrender of such Bond at the Principal Office of the Trustee, together with a written instrument of transfer satisfactory to the Trustee duly executed by the Bondholder or its attorney duly authorized in writing.

The City and the Trustee may deem and treat the Bondholder as the absolute owner of such Bond, whether such Bond is overdue or not, for the purpose of receiving payment of, or on account of, the principal of and interest on such Bond and for all other purposes, and neither the City nor the Trustee shall be affected by any notice to the contrary. All such payments so made to any such Bondholder shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

Any Bond, upon surrender of such Bond at the Principal Office of the Trustee, together with an assignment executed by the Bondholder or its duly authorized agent, at the option of the Bondholder, may be exchanged for an equal aggregate principal amount of Bond or Bonds of any Authorized Denomination of the same series, interest rate and maturity as the Bond being surrendered.

In all cases in which the privilege of exchanging Bonds or registering the transfer of Bonds is exercised, the City shall execute and the Trustee shall authenticate and deliver Bonds in accordance with the provisions of the Indenture. For every such exchange or registration of transfer of Bonds, whether temporary or definitive, the Trustee may make a charge in an amount sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, which sum or sums shall be paid by the person requesting such exchange or registration of transfer as a condition precedent to the exercise of the privilege of making such exchange or registration of transfer

transfer.

Neither the Trustee nor the City shall be required to register the transfer of any Bond during the 15 days next preceding an interest payment date or, in the case of a proposed redemption of Bonds, after they have been selected by the Trustee for redemption.

### **The Trustee**

The City has appointed Amalgamated Bank of Chicago, Chicago, Illinois, as Trustee, for the purposes and upon the express terms and conditions set forth in the Indenture.

The Trustee need perform only those duties that are specifically set forth in the Indenture and no others. The Trustee shall not be answerable for the exercise of any discretion or power under the Indenture or for anything whatsoever in connection with the trust created by the Indenture, except only for its own negligence or bad faith. Under the Indenture, the Trustee is required to exercise such of the rights and powers vested in it by the Indenture and use the same degree of skill and care in its exercise as a prudent person would use and

### **C-1**

exercise under the circumstances in the conduct of his or her own affairs; provided that the Trustee is under no obligation to take any action in respect of the execution or enforcement of any of the trusts created by the Indenture, or to institute, appear in or defend any suit or other proceeding in connection with such execution or enforcement, unless requested in writing so to do by Bondholders of at least a majority in aggregate principal amount of the Bonds then Outstanding, and, if in its opinion such action may tend to involve it in expense or liability, unless furnished from time to time as often as it may require, with security and indemnity satisfactory to it; but the foregoing provision is intended only for the protection of the Trustee.

The Trustee may execute any of the trusts or powers of the Indenture and perform the duties required under the Indenture by or through attorneys, agents or receivers, and is entitled to, and may rely upon, written advice of counsel concerning all matters of trust and duty under the Indenture, and the Trustee is not answerable for the negligence or misconduct of any such attorney or agent selected by it with reasonable care.

The Trustee may buy, sell, own, hold and deal in any of the Bonds for its own account or that of any other person, and may join in any action which any Bondholder may be entitled to take with like effect as if it did not act in any capacity under the Indenture. The Trustee, either as principal or agent, also may engage in or be interested in any financial or other transaction with the City and may act as depository, trustee or agent for any committee or body of Bondholders secured by the Indenture or other obligations of the City as freely as if it did not act in any capacity under the Indenture.

### **Resignation or Removal of Trustee**

The Trustee may resign and be discharged of the trusts created by the Indenture by executing an instrument in writing resigning such trusts and specifying the date when such resignation shall take effect, and filing the same with the City, not fewer than 45 days before the date specified in such instrument when such resignation shall take effect, and by giving Notice by Mail of such resignation, not fewer than 21 days prior to such resignation date, to the Owners of Outstanding Bonds. Such resignation shall take effect on the day specified in such instrument and notice, but only if a successor Trustee has been appointed and has accepted the duties of the Trustee. If the successor Trustee shall not have been appointed within a period of 90 days following the giving of such notice, then the Trustee is authorized to petition any court of competent jurisdiction to appoint a successor Trustee.

The Trustee may be removed by the City at any time by filing with the Trustee an instrument or instruments in writing executed by the City, appointing a successor. Such removal shall be effective 30 days (or such longer period as may be set forth in such instrument) after delivery of the instrument; provided that no such removal shall be effective until the successor Trustee executes, acknowledges and delivers to the City an instrument accepting such appointment.

### **Appointment and Qualifications of Successor Trustee: Automatic Succession in Certain Events**

**Appointment and Qualifications of Successor Trustee, Automatic Succession in Certain Events**

If at any time the Trustee is removed, or is dissolved, or if its property or affairs are taken under the control of any state or federal court or administrative body because of insolvency or bankruptcy, or for any other reason, and if the Trustee shall resign, then the office of the Trustee shall be vacant immediately and a successor may be appointed by the City. After any such appointment, the City must cause notice of such appointment to be given to the predecessor Trustee and the successor Trustee, and must cause Notice by Mail to be given to all Bondholders. No such appointment will be effective until the successor Trustee has accepted such appointment.

If the Trustee resigns and no appointment of a successor Trustee is made pursuant to the provisions of the Indenture described above within 90 days following the giving of notice of resignation, the retiring Trustee may immediately apply to a court of competent jurisdiction for the appointment of a successor Trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee meeting the qualifications set forth in the Indenture.

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Each successor Trustee must be a commercial bank with trust powers or a trust company (a) duly organized under the laws of the United States or any state or territory of the United States, (b) authorized under such laws to perform all the duties imposed upon it by the Indenture and the laws of the State, (c) capable of meeting its obligations under the Indenture, (d) subject to supervision or examination by Federal or state authority, and (e) with combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually pursuant to law or the requirements of such authority, then for the purposes of the Indenture 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 corporation into which any Trustee is merged or converted or with which it is consolidated, or any corporation resulting from any merger or consolidation to which any Trustee is a party, or any company to which all or substantially all of the corporate trust business of the Trustee is sold or transferred, shall be the successor Trustee under the Indenture, without the execution or filing of any paper or any further act on the part of the parties to the Indenture, anything in the Indenture to the contrary notwithstanding.

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#### APPENDIX D

#### PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL

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September 23, 2014

*The Underwriters Listed on Annex I*

City of Chicago City Hall  
121 North LaSalle Street Chicago, Illinois  
60602

Amalgamated Bank of Chicago, as trustee under the Trust  
Indenture defined below One West Monroe Street Chicago,  
Illinois 60603

We have examined a certified copy of the record of proceedings of the City of Chicago (the "City"), together with various accompanying certificates, pertaining to the issuance today by the City of \$292,405,000 Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014 (the "Bonds"). The record of proceedings includes an Ordinance adopted by the City Council of the City on April 30, 2014, providing for the issuance of the Bonds (the "Bond Ordinance"), a Trust Indenture, dated as of September 1, 2014 (the "Trust Indenture"), from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee"), providing for the issuance of the Bonds, a Determination Certificate of the Chief Financial Officer of the City pursuant to the Bond Ordinance establishing certain terms of the Bonds and filed with the City Clerk pursuant to the Bond Ordinance (the "Determination Certificate"), and certificates of officers of the City, the Trustee and the purchasers of the Bonds as to various factual matters. Capitalized terms defined in the Bond Ordinance and the Trust Indenture and not otherwise defined in this opinion are used with the same meanings in this opinion.

The Bonds are being issued for the purposes of (i) paying or reimbursing the City for its payment of certain Project Costs and (ii) paying Costs of Issuance of the Bonds.

The Bonds are dated the date of this opinion and bear interest from their date until paid, payable semi-annually on January 1 and July 1 in each year, with the first interest payment date being January 1, 2015, at the rates per year, and

January 1 and July 1 in each year, with the first interest payment date being January 1, 2015, at the rates per year, and mature on January 1 of each of the years and in the principal amounts, provided in the Bond Ordinance and the Determination Certificate. The Bonds are subject to optional and mandatory sinking fund redemption in advance of their maturity as provided in the Bond Ordinance and the Determination Certificate.

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Based upon this examination, we are of the opinion that:

1. The Bond Ordinance has been duly and lawfully adopted by the City, is in full force and effect and is valid and binding upon the City. The Determination Certificate has been duly authorized and executed by the City, is in full force and effect and is valid and binding upon the City.

2. The Trust Indenture has been duly authorized, executed and delivered by the City. Assuming the due authorization, execution and delivery of the Trust Indenture by the Trustee, the Trust Indenture is in full force and effect and is valid and binding upon the City.

3. The Bonds are valid and legally binding limited obligations of the City. The Bonds, together with the City's Outstanding Second Lien Bonds and any Second Lien Parity Bonds which may be issued in the future, have a claim for payment, as to principal, redemption premium, if any, and interest, solely from the Second Lien Bond Revenues deposited into the 2014 Second Lien Bonds Subaccount established by the Bond Ordinance or comparable subaccounts established for other series of Second Lien Bonds in the Second Lien Bonds Account in the City's Sewer Revenue Fund and from certain other moneys held by the Trustee under the Trust Indenture, all as provided in the Bond Ordinance and the Trust Indenture. Second Lien Bond Revenues consist of Net Revenues Available for Bonds remaining in the Sewer Revenue Fund after required credits and deposits have been made to certain Senior Lien Accounts in the Sewer Revenue Fund pursuant to the ordinances authorizing the Outstanding Senior Lien Bonds and any Senior Lien Parity Bonds that the City may issue in the future. The Second Lien Bond Revenues have been irrevocably pledged to the payment of the Bonds on a parity with the Outstanding Second Lien Bonds and any Second Lien Parity Bonds that the City may issue in the future in accordance with the applicable provisions of the Trust Indenture and the ordinances and indentures authorizing the Outstanding Second Lien Bonds and any such Second Lien Parity Bonds at the time Outstanding. The Bonds do not have a claim for payment from taxes of the City.

4. The Bond Ordinance and the Trust Indenture create a valid pledge of the Trust Estate (as defined in the Trust Indenture), including Second Lien Bond Revenues and moneys and securities held in the Second Lien Bonds Account, subject to application of such moneys and securities in the manner provided in the Bond Ordinance and the Trust Indenture.

5. Interest on the Bonds under present law is not included in "gross income" for federal income tax purposes and thus is exempt from federal income taxes based on gross income. This opinion is subject to compliance of the City with its covenant in the Trust Indenture to comply with all requirements which must be met in order for interest on the Bonds not to be included in gross income for federal income tax purposes under present law. The City has the power to comply with its covenant. If the City were to fail to comply with these requirements, interest on the Bonds could be included in gross income for federal income tax purposes retroactive to the date the Bonds are issued. Interest on the Bonds is not an item of tax preference for calculation of an alternative minimum tax for individuals or corporations under



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September 23, 2014 Page 3

present law. Interest on the Bonds will be taken into account in computing an adjustment used in determining the alternative minimum tax for certain corporations. Ownership of the Bonds may result in other federal tax consequences to certain taxpayers, and we express no opinion regarding any such collateral consequences arising with respect to the Bonds.

6. Interest on the Bonds is not exempt from present Illinois income taxes.

Ownership of the Bonds may result in other federal, state and local tax consequences to certain taxpayers and we express no opinion with respect to any such tax consequences with respect to the Bonds.

The rights of registered owners of the Bonds and the enforceability of provisions of the Bonds, the Bond Ordinance and the Trust Indenture may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights. Enforcement of provisions of the Bonds, the Bond Ordinance or the Trust Indenture by an equitable or similar remedy is subject to general principles of law or equity governing such a remedy, including the exercise of judicial discretion whether to grant any particular form of relief.

This opinion is based upon facts known or certified to us and laws in effect on its date and speaks as of that date. The opinions stated in this letter are expressions of professional judgment based upon such facts and law and are not a guaranty of a result if the validity or tax-exempt status of the Bonds are challenged. We have not undertaken any obligation to revise or supplement this opinion to reflect any facts or circumstances that may come to our attention after the date of this opinion or any changes in law that may occur after that date. In addition, we have not undertaken any obligation to assist the City in complying with those requirements described in paragraph 5 above which the City must meet after the date of this opinion in order for interest on the Bonds not to be included in gross income for federal income tax purposes under present law.

Very truly yours,

*Annex I*

Merrill Lynch, Pierce, Fenner & Smith  
Incorporated  
540 W. Madison St.  
Chicago, IL 60661

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Drexel Hamilton, LLC 30 South Wacker Drive Chicago, Illinois 60606

Harvestons Securities, Inc. 8301 E. Prentice Ave., Suite 305 Greenwood Village, Colorado 80111

The Northern Trust Company 50 S. LaSalle St. Chicago, IL 60603

Podesta & Co.  
208 S. LaSalle Street. Suite 1460 Chicago, Illinois 60604

The Williams Capital Group, L.P. 650 Fifth Avenue, 11th Floor New York. NY 10019  
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## APPENDIX E RETIREMENT FUNDS

### APPENDIX E RETIREMENT FUNDS

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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 ("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

caused the unfunded liabilities of PABF and FABF 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.

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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

estimates 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 "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

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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, Inc. ("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

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](http://www.meabf.org) <<http://www.meabf.org>>; [www.chipabf.org](http://www.chipabf.org) <<http://www.chipabf.org>>; [www.labfchicago.org](http://www.labfchicago.org) <<http://www.labfchicago.org>>; and [www.fabf.org](http://www.fabf.org) <<http://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.

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#### **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 MEARF certain employees and

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

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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:

### **Retirement Fund**

MEABF  
PABF  
FABF  
LABF  
Total

### **Active Members**

30,647 12,161 4,685 2,844 50,337

### **Inactive/ Entitled to Benefits**

14,254 654 57 1,432 16,397

### **Retirees and Beneficiaries**

25,042 13,159 4,640 3,954 46,795



**Totals**

69,943 25,974 9,382 8.230 113,529

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

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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 plaintiffs 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.

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*Investments*

Each Retirement Fund Board manages the investments of its respective Retirement Fund. State law regulates the types of investments in which the Retirement Funds' assets may be invested. Furthermore, the Retirement Fund Boards invest the Retirement Funds' assets in accordance with the prudent person rule, which requires members of the Retirement Fund Boards, who are fiduciaries of the Retirement Funds, to discharge their duties with the care, prudence and diligence that a prudent person acting in a like capacity and familiar with such matters would use in a similar situation.

In carrying out their investment duty, the Retirement Fund Boards may appoint and review investment managers as fiduciaries to manage the investment assets of the Retirement Funds. Such investment managers are granted discretionary authority to manage the Retirement Funds' assets. Additional information regarding the Retirement Funds' investments and investment management may be found on the Retirement Funds' websites; provided, however, that the contents of such websites are not incorporated into this Appendix by such reference.

Table 2 provides information on the investment returns experienced by each of the Retirement Funds.

TABLE 2 - INVESTMENT RATES OF RETURN, 2003-2013

Fiscal Year	MEABF	FABF	LABF PABF
2003	19.6%	6.6%	7.3 (28.7)
2004	10.3	12.7	19.4
2005			13.7
2006	0.1	12.9	14.9
2007	7.5		
2008	28.3%	12.8	
2009	9.5	14.0	11.0 (33.8)
2010	8.0	23.7	17.7 (2.0)
2011	17.5%	11.5	16.2
2012	7.8	11.2	19.5
2013	8.0 (29.2)	21.5	15.5 (0.3)
Assumed Rate <sup>1</sup>	7.5	14.6	15.8

21.2% 11.0  
7.3 12.1

8.8 (27.8) 21.5 12.7

0.8 12.4 13.7 7.75

Source The audited financial statements of the FABF as of December 31 of the years 2003-2012 For MLABF, 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**

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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

the City requests that the City's contributions to the Retirement Funds be determined pursuant to the Pension Code 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

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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.

On December 30, 2010, Governor Pat Quinn signed into law Public Act (P.A.) 96-1495, 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.

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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 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").

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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

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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

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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-

**Fiscal Year**

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

**Actuarial Value  
of Assets<sup>2</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 10,531,447 10,513,564

**Fair Value of Net Assets**

\$12,952,096 13,245,445 14,164,347 14,595,514 9,844,339 10,876,846 11,408,555 10,536,135 10,799,603 11,261,254

**Actuarial Value as a Percentage of Fair Value**

101.21%

98.80

94.86

97.67 140.16 119.99 109.13 109.35

97.51

93.36

Source

(1) (2)  
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 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.

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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

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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 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.

\* 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.

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TABLE 4 - INFORMATION REGARDING CITY'S CONTRIBUTIONS - AGGREGATED

## Fiscal Year

2004  
2005  
2006  
2007<sup>141</sup>  
2008<sup>141</sup>  
2009<sup>4)</sup>  
2010<sup>141</sup>

Hi  
2011 2012 2013

**Actuarially Required Contribution**

\$ 545,232 698,185 785,111 865,776 886,215 990,381 1,112,626 1,321,823 1,470,905 1,695,278

**Actual Employer Contribution\*2)**

\$345,398 423,515 394,899 395,483 416,130 423,929 425,552 416,693 440,120 442,970

**Percentage of Actuarially Required Contribution Contributed<sup>31</sup>**

63.3%  
60.7  
50.3  
45.7  
47.0  
42.8  
38.2  
31.5  
29.9  
26.1

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 year ending December 31, 2011 and December 31, 2012.

- 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.
- 2) Includes the portion of the PPRT contributed to the Retirement Funds in each year.
- 3) The estimated multipliers that would have been necessary for each Retirement Fund to make the full Actuarially Required Contribution in 2013 were as follows: 4.52 for MLABF, 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.

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## THE MEABF

## - FINANCIAL CONDITION OK FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

	2004	2002	2006	2007	2008	2009	2010	2011	2012 2013		
Beginning Net Assets (Fair Value).	\$5,922,789	\$6,242,741	\$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
Income											
• 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
• Miscellaneous Income		2	=	=	=	=	24	=	=	=	=
Total						\$ 888,534	\$ 679,920	\$ 1,056,524	\$ 757,921	\$(1,663,124)	\$1,067,241
									936,195	\$ 320,705	\$ 877,845
											\$1,024,509
Expenditures											
• Benefits and Refunds <sup>1,2</sup>		538,910	560,228	565,887	582,046	599,137	632,864	660,081	695,674	741,583	779,003
• Administrative	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	\$ 640,630
									666,826	\$ 703,050	\$ 748,425
											\$ 785,502
Ending Net Assets (Fair Value)	\$5,166,225	\$5,435,593	\$5,053,249	\$5,182,670	\$5,421,676	\$6,356,888	\$6,841,127	\$7,010,007	\$4,740,567		
Actuarial Value of Assets <sup>3</sup>	\$6,295,788	\$6,003,390	\$5,552,291	\$5,073,320	\$5,114,208	\$6,332,379	\$6,509,146	\$6,890,463	\$6,669,502		
Actuarial Liabilities <sup>4</sup>	10,830,119	11,828,666	12,292,930	13,475,376	13,828,920	9,250,212	9,476,118	9,968,747	10,383,158		
UAAL (Fair Value) <sup>5</sup>	6,393,073	7,239,681	8,292,706	8,407,244	2,893,324	2,634,991	2,958,740	5,642,591	5,663,894		
UAAL (Actuarial Value) <sup>5</sup>	5,825,276	6,740,639	8,402,057	8,714,712	2,917,833	2,966,972	3,078,284	3,713,656	4,534,331		
Funded Ratio (Fair Value) <sup>1</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>1</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

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.

1) Investment income is shown net of fees and expenses.

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

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

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

5) Calculated using net assets.

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## 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	\$3,175.509	\$3,213.432						
Income															
•Member							Contributions							78.801	
89.11(1	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'''							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	\$ 582.453	
Total							\$ 528.778	\$ 697,999	\$ 621.920	\$ (830.016)	\$ 844.239	\$ 661,815	\$ 315,504	\$ 656,719	\$ 697.991
Expenditures															
•Benefits					and				Refunds'-'					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		\$ 409.927	
Total						\$ 439.750	\$ 460.760	\$ 480.762	\$ 502,220	\$ 519.187	\$ 548.197	\$ 579.664	\$ 618.795	\$ 646.224	
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>1m</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>1m</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>5i</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>1m</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>5i</sup>				55 0%	512%	52 8%	52 7%	35 4%	38 1%	37 3%	33 4%	32 0%	318%		
Funded Ratio (Actuarial Value) <sup>1m</sup>				55 9%	50 7%	50 4%	515%	48 3%	44 5%	40 4%	36 2%	313%	29 7%		

Source 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

- 1) Investment income is shown net of fees and expenses
- 2) Beginning in fiscal year 2008, includes expenses related to other post-employment benefits See "Payment for Other Post-Employment Benefits" below
- 3) The actuarial value is determined by application of the Asset Smoothing Method as discussed in "Actuarial Methods - Actuarial Value of Assets" above
- 4) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits See "Payment for Other Post-Employment Benefits" below
- 5) Calculated using net assets

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## TABLE 7 - FINANCIAL CONDITION OF THE PABF FISCAL YEARS 2004-2013 (\$ IN THOUSANDS)

2006

Beginning Net Assets (Fair Value) \$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> <sup>11</sup>  
 •Miscellaneous Income  
 Total

37,734 55,532 139,497 24,322

35,697 90,129 112,017 456  
 44,222 78,971 174,406 87





\$ 1,326,740 \$ 1,372,110 \$ 1,424,909 \$ 1,491,884 \$ 1,569,936 \$ 1,650,544 \$ 1,751,604 \$ 1,819,856 18,046

Ending Net Assets (Fair Value) Actuarial Value of Assets<sup>1</sup> Actuarial Accrued Liabilities<sup>11</sup> UAAL (Fair Value)<sup>51</sup> UAAL (Actuarial Value)<sup>1</sup> Funded Ratio (Fair Value)<sup>1</sup> Funded Ratio (Actuarial Value)<sup>1</sup>

\$12,952,096 SI 3,245,445 SI 3,108,645 20,310,911 7,358,815 7,202,266

63 77%  
64 54%

\$13,435,692 22,271,485 \$,107,135 8,835,793 6.3 60% 60 33%

\$14,254,816 23,213,269 8,617,755 8,958,453 62 88% 61 41%  
SI 3,797,344 24,092,325 14,247,986 10,294,981 40 86% 57 27%  
SI 3,051,349 24,970,808 14,093,962 11,919,459 43 56% 52 27%  
SI 2,449,863 26,723,773 15,315,218 14,273,910 42 69% 46 59%  
\$11,521,138 27,820,098 17,283,963 16,298,960 37 87% 41 41%  
SI 0,531,448 29,883,532 19,083,929 19,352,084 36 1% 35 2%

\$14,164,347 \$14,595,514 \$ 9,844,339 SI 0,876,846 SI 1,408,555 SI 0,536,135 SI 0,799,603 \$11,261,254

\$10,513,564 30,623,493 19,362,239 20,109,929 36 8% 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 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 'fable mav not add due to rounding

1) Investment income is shown net of fees and expenses

2) Includes expenses related to other post-employment benefits beginning in each of the fiscal years as shown in Footnote (2) in Tables 6-9 herein for each respective Retirement Fund See "Payment for Other Post-Employment Benefits" below

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

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

5) Calculated using net assets

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

Fiscal Year  
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

**Actuarial Accrued Liability"**

\$20,310,911 21,598,185 22,271,485 23,213,269 24,092,325 24,970,808 26,723,773 27,233,004 29,883,532 30,623,493

**Actuarial Value of**

Assets<sup>2</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

**Fair Value of Net Assets**

\$12,952,096 13,245,445 14,164,347 14,595,514 9,844,339 10,876,846 11,408,555 10,536,135 10,799,603 11,261,254

**UAAL (Actuarial)""**

\$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

UAAL (Fair Value)"" \$7,358,815 8,352,740 8,107,138 8,617,755 14,247,986 14,093,962 15,315,218 16,696,869 19,083,929 19,362,239

**Funded Ratio (Actuarial)""**

64 5% 60 6  
60 3  
61 4 57.3 52.3 46.6 41.4 35.2 34.3

**Funded Ratio (Fair Value)""**

63 8%  
61 3 63 6  
62 9 40.9 43.6 42.7 37.9 36.1 36.8

**Payroll**

\$2,683,331 2,880,358 3,069,479 3,185,388 3,180,484 3,172,716 3,189,739 3,261,021 3,223,720 3,212,558

**UAAL to Payroll (Actuarial)<sup>1</sup>**

268 4% 295.5 287.9 281.2 323.7 375.7 447.5 499.8 600.0 626.0

**UAAL to Payroll (Fair Value)""**

274 2% 290.0 264.1 270.5 448.0 444.2 480.1 512.0 592.0 602.7



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 201 1, 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

- 1) Beginning with fiscal year 2006, does not include liability related to other post-employment benefits See "Payment for Other Post-Employment Benefits" below
- 2) The actuarial value is determined by application of the Asset Smoothing Method as discussed in "Actuarial Methods - Actuarial Value of Assets" above
- 3) For purposes of this column, "Actuarial" refers to the fact that the calculation was made using the Actuarial Value of Assets
- 4) For purposes of this column, "Fair Value" refers to the fact that the calculation was made using the fair value of Net Assets

A variety of factors impact the Retirement Funds' UAAL and Funded Ratio. A lower return on investment than that assumed by the Retirement Funds, and insufficient contributions when compared to the Normal Cost plus interest will all cause an increase in the UAAL and a decrease in the Funded Ratio. Conversely, higher returns on investment than assumed, and contributions in excess of Normal Cost plus interest will decrease the UAAL and increase the Funded Ratio. In addition, legislative amendments, changes in actuarial assumptions and certain other factors (including, but not limited to, higher or lower incidences of retirement, disability, in-service mortality, retiree mortality or terminations than assumed) will have an impact on the UAAL and the Funded Ratio.

### **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.

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TABLE 11 - PROJECTION OF FUTURE FUNDING STATUS - MEABF''

Fiscal Year

Actuarial

Accrued

Liability

(a).

Market

Assets

Market

Unfunded Accrued Market Actuarial Liabilities Funded

(UAAL) Ratio

.(\*\*)\_\_ &amp;/?)\_

Employer Contribution' 2'

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040							
\$14,322,312	14,788,983	15,257,262	15,736,491	16,213,945	16,686,091	17,149,388	17,600,400									
18,038,164	18,459,401	18,874,417	19,269,819	19,644,224	19,996,084	20,324,749	20,628,151									
20,904,445	21,153,680	21,376,674	21,574,935	21,750,671	21,906,148	22,043,770	22,166,160									
22,275,941	22,376,201	22,470,299														
\$5,277,156	5,088,720	4,855,643	4,585,770	4,264,599	3,885,513	3,441,412	2,925,154									
2,331,452	1,652,472	893,662	36,495													
\$ 9,045,156	9,700,263	10,401,619	11,150,721	11,949,346	12,800,578	13,707,976	14,675,246									
15,706,712	16,806,929	17,980,755	19,233,324	19,644,224	19,996,084	20,324,749	20,628,151									
20,904,445	21,153,680	21,376,674	21,574,935	21,750,671	21,906,148	22,043,770	22,166,160									
22,275,941	22,376,201	22,470,299														
35.3%	33.1	31.3	29.1	26.3	23.3	20.1										
16.6																
12.9																
9.0																
4.7																
0.2																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																
0.0																

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

Fiscal Year

<b>Market</b>				
<b>Actuarial</b>			<b>Unfunded Accrued Market</b>	
<b>Accrued</b>	<b>Market</b>		<b>Actuarial Liabilities Funded</b>	
<b>Liability</b>	<b>Assets</b>		<b>(UAAL) Ratio</b>	
<b>Ja)</b>	<b>(!&gt;)</b>	<b>-</b>	<b>.(a-b).</b>	<b>(b/a)....</b>

2014	\$2,448,874\$1,436,908\$1,011,96655.7%	\$14,032
2015	2,504,4771,408,1781,096,29953.9	14,472
2016	2,558,0091,371,2201,186,78952.8	14,411
2017	2,612,6271,329,4441,283,18350.9	15,387
2018	2,665,6431,279,2371,386,40648.0	15,722
2019	2,716,7501,219,9051,496,84544.9	16,168
2020	2,765,2741,150,3201,614,95441.6	16,675
2021	2,811,0411,069,8241,741,21738.1	17,228
2022	2,853,770977,5411.876,22934.317,813	
2023	2,892,919872,3032,020,61630.218,431	
2024	2,929,006753,9992,175,00725.719,075	
2025	2,961,105620,9902,340,11521.019,752	
2026	2,988,935472,2342.516,70115.820,462	

2027	3,012,165306,5672,705,59810.221,185	
2028	3,030,629122,9282,907,701	4.121,941
2029	3,044,169-3,044,169	0.022,725
2030	3,052,779-3,052,779	0.023,521
2031	3,056,992-3,056,992	0.024,337
2032	3,057,367-3,057,367	0.025,179
2033	3,054,510-3,054,510	0.026,018
2034	3,049,319-3,049,319	0.026,845
2035	3,042,417-3,042,417	0.027,688
2036	3,034,418-3,034,418	0.028,540
2037	3,026,025-3,026,025	0.029,395
2038	3,017,590-3,017,590	0.030,184
2039	3,009,528-3,009,528	0.030,909
2040	3.002,648-3,002,648	0.031,610

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

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

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

Fiscal Year

Actuarial

Accrued

Liability

Market Assets

– (b)

Market

Unfunded Accrued

Market

Actuarial Liabilities  
(UAAL) Ratio

Funded  
\_(b/a)

Employer Contribution' 2'

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040							
\$4,225,089		4,360,451		4,493,997		4,627,415		4,756,606		4,880,732		4,999,515		5,113,491		
5,222,832		5,327,614		5,427,336		5,522,162		5,612,668		5,698,370		5,778,147		5,852,755		
5,923,952		5,990,906		6,053,664		6,112,722		6,169,734		6,226,073		6,282,292		6,340,833		
6,403,348		6,471,937		6,546,019												
51,075,899		1,151,244		1,228,083		1,308,900		1,390,934		1,474,650		1,560,688		1,650,085		
1,744,194		1,845,044		1,953,846		2,072,117		2,201,689		2,345,817		2,506,373		2,683,046		2,875,431
3,082,710		3,305,508		3,545,346		3,804,297		4,084,259		4,386,722		4,715,323		5,073,492		5,464,928
5.891,417																
\$3,149,190		3,209,207		3,265,914		3,318,515		3,365,672		3,406,082		3,438,827		3,463,406		
3,478,638		3,482,570		3,473,490		3,450,045		3,410,979		3,352,553		3,271,774		3,169,709		
3,048,521		2,908,196		2,748,156		2,567,376		2,365,437		2,141,814		1,895,570		1,625,510		
1,329,856		1,007,009		654,602												
25.5%																
26.4																
27.3																
28.3																
29.2																
30.2																
31.2																
32.3																
33.4																
34.6																
36.0																
37.5																
39.2																
41.2																
43.4																
45.8																
48.5																
51.5																
54.6																
58.0																
61.7																
65.6																
69.8																
74.4																
79.2																
84.4																
90.0																
5106,220	112,169	246,132	253,201	260,425	268,308	276,737	285,445	294,115	303,384	313,868						
324,809	336,114	347,685	359,377	370,304	379,314	387,355	393,836	399,775	405,703	410,627						
415,213	419,169	423,542	428,171	432,956												

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

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

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TABLE 14 - PROJECTION OF FUTURE FUNDING STATUS - PABF <sup>1</sup>**Fiscal Year**

Actuarial Accrued Liability  
(?)

**Market Assets**

\_JEL\_.

**Market**

Unfunded Accrued Market  
Actuarial Liabilities Funded  
(UAAL) Ratio  
(a^)

(?!/?)\_

**Employer Contribution' <sup>2</sup>**

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040							
\$10,401,796	10,729,870	11,062,868	11,409,721	11,760,065	12,111,074	12,460,807	12,807,516	13,150,495	13,488,428	13,820,165						
14,144,765	14,461,365	14,768,889	15,068,056	15,346,057	15,602,859	15,838,748	16,058,874	16,264,244	16,456,853	16,641,419						
16,820,971	16,999,574	17,179,866	17,363,605	17,551,592												
\$3,116,381	3,331,205	3,559,011	3,810,987	4,077,395	4,357,100	4,650,079	4,956,243	5,277,247	5,613,787	5,968,320	6,343,147					
6,740,553	7,162,785	7,614,943	8,097,936	8,610,245	9,150,449	9,719,291	10,318,876	10,952,376	11,626,336	12,345,734	13,117,020					
												13,945,618	14,837,009	15,796,433		
\$7,285,415	7,398,665	7,503,857	7,598,734	7,682,670	7,753,974	7,810,728	7,851,273									
7,873,248	7,874,641	7,851,845	7,801,618	7,720,812	7,606,104	7,453,113	7,248,121									
6,992,614	6,688,299	6,339,583	5,945,368	5,504,477	5,015,083	4,475,237	3,882,554									
3,234,248	2,526,596	1,755,159														
30.0%																
31.0																
32.2																
33.4																
34.7																
36.0																
37.3																
38.7																

40.1	
41.6	
43.2	
44.8	
46.6	
48.5	
50.5	
52.8	
55.2	
57.8	
60.5	
63.4	
66.6	
69.9	
73.4	
77.2	
81.2	
85.4	
90.0	
\$ 188,889	188,431 592,863 613,138 634,824 655,923 677,323 699,118 721,134 744,034 767,240
	792,087 818,071 844,860 872,392 901,827 928,497 951,481 970,499 987,603 1,003,483
	1,017,489 1,031,361 1,043,923 1,056,617 1,068,641 1,080,783

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

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

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TABLE 15 - PROJECTION OF FUTURE FUNDING STATUS - AGGREGATE <sup>0</sup>

Fiscal Year	Market	Unfunded Accrued Market
Actuarial	Market	Actuarial Liabilities
Accrued	Assets	Funded
Liability		(UAAL) Ratio
. (?)_	(b)_	_(a_-b)_ (b/_a) ____

**Employer Contribution <sup>(3)</sup>**

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040							
531,398,071	32,383,781	33,372,136	34,386,254	35,396,259	36,394,647	37,374,984	38,332,448	39,265,261	40,168,363	41,050,925	41,897,851	42,707,192	43,475,507	44,201,581	44,871,132	45,484,036
46,040,325	46,546,579	47,006,411	47,426,577	47,816,057	48,181,450	48,532,591	48,876,745	49,221,271	49,570,558	510,906,344	10,979,347	11,013,957	11,035,101	11,012,165	10,937,168	10,802,499
10,330,434	9,983,606	9,569,827	9,072,749	9,414,476	9,815,169	10,244,244	10,780.982	11,485,676	12,233,159	13,024,799	13,864,222	14,756,673	15,710,595	16,732,456	17,832,343	19,019,110
20,301,937	21,687,850	\$20,491,727	21,404,434	22,358,179	23,351,153	24,384,094	25,457,479	26,572,485	27,731,142	28,934,827	30,184,757	31,481,098	32,825,102	33,292,716	33,660,338	33,957,337
33,998,360	33,807,166	33,521,780	33,142,189	32,669,904	32,105,462	31,448,994	30,700,248	29,857,635	28,919,334	27.882,708	34.7%	33.9	33.0	32.1	31.1	30.1
28.9	27.7	26.3	24.9	23.3	21.7	22.0	22.6	23.2	24.0	25.3	26.6	28.0	29.5	31.1	32.9	34.7
36.7	38.9	41.2	43.8	465,375	471,163	1,010,833	1,043,642	1,078,040	1,112,999	1,148,983	1,185,809	1,222,935	1,261,697	1,302,046	1,344,736	1,389,136
1,434,714	1,481,364	1,529,298	1,572,719	1,611,654	1,645,241	1,676,403	1,706,467	1,733,892	1,761,062	1,786,473	1,812,640	1,838,578	1,865,005			

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 MIZABI<sup>7</sup> and LABF are calculated on a cash basis. Projections for PABF and FABF are calculated on an accrual basis.
- 2) Aggregate data presented in this table includes data for all four Retirement Funds.
- 3) Represents contributions expected to be made by the City during the fiscal year.

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 &

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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 from approximately \$208 million 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\\_commission/CSCP\\_Final\\_Report\\_2014-2015.pdf](http://www.chipabf.org/ChicagoPolicePension/PDF/Financials/pension_commission/CSCP_Final_Report_2014-2015.pdf). 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

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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., nonrecurring 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.

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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

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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 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

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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.

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

#### Contribution

#### Year

2015 2016 2017 2018 2019 2020 2021 2022 2030 2040 2050 2055

#### Contributions to LABF Before P.A. 98-641

14.5 14.4 15.4 15.7 16.2 16.7 17.2 17.8 232.6 244.8 217.1 218.1

#### LABF

#### Contributions to LABF Under P.A. 98-641

14.5 24.0 30.5 38.2 47.1 57.3 67.7 69.6 86.2 105.5 124.3 135.3

**Increase in Contributions to LABF Under P.A. 98-641**

i 0.0 9.6 15.1 22.5 30.9 40.6 50.5 51.8 (146.4) (139.3) (92.8) (82.8)

**Contributions to MEABF Before P.A. 98-641**

\$156.1 157.4 161.9 167.1 172.6 178.2 184.0 189.9 1,325.3 1,598.9 1,530.1 1,519.9  
MEABF

**Contributions to MEABF Under P.A. 98-641**

\$156.1 242.7 290.1 361.2 442.1 533.0 585.6 600.3 724.7 917.4 1,184.5 1,332.2

**Increase in Contributions to MEABF Under P.A. 98-641**

i 0.0

85.3 128.2 194.1 269.5 354.8 401.6 410.4 (600.6) (681.5) (345.6) (187.7)

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

**TABLE 17 - PROJECTED FUNDED RATIOS: MEABF AND LABF\*** <sup>11</sup>

**Contribution Year**

2015 2016 2017 2018 2019 2020 2021 2022 2030 2040 2050 2055

**LABF**

**Funded Ratio Before P.A. 98-641**

53.9%  
52.8  
50.9  
48.0  
44.9  
41.6  
38.1  
34.3  
0.0  
0.0  
0.0  
0.0

**MEABF**

**Funded Ratio Under P.A. 98-641**

38.5%  
37.6  
36.8  
35.8

35.4  
35.6  
35.9  
36.2  
38.8  
45.0  
68.7  
90.0

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.

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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

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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.' 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>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.

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## **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](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

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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. TABLE 18 -

SCHEDULE OF FUNDING PROGRESS <sup>01</sup>

Actuarial Valuation Date (Dec. 31)	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	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		
2009	0	533,387	533,387	0		
2010	0	390,611	390,611	0		
2011	0	470,952	470,952	0		
2012	0	415,753	415,753	0	3,223,720	12.9
2012	2013	070,715	70,715	3,212,559	2.2	

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 Contribution
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 2013 contribution amount is approximate

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

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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](http://www.cityofchicago.org/city/en/depts/fin/provdrs/ben/alerts/2013/jan/retiree_healthcarebenefits). 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

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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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