Due: As Shown on the Inside Cover Pages

Subject to the accuracy of certain representations and continuing compliance by the City of Chicago with certain covenants, in the respective opinions of ArentFox Schiff LLP and Golden Holley James, LLP, Co-Bond Counsel, under present law, 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 upon gross income. Such interest is not included as an item of tax preference in computing the federal alternative minimum tax on individuals. Interest on the Bonds is included in computing the adjusted financial statement income of those corporations subject to the corporate alternative income tax. Interest on the Bonds is not exempt from present Illinois income taxes. See "Tax Matters" in this Official Statement for a more complete discussion of these matters.

## \$452,575,000 CITY OF CHICAGO

\$260,105,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A \$192,470,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B

**Dated: Date of Delivery** 

This Official Statement contains information relating to the City of Chicago (the "City") Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A (the "Series 2023A Bonds") and Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B (the "Series 2023B Bonds" and, together with the Series 2023A Bonds, the "Bonds") which will be issued pursuant to a Master Indenture of Trust dated as of May 1, 2023 and a First Supplemental Indenture dated as of May 1, 2023 (together, the "Indenture") from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee"). Prior to the issuance of the Bonds and the effectiveness of the Indenture, each series of the Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City were issued on a parity basis under their own respective trust indentures. The Bonds will be issuable as fully registered bonds in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the Bonds. Purchasers of the Bonds will not receive certificates representing their interests in the Bonds purchased. The Bonds will be issued in denominations of \$5,000 or any integral multiple thereof. Interest on the Bonds is payable on each January 1 and July 1, with the first interest payment date being January 1, 2024. Principal of the Bonds is payable at maturity or upon redemption prior to maturity. Principal of and interest on the Bonds will be paid by the Trustee to DTC, which in turn will remit such principal and interest payments to its participants for subsequent disbursement to the beneficial owners of the Bonds. As long as Cede & Co. is the registered owner as nominee of DTC, payments on the Bonds will be made to such registered owner, and disbursement of such payments to beneficial owners will be the responsibility of DTC and its participants. See "DESCRIPTION OF THE BONDS—Book-Entry Only System" herein.

The Bonds are subject to redemption prior to maturity as described in this Official Statement. See "DESCRIPTION OF THE BONDS—Redemption" herein.

The Bonds are limited obligations of the City having a claim for payment of principal and interest solely from Second Lien Bond Revenues on an equal and ratable basis with all other Second Lien Bonds that are Outstanding from time to time. 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 Outstanding Second Lien Bonds, are also secured by and payable from any amounts on deposit in Second Lien Construction Accounts. The claim of the Bonds, together with any other Outstanding Second Lien Bonds, to Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Outstanding Senior Lien Bonds and any future Senior Lien Parity Bonds as described herein.

The scheduled payment of principal of and interest on the Bonds when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Bonds by Assured Guaranty Municipal Corp. ("AGM").



The City will use the proceeds from the sale of the Series 2023A Bonds to (i) finance or reimburse the City for certain capital improvements to and extensions of the wastewater transmission system of the City, (ii) fund capitalized interest on the Series 2023A Bonds and (iii) pay costs of issuance of the Series 2023A Bonds. The City will use the proceeds from the sale of the Series 2023B Bonds to (i) refund certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City, and (ii) pay costs of issuance of the Series 2023B Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS" herein.

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 A SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE SEWER SYSTEM. THE CITY SHALL NOT BE OBLIGATED TO PAY THE BONDS EXCEPT FROM THE REVENUES PLEDGED TO THEIR PAYMENT. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE STATE OF ILLINOIS OR ANY POLITICAL SUBDIVISION OF THE STATE OF ILLINOIS IS PLEDGED TO THE PAYMENT OF THE BONDS.

Maturities, Principal Amounts, Interest Rates, Prices, Yields and CUSIP Numbers are set forth on the inside cover pages.

The Bonds are offered when, as and if issued, and accepted by the Underwriters, subject to delivery of separate approving legal opinions by ArentFox Schiff LLP, Chicago, Illinois, and Golden Holley James, LLP, Chicago, Illinois, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the City by (i) its Acting Corporation Counsel, and (ii) in connection with the preparation of this Official Statement, Charity & Associates, P.C., Chicago, Illinois, and BurgherGray LLP, Chicago, Illinois, Co-Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Chico & Nunes, P.C., Chicago, Illinois. It is expected that the Bonds will be available for delivery through the facilities of DTC on or about May 11, 2023.

Stifel, Nicolaus & Company, Incorporated Siebert Williams Shank & Co., LLC

PNC Capital Markets LLC Cabrera Capital Markets LLC

Stinson Securities, LLC Valdés & Moreno Inc.

Blaylock Van, LLC

# MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIP NUMBERS<sup>†</sup>

# \$260,105,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A

Maturity (January 1)	Principal Amount	Interest Rate	Price	Yield	CUSIP <sup>†</sup>
2040	\$6,960,000	5.25%	112.086*	3.680%	167727B88
2041	7,325,000	5.25	111.593*	3.740	167727B96
2042	7,710,000	5.25	111.102*	3.800	167727C20
2043	8,115,000	5.25	110.532*	3.870	167727C38

\$47,445,000 5.25% Term Bonds due January 1, 2048, Price 109.324\*, Yield 4.020%, CUSIP<sup>†</sup>:167727E28 \$61,280,000 5.25% Term Bonds due January 1, 2053, Price 109.109\*\*, Yield 4.140%, CUSIP<sup>†</sup>:167727C46 \$79,140,000 5.25% Term Bonds due January 1, 2058, Price 108.248\*\*, Yield 4.240%, CUSIP<sup>†</sup>:167727C53 \$42,130,000 5.50% Term Bonds due January 1, 2062, Price 110.725\*\*, Yield 4.190%, CUSIP<sup>†</sup>:167727C61

<sup>\*</sup>Priced to the July 1, 2032 first optional redemption date.

<sup>\*\*</sup>Priced to the July 1, 2033 first optional redemption date.

<sup>&</sup>lt;sup>†</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP numbers have been assigned by an independent company not affiliated with the City and are included solely for the convenience of the registered owners of the Series 2023A Bonds. Neither the City nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2023A Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2023A Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2023A Bonds.

# MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIP NUMBERS $^\dagger$

\$192,470,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B

Maturity (January 1)	Principal Amount	Interest Rate	Price	Yield	CUSIP <sup>†</sup>
2029	\$14,385,000	5.00%	111.786	2.730%	167727C79
2030	15,105,000	5.00	113.305	2.790	167727C87
2031	15,860,000	5.00	114.735	2.840	167727C95
2032	16,650,000	5.00	116.191	2.870	167727D29
2033	17,480,000	5.00	116.662*	2.910	167727D37
2034	18,360,000	5.00	116.313*	2.950	167727D45
2035	19,275,000	5.00	115.360*	3.060	167727D52
2036	20,235,000	5.00	114.161*	3.200	167727D60
2037	21,255,000	5.00	112.725*	3.370	167727D78
2038	17,315,000	5.00	111.558*	3.510	167727D86
2039	16,550,000	5.00	110.734*	3.610	167727D94

<sup>\*</sup>Priced to the July 1, 2032 first optional redemption date.

<sup>&</sup>lt;sup>†</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP numbers have been assigned by an independent company not affiliated with the City and are included solely for the convenience of the registered owners of the Series 2023B Bonds. Neither the City nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series 2023B Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2023B Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2023B Bonds.

## CITY OF CHICAGO

#### **MAYOR**

Lori E. Lightfoot

#### **CITY CLERK**

Andrea M. Valencia

## **CITY TREASURER**

Melissa Conyears-Ervin

# CITY COUNCIL COMMITTEE ON FINANCE

Scott Waguespack, Chairman

#### **CHIEF FINANCIAL OFFICER**

Jennie Huang Bennett

## CITY COMPTROLLER

Reshma N. Soni

## **BUDGET DIRECTOR**

Susie Park

## **ACTING CORPORATION COUNSEL**

John L. Hendricks, Esq.

#### DEPARTMENT OF WATER MANAGEMENT

Andrea R.H. Cheng, Commissioner

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Golden Holley James, LLP Chicago, Illinois

#### **CO-DISCLOSURE COUNSEL**

Charity & Associates, P.C. Chicago, Illinois

BurgherGray LLP Chicago, Illinois

## **CO-FINANCIAL ADVISORS**

PFM Financial Advisors LLC Chicago, Illinois

Sycamore Advisors LLC Chicago, Illinois

Certain information contained in, or incorporated by reference in, this Official Statement has been obtained by the City of Chicago (the "City") from The Depository Trust Company and other sources that are deemed reliable. No representation or warranty is made, however, as to the accuracy or completeness of such information by the Underwriters or the City. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters reviewed the information in this Official Statement in accordance with, and as part of, their respective 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. This Official Statement is being used in connection with the sale of securities as referred to herein and may not be used, in whole or in part, for any other purpose. The delivery of this Official Statement at any time does not imply that information herein is correct as of any time subsequent to its date.

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

This Official Statement, including the Appendices, contains certain opinions, estimates and 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 opinions, estimates, projections and forward-looking statements set forth in this Official Statement 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, but, in the view of the City, were prepared on a reasonable basis, reflect the best currently available estimates and judgments, and present, to the best of the City's knowledge and belief, the expected course of action and the expected future financial performance of the City. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on such opinions, statements or prospective financial information.

The prospective financial information set forth in this Official Statement, except for certain information sourced to parties other than the City, is solely the product of the City. Neither the City's independent auditors, nor any other independent auditors, have compiled, examined, or performed any procedures with respect to, or been consulted in connection with the preparation of, the prospective financial information and forward-looking statements contained herein. The City's independent auditors assume no responsibility for the content of the prospective financial information set forth in this Official Statement, including any estimates, disclaim any association with such prospective financial information, and have not, nor have any other independent auditors, expressed any opinion or any other form of assurance on such information or its achievability.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE" and "APPENDIX G - SPECIMEN MUNICIPAL BOND INSURANCE POLICY."

References to web site addresses presented in this Official Statement are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such web sites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

THE BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, NOR HAS THE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE REGISTRATION OR QUALIFICATION OF THE BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LAW OF THE STATES IN WHICH THE BONDS HAVE BEEN REGISTERED OR QUALIFIED AND THE EXEMPTION FROM REGISTRATION OR QUALIFICATION IN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF.

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

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## OFFICIAL STATEMENT

# \$452,575,000 CITY OF CHICAGO

\$260,105,000 SECOND LIEN WASTEWATER TRANSMISSION REVENUE BONDS, PROJECT SERIES 2023A

\$192,470,000 SECOND LIEN WASTEWATER TRANSMISSION REVENUE BONDS, REFUNDING SERIES 2023B

#### INTRODUCTION

This Official Statement, including the cover page, inside cover pages, and the Appendices, sets forth certain information in connection with the sale of \$260,105,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A (the "Series 2023A Bonds") and \$192,470,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B (the "Series 2023B Bonds" and, together with the Series 2023A Bonds, the "Bonds"), of the City of Chicago (the "City"), which are to be issued pursuant to the Bond Ordinance (defined herein). All capitalized terms used in this Official Statement and not otherwise defined herein have the meanings provided in APPENDIX A—"GLOSSARY OF CERTAIN TERMS."

#### **Purposes**

The proceeds from the sale of the Series 2023A Bonds will be used to (i) finance or reimburse the City for certain capital improvements to and extensions of the wastewater transmission system of the City (the "Sewer System"), (ii) pay capitalized interest on the Series 2023A Bonds and (iii) pay costs of issuance of the Series 2023A Bonds. The proceeds from the sale of the Series 2023B Bonds will be used to (i) refund certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City, and (ii) pay costs of issuance of the Series 2023B Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS."

#### 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 June 27, 2018, as amended by an ordinance adopted by the City Council on October 27, 2021 and an ordinance adopted by the City Council on November 7, 2022 (collectively, the "Bond Ordinance"). The Bonds are being issued under a Master Indenture of Trust dated as of May 1, 2023 and a First Supplemental Indenture dated as of May 1, 2023 (together, the "Indenture"), from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee"). The Indenture is being entered into by the City in order to realize administrative benefits relative to its practice of having each series of Second Lien Bonds be governed by a separate ordinance and trust indenture. The Indenture will not supersede the ordinances and indentures for Second Lien Bonds issued prior to the issuance of the Series 2023 Bonds, but will, together with future supplemental indentures, govern the Series 2023 Bonds and future issuances of Second Lien Bonds.

#### **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, including those that were issued prior to the effectuation of the Indenture and remain outstanding. 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 B — "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 "DESCRIPTION OF THE BONDS – Redemption."

#### **Rate Covenant**

In the Indenture, the City covenants that it 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, (b) produce 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 in each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due the Bond Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds then Outstanding, and (c) produce 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, which Second Lien Bond Revenues shall in each Fiscal Year at least be equal to one hundred ten percent of the sum required to pay promptly when due the Second Lien Bonds Debt Service Requirement for the Fiscal Year on Second Lien Bonds. The amount of Net Revenues Available for Bonds that exceeds one hundred percent of the sum required to pay promptly when due the Bond Debt Service Requirement for any Fiscal Year on all Senior Lien Bonds Outstanding may be included in determining compliance with the requirements of clauses (b) and (c) of the preceding sentence for such Fiscal Year. The foreging covenants are collectively referred to herein as the "Rate Covenant." See "SECURITY FOR THE BONDS — Second Lien Rate Covenant," "FINANCIAL OPERATIONS — Annual Budget Review and Implementation of Annual Budget", and APPENDIX B — "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE — Additional Second Lien Parity Bonds."

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. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the Rate Covenant, the City shall prepare or will 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 of the City and the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant.

#### City of Chicago Sewer System

The Sewer System consists of approximately 4,400 miles of sewers, more than 350,000 sewer structures, and a service area of roughly 230 square miles inhabited by approximately 2.7 million people. 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 "DEPARTMENT OF WATER MANAGEMENT" and "SEWER SYSTEM."

## **Sewer System Rates**

The City Council has authority to make adjustments to sewer service rates. No regulation by any administrative agency applies to the Sewer System rates. Under certain conditions, the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant. See "INTRODUCTION – Rate Covenant."

The Sewer System rates for all accounts located within the City are a percentage of the Water System rates. Metered water rates 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. 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 5% of the previous year's rate. As of June 1, 2022 Sewer System rates were \$4.33 per 1,000 gallons of water. On June 1, 2023, the Sewer System rate will increase by 5 percent to \$4.55 per 1,000 gallons of water. The City Council may take action at any time to alter the then-current schedule of water rates. See "FINANCIAL OPERATIONS."

#### Recent Developments regarding the City of Chicago and the Office of Mayor

As presented on the third inside cover page, as of the date of this Official Statement, Lori E. Lightfoot serves as the Mayor of the City of Chicago (the "Mayor"). On April 4, 2023, Brandon Johnson was elected to serve as Mayor. Mr. Johnson is scheduled to be sworn in as Mayor on May 15, 2023. The new Mayor may implement changes in the City's operating and financial practices and policies and departmental staff leadership. The City does not expect that any of such changes will have any material adverse impact on the security for the Bonds, the Second Lien Bond Revenues or the ability of the City to pay the debt service on the Bonds.

#### **Concurrent Financial Transaction of the City**

At or about the time of the delivery of this Official Statement and the expected issuance of the Bonds, the City will have commenced the process of delivering notices of consent solicitation statements to holders of outstanding City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Series 2008C and City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (Taxable) relating to a proposed amendment to the respective trust indentures relating to such bonds. The proposed amendment is intended to amend the definition of "debt service reserve requirement" in each trust indenture and allow the City, upon meeting other conditions, to reduce the debt service reserve account in each trust indenture to \$0. The foregoing is collectively described as the "Concurrent DSRF Transaction." The Concurrent DSRF Transaction and its consummation are separate and apart from and not contingent upon the issuance of the Bonds, are not a part of any common plan of finance with the Bonds and are not deemed to be security for the Bonds.

#### ESTIMATED SOURCES AND USES OF FUNDS

#### **Project Costs**

The proceeds from the sale of the Series 2023A Bonds will be used to (i) finance or reimburse the City for certain programs and projects for the Sewer System (the "Project Costs"), (ii) fund capitalized interest on the Series 2023A Bonds and (iii) pay costs of issuance of the Series 2023A Bonds. Such programs and projects, and the amounts allocated to each, are estimates and are subject to change. See "DEPARTMENT OF WATER MANAGEMENT — Capital Improvement Program."

## **Refunding of Refunded Bonds**

The proceeds from the sale of the Series 2023B Bonds, along with other available moneys on deposit under the Indenture, will be used to refund certain of the Oustanding Series 2012 Second Lien Bonds (the "Refunded Bonds"), and (ii) pay costs of issuance of the Series 2023B Bonds. See APPENDIX F – "THE REFUNDED BONDS."

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

The following table sets forth the estimated application of the proceeds of the Bonds:

	Series 2023A Bonds	Series 2023B Bonds	Total
Source of Funds			
Principal Amount of Bonds  Net Original Issue Premium	\$260,105,000.00 24,452,685.55	\$192,470,000.00 26,954,055.05	\$452,575,000.00 51,406,740.60
Total Sources of Funds	\$284,557,685.55	\$219,424,055.05	\$503,981,740.60
Use of Funds			
Project Costs	\$246,466,597.02	\$217,019,685.69	\$246,466,597.02 217,019,685.69
Deposit to Capitalized Interest Account Costs of Issuance (including Underwriters'	34,194,705.79	, .,,	34,194,705.79
discount and bond insurance premium) Total Uses of Funds	3,896,382.74 \$284,557,685.55	2,404,369.36 \$219,424,055.05	6,300,752.10 \$503,981,740.60

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#### DESCRIPTION OF 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, 2024. 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 page 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."

Principal of and interest on the Bonds will be paid by the Trustee. If any payment on any Bond 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.

#### Series 2023A Bonds

The Series 2023A Bonds maturing on or after January 1, 2040, and though an including January 1, 2048 are subject to redemption prior to maturity at the option of the City, at any time on or after July 1, 2032, 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 Series 2023A Bonds maturing on and after January 1, 2053, are subject to redemption prior to maturity at the option of the City, at any time on or after July 1, 2033, 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.

#### Series 2023B Bonds

The Series 2023B Bonds maturing on and after January 1, 2033, are subject to redemption prior to maturity at the option of the City, at any time on or after July 1, 2032, 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 Sinking Fund Redemption.

The Series 2023A Bonds maturing on January 1, 2048 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>	Principal Amount
2044	\$8,545,000
2045	8,990,000
2046	9,465,000
2047	9,960,000
2048*	10,485,000
* Final Maturity	

The Series 2023A Bonds maturing on January 1, 2053 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:

Year	Principal Amount
2049	\$11,035,000
2050	11,615,000
2051	12,225,000
2052	12,865,000
2053*	13,540,000
* Final Maturity	

The Series 2023A Bonds maturing on January 1, 2058 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>	Principal Amount
2054	\$14,250,000
2055	15,000,000
2056	15,785,000
2057	16,615,000
2058*	17,490,000
* Final Maturity	

The Series 2023A Bonds maturing on January 1, 2062 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>	Principal Amount
2059	\$9,700,000
2060	10,235,000
2061	10,800,000
2062*	11,395,000
* Final Maturity	

Final Maturity

The Series 2023B Bonds are not subject to mandatory redemption.

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 its 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 like 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. A redemption notice provided in connection with optional redemption shall either (i) state that the redemption is conditioned on there being on deposit in the Principal and Interest Accounts on the date fixed for redemption sufficient moneys to pay the redemption, be sent only if sufficient moneys to pay the redemption price of the Bonds to be redeemed is on deposit in the applicable Principal and Interest Account in the date fixed for redemption. 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 of the Bonds of the same maturity, the particular Bonds or portion of 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 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 Bonds for redemption, the Trustee shall treat each such Bond as representing that number of Bonds of the minimum Authorized Denomination which is obtained by dividing the principal amount of such Bond to be redeemed in part by the minimum Authorized Denomination. So long as DTC or its nominee is the registered owner of the Bonds, if fewer than all of the Bonds are called for redemption, the particular Bonds or portions of Bonds to be redeemed will be selected by lot by DTC in such manner as DTC may determine. See "DESCRIPTION OF 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 together with an assignment executed by the Bondholder or its duly authorized agent, 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 description of the procedures and recordkeeping with respect to the beneficial ownership interests in the Bonds, payment of interest and other payments on the Bonds to DTC Participants or Beneficial Owners (each as hereinafter defined), confirmation and transfer of beneficial ownership interests in the Bonds and other related transactions by and between DTC, DTC Participants and Beneficial Owners is based on certain information furnished by DTC. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof. Accordingly, neither the City nor the Underwriters of the Bonds makes any representation concerning these matters.

The information set forth below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC currently in effect, and the City expressly disclaims any responsibility to update this Official Statement to reflect any such changes. Investors wishing to use the facilities of DTC are advised to confirm the continued applicability of the rules, regulations and procedures of DTC. The City will have no responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Bonds held through the facilities of DTC or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of each Series of the Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC. DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a rating of AA+ from S&P Global Ratings. The DTC Rules applicable to its Direct Participants and Indirect Participants (collectively, "DTC Participants) are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of 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 DTC 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 DTC 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 DTC 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 DTC 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 Ordinance and the Indenture or other documents related to the Bonds.

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

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

Payment of principal and interest on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by DTC Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such DTC Participant and not of DTC, the Underwriters, the Trustee or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest 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 DTC 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 will 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.

Unless otherwise noted, the information contained in the preceding paragraphs concerning DTC and DTC's book-entry system has been extracted from information furnished by DTC. Neither the City nor the Underwriters makes any representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

SO LONG AS THE BONDS ARE REGISTERED IN THE NAME OF CEDE & CO., OR SUCH OTHER DTC NOMINEE, AS NOMINEE FOR DTC, THE CITY AND THE TRUSTEE MAY TREAT DTC (OR ITS NOMINEE) AS THE SOLE AND EXCLUSIVE REGISTERED OWNER OF THE BONDS FOR ALL PURPOSES UNDER THE BOND ORDINANCE AND INDENTURE, INCLUDING FOR THE PURPOSES OF PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THE BONDS, GIVING ANY NOTICE PERMITTED OR REQUIRED TO BE GIVEN TO REGISTERED OWNERS UNDER THE ORDINANCE AND INDENTURE, REGISTERING THE TRANSFER OF THE BONDS OR OTHER ACTION TO BE TAKEN BY REGISTERED OWNERS AND FOR ALL OTHER PURPOSES WHATSOEVER.

THE CITY AND THE TRUSTEE SHALL NOT HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY DTC PARTICIPANT, TO ANY PERSON CLAIMING A BENEFICIAL OWNERSHIP INTEREST IN THE BONDS UNDER OR THROUGH DTC OR TO ANY DTC PARTICIPANT OR ANY OTHER PERSON WHICH IS NOT SHOWN ON THE REGISTRATION BOOKS OF THE CITY (KEPT BY THE TRUSTEE) AS BEING A REGISTERED OWNER THAT DTC OR DTC PARTICIPANTS WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE BONDS: (i) PAYMENTS OF PRINCIPAL OR INTEREST ON THE BONDS; (ii) CONFIRMATIONS OF THEIR OWNERSHIP INTERESTS IN THE BONDS; OR (iii) OTHER NOTICES SENT TO DTC OR CEDE & CO., ITS PARTNERSHIP NOMINEE, AS THE REGISTERED OWNER OF THE BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC OR DTC PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT.

INTEREST AND PRINCIPAL WILL BE PAID BY THE CITY OR THE TRUSTEE TO DTC OR ITS NOMINEE. DISBURSEMENT OF SUCH PAYMENTS TO THE DIRECT PARTICIPANTS IS THE RESPONSIBILITY OF DTC, AND DISBURSEMENT OF SUCH PAYMENTS TO THE BENEFICIAL OWNERS IS THE RESPONSIBILITY OF THE DTC PARTICIPANTS.

So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, references in this Official Statement to the holders or registered owners of the Bonds (other than under the heading "TAX MATTERS" herein) shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Bonds.

NONE OF THE CITY, THE TRUSTEE OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC, ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO: (i) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (ii) THE DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE BONDS UNDER THE TERMS OF THE ORDINANCE OR INDENTURE; (iii) THE SELECTION BY DTC OR ANY DTC PARTICIPANT OF ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE BONDS; (iv) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR INTEREST DUE WITH RESPECT TO THE BONDS; (v) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC OR CEDE & CO. OR OTHER DTC NOMINEE AS THE REGISTERED HOLDER OF THE BONDS; OR (vi) ANY OTHER MATTER.

Each person for whom a DTC Participant acquires an interest in the Bonds, as nominee, may desire to make arrangements with such DTC Participant to receive a credit balance in the records of such DTC Participant and may desire to make arrangements with such DTC Participant to have all notices of redemption or other

communications of DTC, which may affect such person, to be forwarded in writing by such DTC Participant and to have notification made of all interest payments. NONE OF THE CITY, THE TRUSTEE OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO SUCH DTC PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE BONDS.

When reference is made to any action which is required or permitted to be taken by the Beneficial Owners, such reference only relates to those permitted to act (by statute, regulation or otherwise) on behalf of such Beneficial Owners for such purposes. When notices are given, they will be sent by the Trustee to DTC only.

The City, in its sole discretion and without the consent of any other person, may terminate the services of DTC with respect to the Bonds if the City determines that DTC is unable to discharge its responsibilities with respect to the Bonds or that a continuation of the requirement that all of the Outstanding Bonds be registered in the registration books kept by the Trustee in the name of Cede & Co., as nominee of DTC, is not in the best interests of the Beneficial Owners. In the event that no substitute securities depository is found by the City or restricted registration is no longer in effect, Bond certificates will be delivered as described in the Ordinance and Indenture.

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

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

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

#### SECURITY FOR THE BONDS

#### General

The Bonds are limited obligations of the City and do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provisions or limitations as to indebtedness. The Bonds have no claim to be paid from taxes of the City. As described below, the Bonds, together with the Outstanding Second Lien Bonds, including those issued and outstanding prior to the effective date of the Indenture and any Second Lien Parity Bonds issued from time to time in the future (which are expected to be issued under the Indenture), 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—4. The Second Lien Bonds Account," below. In the Indenture, other than the Oustanding Senior Lien Bonds, the City covenants and agrees not to issue any additional Senior Lien Parity Bonds.

"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 plus the amounts allocated from the Sewer Rate Stabilization Account as provided in the Indenture plus the amounts allocated from the Residual Account at the direction of the Chief Financial Officer as provided in the Indenture. "Net Revenues" means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs. The terms "Gross Revenues" and "Operation and Maintenance Costs" have the meanings set forth in APPENDIX A—"GLOSSARY OF CERTAIN TERMS."

#### **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 those issued and outstanding prior to the effective date of the Indenture and any Second Lien Parity Bonds issued from time to time in the future (which are expected to be issued under the Indenture). Second Lien Bond Revenues consist of all Net Revenues Available for Bonds deposited into the Second Lien Bonds Account pursuant to the Bond Ordinance and the ordinances authorizing each prior series of Outstanding Second Lien 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 and the prior respective indentures governing Second Lien Bonds issued prior to the effective date of 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 —4. 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, any Subordinate Lien Obligations, any Commercial Paper Notes or any Line of Credit Notes. 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. The Sewer Revenue Fund is separate, distinct and segregated from the City's General Fund and is not encumbered by any liens, claims, security interests or

obligations of the City relating to its General Fund. Net Revenues Available for Bonds are required pursuant to the Bond Ordinance 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 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 and the Residual 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 Account.
- **3. The Senior Lien Rebate Account** is 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 certain Series of Outstanding Second Lien Bonds is or will be met by separate municipal bond debt service reserve fund policies and by cash deposits.

- 5. The Second Lien Debt Service Reserve Account is used to pay principal of, redemption premium, if any, and interest on the Outstanding Second Lien Bonds as the same become due at any time when there are insufficient funds available for such purpose in the Second Lien Bonds Account (after any available amounts in the Sewer Rate Stabilization Account and the Residual Account have first been applied to that purpose, excluding amounts in excess of the Second Lien Bonds Debt Service Reserve Requirement for Outstanding Second Lien Bonds), except to the extent required to be credited to the Second Lien Rebate Account.
- **6. The Second Lien Rebate Account** is used to make required rebates of arbitrage to the United States with respect to any Second Lien Bonds.

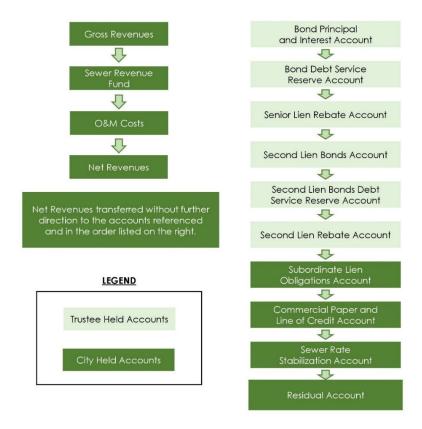
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- 7. The Subordinate Lien Obligations Account is used to make debt service payments and other required deposits with respect to any outstanding Subordinate Lien Obligations. As of the date of this Official Statement, the only Subordinate Lien Obligations outstanding are certain loans to the City made by the Illinois Environmental Protection Agency ("IEPA"). See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE—Subordinate 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.
- 8. The Commercial Paper and Line of Credit Account is used for the purpose of paying such amounts as may be required to be paid by the related trust indentures governing Commercial Paper Notes, and for the purpose of paying such amounts as may be required to be paid by the related line of credit agreement governing such Line of Credit Notes.
- The Sewer Rate Stabilization Account is funded by transfers from the Sewer Revenue Fund from Net Revenues and deposited to the credit of the Sewer Rate Stabilization Account the amounts as shall be required for the balance in the Sewer Rate Stabilization Account to equal at least ninety (90) Days' Cash On Hand as of January 1 of each year. 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), deposits when due in the Commercial Paper and Line of Credit 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, the Second Lien Bonds Account, or the Subordinate Lien Obligations 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, the Subordinate Lien Obligations Account, or the Commercial Paper and Line of Credit Account may be transferred to the Sewer Rate Stabilization Account at any time upon the direction of the Authorized Officer. The Sewer Rate Stabilization Account shall be maintained in a separate bank account in a bank or banks designated by the Chief Financial Officer pursuant to a depository agreement. For more information concerning the Sewer Rate Stabilization Account, see "FINANCIAL OPERATIONS — Historical and Projected Operations."
- 10. The Residual Account is funded by transfers from the Sewer Revenue Fund from Net Revenues Available for Bonds and deposited to the credit of the Residual Account such amounts as are not otherwise required for the purposes specified in paragraphs (1) through (9) above or as required by the Indenture. The Residual Account shall be maintained in a bank or banks designated by the Chief Financial Officer pursuant to a depository agreement. In any year the City may withdraw any amounts from the Residual Account and use those amounts for (i) paying any expenses or obligations of the Sewer System, including, without limitation, any Operation and Maintenance Costs, (ii) making deposits when due in the Second Lien Bonds Account, (iii) making deposits when due in the Subordinate Lien Obligations Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bond Accounts), (iv) making deposits when due in the Commercial Paper Account (but only if and

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to the extent no amounts are required to be deposited in the Second Lien Bond Accounts or the Subordinate Lien Obligations Account), (v) making deposits when due in the Line of Credit Notes Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bond Accounts, in the Subordinate Lien Obligations Account or in the Commercial Paper Account), (vi) any cost of repairs, replacements, renewals, improvements, equipment or extensions to the Sewer System or (vii) any other cost or expense relating to the Sewer System or the financing or refinancing of the Sewer System. The Chief Financial Officer may allocate from the Residual Account to Net Revenues Available for Bonds, the amount determined by the CFO of the City of Chicago to be allocated for such purpose.

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



Any funds available in the Sewer Revenue Fund after the requirements above have been satisfied or which are not necessary to satisfy such requirements may be used for any lawful purpose of the Sewer System. Funds in the Accounts in the Sewer Revenue Fund established in the 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 Accounts. 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.

The Series 2010B Second Lien Bonds are qualified "Build America Bonds" for purposes of the American Recovery and Reinvestment Act of 2009 (the "Recovery Act"), which allows the City to receive Federal Subsidies from the United States Treasury in connection with such bonds. As provided in the Indenture, Gross Revenues exclude Federal Subsidies unless the Chief Financial Officer designates such Federal Subsidies as amounts to be deposited into the Sewer Revenue Fund and subject to the lien of the Indenture. The City may designate the

Federal Subsidies associated with the Series 2010B Second Lien Bonds to be deposited into the Sewer Revenue Fund and subject to the lien of the Indenture and provides certain projections herein assuming such designation. However, such designation has not been made and there is no assurance that such designation will be made in the future. Accordingly, unless or until such Federal Subsidies are designated to be deposited into the Sewer Revenue Fund and subject to the lien of the Indenture, such Federal Subsidies do not constitute security for, and are not available for payment of, the Bonds or any other Second Lien Bonds, nor any Senior Lien Bonds, Subordinate Lien Obligations, or Short Term Obligations.

#### **Payment of Debt Service on the Bonds**

The Indenture establishes the 2023 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 2023 Second Lien Bonds Revenue Fund the amounts required to be deposited in such 2023 Second Lien Bonds Revenue Fund from amounts on deposit in the Second Lien Bonds Account. The Indenture establishes a 2023 Principal and Interest Account within the 2023 Second Lien Bonds Revenue Fund. Moneys on deposit in the 2023 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.

#### **Second Lien Rate Covenant**

In the Indenture, the City covenants that it 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, (b) produce 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 in each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due the Bond Debt Service Requirement for the Fiscal Year on all Senior Lien Bonds then Outstanding, and (c) produce 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, which Second Lien Bond Revenues shall in each Fiscal Year at least be equal to one hundred ten percent of the sum required to pay promptly when due the Second Lien Bonds Debt Service Requirement for the Fiscal Year on Second Lien Bonds. The amount of Net Revenues Available for Bonds that exceeds one hundred percent of the sum required to pay promptly when due the Bond Debt Service Requirement for any Fiscal Year on all Senior Lien Bonds Outstanding may be included in determining compliance with the requirements of clauses (b) and (c) of the preceding sentence for such Fiscal Year. The foreging covenants are collectively referred to herein and heretofore defined as the "Rate 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. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the Rate Covenant, the City shall 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 of the City and the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant.

#### **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, Subordinate Lien Obligations, Commercial Paper Notes, or Line of Credit Notes, in each case upon compliance with certain

conditions set forth in the Indenture. See APPENDIX B — "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 B — "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

#### **Deficiencies and Excesses**

In the event of a deficiency on any Interest Payment Date in the Bond Principal and Interest Account, the Bond Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien Bonds Account, the Second Lien Bonds Debt Service Reserve Account, the Second Lien Rebate Account, the Subordinate Lien Obligations Account or the Commercial Paper and Line of Credit Account, the City shall transfer an amount from the Residual Account in the amount of such deficiency for deposit into the related deficient account. In addition, the amount of any 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, as required by this Indenture.

#### **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 commingled basis with a variety of other funds of the City, including the General Fund. The amounts which are commingled and invested as described above are referred to as the City's "consolidated cash." Consolidated cash may be used for interfund borrowings among various funds of the City, including, but not limited to, the Sewer Revenue Fund, and such use reduces the need for external borrowing by the City to meet the needs of the Sewer Revenue Fund and other funds of the City. The City has maintained its consolidated cash, including interfund borrowing by the Sewer Revenue Fund, so as to meet the obligations of the Sewer Revenue Fund in a timely fashion.

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 C—"CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020, AND INDEPENDENT AUDITORS' REPORT—Notes (1) and (2)." In the 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 enacted 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 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.

#### **BOND INSURANCE**

## **Bond Insurance Policy**

Concurrently with the issuance of the Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy"). The Policy guarantees the scheduled payment of principal of and interest on the Bonds when due as set forth in the form of the Policy included as APPENDIX G to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

## **Assured Guaranty Municipal Corp.**

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. ("AGL"), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol "AGO". AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and international public finance (including infrastructure) and structured finance markets and asset management services. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM's financial strength is rated "AA" (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("S&P"), "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A1" (stable outlook) by Moody's Investors Service, Inc. ("Moody's"). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM's long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

## Current Financial Strength Ratings

On October 21, 2022, KBRA announced it had affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On July 8, 2022, S&P announced it had affirmed AGM's financial strength rating of "AA" (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On March 18, 2022, Moody's announced it had upgraded AGM's insurance financial strength rating to "A1" (stable outlook) from "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

## Capitalization of AGM

#### At December 31, 2022:

- The policyholders' surplus of AGM was approximately \$2,747 million.
- The contingency reserve of AGM was approximately \$855 million.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately \$2,134 million. Such amount includes (i) 100% of the net unearned premium reserve and net deferred ceding commission income of AGM, and (ii) the net unearned premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiary Assured Guaranty UK Limited ("AGUK") and its 99.9999% owned subsidiary Assured Guaranty (Europe) SA ("AGE").

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and net deferred ceding commission income of AGM were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGUK and AGE were determined in accordance with accounting principles generally accepted in the United States of America.

#### Incorporation of Certain Documents by Referencep

Portions of AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the Securities and Exchange Commission (the "SEC") on March 1, 2023 that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof.

All information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at <a href="http://www.sec.gov">http://www.sec.gov</a>, at AGL's website at <a href="http://www.assuredguaranty.com">http://www.assuredguaranty.com</a>, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

#### Miscellaneous Matters

AGM makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE".

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#### **OUTSTANDING DEBT AND ANNUAL DEBT SERVICE**

## Senior Lien and Second Lien Obligations

The outstanding indebtedness of the Sewer System consists of \$19.9 million aggregate principal amount of Senior Lien Bonds and, following the issuance of the Bonds and the refunding of the Refunded Bonds, approximately \$1.62 billion aggregate principal amount of Second Lien Bonds. The City has covenanted in the Indenture that it will not issue additional Senior Lien Bonds, which covenant will continue to remain effective once there are no longer any Senior Lien Bonds outstanding. The Subordinate Lien Obligations outstanding are described below. The debt service of the Senior Lien Bonds and the Second Lien Bonds, after the issuance of the Bonds, is as shown in the following table.

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SENIOR LIEN AND SECOND LIEN OUTSTANDING ANNUAL DEBT SERVICE<sup>(1)</sup>

2023B Bonds 2023A Bonds Outstanding Outstanding **Total Second Total Debt Capitalized** Senior Lien **Second Lien** Lien Debt Service Interest Bonds(2)\*  $\underline{Requirements}^{(3)}$ Fiscal Year Bonds\* **Principal** Interest **Total** Principal Interest Total Service \$8,791,646 2023 \$13,695,000 \$8,791,646 \$0 \$6,148,347 \$6,148,347 \$126,324,967 \$106,481,620 \$112,629,967 2024 120,095,183 13,760,838 13,760,838 0 9,623,500 595,000 9,623,500 129,718,683 130,313,683 13,760,838 0 2025 24,680,000 13.760.838 9.623.500 9,623,500 95,405,061 105,028,561 129,708,561 2026 11,447 9,623,500 9,623,500 24,680,000 95,485,476 13,760,838 13,749,390 118,858,366 143,538,366 2027 24,680,000 95,549,985 13,760,838 13,760,838 9,623,500 9,623,500 118,934,323 143,614,323 2028 143,187,884 105,418,546 13,760,838 13,760,838 \$14,385,000 9,623,500 24,008,500 143,187,884 2029 105,396,952 13,760,838 8,904,250 13,760,838 15,105,000 24,009,250 143,167,040 143,167,040 2030 105,200,845 13,760,838 13,760,838 15,860,000 8,149,000 24,009,000 142,970,683 142,970,683 2031 105,174,458 13,760,838 13,760,838 16,650,000 7,356,000 24,006,000 142,941,296 142,941,296 2032 104,787,589 13,760,838 13,760,838 17,480,000 6,523,500 24,003,500 142,551,927 142,551,927 2033 104,544,217 13,760,838 13,760,838 18,360,000 5,649,500 24,009,500 142,314,554 142,314,554 2034 141.889.834 141,889,834 104,122,497 13,760,838 13,760,838 19,275,000 4,731,500 24,006,500 2035 103,670,519 13,760,838 13,760,838 20,235,000 3,767,750 24,002,750 141,434,106 141,434,106 2036 93,992,749 13,760,838 13,760,838 21,255,000 2,756,000 24,011,000 131,764,587 131,764,587 2037 98,474,087 13,760,838 13,760,838 17,315,000 1,693,250 19,008,250 131,243,175 131,243,175 2038 83,364,075 13,760,838 13,760,838 16,550,000 827,500 17,377,500 114,502,413 114,502,413 2039 61,058,185 \$6,960,000 13,760,838 20,720,838 81,779,023 81,779,023 2040 30,332,138 7,325,000 13,395,438 20,720,438 51,052,575 51,052,575 2041 30,355,088 7,710,000 13,010,875 20,720,875 51,075,963 51,075,963 2042 30,369,450 8,115,000 12,606,100 20,721,100 51,090,550 51,090,550 2043 30,395,200 8,545,000 12,180,063 20,725,063 51,120,263 51,120,263 2044 10,872,950 8,990,000 11,731,450 20,721,450 31,594,400 31,594,400 2045 10,871,950 9,465,000 11,259,475 20,724,475 31,596,425 31,596,425 2046 10.871.700 9,960,000 10,762,563 20,722,563 31.594.263 31.594.263 2047 10,871,200 10,485,000 10,239,663 20,724,663 31,595,863 31,595,863 2048 10.873,800 11.035.000 9.689.200 20,724,200 31.598,000 31.598,000 2049 10,872,000 11,615,000 9,109,863 20,724,863 31,596,863 31,596,863 2050 8,500,075 20,725,075 31,600,475 31,600,475 10,875,400 12,225,000 2051 10,873,200 7,858,263 20,723,263 31,596,463 31,596,463 12,865,000 2052 13,540,000 7,182,850 20,722,850 20,722,850 20,722,850 2053 14,250,000 6,472,000 20,722,000 20,722,000 20,722,000 2054 15,000,000 5,723,875 20,723,875 20,723,875 20,723,875 20,721,375 20,721,375 2055 15,785,000 4,936,375 20,721,375 2056 4,107,663 20,722,663 20,722,663 20,722,663 16,615,000 2057 17,490,000 3,235,375 20,725,375 20,725,375 20,725,375 2058 9,700,000 2,317,150 12,017,150 12,017,150 12,017,150 2059 10,235,000 1,783,650 12,018,650 12,018,650 12,018,650 2060 10,800,000 1,220,725 12,020,725 12,020,725 12,020,725 2061 11,395,000 626,725 12,021,725 12,021,725 12,021,725 \$297,094,097 \$88,330,000 \$1,896,656,119 \$260,105,000 \$396,914,459 \$36,324,768 \$620,694,690 \$192,470,000 \$104,624,097 \$2,814,444,907 \$2,902,774,907

**Note:** The applicable footnotes for the preceding table are shown on the following page.

#### FOOTNOTES FOR THE PRECEDING TABLE ENTITLED "SENIIOR LIEN AND SECOND LIEN OUTSTANDING ANNUAL DEBT SERVICE"

- \*Outstanding Senior Lien Bonds and outstanding Second Lien Bonds are governed by the terms of the respective trust indentures relating to such bonds on a parity basis.
- (1) Reflects the issuance of the Bonds and the Refunding of the Refunded Bonds. Principal and interest (including the amount of interest that has accreted on capital appreciation bonds) for each year includes amounts payable on the City's wastewater transmission revenue bonds on July 1 of that year and January 1 of the following year. All of the City's outstanding wastewater transmission revenue bonds bear interest at a fixed rate.
- (2) Interest for each year includes the full amount of interest payable on the City's Series 2010B Second Lien 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.

## **Subordinate Obligations**

The City has entered into loan agreements with the IEPA as shown in the following table, to fund Sewer System projects. Each loan constitutes a Subordinate Lien Obligation. It is anticipated that the City will enter into additional IEPA loans in the future. 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. As of April 1, 2023, there were \$412.1 million outstanding aggregate principal amount of Subordinate Lien Obligations in the form of loans from the IEPA.

IEPA SEWER REVENUE FUND LOANS OUTSTANDING(1)

Repayment	Final Maturity Date	Interest Rate (%)	Amount of Loan Outstanding(2)
L17-2509	8/28/2027	2.50	\$412,275
L17-3629	6/21/2031	0.00	6,502,925
L17-4565	12/30/2032	1.25	9,673,680
L17-4682	3/20/2033	1.25	9,538,901
L17-4863	3/4/2034	2.295	9,446,159
L17-5006	7/21/2035	1.93	37,045,631
L17-5224	8/18/2036	1.86	3,146,735
L17-5230	6/9/2036	1.995	41,263,413
L17-5323	11/3/2037	1.75	5,360,296
L17-5328	5/30/2023	1.86	51,552,907
L17-5396	11/7/2038	1.75	22,787,912
L17-5397	4/26/2039	1.76	15,143,569
L17-5398	1/15/2040	1.76	22,764,400
L17-5413	12/19/2038	1.76	51,667,626
L17-5560	4/9/2040	1.84	44,999,883
L17-5561	10/7/2040	1.84	27,391,735
L17-5653	8/9/2042	1.35	53,368,831
Total Outstanding Prin	cipal Balance		<u>\$412,066,878</u>

<sup>(1)</sup> Outstanding principal amounts as of April 1, 2023.

The City has also signed initial loan agreements pertaining to an additional \$134.3 million of IEPA loans. Disbursements for these loans are ongoing and the final amounts of the loans may change based on project needs. The interest rates and expected maturity dates are shown as set out in the initial loan agreements, but may change when the final loan agreements are signed following the final disbursement of each loan.

IEPA SEWER REVENUE FUND LOANS WITH INITIAL LOAN AGREEMENTS

<u>IEPA Loans Still</u> <u>Disbursing</u>	Expected Maturity	Expected Rate	Full Amount of Loan
L17-5399	10/11/2042	2.00	\$11,447,442
L17-5400	5/27/2042	1.35	15,206,872
L17-5798	5/26/2043	1.11	18,207,459
L17-5799	10/30/2042	1.11	57,905,750
L17-5800	7/5/2041	1.11	31,548,794
Total Pending Loan Amour	nts		<u>\$134,316,317</u>

The Series 2012 Bond Ordinance authorized the issuance from time to time of Commercial Paper Notes and Line of Credit Notes for the purposes of financing or refinancing capital improvements to the Sewer System or providing funds to meet the cash flow needs of the Sewer System, among others. The maximum aggregate principal amount of all Commercial Paper Notes and 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 Commercial Paper Notes or Line of Credit Notes for payment from moneys in the Sewer Revenue Fund is subordinate to the claim of the Bonds. The City has no Commercial Paper Notes nor Line of Credit Notes outstanding pursuant to this authorization, however the City reserves its rights to issue Commercial Paper Notes and Line of Credit Notes in the future.

All interest rate swaps associated with the City's Second Lien Bonds have been terminated, however the City reserves its rights to enter into interest rate swaps in connection with Second Lien Bonds in the future.

## DEPARTMENT OF WATER MANAGEMENT

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

The budgeted employment level of the Department for 2023 for Sewer System employees was 432 (this represents the total number of Sewer System employees on the City's payroll and excludes leaves of absence and duty disability). The Department includes employees with professional qualifications in the fields of engineering, law, science, construction management, public sector management and financial management, as well as skilled technical personnel. Substantially all of the Department's employees are covered by collective bargaining agreements, whose terms expired on June 30, 2022, with the agreements remaing in effect while negotiaions continue on successor agreements.

In 2023, the City undertook a salary compression analysis (the "Salary Study") as a managerial retention initiative. The Salary Study recommended the adjustment of certain non-represented managerial salaries, including Department non-represented managerial employees, to more accurately reflect executive functions, levels of supervision, and responsibilities. The ordinance authorizing the adjustment of managerial salaries according to the Salary Study was passed by City Council on April 19, 2023.

The Department is building efficiencies and cost savings for the City by coordinating the activities of the Sewer System with the work of other City agencies, the Office of the Mayor, other City departments and private utility providers. For example, the Department and other City agencies participate in regularly scheduled coordination meetings to review critical infrastructure requirements, share in the costs of administration, set program deadlines, work with tax-increment financing capital planning and ensure the Chicago Department of Transportation manages rights of way scheduling and construction.

The Department has increased its use of mapping and technology. Some of the key benefits from these programs include but are not limited to: (i) the ability to update existing systems like 311 from the field; (ii) the ease of integrating the Geographic Information System with other systems such as the Department's work order management system, metering system, and scheduling software; (iii) the ability to coordinate with field crews and off-site contractors directly; and (iv) having live data presented in a visual format that provides a full operational picture and true status updates. The Department pushes information out into the field using mobile devices so that the construction and maintenance crews can quickly and easily follow the plan and report back live information and progress of their work. In 2017, the City took an innovative approach and developed a citywide full-pipe model of the sewer system that accounts for the complex nature of Chicago's land and sewer features. Since then, the full-pipe model has been used to understand the hydraulic model performance of the existing system and evaluate options to improve it.

#### **Organization and Staffing**

The chief administrator of the Department is the Commissioner, who is appointed by the Mayor with the approval of the City Council. On May 26, 2021, Andrea R.H. Cheng was appointed by the Mayor as Commissioner. Under the direction of the Commissioner, the Department is organized into five bureaus and the Commissioner's office as follows:

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

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

<u>Operations and Distribution</u>: 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.

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

<u>Engineering Services</u>: 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 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 major facilities of the Sewer System.

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#### **Description of Physical Facilities**

The Sewer System consists of approximately 4,400 miles of sewers, ranging in size from six inches to over 21 feet in diameter. The tables below provide a profile of the transmission facilities of the Sewer System by size, age and length:

WASTEWATER TRANSMISSION AND COLLECTION FACILITIES

Size (in inches)	Length (in miles)	Percent of System
6-36	3,732	83.5%
42-84	538	12.0
Larger than 84	<u>201</u>	4.5
Total	<u>4,471</u>	<u>100.0</u> %

Years Placed in Service	Approximate Length (in miles)	Approximate Percent of System		
2021-2022	23	0.5%		
2011-2020	202	4.5		
2001-2010	136	3.1		
1991-2000	187	4.2		
1981-1990	149	3.3		
1961-1980	371	8.3		
1941-1960	391	8.7		
1921-1940	848	19.0		
1901-1920	1,024	22.9		
Prior to 1900	<u>1,141</u>	25.5		
Total	<u>4,471</u>	<u>100.0</u> %		

These wastewater collection and transmission facilities primarily operate as a gravity system.

#### **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, and improvement of overall hydraulic capacity the Department most recently prepared a projected capital improvement program covering a five-year period from 2022 to 2026 (the "Capital Improvement Program"). Under the Capital Improvement Program, the City intends to construct 65 miles of sewer main, line 212 miles of existing sewers and rehabilitate 5,000 sewer structures.

The Capital Improvement Program follows the conclusion of the previous ten-year plan undertaken between 2012 to 2021 (the "2012 to 2021 CIP"), which was intended to address deferred maintenance and accelerate investment in sewer main replacement and lining. In total, the Department constructed 212 miles of sewer main, lined 546 miles of sewer main, and constructed 101,000 sewer structures.

The Sewer System's expenditures for 2017 through 2021 and projected expenditures for 2022 through 2026 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 IEPA loans, as well as funding from current sewer revenue (also referred to as "Pay-Go"). In 2021 and 2022, as with other large infrastructure systems across the country, the Department experienced some project delays and increased costs due to shortages in supplies and manpower. The Department's CIP, as planned over the long term, will not be materially impacted by prior years' shortages.

HISTORICAL AND PROJECTED CAPITAL IMPROVEMENT PROGRAM FUNDING BY SOURCE\*

<u>Funding</u> <u>Sources</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Bonds	\$65.7	\$81.1	\$35.6	\$46.5	\$1.6	107.5	\$125.8	\$180.6	\$166.5	\$163.9
Pay-Go	49.8	22.3	12.8	24.4	119.1	53.4	4.4	-	14.5	19.6
Grants	7.6	-	4.8	2.8	-	-	-	-	-	-
IEPA Loans	<u>49.5</u>	<u>99.4</u>	<u>116.6</u>	<u>41.7</u>	<u>36.5</u>	<u>116.1</u>	<u>93.1</u>	<u>51.2</u>	<u>51.2</u>	<u>51.2</u>
Total	<u>\$172.6</u>	<u>\$202.8</u>	<u>\$169.7</u>	<u>\$115.4</u>	<u>\$157.3</u>	<u>\$277.00</u>	<u>\$223.3</u>	<u>\$231.8</u>	<u>\$232.2</u>	<u>\$234.7</u>

<sup>\*</sup>The amounts shown are in the millions. The amounts shown for years 2017-2021 are actual cash expenditures.

The Department has applied for and received funding from the IEPA Clean Water Initiative State Revolving Loan Fund Program. This program provides loans for a twenty-year repayment term in most instances with shorter repayment schedules negotiated under certain project circumstances. The loans, which are Subordinate Lien Obligations, are provided at simple interest and payback does not begin until the completion of the construction. Interest rates for the program are established annually and are calculated and applied at one-half the Bond Market Interest Rate, defined as the mean interest rate of the *Bond Buyer* 20 Bond General Obligation Index for the preceding fiscal year. The interest rate in effect at the time of origination remains fixed for the life of the loan. See "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE—Subordinate Obligations."

Area 4 Regional Sewer Master Planning. The Department is advancing the Citywide Master Planning efforts to the southside Area 4 Watershed to address this region's flooding and local sewers surcharge and sewer backup problems. The Area 4 planning area or watershed stretches south of the 87th Street, between Cicero Avenue to the west, Lake Michigan to the east, and is located within City Wards 8, 9, 10, 19, and 21. This area serviced by the city's combined sewers is approximately 30 square miles which is about 15 percent of total service area of the City. The project includes regional sewer improvements for the entirety of Area 4 with verification and optimization of local sewer system as summarized in the previous Area 4 study reports. Detailed hydrologic & hydraulic modelling will be used for listing and verification/optimization of the size and location of various future connecting sewer projects to achieve a 5-year level of flood protection for the Area 4. The Area 4 Tunnel will add additional conveyance capacity and relief to existing trunk sewers that are generally 36-inch and larger in diameter.

Lead Service Line Replacement Program. There are approximately 387,000 lead service lines in the City, primarily in single-family and two-flat residences. Lead is a toxin that is harmful to human health. Developing fetuses, infants and young children are especially vulnerable. Due to the high concentration of lead service lines in the City, the City announced plans to replace every lead service line in the City. The City estimates that the full cost to replace all of the lead service lines in the City is \$8 to \$10 billion. Lead Service Line Replacement ("LSLR") consists of replacement of the water line running from the water main to the external water shut-off valve (sometimes called the "Buffalo-box" or "B-box") and replacement of the water line running from the external water shut-off valve into the home. On August 27, 2021, the Lead Service Line Replacement and

Notification Act, 415 ILCS 5/17.12 (the "Lead Service Line Replacement Act"), was signed into state law and became effective for Chicago on January 1, 2023. Among other things, the Lead Service Line Replacement Act requires the owners and operators of community water supplies in the State to develop, implement and maintain a comprehensive water lead service line replacement plan. The legislation provides no funding for the replacement. Under the Lead Service Line Replacement Act, the City has 50 years (with the possibility of up to 15 years of extensions) to complete the LSLR work. The 50-year replacement period for the City does not begin until April 15, 2027. The Lead Service Line Replacement Act requires full water service line replacement whenever any lead or galvanized iron lines are broken or disturbed, including for service line leaks and breaks and water or sewer main replacement. Therefore, any lead service lines that are disturbed as a result of the Capital Improvement Program will have to be replaced. Sewer Revenues may not be used to fund LSLR. Any costs to finance LSLR required as a result of the Capital Improvement Program will be paid from alternative funding sources.

#### **US EPA**

In 1975, the Water Reclamation District began the construction of its Tunnel and Reservoir Plan ("TARP") project to address combined sewer overflows ("CSOs") in the metropolitan Chicago area. Tunnel systems have been completed and TARP is the long term control plan to mitigate flooding in Chicago. The project will be completed upon the final completion of the reservoirs, which is expected to be in 2029. In 2004, the United States Environmental Protection Agency ("US EPA") 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 Department receives requests for information from US EPA regarding CSOs and related issues from time to time, to which it responds. The Department and other City officials have been in conversations with US EPA and other interested environmental organizations on the renewal of the National Pollutant Discharge Elimination System ("NPDES") permit for Chicago CSO outflows. Once the Department, other City officials, and other interested environmental organizations reach an accord, the City will work directly with the Illinois EPA on the issuance of the new NPDES permit.

## **SEWER 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, constructed and continues to be 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. For additional economic and demographic information regarding the City and the Sewer System, see APPENDIX E – CITY OF CHICAGO ECONOMIC AND DEMOGRAPHIC INFORMATION.

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

SEWER SYSTEM SERVICE AREA
POPULATION

TOFULATION				
Year	Population			
1970	3,369,357			
1980	3,005,072			
1990	2,783,726			
2000	2,896,016			
2010	2,695,598			
2020	2,746,388			

Source: U.S. Census Bureau.

#### FINANCIAL OPERATIONS

## **Recent Sewer Service Rates**

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 100 percent of the gross amount charged for water service, whether such water service is metered or nonmetered.

On June 1, 2023, the water rate will increase by 5.0 percent to \$4.55 per 1,000 gallons. By ordinance, the water rate is automatically adjusted by applying to the previous year's rate 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 ("CPI"). Such increases do not require further action by the City Council. Any such automatic annual increase, however, shall be capped at 5 percent of the previous year's rate. Because the sewer rate is set as a percentage of the water rate, sewer rates also increase annually based on any increase in the CPI (which increase commenced June 1, 2016). The City Council may take action at any time to alter the then-current schedule of water or sewer rates. Under certain conditions, the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant. See "INTRODUCTION – Rate Covenant."

The historical sewer rates are shown in the following table.

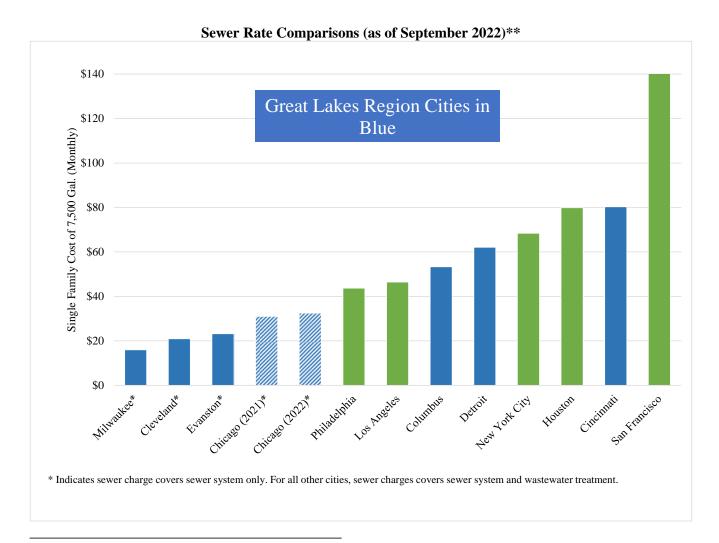
## **HISTORICAL SEWER RATES**

Effective Date	Gross Water Rate Per 1,000 Gallons	Water Rate Increases Approved by City Council	Percentage of Water Bill	Per 1,000 Gallons	Percentage Change
January 1, 2013	2.88	15%	92%	2.65	19%
January 1, 2014	3.31	15%	96%	3.18	20%
January 1, 2015	3.81	15%	100%	3.81	20%
June 1, 2016	3.81		100%	3.81	
June 1, 2017	3.88	1.83%	100%	3.88	1.83%
June 1, 2018	3.95	1.54%	100%	3.95	1 .54%
June 1, 2019	3.98	0.82%	100%	3.98	0.82%
June 1, 2020	4.08	2.45%	100%	4.08	2.45%
June 1, 2021	4.13	1.10%	100%	4.13	1.10%
June 1, 2022	4.33	5.00%	100%	4.33	5.00%

## **Sewer Rate Comparisons**

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 amounts shown are intended to reflect comparable charges for similar service for comparison purposes only and are not intended to reflect all components of the rates and charges for the cities listed. The Sewer System rates for all accounts located within the City are a percentage of the Water System rates. Metered water rates 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.

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Source: City of Chicago, Department of Water Management

#### **Sewer Accounts**

As of December 31, 2021, the Sewer System supplied 494,329 accounts. As shown in the table below, of these 494,329 accounts, 62,680 were exempt accounts, resulting in a total of 431,649 revenue paying sewer accounts. 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.

<sup>\*\*</sup> The City's Department of Water Management does not operate any sewage treatment facilities. The rates shown for the City and Milwaukee reflect sewer charges that include wastewater transmission only. The rates shown for the other cities reflect sewer charges that include wastewater transmission and wastewater treatment.

The following table reflects the total accounts of the Sewer System, nonmetered and metered, net of exempt accounts, for the years 2017 through 2021.

Water System and Sewer System Accounts

	Water Accounts			Sewer	Accounts
Year Ended December 31	Non- metered	Metered	Total	Exempt	Revenue Paying Sewer Accounts
2017	190,276	303,877	494,153	66,995	427,158
2018	180,608	313,758	494,366	66,982	427,384
2019	178,348	316,262	494,610	66,889	427,721
2020	177,641	316,783	494,424	63,608	430,816
2021	176,931	317,398	494,329	62,680	431,649

During 2021, residential accounts represented approximately 66 percent of Sewer System revenues and industrial and commercial accounts represented approximately 24 percent of such revenues. The remaining 10 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. All industrial and commercial accounts are metered. 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 2021 Five Largest Sewer Accounts by Revenue

Customer	Revenue (dollars in thousands)
City of Chicago Department of Aviation	\$3,343
CPD – Lincoln Park	1,679
University of Illinois at Chicago	1,383
Ford Motor Co	1,377
WR Grace and Company	1,322
Total of Top 5	\$9,104
% of Sewer Sales	2.4
Total Billed Sewer Fees <sup>(1)</sup>	\$378,566

Source: City of Chicago, Department of Water Management

## **Collections and Delinquencies**

The Department of Finance follows the same collection strategy for collecting water accounts and sewer accounts, as described below. The Department of Finance bills most large industrial, commercial and wholesale municipal accounts each month, with a few exceptions that are billed quarterly. Metered residential accounts and smaller accounts are generally billed once every two months, unless a customer enters into a payment arrangement or enrolls in the UBR Program (as defined below), in which case they are billed monthly. As of December 2020, non-metered accounts are billed monthly.

<sup>(1)</sup> 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.

On September 14, 2016, the City Council approved a tax on the use or consumption of water in the City, and on the transfer of wastewater to the Sewer System from properties located in the City (subject to certain exceptions) (the "Chicago Water and Sewer Tax"). The Chicago Water and Sewer Tax revenues are not Gross Revenues of the Sewer System and will not be utilized for the operations of the Sewer System, and the Chicago Water and Sewer Tax revenues will not be pledged to the repayment of the Bonds. The Chicago Water and Sewer Tax current rate is \$1.255 per 1,000 gallons. The Chicago Water and Sewer Tax appears as a separately stated item on the Unified Bill (as defined below) for City-provided water, sewer and refuse collection services.

Chicago residents receiving both water and sewer service from the City, as well as refuse collection services provided by the City's Department of Streets and Sanitation, are sent a unified utility bill which details the charges for each service (a "Unified Bill"). Pursuant to the City's Municipal Code, payments on the Unified Bills are allocated pro rata among the charges shown on the bills, with oldest unpaid amounts being paid first. The first Unified Bills, which included refuse collection services, were sent between April and September 2016 to City residents. Beginning in March 2017, the Unified Bills also included the Chicago Water and Sewer Tax as a separate charge. To date, the allocation of partial payments on the Unified Bills to water accounts, Chicago Water and Sewer Tax and refuse collection services has not had a material adverse effect on the collection of sewer charges by the City.

Payments on both metered and non-metered accounts are due 21 days after the bills are issued. A late payment penalty assessed at a monthly rate of one and one-fourth percent is imposed on all charges in excess of \$10.00 for which payment in full is not received within 30 calendar days from the date the bill was issued.

Delinquency notices, which were generated at an average rate of 6,564 per week in 2022, are sent to delinquent account holders when their balances are 30 days past due. A second delinquency notice is sent after 60 days. A third delinquency notice is sent after 90 days. After an active account reaches 365 days past due with a balance greater than \$1,000, the account is referred to an outside law firm for collections. Inactive accounts (those that do not currently have water or sewer service) that are 91 days past due with balances of \$200 or greater are referred to an outside law firm for collection. The outside law firm may pursue collection by obtaining a judgment at the City of Chicago Department of Administrative Hearings, by recording a lien against the property, or by additional legal collection actions. Additionally, 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 service charges and penalties due and owing on the Unified Bill for service to that property have been paid in full.

## **Utility Billing Relief Program**

In 2019, the City implemented a moratorium on water shutoffs for non-payment. In April 2020, in order to address issues with water affordability for low-income residents, the City launched the Utility Billing Relief Program (the "UBR Program"). The UBR Program provides low-income City residents with a reduced rate on their water rate, sewer rate, and Chicago Water and Sewer Tax as well as debt relief for those who demonstrate they can manage the reduced rate bills for one year. Benefits for UBR participants include: a reduced rate on water rates, sewer rates, and Chicago Water and Sewer Tax, no late payment penalties or debt collection activity; and debt forgiveness after successfully completing one year with no past due balance. In order to be eligible for the UBR Program, an applicant must meet the income criteria for the Low Income Home Energy Assistance Program, which currently requires that the applicant must earn income at or below 200 percent of the federal poverty level and must own and reside in the single family home or 2-unit property with which the overdue bills are associated and for which relief is sought. As of December 2022, the UBR program has helped approximately 20,000 unique accountholders through reduced billing rates and an opportunity to forgive past utility debt.

The amount of annual net sewer charges and cash collected from current and prior years' billings are included in the table below.

## **ANNUAL NET SEWER CHARGES**

Year	Net Sewer Charges <sup>(1)(2)</sup>	Cash Collected During Year for Current Years <sup>(1)(3)</sup>	Percentage of Charges Collected		
2012	\$259,605	\$237,392	91%		
2013	279,274	266,172	95%		
2014	330,616	306,139	93%		
2015	384,946	356,314	97%		
2016	367,532	349,388	95%		
2017	367,533	349,388	95%		
2018	369,932	355,535	96%		
2019	363,709	348,079	96%		
2020	338,123	324,999	96%		
2021	363,216	348,091	96%		
2022	384,818	357,530	93%		

- (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.

## **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 a 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 2023 budget was approved by the City Council on November 7, 2022.

During each year, 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 2022, there were no such restrictions in the Department's quarterly expenditures.

## The Financial Policies of the Sewer System

The City has developed the following financial policies applicable to the Sewer System (the "Financial Policies"):

Segregation of Funds.

Since 2019, the City has maintained all cash and investments of the Sewer Fund in separate bank accounts from the City's general accounts, including those of the Corporate Fund of the City. Gross Revenues of the Sewer System are deposited directly in the segregated accounts after they are allocated from the Unified Bill. As part of the Financial Policies, the City intends to continue maintaining all cash and investment of the Sewer Fund in segregated bank accounts.

## Days Cash on Hand.

In addition to the requirement in the Indenture that the City maintain amounts in the Sewer Rate Stabilization Account equal to at least 90 Days' Cash On Hand, the City also intends to maintain at least 270 Days' Cash On Hand. For the purpose of calculating Days' Cash On Hand under the Financial Policies, the balance in the Sewer Rate Stabilization Account will be included, along with any unrestricted cash and investments and any other restricted cash and investments available for the payment of debt service. The City calculates Sewer Fund Days' Cash On Hand as of December 31, 2021 to equal 575 days, and projects that Days' Cash On Hand for the projection period will remain at comparable levels.

The Financial Policies as described above are not a legal requirement to which the City is bound but represent practices that, as of the date of this Official Statement, the City intends to follow in connection with the financial operations of the Sewer System. Subject to compliance by the City with the requirements of the Indenture, the Financial Policies may be changed, terminated in whole or in part, or disregarded in whole or in part at the City's discretion. No assurance can be given regarding future compliance by the City with the Financial Policies.

### **Historical and Projected Operations**

The Sewer Revenue Fund is separate, distinct and segregated from the City's General Fund and is not encumbered by any liens, claims, security interests or obligations of the City relating to its General Fund. 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, 2017 through December 31, 2021, together with projected financial operations and projected debt service requirements for the years ending December 31, 2022 through December 31, 2026. The projected financial operations and debt service coverage calculations also include additional assumed issuances of debt through the end of the projection period. There is no assurance of the size or timing of such future transactions or whether they will occur at all. As available, the City also intends to dedicate approximately half of net revenues after payment of debt service for Pay-Go to offset debt issuance in future years. The Sewer Fund Financial Statements for the year ended December 31, 2022 are not expected to be published until June 30, 2023. Financial results for the fiscal year ended December 31, 2022 are categorized as projected for the purposes of this section and should not be considered to be reflective of actual financial results for the period.

The Sewer Revenue Fund's operating revenues for 2021 increased by \$32.3 million compared to prior year operating revenues, which is an increase of 8.8 percent. This increase is primarily due to increased consumption and a 1.1% increase in Sewer System rates that took effect on June 1, 2021.

The Sewer Revenue Fund's operating expenses before depreciation and amortization for 2021 increased \$20.6 million from the year ended 2020 due to an increase in pension expenses. For 2022, projected operating revenues are estimated to increase by 2.5%, primarily based on a sewer rate increase of 5% on June 1, 2022, based on 2021 growth in CPI subject to a 5% maximum increase. 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. Rate increases are projected to be partially offset by marginal decreases in water consumption due to water conservation efforts. Therefore, operating revenues are projected to increase at a modest rate.

Projected operating expenses (excluding General Fund reimbursements and pension contributions) in 2022 through 2026 are reflective of an expected increase in expenses based on historical trends. Projected operating expenses also reflect an increase in each year based on growth in indirect costs being charged to the Sewer Revenue Fund as reimbursements to the General Fund. The methodology for charging these indirect costs to the Sewer Revenue Fund is prepared by a third party and is consistent with generally accepted accounting principles. The Sewer Revenue Fund has historically been charged for indirect costs properly allocable to that Fund. Direct pension contributions are budgeted at \$29.0 million and \$28.3 million in 2022 and 2023, respectively. Indirect pension contributions allocable to the Sewer Revenue Fund are budgeted to be \$14.5 million in 2022 and \$14.6 million in 2023. Pursuant to the Pension Funding Policy, the City budgeted the 2023 Advance Pension Contribution, of which the Water Fund's allocable shared was \$4.2 million. Future pension contributions are projected to grow from 2024 to 2026 based on the City's internal projections incorporating actual pension fund returns of 12.1% on average for 2022, assumed 0.0% returns in 2023, and an anticipated reduction in the discount rate used by MEABF from 7.00% to 6.75% beginning in 2023.

Water usage in the City, upon which sewer charges are based, is assumed to marginally decline throughout the projection period due to ongoing water conservation efforts. In addition to rate increases, the City could achieve compliance with its Rate Covenant 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 and the Residual 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.

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# CITY OF CHICAGO SEWER SYSTEM Historical and Projected Financial Operations (Dollars in Thousands) (1)

_			Actual					Projected		
	(Year Ended December 31)				(Year Ended December 31)					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Operating Revenues										
Sewer sales (2)(3)	\$377,286	\$380,822	\$373,902	\$356,267	\$377,514	\$386,317	\$404,304	\$421,930	\$435,976	\$446,356
Less: provision for bad debt (4)	(20,813)	(12,611)	(23,849)	(22,792)	(12,297)	(12,543)	(12,794)	(13,050)	(13,311)	(13,577)
Other operating revenues	1,150	1,492	1,023	484	1,052	1,000	1,000	1,000	1,000	1,000
Total Operating Revenues	357,623	369,703	351,076	333,959	366,269	374,774	392,511	409,881	423,666	433,779
Operating Expenses (5)										
Repairs	\$41,881	\$43,654	\$41,614	\$47,398	\$44,066	\$46,269	\$48,583	\$50,769	\$52,343	\$53,547
Maintenance	24,660	24,909	22,958	24,405	25,861	27,154	28,512	29,795	30,718	31,425
Administrative and general	12,591	13,472	12,367	12,320	13,891	14,586	15,315	16,004	16,500	16,880
Engineering	2,466	3,664	3,515	4,776	5,328	5,594	5,874	6,138	6,329	6,474
General Fund reimbursements (6)	47,522	51,188	53,688	54,467	55,937	37,658	37,213	38,888	40,093	41,015
Direct pension contributions	34,397	18,938	3,266	(23,853)	(4,979)	29,018	28,307	30,977	31,984	32,252
Advance pension contributions	-	-	-	-	-	-	4,176	6,053	5,900	5,524
Indirect pension contributions	-	-	-	-	-	14,529	14,577	15,548	15,787	15,810
<b>Total Operating Expenses</b>	\$163,517	\$155,825	\$137,408	\$119,513	\$140,104	\$174,808	\$182,556	\$194,172	\$199,653	\$202,927
Nonoperating Revenues <sup>(7)</sup>	4,354	7,446	11,737	12,128	2,165	4,134	13,185	13,185	13,185	13,185
Net Revenues	\$198,460	\$221,324	\$225,405	\$226,574	\$228,330	\$204,100	\$223,139	\$228,894	\$237,198	\$244,038
Plus: Pension expense other than contribution <sup>(8)</sup>	24,921	6,191	(12,572)	(40,972)	(24,917)	_	_	_	_	_
Transfer from (to) Sewer Rate Stabilization Account	(1,281)	´ -	-	-		-	(2,888)	(1,937)	(2,904)	(1,370)
Other Available Funds <sup>(9)</sup>	200,990	221,509	234,799	255,980	263,437	207,660	207,660	207,660	207,660	207,660
Net Revenues Available for Bonds	\$423,090	\$449,024	\$447,632	\$441,582	\$466,850	\$411,760	\$427,911	\$434,617	\$441,954	\$450,328
Sewer Rate Stabilization Account Year-End Balance	\$32,196	\$36,902	\$36,902	\$40,814	\$40,814	\$40,814	\$43,702	\$45,639	\$48,543	\$49,913
Net Revenues Available for Bonds <sup>(10)</sup>	\$423,090	\$449,024	\$447,632	\$441,582	\$466,850	\$411,760	\$427,911	\$434,617	\$441,954	\$450,328
Debt Service Requirements:(11)(12)										
Senior Lien Debt Service Requirement	_	_	\$10,525	\$13,654	\$13,720	\$13,670	\$13,695	\$595	\$24,680	\$24,680
Senior Lien Debt Service Coverage (1.15 Required)	-	-	42.53x	32.34x	34.03x	30.12x	31.25x	730.45x	17.91x	18.25x
Second Lien Debt Service Requirement	\$131,500	\$134,343	\$124,556	\$123,522	\$117,094	\$123,689	\$98,656	\$113,261	\$95,155	\$101,846
Combined Senior and Second Lien Debt Service Requirements Combined Senior and Second Lien Debt Service Coverage	\$131,500	\$134,343	\$135,081	\$137,176	\$130,814	\$137,359	\$112,351	\$113,856	\$119,835	\$126,526
(1.0 Required)	3.22x	3.34x	3.31x	3.22x	3.57x	3.00x	3.81x	3.82x	3.69x	3.56x
IEPA Loans Subordinate Lien Debt Service Requirement	\$10,612	\$12,933	\$18,117	\$21,727	\$27,387	\$33,234	\$42,574	\$42,574	\$42,574	\$42,574
Combined Senior, Second & Subordinate Lien Debt Service		0.4.5.05.4	01.50.100	#4. <b>#</b> 0.00 <b>2</b>	<b></b>	<b>**</b>	****	<b>***</b> *********************************	04.50.400	
Requirement <sup>(13)</sup> Combined Senior, Second & Subordinate Lien Debt Service	\$142,112	\$147,276	\$153,198	\$158,903	\$158,201	\$170,593	\$154,925	\$156,430	\$162,409	\$169,100
Coverage (1.15 required)	2.98x	3.05x	2.92x	2.78x	2.95x	2.41x	2.76x	2.78x	2.72x	2.66x

**Note:** The applicable footnotes for the preceding table are shown on the following page.

#### FOOTNOTES FOR THE PRECEDING TABLE ENTITLED "CITY OF CHICAGO SEWER SYSTEM - Historical and Projected Financial Operations"

- (1) Totals may not add due to rounding.
- (2) 2022 sewer sales are preliminarily estimated to grow by 2.3%. Projections in 2023 to 2026 are based on projected inflationary trends as published by the Federal Reserve.
- (3) Projected annual Sewer Sales reflect gross billings and not collections, which is in accordance with generally accepted accounting principles. Prior year collections have averaged 95.0% of gross billings.
- (4) Projected provision for bad debt is preliminarily estimated to increase by 2% in 2022 through 2026.
- (5) Non-pension operating expenditure growth is preliminarily estimated to increase by 5.0% in 2022, and projected to increase based on projected inflationary trends as published by the Federal Reserve.
- (6) General Fund reimbursements in 2017 through 2021 include indirect pension contributions. For 2022 and 2023, General Fund reimbursements are based on budgeted amount. For 2024 through 2026, General Fund reimbursements are projected to grow based on projected inflationary trends as published by the Federal Reserve. Direct, indirect, and advance pension contributions in 2022 and 2023 are based on budgeted amounts.
- (7) In 2023 through 2026, includes projected Build America Bond Federal Subsidy receipts (net of assumed 6.2% sequestration) from the U.S. Treasury, which the City expects to receive in connection with its Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B. The Indenture permits such Federal Subsidies to be included in Gross Revenues, provided the City's Budget Director designates such amounts to be deposited in the Sewer Revenue Fund and subject to the lien of this Indenture. The City has not yet designated the Build America Bond Federal Subsidy receipts to be deposited into the Sewer Revenue Fund. The City expects to make such designation in Fiscal Year 2023, but there is no assurance that such designation will be made in Fiscal Year 2023 or in future years.
- (8) Of the \$(5.0) million of pension expense for 2021, \$19.9 million is the portion of the City's pension contribution payable in 2021 to the pension funds and allocable to the Sewer Fund. The remaining portion of the pension expense for 2021 (i.e. \$(24.9) million) is recognized on the income statement of the Sewer Fund for 2021 pursuant to GASB 68 but is not due and payable by the City during 2021; accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.
- (9) Other Available Funds are equal to total current unrestricted assets net of total current liabilities included in the annual Basic Financial Satements Statements of Net Position as of December 31 of the prior year.
- (10) As provided in the Ordinance, Gross Revenues remaining in any period after providing sufficient funds for Operations and Maintenance Costs, for paying required debt service on all bonds and notes secured by Sewer System revenues, for paying any required amounts into any other accounts established for any bonds or notes secured by Sewer System revenues and to make any deposits into the Sewer Rate Stabilization Account ("'Other Available Funds"), can be applied to debt service for any furure period. Other Available Funds is equal to total current unrestricted assets net of total current liabilities included in the annual Basic Financial Statements Statements of Net Position as of December 31 of the prior period. From 2023 through 2026, Other Available Funds are projected to be \$207.7 million per year.
- (11) Reflects the issuance of the Bonds and the refunding of the Refunded Bonds. Also assumes future defeasances that are not expected to be completed by the date of the issuance of the Bonds, future refundings of callable bonds with certain interest rate assumptions, and future issuance of bonds to fund capital expenditures. There can be no assurance that any future defeasances, refundings, or capital financings will be completed when assumed, or at all.
- (12) Principal and interest (including the amount of interest that has accreted on capital appreciation bonds) for each year includes amounts payable on the City's wastewater transmission revenue bonds on July 1 of that year and January 1 of the following year.
- (13) Debt service includes IEPA loan debt service. Interest for each year also includes the full amount of interest payable on the City's Series 2010B Second Lien Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U.S. Treasury. The direct payment subsidies are rather included in Gross Revenues as noted above.

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#### **Pension Costs**

Determination of Pension Contributions

Pension costs paid out of the Sewer Revenue Fund constitute 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 Bond Ordinance and the Indenture. See "INTRODUCTION – Rate Covenant."

The City participates in four single-employer defined-benefit pension plans for City employees: the Municipal Employees' Annuity and Benefit Fund of Chicago ("MEABF"), the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF," and together with MEABF, the "Municipal and Laborers' Funds"), the Policemen's Annuity and Benefit Fund ("PABF"), and the Firemen's Annuity and Benefit Fund ("FABF," and together with PABF, the "Public Safety Funds," which, together with the Municipal and Laborers' Funds, are referred to herein as the "Retirement Funds"). Sewer System employees participate in the Municipal and Laborers' Funds.

Certain of the annual comprehensive financial reports of the Retirement Funds and certain of the actuarial valuations of the Retirement Funds may be obtained by contacting the Retirement Funds. Certain of these reports may also be available on the Retirement Funds' websites (www.meabf.org; www.labfchicago.org; www.chipabf.org; and www.fabf.org); provided, however, that the contents of these reports and of the Retirement Funds' websites are not incorporated herein by such reference.

Members of each Retirement Fund are eligible (individually, an "Eligible Member," and collectively, "Eligible Members") for an annual annuity payment (the "Annuity Benefits") if they meet certain age, years of service and prior service credit requirements (the "Eligibility Factors"). Benefits to each Eligible Member are statutorily established based on a combination of the Eligibility Factors and the Eligible Member's average annual salary for certain years prior to retirement (the "Annuity Factors").

Annuity Benefits for each of the Retirement Funds are funded from three sources: (i) contributions from the City (the "City Contributions") which are funded from the proceeds of a property tax levy (the "Pension Levy") on all taxable property located within the City or other available funds ("Other Pension Available Funds"), including payments from the Department on behalf of Sewer System employees, (ii) contributions from Eligible Members (the "Employee Contributions," and together with the City Contributions, the "Contributions"), and (iii) investment returns. The Department has historically contributed its pro rata share of City Contributions to the Retirement Systems (the "Department Portion") based on the Annuity Factors for the number of Sewer System employees who are Eligible Members. See APPENDIX C—"CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020, AND INDEPENDENT AUDITOR'S REPORT—Notes to Basic Financial Statements — 6. Pension Plans." Pension liabilities are not recorded at the fund level for the Sewer Revenue Fund.

The City Contributions and Employee Contributions are each established by the Illinois Pension Code (the "Pension Code"). Historically, the Contributions required under the Pension Code do not relate to, and in prior years were substantially less than, the contribution amounts that would have been required if the Retirement Funds were funded based on actuarial determinations of the contribution amounts necessary to fully fund the Annuity Benefits to Eligible Members of each Retirement Fund over an extended period. See "INVESTMENT CONSIDERATIONS – Unfunded Pensions" herein. In an effort to improve the funded status of the Retirement Funds, the Illinois General Assembly passed Public Act 96-1495 ("P.A. 96-1495"), which modified provisions of the Pension Code with respect to PABF and FABF, and Public Act 100-23 ("P.A. 100-23") which modified provisions of the Pension Code with respect to MEABF and LABF.

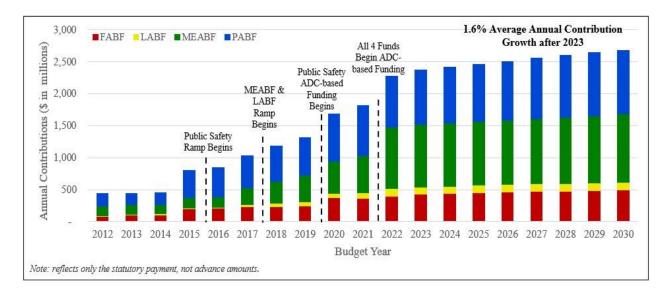
P.A. 96-1495, as later amended by Public Act 99-506, provides for the City to contribute the actuarially determined amounts necessary to achieve a 90 percent funded ratio in the Public Safety Funds by 2055, but made no changes to the Annuity Benefits for Eligible Employees hired before January 1, 2011 and established Annuity Benefits for Eligible Members hired on or after January 1, 2011 based on the Annuity Factors, but with the average annual salary capped at a certain amount, and the annual increases to the Annuity Benefits tied to the lesser of 3.0 percent or the consumer price index. Additionally, for Eligible Members hired on or after January 1, 2011, P.A. 96-1495 reduced a survivor's Annuity Benefit equal to 2/3 of the Annuity Benefits that the deceased Eligible Member was receiving at the time of his or her death.

The Pension Code establishes Annuity Benefits for Eligible Members of the Municipal and Laborers' Funds hired prior to January 1, 2011 based on the Annuity Factors, subject to 3 percent automatic annual increases after the Eligible Members' first full year of retirement and Annuity Benefits for Eligible Members hired on or after January 1, 2011 based on the Annuity Factors, but with the average annual salary capped at a certain amount, and the annual increases to the Annuity Benefits are tied to the consumer price index. Further, the Pension Code establishes the Employee Contribution for MEABF and LABF Eligible Members hired prior to January 1, 2017 at 8.5 percent of the salary of each employee on an annual basis. Pursuant to P.A. 100-23, MEABF and LABF Eligible Members hired on or after January 1, 2017 ("New Members") will contribute 11.5 percent of their salaries to their respective Retirement Funds and will be eligible for benefits at age 65 (as opposed to age 67 for Eligible Members hired between January 1, 2011 and January 1, 2017) ("Tier II Member"). In addition, Tier II Members of MEABF and LABF will be eligible to receive benefits at age 65 provided that such Tier II Members agree to contribute an additional 3.0 percent of their salaries to their respective Retirement Funds.

P.A. 100-23 requires that the City contribute the actuarially determined amounts required to achieve a 90 percent funded ratio in each of MEABF and LABF by 2058.

The City increased aggregate pension contributions by \$2.2 billion from 2014 to the 2023 budgeted contributions, and by \$1.3 billion from 2019 to 2023 budgeted contributions, including \$242 million contributed under the Pension Funding Policy. Aggregate contributions are expected to grow approximately 1.6% annually after 2023.

## HISTORICAL AND PROJECTED BUDGETED PENSION CONTRIBUTIONS



## 2023 Budgeted Contributions

The City's Fiscal Year 2023 budget includes the following contributions to the Retirement Funds (as indicated by total annual contribution and the Sewer Revenue Fund's proportional share): (i) \$1,077.7 million for MEABF, of which \$17.9 million, or less than two percent, is the Sewer Revenue Fund's proportional share; and (ii) \$124.1 million for LABF, of which \$14.6 million, or 11.8 percent, is the Sewer Revenue Fund's proportional share. In addition, the 2023 Sewer Fund budget includes \$14.8 million for indirect pension contributions chargeable to the Water Fund, and \$4.2 million pursuant to the Pension Funding Policy. These 2023 budgeted contributions include the advance pension contribution described below.

## New Pension Funding Policy

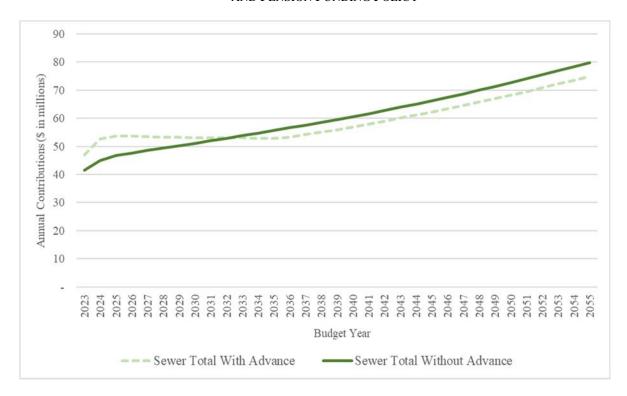
With the 2023 Budget year, the City published a new debt and pension management policy (the "Pension Funding Policy") that states: "Starting in fiscal year 2023, the City will annually budget for an advance pension contribution which, in addition to the statutorily required contribution, and in the determination of the CFO, will not increase the total net pension liability of the City's four pension funds based on best efforts projections and information available at the time of budget. This total net pension liability calculation will be based on the GASB 67/68 calculation of net pension liability included annually in the City's Annual Comprehensive Financial Report and will include components of said calculation including interest cost derived from unfunded liability, normal cost, administrative costs, employee contributions and market value of the assets of the fund." It also provides that the advance contribution shall be paid on the first business day of the year in which such contributions are budgeted.

The first of these advance pension contributions, for \$242.0 million, is included in the 2023 Budget adopted by the City Council on November 7, 2022 (the "2023 Advance Pension Contribution"). The 2023 Advance Pension Contribution, in addition to preventing an increase in the City's net pension liability, also avoids an estimated \$30 million in market losses due to asset liquidations. In accordance with the Pension Funding Policy, the 2023 Advance Pension Contribution was paid on the first business day of the 2023 fiscal year (January 3, 2023). The 2023 Advance Pension Contribution is included in the figures cited above under "2023 Budgeted Contributions." As part of the Pension Funding Policy, the Sewer Revenue Fund pays its proportionate share of the Advance Pension Contribution. For Budget Year 2023, that payment was approximately \$2.8 million for MEABF and \$1.4 million for LABF.

2023 ADVANCE PENSION CONTRIBUTION BY RETIREMENT FUND (\$ IN MILLIONS)

Retirement Fund	Amount
MEABF	\$101.6
LABF	12.1
PABF	89.5
FABF	38.7
Total:	\$242.0

## PROJECTED CONTRIBUTIONS UNDER EXISTING STATUTORY REQUIREMENT AND PENSION FUNDING POLICY



The City intends to include the investment losses and gains in line with the current practices for the statutory contribution. In 2022, a 12.1% investment loss is projected to increase the 2024 pension contribution by cost \$141 million and such losses may be included in the Fiscal Year 2024 Budget and are included in the current City's out-year financial planning. The City projects that the pension contribution that will be included as part of the 2024 Budget will increase by \$174 million over 2023, including a \$33 million increase in the advance pension contributions calculated based on the Pension Funding Policy. Projections of future pension contributions also incorporate assumed 0.0% returns in 2023, and an anticipated reduction in the discount rate used by MEABF from 7.00% to 6.75% beginning in 2023.

Under the Pension Funding Policy, the City projects that it may contribute advance funding amounts of \$1.2 billion through 2030, resulting in reduced required contributions of \$3.8 billion from 2031 to 2058, resulting in a net reduction in total future pension contributions of \$2.6 billion overall and of \$60 million in Sewer Fund contributions. These advance contributions to all four funds will stabilize the overall level of the City's total net pension liability and prevent significant liquidation losses.

During calendar year 2022, due to the negative investment returns experienced by the Retirement Funds combined with delays in the collection and distribution of the Pension Levy by the County, each of the Retirement Funds considered the liquidation of assets in order to make benefit payments to members. To avoid such asset sales, beginning in September 2022, the City began making monthly advance contributions to each of the Retirement Funds. Such advance contributions were made by the City in each of September, October and November 2022 (except that the City did not advance funds to LABF in September 2022) in a total amount of \$512.7 million. The advances to PABF (in an aggregate amount of \$220.0 million), \$30.1 million of the total FABF advances (the aggregate amount of which were \$77.7 million), and \$25.4 million of the total LABF advances (the aggregate amount of which were \$28.0 million) were advances on the City's required contributions to such Retirement Funds for Fiscal Year 2022. The City will reimburse itself by the amount of such advances from the proceeds of the Pension Levy upon disbursement thereof from the Cook County Treasurer. The balance

of the LABF advances (\$2.6 million), the balance of the FABF advances (\$47.6 million) and all of the MEABF advances (in the amount of \$187.0 million) represent advances of the portion of the City's Fiscal Year 2023 contribution to such Retirement Funds funded from Other Pension Available Funds, payable in February 2023. None of the advance pension contributions described in this paragraph are part of or related to the Pension Funding Policy or the 2023 Advance Pension Contribution, both of which are described in the preceding paragraphs.

The Pension Funding Policy as described above is not a legal requirement to which the City is bound but represents practices that, as of the date of this Official Statement, the City intends to follow in connection with advance pension contributions. Subject to compliance by the City with the requirements of the Indenture and with applicable statutory requirements, the Pension Funding Policy may be changed, terminated in whole or in part, or disregarded in whole or in part at the City's discretion. In addition, any advance pension contributions in 2024 and later years contemplated by the Pension Funding Policy would be subject to approval and appropriation by the City Council. No assurance can be given regarding future compliance by the City with the Pension Funding Policy.

#### **COVID-19 Pandemic**

The COVID-19 pandemic has had certain economic and operational impacts on governmental entities, including the City and the Sewer System. Notwithstanding such impacts, the COVID-19 pandemic did not have a material adverse impact on the revenues and expenses of the Sewer Fund and the operations of the Sewer System for actual fiscal years 2020 and 2021 and projected fiscal years 2022 – 2026. See "FINANCIAL OPERATIONS – Historical and Projected Financial Operations." Further, the City continues to experience a robust economic recovery from the COVID-19 pandemic (see APPENDIX E – INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS) and the City does not expect that the COVID-19 pandemic will have any material adverse impact on the security for the Bonds, the Second Lien Bond Revenues or the ability of the City to pay the debt service on the Bonds.

## INVESTMENT CONSIDERATIONS

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

## **Effect of Potential Future Ratings Downgrades**

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

#### **Unfunded Pensions**

The Retirement Funds have significant unfunded liabilities and low funding ratios. The City's required contributions to the Retirement Funds are projected to increase in future years as set forth under "FINANCIAL OPERATONS - Pension Costs." Future required contribution increases may require the City to increase its revenues, reduce its expenditures, or some combination thereof, which may impact the services provided by the City or limit the City's ability to generate additional revenues in the future.

### **Environmental Regulations**

The City is subject to state and federal environmental laws and regulations applicable to the Sewer System's overflows into Chicago area waterways. These laws and regulations are subject to change, and the City may be required to expend substantial funds to meet the requirements of such changing laws and regulations in the future. Failure to comply with these laws and regulations may result in the imposition of administrative, civil and criminal penalties, or the imposition of an injunction requiring the City to take or refrain from taking certain actions. In addition, the City may be required to remediate contamination on properties owned or operated by the City or on properties owned by others, but contaminated as a result of City operations.

Sewer services are governed by various federal and state environmental protection and health and safety laws and regulations, including the federal Clean Water Act and similar state laws, and federal and state regulations issued under these laws by the EPA and IEPA. These laws and regulations establish, among other things, criteria and standards for wastewater and for discharges into the waters of the United States and nearby states. Pursuant to these laws, the Department is required to obtain various environmental permits for operations. Violations or noncompliance could result in fines or other sanctions by regulators and/or such violations or noncompliance could result in civil suits. Environmental laws and regulations are complex and change frequently. These laws, and the enforcement thereof, have tended to become more stringent over time. While the Department has budgeted for future capital and operating expenditures to comply with these laws and permitting requirements, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise operating costs.

## Operational Security and Cybersecurity of the Sewer System

Operational Security of the Sewer System

The physical damage to the Sewer System resulting from vandalism, sabotage, natural disasters or terrorist activities may adversely affect the operations of the Sewer System. While the Department maintains robust procedures and capabilities to ensure the physical security of the System, including (i) collaboration with the City's Office of Emergency Management and Communications (OEMC), which provides the Department with access to the citywide network of video cameras to allow 24/7 surveillance of the Sewer System, (ii) as part of the Department's ongoing partnership with law enforcement agencies, including the Chicago Police Department, the US Coast Guard, the FBI and the Department of Homeland Security, and (iii) elevated enhancement of physical security of the Sewer System and sewer access points in advance of large-scale public events and/or in response to any intelligence received indicating a potential threat, there can be no complete assurance that the City's comprehensive security, emergency preparedness and response plans will completely prevent or mitigate all such potential physical damage, or that the costs of maintaining such security measures will not be greater than currently anticipated.

#### Cybersecurity of the Sewer System

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

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;

- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events; and
- difficulties in the implementation of upgrades or modification to information technology systems.

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

## **Water Conservation**

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

## **Limited Obligations**

The Bonds are limited obligations of the City payable solely from Second Lien Bond Revenues. The Bonds are not secured by a lien upon any physical properties of the Sewer System, nor has the City established a debt reserve account with respect to the Bonds.

## **Second Lien Status of Bonds**

The Bonds are secured by a junior lien on Net Revenues Available for Bonds. Therefore, the security for the payment of the principal of and interest on the Bonds could be adversely affected by the amount of debt service payable with respect to Senior Lien Bonds.

#### **Issuance of Additional Bonds**

Subject to certain financial tests and limitations contained in the Indenture, the City may issue Wastewater Transmission Revenue Bonds on a parity with the Bonds. The debt service requirements for the payment of any such additional Wastewater Transmission Revenue Bonds may be substantial.

The financial tests that must be satisfied to permit the issuance of additional bonds are based on certain assumptions concerning future revenue and debt service requirements. Actual debt service requirements may exceed assumed requirements and result in lower debt service coverage on the Bonds.

## No Assurance of Secondary Market

There can be no assurances that a secondary market for the Bonds will be established, maintained or functioning. Accordingly, each purchaser should expect to bear the risk of the investment represented by the Bonds to maturity.

## **Adverse Change in Laws**

There are a variety of State and federal laws, regulations and constitutional provisions that apply to the City's ability to raise taxes, fund its pension obligations or to reorganize its debts. There is no assurance that there will not be any change in, interpretation of, or addition to such applicable laws, regulations and provisions. Any

such change, interpretation or addition may have a material adverse effect, either directly or indirectly, on the City or the taxing authority of the City, which could materially adversely affect the City's operations or financial condition.

Interest on the Bonds could become subject to federal and/or State income tax as a result of changes in tax laws. For example, recent legislative tax proposals in the U.S. Congress would eliminate, reduce or otherwise alter the tax benefits currently provided to certain owners of state and local government bonds. The Bonds will not be subject to mandatory redemption, and the interest rates on the Bonds will not be subject to adjustment, in the event of any change in the tax treatment of interest on the Bonds. In such event, the market value of and ability of owners to sell the Bonds could be adversely affected. No assurance can be provided, and no predictions can be made, as to whether there will be any change in tax laws relating to state and local government bonds, including the Bonds, or to what effect.

Investors in the Bonds should consult their own financial and tax advisors in connection with their purchase of the Bonds.

## Bankruptcy

Under federal law, municipalities, including the City, are ineligible for bankruptcy unless specifically authorized to be a debtor in bankruptcy by state law or by a governmental officer or organization empowered by state law to authorize such entity to be a debtor in a bankruptcy. State law does not currently permit municipalities, including the City, to be debtors in bankruptcy, and therefore municipalities, including the City, are currently ineligible for bankruptcy.

As with all State law, the current prohibition on municipal bankruptcies is subject to review or change by State government. From time to time, legislation has been introduced in the Illinois General Assembly, which, if enacted, would permit Illinois municipalities to be debtors in bankruptcy. The City is unable to predict whether the Illinois General Assembly will adopt any such legislation or the form of such legislation if enacted.

In the event of a change in State law to provide that the City is eligible to be a debtor in bankruptcy, and that authority is acted upon, there is no guarantee that the bankruptcy court would consider the Bondholders to have a secured claim under the Bankruptcy Code with respect to Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts that are derived from the remittance of Gross Revenues into the City's Sewer Revenue Fund. The Sewer Revenue Fund is not held by the Trustee, and is not subject to a statutory lien in favor of the Bondholders. In addition, the Second Lien Bond Revenues may not be "special revenues" as defined in the Bankruptcy Code.

#### **Uncertain Enforcement Remedies**

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

The Indenture does not contain a provision allowing for the acceleration of the Bonds in the event of a default in the payment of principal of and interest on the Bonds when due.

## **Force Majeure Events**

Certain unanticipated events beyond the City's control, such as the COVID-19 pandemic, could have a material adverse effect on the Department's and City's operations and financial conditions if they were to occur. These events include fire, flood, earthquake, pandemic, epidemic, adverse health conditions or other unavoidable

casualties or acts of God, freight embargo, labor strikes or work stoppages, civil commotion, new acts of war or escalation of existing war conditions, sabotage, terrorism or enemy action, pollution, unknown subsurface or concealed conditions affecting the environment, and any similar causes and unanticipated events. No assurance can be provided that such events will not occur, and, if any such events were to occur, the effect of such event or events on the Department's and City's operations and financial condition on the Net Revenues Available for Bonds cannot be predicted.

#### **Other Considerations**

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

<u>Sewer Rates</u>. While there is currently no State statute regulating Sewer rates, future State statutes or court decisions could limit or otherwise adversely affect the City's ability to set sewer rates. See "—Adverse Change in Laws" above.

#### **Forward-Looking Statements**

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

#### LITIGATION

There are no pending legal proceedings to which the City is a party or to which any of its property is subject 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.

Farmer v. City of Chicago. This case is a putative class action in the Circuit Court of Cook County, Illinois challenging the reasonableness of the City's water rates and sewer rates. In particular, the plaintiff alleges that the various exemptions for hospitals, certain government organizations and non-profits cause non-exempt customers to pay more, causing their rates to be unreasonable. The plaintiff seeks, on behalf of a class of City water and sewer customers, "disgorgement" of the excess charges in the period 2016 to the present. The City has filed a motion to dismiss. The motion has been briefed and argued and a decision is pending. The City is vigorously defending this case.

#### **RATINGS**

The Bonds are rated "A+" (stable outlook) by S&P, "A" (positive outlook) by Fitch, and "AA-" (stable outlook) by Kroll. The Bonds are expected to be assigned ratings of "AA" (stable outlook) and "AA+" (stable outlook) by S&P and Kroll, respectively, based upon the issuance of the Policy for the Bonds by AGM (defined herein) at the time of delivery of the Bonds. The City did not request a rating from any other rating service for the Bonds. 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.

#### **CERTAIN LEGAL MATTERS**

Legal matters incident to the authorization and issuance of the Bonds are subject to the separate approving opinions of ArentFox Schiff LLP, Chicago, Illinois and Golden Holley James, LLP, Chicago, Illinois, Co-Bond Counsel. The proposed form of their respective opinions are included herein as APPENDIX D—"PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL."

Certain legal matters will be passed on for the City by (i) its Acting Corporation Counsel, and (ii) in connection with the preparation of this Official Statement, Charity & Associates, P.C., Chicago, Illinois, and BurgherGray LLP, Chicago, Illinois, Co-Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Chico & Nunes, P.C., Chicago, Illinois.

#### INDEPENDENT AUDITORS

The basic financial statements of the City of Chicago, Illinois Sewer Fund as of and for the years ended December 31, 2021 and 2020 and included as APPENDIX C to this Official Statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein.

## CO-FINANCIAL ADVISORS AND INDEPENDENT REGISTERED MUNICIPAL ADVISORS

The City has engaged PFM Financial Advisors LLC and Sycamore Advisors LLC as its financial advisors (the "Co-Financial Advisors") in connection with the issuance and sale of the Bonds. The Co-Financial Advisors have provided advice on the plan of finance and structure of the Bonds and have reviewed certain documents, including this Official Statement, with respect to financial matters. The Co-Financial Advisors have not independently verified the factual information contained in this Official Statement but have relied on the information provided by the City and other sources. The Co-Financial Advisors are "municipal advisors" as defined in SEC Rule 15Ba1-1 (the "SEC Rule").

The City has retained six firms (Acacia Financial Group; PFM Financial Advisors LLC; Public Alternative Advisors, LLC; RSI Group, LLC and Sycamore Advisors, LLC) to serve as a pool of independent registered municipal advisors (the "IRMAs") as defined in the SEC Rule 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 IRMAs will not advise on the investment of City funds held by the Office of the City Treasurer. The IRMAs' compensation is not dependent on the issuance of the Bonds.

#### UNDERWRITING

Stifel, Nicolaus & Company, Incorporated, as representative on behalf of itself and the other underwriters listed on the cover of this Official Statement (the "Underwriters") has agreed, subject to certain conditions, to purchase the Bonds at a price equal to \$501,119,577.47 (which represents the aggregate principal amount of the Bonds, plus an original issue premium of \$51,406,740.60, less an Underwriters' discount of \$2,862,163.13).

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

PNC Capital Markets LLC may offer to sell the Bonds to its affiliate, PNC Investments, LLC ("PNCI"). Securities in PNC Capital Markets LLC's inventory for resale to PNCI's customers may include securities such as those offered by the City.

Valdés & Moreno Inc. ("V&M") has entered into a formal distribution agreement with Rockfleet Financial Services, Inc. ("Rockfleet"), a woman-owned business enterprise, whereby V&M can potentially distribute municipal securities to retail and institutional investors through Rockfleet. As part of this agreement, V&M will compensate Rockfleet part of the takedown for its selling efforts with respect to the Bonds.

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

In the respective 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 and thus is exempt from present Federal income taxes based upon 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, except as may arise for certain corporations under the corporate minimum tax provisions of the Inflation Reduction Act of 2022. The opinions

described in this paragraph assume the accuracy of certain representations, certifications of fact, and statements of reasonable expectations made by the City and others in connection with the issuance of the Bonds and continuing compliance by the City and others with the above-referenced covenants.

Ownership of the Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, certain insurance companies, certain corporations (including S corporations and foreign corporations operating branches in the United States), individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise eligible for the earned income tax credit, 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.

## **Discount and Premium**

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 the 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 of the Bonds 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 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 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.

The opinion of Bond Counsel expresses the professional judgment of the attorneys rendering the opinion on the legal issues explicitly addressed in the opinion. By rendering a legal opinion, the opinion giver does not undertake to be an insurer or guarantor of the expression of professional judgment, of the transaction opined upon, or of the future performance of the parties to the transaction. Rendering an opinion does not guarantee the outcome of any legal dispute that may arise out of the transaction.

In rendering their opinions, 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, 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 Payers 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.

#### SECONDARY MARKET DISCLOSURE

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

A failure by the City to comply with the Undertaking will not constitute a default under the Bonds, the Indenture or the 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.

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

## **Annual Financial Information Disclosure**

The City covenants that it will disseminate to EMMA its Annual Financial Information and its Audited Financial Statements (as described below) to the MSRB, commencing with the Audited Financial Statements for the fiscal year ended December 31, 2022, 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 (i) under the caption "SEWER SYSTEM — General," the table captioned "Sewer System Service Area Population," (ii) under the caption "DEPARTMENT OF WATER MANAGEMENT," the table captioned "Historical and Projected Capital Improvement Program Funding by Source" (only with respect to the total amounts for the previous five years), and (iii) under the caption "FINANCIAL OPERATIONS," the table captioned "Historical Sewer Rates" (only with respect to the previous five years and only the "Per 1,000 Gallons" column), the table captioned "Water System and Sewer System Accounts," (only with respect to the Sewer System accounts for the previous five years), the table captioned "Annual Net Sewer Charges" (only with respect to the previous five years) and the table captioned "Historical and Projected Financial Operations" (only with respect to the previous five years).

"Audited Financial Statements" means the audited basic 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, 2023) will be provided to the MSRB on EMMA, 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 will be included, and Audited Financial Statements will be filed within 30 days of availability to the City.

## **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 all Series of the Bonds, are:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults, if material;
- (c) unscheduled draws on debt service reserves reflecting financial difficulties;
- (d) unscheduled draws on credit enhancements reflecting financial difficulties;
- (e) substitution of credit or liquidity providers, or their failure to perform;
- (f) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, notices of proposed issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
  - (g) modifications to rights of holders of the respective Series of Bonds, if material;
  - (h) bond calls, if material, and tender offers;
  - (i) defeasances;
- (j) release, substitution or sale of property securing repayment of the respective Series of Bonds, 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;
  - (n) appointment of a successor or additional trustee or the change of name of a trustee, if material;
- (o) incurrence of a "financial obligation" of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect holders of the respective Series of Bonds, if material; or

(p) a default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the City, any of which reflect financial difficulties.

The term "financial obligation" as used in paragraphs (o) and (p) of the Reportable Events above means a (i) debt obligation, (ii) derivate instrument entered into in connection with, or pledged as a security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of any of the foregoing. The term "financial obligation" does not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

## **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 with respect to a Series of Bonds, 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 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.

## **Amendments; Waiver**

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

- (a) (i) the amendment or waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the City or type of business conducted;
- (ii) the Undertaking, as amended, or the provision, as waived, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and
- (iii) the amendment or waiver does not materially impair the interests of the Beneficial Owners of the Bonds, as determined by a party unaffiliated with the City (such as 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 waiver; or
  - (b) the amendment or waiver is otherwise permitted by the Rule.

#### **EMMA**

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

## **Termination of Undertaking**

The Undertaking shall be terminated if the City shall no longer have any legal liability for any obligation on or relating to repayment of the Bonds under the 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 Reportable Event, in addition to that which is required by the Undertaking. If the City chooses to include any information in any Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event in addition to that which is specifically required by the Undertaking, the City shall have no obligation under the Undertaking to update such information or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event.

## **Corrective Action Related to Certain Bond Disclosure Requirements**

The City failed to comply with certain continuing disclosure undertakings previously entered into by it pursuant to the Rule as described below. Such non-compliance may or may not be material.

The City failed to file on a timely basis certain Annual Financial Information for the years 2018, or 2021, with respect to the City's Tax Increment Allocation Revenue Refunding Bonds (Pilsen Redevelopment Project), Series 2014A and Series 2014B (the "**Pilsen Series 2014AB Bonds**"). However, the Pilsen Series 2014 AB Bonds have since matured. The City filed on EMMA the 2021 annual information for the Pilsen bonds on July 29, 2022.

In July 2019, the City filed on EMMA on a timely basis the City's 2018 audited financial statements for the General Fund for all then-outstanding general obligation bonds of the City, except with respect to the City's General Obligation Bonds, Library Series 2008D (the "Series 2008D Bonds"). On December 17, 2019, those financial statements were filed on EMMA with respect to the Series 2008D Bonds, and the City filed on EMMA a notice regarding its failure to file on a timely basis the 2018 audited financial statements with respect to the Series 2008D Bonds.

On September 14, 2020, the City filed on EMMA a notice regarding its failure to file on a timely basis a certain capital improvements table for the years 2018 and 2019, among others, in connection with the City's General Obligation Bonds, Project and Refunding Series 2014A and Taxable Project and Refunding Series 2014B (the "Series 2014AB Bonds"). In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the years 2018 and 2019, among others, with respect to the Series 2014AB Bonds.

On September 14, 2020, the City filed on EMMA a notice regarding its failure to file on a timely basis a certain capital improvements table for the years 2018 and 2019 in connection with the City's Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Refunding Series 2017B (the "Series 2017AB Bonds"). In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the years 2018 and 2019 with respect to the Series 2017AB Bonds.

On July 8, 2021, S&P Global Ratings upgraded the rating of the City's Motor Fuel Tax Revenue Refunding Bonds, Series 2013 (Issue of June 2014), including the Riverwalk Transportation Infrastructure Finance and Innovation Act draw-down loan, from "BB+" to "BBB-." On July 27, 2021, the City filed with EMMA an event notice relating to this rating upgrade.

On November 12, 2021, the City filed a notice regarding its failure to file on a timely basis certain Annual Financial Information including certain capital improvements tables for the year 2020 and certain third-party sourced Retirement Fund tables with respect to the Series 2014AB Bonds. In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the year 2020 and Tables 4 and 9 of the third-party sourced Retirement Fund tables with respect to the Series 2014AB Bonds. On August 9, 2022, the City filed on EMMA a notice regarding its failure to file on a timely basis certain Annual Financial Information in connection with the Series 2014AB Bonds and the City's General Obligation Bonds, Series 2021A and Series 2021B (the "Series 2021 Bonds"). In connection with such notice filing, the City filed Tables 1-10 on EMMA in connection with the Series 2014AB Bonds and the Series 2021 Bonds.

On August 9, 2022, the City filed on EMMA a notice regarding its failure to file on a timely basis certain Annual Financial Information in connection with the City's Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Refunding Series 2017B. In connection with such notice filing, the City also filed on EMMA a table titled "Historical Capital Improvement Program Funding by Source," including data from 2018 to 2021, among other years.

#### **CERTAIN VERIFICATIONS**

Robert Thomas, CPA, LLC, Shawnee Mission, Kansas (the "Verifier"), upon delivery of the Bonds, will deliver to the City, Co-Bond Counsel and the Underwriters a report stating that the firm, at the request of the City and the Underwriters, has reviewed the mathematical accuracy of certain computations based on certain assumptions relating to (i) the sufficiency of the principal and interest received from the investment in the Defeasance Obligations, together with any initial cash deposit, to meet the timely payment of the applicable principal or redemption price of and interest on the Refunded Bonds, as described under "ESTIMATED SOURCES AND USES OF FUNDS – Refunding of Refunded Bonds" and (ii) the yields on the Bonds and on the Defeasance Obligations.

The Verifier will express no opinion on the attainability of any assumptions or the tax-exempt status of the Bonds. The computations verified by the Verifier are intended in part to support conclusions of the City and Co-Bond Counsel concerning the federal income tax status of the Bonds.

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#### **MISCELLANEOUS**

The foregoing summaries or descriptions of provisions of the 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: <u>/s/ Jennie Huang Bennett</u> Chief Financial Officer







#### APPENDIX A

#### **GLOSSARY OF CERTAIN TERMS**

The following are definitions of certain terms used in the 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 Bonds Requirement" means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to 100 percent of Aggregate Second Lien Debt Service with respect to such Bond Year or other specified 12-month period with respect to the Second Lien Bonds of all Series and all Section 2.8 Obligations and Section 2.9 Obligations, provided that for purposes of Section 4.6 under the Indenture, "Aggregate Second Lien Bonds Requirement" means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, 100 percent of Annual Second Lien Debt Service with respect to such Bond Year or other specified 12-month period, and for purposes of calculating interest payable during such Bond Year or other specific 12-month period in respect of any Variable Rate Bonds, the rate of interest shall be assumed to equal the rate of interest paid with respect to such Variable Rate Bonds on the Interest Payment Date immediately preceding the date of calculation.

"Aggregate Second Lien Debt Service" means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate amounts required by the provisions of all Supplemental Indentures creating series of Second Lien Bonds and all instruments creating Section 2.8 Obligations and Section 2.9 Obligations to be deposited from Second Lien Bond Revenues in all sub-funds, accounts and subaccounts created under such Supplemental Indentures in such Bond Year or other specified 12-month period.

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

"Annual Second Lien Debt Service" means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.8 Obligations or Section 2.9 Obligations, an amount of money equal to the sum of (a) all interest, costs or fees payable during such Bond Year or other specified 12-month period with respect to all Second Lien Bonds of said series, such Section 2.8 Obligations and Section 2.9 Obligations Outstanding on said date of computation and (b) all Principal Installments payable during such Bond Year or other specified 12-month period with respect to all Second Lien Bonds of said series, such Section 2.8 Obligations and Section 2.9 Obligations Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds, Section 2.8 Obligations and Section 2.9 Obligations will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Indenture and the Supplemental Indenture creating such series or the instrument creating such Section 2.8 Obligations or Section 2.9 Obligations of Principal Installments payable at or after said date of computation.

"Annual Senior Lien Debt Service" means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period and with respect to Senior Lien Bonds of a particular series, an amount of money equal to the sum of (a) all interest payable during such Bond Year or other specified 12-month period on all Senior Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Bond Year or other specified 12-month period with respect to all Senior Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that Senior

Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation.

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

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

"Authorized Officer" means (a) the Chief Financial Officer of the City or, if the position of Chief Financial Officer is vacant or if the Chief Financial Officer so determines and designates, the City Comptroller as long as such designation is effective, and (b) the City Clerk with respect to the certification of any ordinance or resolution of the City Council or any other document filed in his or her office.

"Beneficial Owner" means the owner of a beneficial interest in Second Lien Bonds issued under the Indenture 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 Requirement" means, for any Fiscal Year, the principal of and interest on the Outstanding Senior Lien Bonds required to be paid in that Fiscal Year. Any Outstanding 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. If the City has entered into an Interest Rate Hedge Agreement with respect to all or any portion of the Outstanding 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 as follows: for purposes of computing the interest payable on any Outstanding 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 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.

"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 Bond Ordinance.

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

Instrument, including amounts owed pursuant to an Interest Rate Hedge Agreement with respect to such Senior Lien Bonds to the extent such amounts constitute interest.

"Bond Debt Service Reserve Requirement" means, as of any date of computation, an amount equal to the sum of (i) that amount established in the Senior Lien Bond Ordinance authorizing the Outstanding Senior Lien Bonds, not to exceed the least of (A) the highest future Bond Debt Service Requirement of the Outstanding Senior Lien Bonds in any Fiscal Year including the Fiscal Year in which the date of computation falls; (B) 10 percent of the original principal amount of the Outstanding Senior Lien Bonds (less any original issue discount); or (C) 125 percent of the average annual Bond Debt Service Requirement for the Outstanding Senior Lien Bonds. Outstanding 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.

"Bondholder" or "Owner" means the person in whose name any Second Lien 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 Bond Ordinance.

"Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A and the the Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B, authorized by the Bond Ordinance and issued under the Indenture.

"Business Day" means any day of the year on which banks located in the city, or cities, respectively, in which are located the designated corporate trust office of the Trustee, the principal office of any Remarketing Agent and the office of the provider of a Credit Enhancement Instrument at which drawings under the Credit Enhancement Instrument are to be made, are not required or authorized to remain closed and on which The New York Stock Exchange, Inc. is not closed.

"Capital Appreciation Obligation" means a Second Lien Bond bearing interest that is compounded on an initial date and semiannually thereafter, and is payable at maturity.

"Cash on Hand" means the sum of cash, cash equivalents, liquid investments and marketable securities in the Sewer Revenue Fund (excluding any such items in the Senior Lien Rebate Accounts, Second Lien Bonds Account, Subordinate Lien Obligations Account, Commercial Paper Account or Line of Credit Notes Account).

"Certificate" means an instrument of the City in writing signed by an Authorized Officer. Any such instrument in writing and supporting opinions or representations, if any, may, but need not, be combined in a single instrument with any other instruments, opinion or representation, and the two or more so combined shall be read and construed so as to form a single instrument. Any Certificate may be based, insofar as it relates to legal, accounting or engineering matters, upon the opinion or representation of counsel, accountants, or engineers, respectively, unless the Authorized Officer signing such Certificate knows that the opinion or representation with respect to the matters upon which such Certificate may be based is erroneous. The same Authorized Officer, or the same counsel or accountant or other persons, as the case may be, need not certify to all of the matters required to be certified under any provision of the Indenture or any Supplemental Indenture, but different officers, counsel, accountants or other persons may certify to different facts, respectively.

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

"City" means the City of Chicago.

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

"City Council" means the City Council of the City.

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

"Commercial Paper and Line of Credit Account" means the separate account of that name previously established in the Sewer Revenue Fund by prior Second Lien Bond Ordinances.

"Commercial Paper Notes" means obligations commonly described as "commercial paper" issued by the City from time to time payable from the Commercial Paper and Line of Credit Account pursuant to the Series 2012 Bond Ordinance.

"Compound Accreted Value" means, with respect to any Capital Appreciation Obligation, as of any date of calculation, its original principal amount plus the appreciation in its principal amount to that date calculated as provided in the related Second Lien Bond Determination Certificate.

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

"Counsel's Opinion" means a written opinion of counsel selected by the City (who may be the Corporation Counsel for the City).

"CP/Line of Credit Notes Revenues" means all sums, amounts, funds or monies which are deposited to the Commercial Paper and Line of Credit Account pursuant to the Indenture.

"Credit Enhancement Instrument" means, with respect to all or a portion of a series of Second Lien Bonds issued under the Indenture, a letter of credit, a line of credit, a standby purchase agreement, a financial guaranty insurance policy, a surety bond, or a similar instrument providing credit support and/or liquidity support with respect to such Second Lien Bonds.

"Days' Cash on Hand" means Cash on Hand, divided by the quotient of (i) operating expenses, as shown on the most recent audited financial statements of the Sewer Revenue Fund, and (ii) 365.

"Defeasance Obligations" means (i) cash, (ii) United States Treasury bills, notes and bonds or certificates of indebtedness the principal of and interest on which are unconditionally guaranteed by, the United States of America; (iii) 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 (ii) of this definition, which obligations are held in trust by a bank described in clause (d) of "Permitted Investments," 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 prescribed by federal law or regulations adopted after the date of adoption 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 all obligations which are payable from Net Revenues; and (iv) obligations, participation or other instruments of or issued by a federal agency or United States government-sponsored enterprise or instrumentality, including but not limited to Fannie Mae, the Federal Home Loan Mortgage Corporation, the United States Postal Service, the Government National Mortgage Association and the Federal Financing Bank.

"Deputy City Clerk" means the duly appointed and qualified person serving as the Deputy City Clerk of the City.

"Depository" means any bank, trust company, national banking association, savings bank or other banking association selected by the Authorized Officer as a depository of moneys and securi-ties held in any Second Lien Construction Account and in the Bond Principal and Interest Ac-count, the Bond Debt Service Reserve Account, the Senior Lien Rebate Account, the Second Lien Bonds Account, the Second Lien Bonds Debt Service Reserve Account, and the Second Lien Rebate Account under the provisions of the Senior Lien Bond Ordinance, the Second Lien Bond Ordinances for the Outstanding Second Lien Bonds, and the Indenture.

"Determination Certificate" means a Certificate of an Authorized Officer with respect to one or more series of Second Lien Bonds filed with the office of the City Clerk, addressed to the City Council, as provided in the applicable Second Lien Bond Ordinance or Second Lien Bond Ordinances.

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

"Electronic Means" shall mean the following communications methods: e-mail, fac-simile transmission, secure electronic transmission containing applicable authorization codes, passwords and/or authentication keys issued by the Trustee, or another method or system speci-fied by the Trustee as available for use in connection with its services hereunder.

"Event of Default" means an Event of Default under the Indenture.

"Federal Subsidies" means (a) the direct payments by the Treasury to the City of a portion of the interest payable by the City on Series 2010B Second Lien Bonds and (b) to the extent available to the City after the effectiveness of this Indenture, payments by the Treasury 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.

"Governmental Obligations" means obligations described in clauses (ii), (iii), and (iv) of the definition of the term "Defeasance Obligations."

"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 (a) amounts credited to customers on their bills, such as for the purchase price paid to such customers for capital assets of the sewer system or (b) Federal Subsidies unless the Chief Financial Officer designates such Federal Subsidies as amounts to be deposited into the Sewer Revenue Fund and subject to the lien of this Indenture.

"Hedge Counterparty" means the person or persons with which the City enters into an Interest Rate Hedge Agreement.

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

"IEPA Loan" means, collectively, the borrowing or borrowings by the City from the IEPA under the IEPA Program and evidenced by one or more loan agreements between the City and the IEPA setting forth the terms of an IEPA Loan.

*"IEPA Program"* means the Water Pollution Control Loan Program or any successor program administered by the State, and any similar program through which funds are authorized by the federal government, including the United States Environmental Protection Agency, and administered by the State or any federally authorized agency.

"Indenture" means the Master Indenture of Trust from the City to the Trustee, dated as of May 1, 2023, with respect to the Bonds, as supplemented by the First Supplemental Indenture from the City to the Trustee, dated as of May 1, 2023, and as amended or supplemented in accordance with the terms thereof, providing for the issuance of the Bonds.

"Internal Revenue Code" means the Internal Revenue Code of 1986, as amended, or any successor act and the regulations promulgated thereunder.

"Interest Payment Date" means, with respect to a series of Second Lien Bonds, January 1 and July 1 of each year, for Outstanding Second Lien Bonds, on the date specified in the applicable bond ordinance, trust indenture or Determination Certificate and, for the Series 2023 Second Lien Bonds and other Second Lien Parity Bonds issued under the Indenture, on the date specified in the applicable Supplemental Indenture.

"Interest Rate Hedge Agreement" means an interest rate exchange, hedge or similar agreement, with a Hedge Counterparty 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 any series of 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. 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 the Senior Lien Bond Ordinance, applicable Second Lien Bond Ordinance or related Determination Certificate or Determination Certificates, or in the Indenture. 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.

"Line of Credit Notes" means the Line of Credit Notes defined in and authorized by the Series 2012 Bond Ordinance, payable from the Commercial Paper and Line of Credit Account.

"Mayor" means the Mayor of the City.

"Municipal Code" means the Municipal Code of Chicago, as from time to time amended.

"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 plus the amounts allocated from the Sewer Rate Stabilization Account as provided in the Indenture plus the amounts allocated from the Residual Account at the direction of the Chief Financial Officer as provided in 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, pensions and pension-related expenses, 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 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 or Subordinate Lien Obligations, "*Outstanding*" shall have the meaning ascribed to such term in the Senior Lien Bond Ordinance or the related Subordinate Lien Obligation Ordinances, as applicable.

Outstanding Bonds" means, collectively, the Outstanding Senior Lien Bonds and the Outstanding Second Lien Bonds.

"Outstanding Second Lien Bond Indentures" means, collectively, the Series 2001 Indenture, the Series 2008A Indenture, the Series 2018 Indenture, the Series 2010 Indenture, the Series 2014 Indenture, the Series 2015 Indenture and the Series 2017 Indenture.

"Outstanding Second Lien Bonds" means, collectively, the Outstanding Series 2001 Second Lien Bonds, the Outstanding Series 2008 Second Lien Bonds, the Outstanding Series 2010 Second Lien Bonds, the Outstanding Series 2012 Second Lien Bonds, the Outstanding Series 2015 Second Lien Bonds and the Outstanding Series 2017 Second Lien Bonds.

"Outstanding Senior Lien Bonds" means the Outstanding Series 1998A Senior Lien Bonds.

"Paying Agent" means such banking institution as may be appointed by the Chief Financial Officer as paying agent for a series of Second Lien Bonds, or any successor to it in that capacity appointed by the Chief Financial Officer and any co-paying agent separately appointed by the Chief Financial Officer.

"Payment Date" means any date on which a Principal Installment or interest on any series of Second Lien Bonds is payable in accordance with its terms and, in the case of Outstanding Second Lien Bonds, the terms of the applicable bond ordinance, trust indenture or Determination Certificate, in the case of the Series 2023 Second Lien Bonds and other Second Lien Parity Bonds, the terms of the Indenture and the Supplemental Indenture creating such series and, in the case of any Section 2.8 Obligations or amounts which are payable under any Section 2.9 Obligations, in accordance with the terms of the instrument creating such Section 2.8 Obligations or such Section 2.9 Obligations.

"Permitted Investments" means any of the following:

- (a) United States Treasury bills, notes and bonds or certificates of indebtedness, the principal of and interest on which are unconditionally guaranteed by, the United States of America;
- (b) obligations, participations or other instruments of or issued by a federal agency or United States government-sponsored enterprise or instrumentality, including but not limited to Fannie Mae, the Federal Home Loan Mortgage Corporation, the United States Postal Service, the Government National Mortgage Association and the Federal Financing Bank;
- (c) debt obligations of any state of the United States or any other political or governmental subdivision of any state of the United States rated, at the time of purchase, no less than A-, or equivalent rating, by at least two accredited Rating Agencies, or have an equivalent credit enhancement instead of a second rating;
- (d) fully collateralized at least 100% by a combination of bonds, notes, or other securities constituting the direct and general obligation of any agency or instrumentality of the United States, of any US State, or any political subdivision of a US State, which are rated at least AA, or equivalent rating, by at least two accredited ratings agencies and maintaining such rating during the term of such investments;
- (e) 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 and maintaining such rating during the term of such investment;
- (f) fully collateralized at least 100% by an irrevocable letter of credit issued in favor of the City of Chicago by the Federal Home Loan Bank, provided that the Federal Home Loan Bank's short-term debt obligations are rated in the highest rating category by at least one accredited ratings agency throughout the term deposit;
- (g) 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 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;

- (h) obligations of any state of the United States of America or any political subdivision of a state or any agency or instrumentality of a state or political subdivision which are, at the time of purchase, rated by at least two Rating Agencies or have an equivalent credit enhancement instead of a second rating;
- (i) bonds, notes, debentures or other evidences of indebtedness issued or guaranteed by any corporation which are, at the time of purchase, rated as investment grade by at least two Rating Agencies, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, in their highest rating category (if not rated by at least two Rating Agencies then a rating by a single Rating Agency shall be satisfactory), for comparable types of debt obligations;
- repurchase agreements and investment agreements (including forward purchase (j) agreements pursuant to which the City agrees to purchase securities of the type described in clauses (a), (b), (c), (f), (g) and (i) of this definition of "Permitted Investments"), with any bank, trust company, national banking association (which may include any Paying Agent or Bond Registrar), insurance company or any other financial institution which at the date of the agreement has an outstanding, unsecured, uninsured and unguaranteed debt issue rated by at least two Rating Agencies in one of their three highest respective long-term rating categories, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, or if such institution is not so rated, that the agreement is secured by such securities as are described in clauses (a) through (d) above, inclusive, having a market value at all times (exclusive of accrued interest, other than accrued interest paid in connection with the purchase of such securities) at least equal to the principal amount invested pursuant to the agreement, provided that (i) a custodian for the City (which custodian is not the entity with which the City has the repurchase or investment agreement) has a perfected first security interest in the collateral and the City has received an opinion of counsel to that effect, (ii) the custodian or an agent of the custodian (which agent is not the entity with which the City has the repurchase or investment agreement) has possession of the collateral, and (iii) such obligations are in the opinion of such counsel free and clear of claims by third parties;
- (k) prime commercial paper of a corporation incorporated under the laws of any state of the United States of America, rated by a least two Rating Agencies in its two highest short-term rating category, without regard to any refinement or gradation of rating category by numerical modifier or otherwise:
- (l) 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 category by numerical modifier or otherwise, as rated by at least one Rating Agency and maintaining such rating during the term of such investment;
- (m) shares of a money market fund registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933, as amended (including those for which the Trustee or an affiliate receives and retains a fee for services provided to the fund, whether as a custodian, transfer agent, investment advisor or otherwise).

- (n) supranational debt instruments of international institutions established or chartered by multiple countries or other international institutions, rating, at the time of purchase, no less than A-, or equivalent rating, by at least two accredited rating agencies, or have an equivalent credit enhancement instead of a second rating;
- (o) Structured Investment Vehicles backed or guaranteed by US Government Sponsored Enterprises or the United States Government; an
- (p) any other suitable investment instrument permitted by state laws governing municipal investments or City Municipal Code, subject to the reasonable exercise of prudence in investing public funds.

# "Principal Installment" means:

- (a) as of any particular date of computation and with respect to Outstanding Senior Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Senior Lien Bonds of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Senior Lien Bonds which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Senior Lien Bond Ordinance of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Senior Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Senior Lien Bonds of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment;
- (b) as of any particular date of computation and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.8 Obligation, an amount of money equal to the aggregate of (i) the principal amount of Second Lien Bonds of said series or of Section 2.8 Obligations which mature on a single future date, reduced by the aggregate principal amount of such 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 Series 2023 Second Lien Bonds or any Second Lien Parity Bonds, or the ordinance or trust indenture creating any other series of Second Lien Bonds, or the instrument creating such Section 2.8 Obligations, of Sinking Fund Payments payable at or before said future date for the retirement of such Second Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of such Second Lien Bonds (including Section 2.8 Obligations), and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.; and
- (c) as of any particular date of computation and with respect to Subordinate Lien Obligations of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Subordinate Lien Obligations of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Subordinate Lien Obligations which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Subordinate Lien Obligation Ordinance authorizing the issuance of each series of Subordinate Lien Obligations of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Subordinate Lien Obligations, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Subordinate Lien Obligations of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.

<sup>&</sup>quot;Principal Office" means, with respect to the Trustee, its principal office in Chicago, Illinois.

"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, services and equipment to protect and enhance the safety, integrity and security of the Sewer System, and any project eligible for funding by the IEPA through the IEPA Program.

"Project Bonds" means a series of Second Lien Bonds the proceeds of which are used for Project Costs.

"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, and legal and other professional fees or costs of the City.

"Qualified Collateral" means:

- (a) Governmental Obligations;
- (b) direct and general obligations of any state of the United States of America or any political subdivision of the State of Illinois which are rated not less than "AA" or "Aa" or their equivalents by any Rating Agency; and
- (c) public housing bonds issued by public housing authorities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America, or project notes issued by public housing authorities, or project notes issued by local public agencies, in each case fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America.

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

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

"Redemption Price" means, with respect to any series of Second Lien Bonds, the principal amount of such Second Lien Bonds plus the applicable premium, if any, payable upon redemption of such Second Lien Bonds pursuant to the provisions of such Second Lien Bonds or the applicable Second Lien Bond Ordinance or trust indenture or Supplemental Indenture creating such Series of Second Lien Bonds, or such other redemption price or tender price as may be specified in such Second Lien Bonds or applicable Second Lien Bond Ordinance or trust indenture or Supplemental Indenture.

"Refunding Obligations" means all Second Lien Bonds whether issued in one or more series, authenticated and delivered on original issuance for the purpose of the refunding of Senior Lien Bonds or Second Lien Bonds or Subordinate Lien Obligations of any series. The refunding effectuated by the issuance of Refunding Obligations may be accomplished through a tender offer for any of the Outstanding Bonds or through an exchange of Refunding Obligations for any of the Outstanding Bonds.

"Regulations" means the Income Tax Regulations (26 CFR Part I) promulgated under and pursuant to the Code.

"Residual Account" means the account of the name created by the Indenture.

"Second Lien Bond Ordinance" means the ordinance or ordinances of the City authorizing one or more series of Second Lien Bonds.

"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 Indenture, (iii) the Supplemental Indenture authorizing the Series 2023 Bonds, and (iv) the Supplemental Indentures authorizing any Second Lien Parity Bonds.

"Second Lien Bonds" means the Series 2001 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series 2014 Second Lien Bonds, the Series 2015 Second Lien Bonds, the Series 2017 Second Lien Bonds, the Series 2023 Second Lien Bonds, and all Second Lien Parity Bonds.

"Second Lien Bonds Account" means the separate account of that name previously established for the Second Lien Bonds in the Sewer Revenue Fund by prior Second Lien Bond Ordinances and expressly continued by the Indenture.

"Second Lien Bonds Debt Service Requirement" means, for any Fiscal Year, the principal of and interest on the Second Lien Bonds then Outstanding required to be paid in that Fiscal Year. Any Second 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. If the City has entered into an Interest Rate Hedge Agreement with respect to all or any portion of the Second Lien Bonds, the interest payable on such Second 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 as follows: for purposes of computing the interest payable on any Second 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 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.

"Second Lien Bonds Debt Service Reserve Account" means the separate account of that name previously established for the Second Lien Bonds with a Depository designated by the Authorized Officer by prior Second Lien Bond Ordinances and described in Section 3.3(e) of the Indenture.

"Second Lien Bonds Debt Service Reserve Account Credit Enhancement Instrument Coverage" means, with respect to any Credit Enhancement Instrument for the Second Lien Bonds Debt Service Reserve Account on any date of determination, the amount available to pay principal of and interest on the Second Lien Bonds under that Credit Enhancement Instrument, including amounts owed pursuant to an Interest Rate Hedge Agreement with respect to such Second Lien Bonds to the extent such amounts constitute interest.

"Second Lien Bonds Debt Service Reserve Requirement" means, as of any date of computation and with respect to each series of Second Lien Bonds beginning with the Series 2023 Second Lien Bonds, the amount, if any, established in the Supplemental Indenture authorizing such series of Second Lien Bonds, not to exceed the least of (A) the highest future Second Lien Bonds Debt Service Requirement of such series in any Fiscal Year including the Fiscal Year in which the date of computation falls; (B) 10 percent of the original principal amount of such series (less any original issue discount); or (C) 125 percent of the average annual Second Lien Bonds Debt Service Requirement for the Outstanding Second Lien Bonds of such series. Outstanding Second 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.

"Second Lien Bonds Ordinances" means Ordinances of the City authorizing the issuance of Second Lien Parity Bonds.

"Second Lien Construction Accounts" means (i) an account, if any, established for construction purposes by the Series 2001 Bond Ordinance, the Series 2008 Bond Ordinance, the Series 2010 Bond Ordinance, the Series 2012 Bond Ordinance, the Series 2014 Bond Ordinance, the Series 2015 Bond Ordinance, the Series 2017 Bond Ordinance, the Supplemental Indenture authorizing the Series 2023 Second Lien Bonds, or the Supplemental Indenture 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 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series 2014 Second Lien Bonds, the Series 2015 Second Lien Bonds, the Series 2017 Second Lien Bonds, and the Series 2023 Second Lien Bonds, which are payable from Second Lien Bond Revenues on an equal and ratable basis with all other Outstanding Second Lien Bonds.

"Second Lien Rebate Account" means the account of that name provided for in the Indenture.

"Section 2.8 Obligations" means any obligations incurred by the City to reimburse or otherwise make payments to the issuer or issuers of one or more Credit Enhancement Instruments (including Qualified Reserve Account Credit Instruments) securing all or any portion of one or more series of Second Lien Bonds, including any fees or other amounts payable to the issuer of any such Credit Enhancement Instruments, whether such obligations are set forth in one or more reimbursement agreements entered into between the City and the issuer of any such Credit Enhancement Instruments, or in one or more notes or other evidences of indebtedness executed and delivered by the City pursuant thereto, or any combination thereof.

"Section 2.9 Obligations" means any obligations incurred by the City to any one or more Hedge Counterparties, including any fees or amounts payable by the City under each related Interest Rate Hedge Agreement or agreement described in the Indenture.

"Senior Lien Bond Ordinance" means, to the extent applicable, Parts A and D of the Series 1998 Bond Ordinance.

"Senior Lien Bonds" means the Series 1998 Senior Lien Bonds.

"Senior Lien Construction Accounts" means (i) the account, if any, established for construction purposes by the Senior Lien Bond Ordinance, and (ii) any account established to pay costs of issuance of Senior Lien Bonds.

"Senior Lien Rebate Account" means the account of that name provided for in the Senior Lien Bond Ordinance and in the Indenture.

"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.

"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 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.

"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 from the City to Amalgamated Bank of Chicago, as trustee, dated as of December 1, 2011, amending and restating the original Trust Indenture, dated as of October 1, 2008, from the City to Amalgamated Bank of Chicago, as trustee, as such Amended and Restated Trust Indenture has been amended by the First Amendment dated as of March 1, 2012, the Second Amendment dated as of December 1, 2014, the Third Amendment dated as of August 19, 2015, the Fourth Amendment dated as of September 1, 2015, and the Fifth Amendment dated as of October 1, 2015, providing for the issuance of the Series 2008C Second Lien Bonds.

"Series 2008C Second Lien Bonds" means the Second Lien Wastewater Transmission 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 2010A Second Lien Bonds and the Series 2010B Second Lien Bonds.

"Series 2010A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2010A (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 2010A (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.

"Series 2014 Bond Ordinance" means the ordinance passed by the City Council on April 30, 2014, authorizing the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Indenture" means the Trust Indenture dated as of September 1, 2014 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Second Lien Bonds" means the Wastewater Transmission Revenue Project Bonds, Series 2014, of the City authorized pursuant to the Series 2014 Bond Ordinance and issued pursuant to the Series 2014 Indenture, consisting of the \$292,405,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014.

*"Series 2015 Bond Ordinance"* means the ordinance passed by the City Council on September 24, 2015, authorizing the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Indenture" means the Trust Indenture dated as of October 1, 2015 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (Taxable) of the City authorized pursuant to the Series 2015 Bond Ordinance and issued pursuant to the Series 2015 Indenture, consisting of the \$87,080,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (Taxable).

"Series 2017 Bond Ordinance" means the ordinance passed by the City Council on January 13, 2016, authorizing the issuance of the Series 2017 Second Lien Bonds.

"Series 2017 Indenture" means the Trust Indenture dated as of June 1, 2017 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2017 Second Lien Bonds.

"Series 2017 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2017 of the City authorized pursuant to the Series 2017 Bond Ordinance and issued pursuant to the Series 2017 Indenture, consisting of the \$180,590,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A, and the \$215,485,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B.

"Series 2023 Bond Ordinance" means an ordinance duly adopted by the City Council on June 27, 2018, as such ordinance was modified and amended by an ordinance duly adopted by the City Council on October 27,

2021, and an ordinance duly adopted by the City Council on November 7, 2022, authorizing the issuance of the Series 2023 Second Lien Bonds.

"Series 2023 Second Lien Bonds" means the \$452,575,000 Second Lien Wastewater Transmission Revenue Project and Refunding Bonds, Series 2023, of the City authorized pursuant to the Series 2023 Bond Ordinance and issued pursuant to the Indenture and the Series 2023 Supplemental Indenture.

"Series 2023 Supplemental Indenture" means the Supplemental Indenture authorizing the Series 2023 Second Lien Bonds.

"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 Indenture.

"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 prior Second Lien Bond Ordinances and described in the Indenture.

"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.

"Sinking Fund Payment" means:

- (a) as of any particular date of determination and with respect to the Outstanding Senior Lien Bonds, the amount required by the Senior Lien Bond Ordinance to be paid by the City on a sin-gle future date for the retirement of Senior Lien Bonds of such series which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Senior Lien Bond;
- (b) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series or consisting of any Section 2.8 Obligations, the amount required by the prior Second Lien Bond Ordinance or the Supplemental Indenture creating such series or the instrument creating such Section 2.8 Obligations to be paid by the City on a single future date for the retirement of such Second Lien Bonds (including Section 2.8 Obligations) which mature af-ter said future date, but does not include any amount payable by the City by reason only of the maturity of a Second Lien Bond; and
- (c) as of any particular date of determination and with respect to the Outstanding Subordinate Lien Obligations of any series, the amount required by a Subordinate Lien Obligation Ordinance to be paid in any event by the City on a single future date for the retirement of Subordinate Lien Obligations of such series which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Subordinate Lien Obligation.

"State" means the State of Illinois.

"Subordinate Lien Construction Accounts" means (i) the various accounts established for construction purposes by Subordinate Lien Obligation Ordinances, and (ii) any account established to pay costs of issuance of Subordinate Lien Obligations.

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

"Subordinate Lien Obligation Ordinances" means ordinances of the City authorizing the issuance of Subordinate Lien Parity Obligations.

"Subordinate Lien Obligation Revenues" means all sums, amounts, funds or monies which are deposited to the Subordinate Lien Obligations Account pursuant to the Indenture.

"Subordinate Lien Obligations" means obligations, including Subordinate Lien Parity Obligations, that are payable from sums, amounts, funds or monies which are deposited to the Subordinate Lien Obligations Account or Subaccounts pursuant to the Subordinate Lien Obligation Ordinances.

"Subordinate Lien Obligations Account" means the separate account of that name previously established in the Sewer Revenue Fund by prior Second Lien Bond Ordinances and expressly continued by the Indenture.

"Subordinate Lien Parity Obligations" means Subordinate Lien Obligations issued on or after the date of the Indenture.

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

"Tax-Exempt Second Lien Bonds" means Second Lien Bonds, the interest on which, as of their date of issuance, is not includable in gross income for federal income tax purposes under the federal income tax laws in effect from time to time.

"Taxable Second Lien Bonds" means Second Lien Bonds, the interest on which, as of their date of issuance, is includable in gross income for federal income tax purposes under the federal income tax laws in effect from time to time

"Treasury" means the United States Treasury Department.

"Trust Estate" means as provided in the granting clauses of the Indenture.

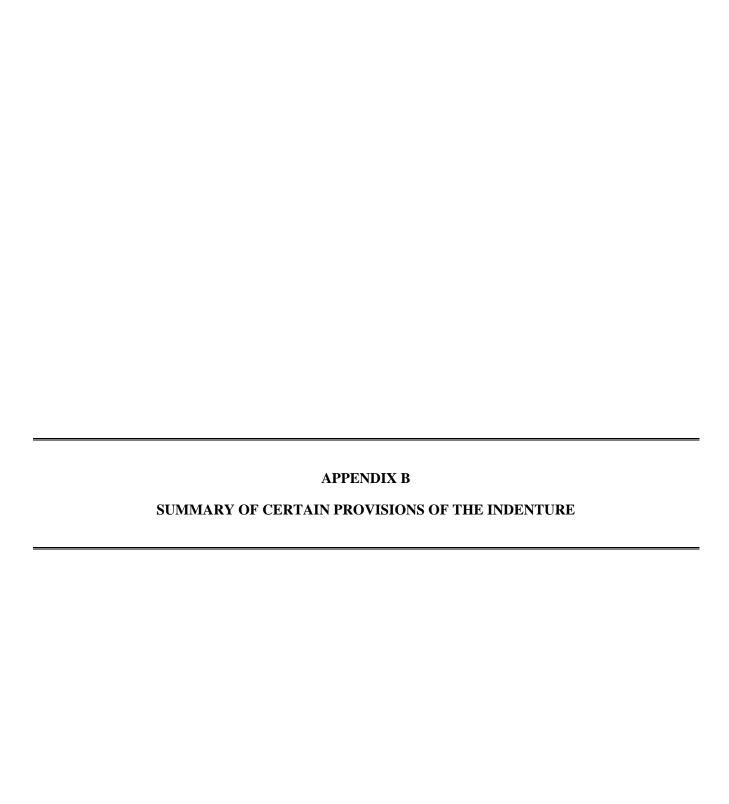
"Trustee" means Amalgamated Bank of Chicago, as Trustee under the Indenture, and its successors and assigns.

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

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

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







# APPENDIX B

# 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 Outstanding 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, Subordinate Lien Obligations or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds and Subordinate Lien Obligations, upon compliance with the following conditions:
  - (i) the funds required to be transferred to the Second Lien Bonds Account and its sub-funds, accounts and subaccounts shall have been transferred in full up to the date of delivery of such Second Lien Parity Bonds; and
  - (ii) 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 110 percent of the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming (w) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery and (x) any projected withdrawal from or deposits into the Sewer Rate Stabilization Account of such amounts as shall be estimated by the Authorized Officer in the current or any future fiscal year. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):
    - (1) 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) 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 scheduled to take effect in a future Fiscal Year, such rate increase may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for such completed Fiscal Year;

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

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 (a)(ii)(1) 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 (a)(ii)(1), and (B) Net Revenues Available for Bonds for the preceding Fiscal Year (as estimated by the Authorized Officer), adjusted as described in paragraph (a)(ii)(1), shall equal at least 110 percent of the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming (y) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery and (z) any projected withdrawal from or deposits into the Sewer Rate Stabilization Account of such amounts as shall be estimated by the Authorized Officer in the current or any future fiscal year.

- (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; of
  - (ii) to pay, redeem or refund any Senior Lien Bonds or Second Lien Bonds if (A) the sum of the Aggregate Senior Lien Debt Service, the Aggregate Second Lien Debt Service and the Aggregate Subordinate Lien Debt Service in each Fiscal Year in which there was to be any Aggregate Senior Lien Debt Service, Aggregate Second Lien Debt Service or Aggregate Subordinate Lien Debt Service on Bonds after the issuance of the Second Lien Parity Bonds and the payment, redemption or refunding of such Bonds will not be in excess of (B) the sum of the Aggregate Senior Lien Debt Service, Aggregate Second Lien Debt Service and Aggregate Subordinate Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each such Fiscal Year.
- (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 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, (b) issuing bonds, notes or other evidences of indebtedness payable out of, or secured by a pledge of, or secured by, the pledge of amounts

which may be withdrawn from the Second Lien Bonds Account so long as such pledge is expressly junior and subordinate to the pledge contained in the Indenture, (c) issuing Subordinate Lien Obligations.

# **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 Second Lien Bonds, including, without limitation, Section 2.8 Obligations, in strict conformity with the terms of such Second Lien Bonds and of this Indenture, the Supplemental Indentures creating the Second Lien Bonds of each series and the Outstanding Second Lien Bond Indentures and the instruments creating Section 2.8 Obligations or Section 2.9 Obligations, and that it will faithfully observe and perform all the conditions, covenants and requirements of this Indenture, each such Supplemental Indenture and instrument and of the Second Lien Bonds issued or incurred under such Supplemental Indenture..

# **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 Second Lien Bonds are Outstanding, to continue to operate the Sewer System as a revenue-producing system so as to produce Net 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 Budget Director 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 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.

Additionally, for 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 agrees:

(a) Not to direct or permit any action which (or fail to take 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.

- (b) To (i) 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 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.
- (c) To, 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 paragraph (a) above. The City shall also make or cause to be made identifiable investments of amounts allocable to the 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 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.
- (d) Not to 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.

The provisions of described in paragraphs (a) through (d) 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 Second Lien 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 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:

- (a) to close the Indenture against, or provide limitations and restrictions in addition to the limitations and restrictions contained in this Indenture on, the issuance of Second Lien Bonds or other evidences of indebtedness;
- (b) to add to the covenants and agreements of the City in the Indenture other covenants and agreements to be observed by the City which are not contrary to or inconsistent with this Indenture as theretofore in effect;

- (c) to add to the limitations and restrictions in the Indenture other limitations and restrictions to be observed by the City which are not contrary to or inconsistent with this Indenture as theretofore in effect:
- (d) to surrender any right, power or privilege reserved to or conferred upon the City by the terms of the Indenture, but only if the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the City contained in this Indenture;
- (e) to create a series of Second Lien Bonds and, in connection with such creation, to specify and determine the matters and things referred to in Article II and also any other matters and things relative to such Second Lien Bonds which are not contrary to or inconsistent with the Indenture as theretofore in effect, or to amend, modify or rescind any such authorization, specification or determination at any time prior to the first issuance of such Second Lien Bonds;
- (f) to, confirm, as further assurance, the pledge under the Indenture and the subjection of additional properties, Second Lien Bond Revenues or other collateral to any lien, claim or pledge created or to be created by this Indenture;
- (g) to modify any of the provisions of the Indenture in any respect whatever, provided that such modification shall be, and shall be expressed to be, effective only after all Second Lien Bonds Outstanding at the date of the execution and delivery of such Supplemental Indenture shall cease to be Outstanding;
- (h) to cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in this Indenture;
- (i) to insert such provisions clarifying matters or questions arising under the Indenture as are necessary or desirable and are not contrary to or inconsistent with the Indenture as theretofore in effect; and
  - (j) to provide additional duties of the Trustee under the Indenture.

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 written consent of the Owners of a majority in principal amount of the Second Lien Bonds then Outstanding (excluding therefrom any 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 the Indenture; provided that, unless approved in writing by the Owners of all the Second Lien 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 Second Lien Bond then Outstanding, or the rate of interest on such Second Lien Bonds; or (ii) a preference or priority of any Second Lien Bond or Second Lien

Bonds over any other second Lien Bond or Second Lien Bonds; or (iii) a reduction in the aggregate principal amount of Second Lien 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 Second Lien Bonds, the principal of and interest to and Redemption Price, if any, to become due on such Second Lien Bonds, at the times and in the manner stipulated in the Second Lien Bonds, the Indenture, and the applicable Supplemental Indentures creating such Second Lien Bonds and the instruments creating Section 2.8 Obligations and Section 2.9 Obligations, 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 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.

Any Second Lien Bonds shall, prior to the maturity or redemption date of such Second Lien Bonds, be deemed to have been paid as meant and with the effect expressed above if: (i) in case any of said 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 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 Second Lien Bonds on and prior to the maturity date or redemption date of such 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 Second Lien 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 Second Lien Bonds that the deposit required by clause (ii) above has been made with the Trustee or escrow agent and that said Second Lien 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 Second Lien 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 Second Lien Bonds and such 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 Second Lien Bonds on and prior to such redemption date or maturity date of such 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.

# **Payment, Registration and Transfer Provisions**

Details of payments of the Second Lien Bonds when in the book-entry form and the book-entry only system are described above under the subcaption "DESCRIPTION OF THE BONDS — Book-Entry Only System." The following provisions of the Indenture apply to the Second Lien Bonds upon the discontinuation of the DTC or any other book-entry registration system for the Second Lien Bonds.

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

All payments of interest on the Second Lien 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 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.

The transfer of any Second Lien Bond shall be registered upon the books of the Trustee at the written request of the Owner or its attorney duly authorized in writing, upon surrender of such 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 Owner or its attorney duly authorized in writing.

The City and the Trustee may deem and treat the Owner as the absolute owner of such Second Lien Bond, whether such Second Lien Bond is overdue or not, for the purpose of receiving payment of, or on account of, the principal of and interest on such 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 Owner shall be valid and effectual to satisfy and discharge the liability upon such Second Lien Bond to the extent of the sum or sums so paid.

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

In all cases in which the privilege of exchanging Second Lien Bonds or registering the transfer of Second Lien Bonds is exercised, the City shall execute and the Trustee shall authenticate and deliver Second Lien Bonds in accordance with the provisions of the Indenture. For every such exchange or registration of transfer of 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 Second Lien Bond during the 15 days next preceding an interest payment date or, in the case of a proposed redemption of Second Lien Bonds, after they have been selected by the Trustee for redemption.

# Payments or Actions Required on Days Other Than Business Days

If (a) the date for making any payment or (b) the last date for performance of any act or the exercising of any right, as provided in the Indenture, is not a Business Day, such payment may be made or such act may be performed or such right may be exercised on the next succeeding Business Day, with the same force and effect as if made or done on the nominal date provided in this Indenture, and no interest shall accrue for the period after such nominal date.

# 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 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

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.

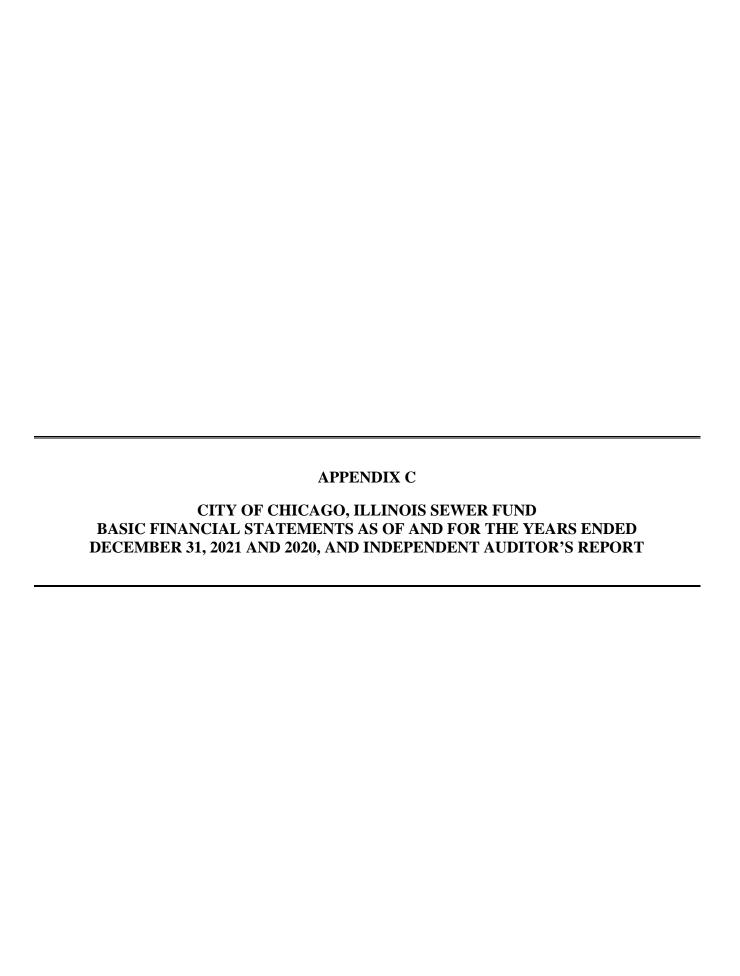
Each successor Trustee must be a commercial bank with trust powers or a trust company (a) duly organized under the laws of the United States or any state or territory of the United States, (b) authorized under such laws to perform all the duties imposed upon it by the Indenture and the laws of the State, (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.

# **Certain Rights of Bond Insurer**

The issuer of a municipal bond insurance policy with respect to Series 2023 Second Lien Bonds is deemed to be the sole Owner of the Series 2023 Second Lien Bonds for purposes of approving amendments to the Indenture (other than certain amendments that require the consent of each affected Owner or the consent of the Trustee), exercising remedies upon the occurrence of a default under the Indenture, providing specific approvals, consents or waivers or instruments of similar purpose, and to the extent the bond insurer is deemed to be the sole Owner for such purposes, the rights of the Owners of the Series 2023 Second Lien Bonds will be abrogated.







# City of Chicago, Illinois Sewer Fund

Basic Financial Statements as of and for the Years Ended December 31, 2021 and 2020, Required Supplementary Information, Statistical Information, and Independent Auditor's Report

# CITY OF CHICAGO, ILLINOIS SEWER FUND

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# INDEPENDENT AUDITOR'S REPORT

To the Honorable Lori Lightfoot, Mayor And Members of the City Council City of Chicago, Illinois

### **Report on the Audits of the Financial Statements**

# **Opinion**

We have audited the financial statements of the Sewer Fund ("Sewer Fund"), an enterprise fund of the City of Chicago, Illinois (the "City"), as of and for the years ended December 31, 2021 and 2020, 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.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Sewer Fund, as of December 31, 2021 and 2020, and the respective changes in financial position, and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

# **Basis for Opinion**

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audits of the Financial Statements section of our report. We are required to be independent of the Sewer Fund, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

# **Emphasis of Matter**

As discussed in Note 1, the basic financial statements present only the Sewer Fund, an enterprise fund of the City, and do not purport to, and do not, present fairly the financial position of the City as of December 31, 2021 and 2020, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

# **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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 for the Audits of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to
  fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
  include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
  statements.
- obtain an understanding of internal control relevant to the audit 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 Sewer Fund's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audits.

# **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability and Related Ratios, and the Schedule of Contributions be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

# **Supplementary Information**

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Sewer Fund's basic financial statements. The additional supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audits and the reports of other auditors, the Combining and Individual Fund Statements are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

# **Other Information**

Management is responsible for the other information included in the basic financial statement. The other information is comprised of the statistical section but does not include the basic financial statements and our auditor's report thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

June 29, 2022

Defoite & Touche LLP

## MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the City of Chicago, Illinois (the "City"), Sewer Fund's (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, 2021 and 2020. Please read this discussion in conjunction with the Sewer Fund's basic financial statements and the notes to basic financial statements following this section.

#### **FINANCIAL HIGHLIGHTS**

#### 2021

- Gross operating revenues for 2021 increased by \$21.8 million (6.1%). This increase is primarily due to increase in pumpage and a rate increase of 1.10% during 2021.
- Operating expenses before depreciation and amortization increased by \$20.6 million (17.2%) as compared to 2020 primarily due to a decrease in the change of deferred inflows and due to changes in assumptions. The increase in operating expenses is also due to a slight increase in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise funds, as well as current year recognition of deferred outflows due to differences between expected and actual experience and changes of assumptions at the Municipal Employees' Annuity and Benefit Fund of Chicago and due to changes of assumptions at the Laborers' and Retirement Board Employees' Annuit and Benefit Fund of Chicago.
- The Sewer Fund's total net position for 2021 increased by \$89.5 million, or 11.6% compared to 2020 due to an excess of revenues over expenses.
- The Sewer Fund's net position at December 31, 2021, was \$863.2 million. This increase of \$89.5 million is due to an increase of revenues as the provision of doubtful accounts decreased due to the full year implementation of the Utility Billing Relief Program, which provides financial relief to low income households, as well as an increase in revenue collections.
- Utility plant additions in 2021 were \$100.6 million, due to the continuing capital improvement program.

## 2020

- Operating gross revenues for 2020 decreased by \$17.6 million (4.7%). This decrease is primarily due to
  decrease in pumpage and penalty relief from the Utility Billing Relief program as compared to prior-year
  gross operating revenues. There was a rate increase of 2.45% during 2020.
- Operating expenses before depreciation and amortization decreased by \$17.9 million (13.0%) as compared to 2019 primarily due to a decrease in pension expense due to changes in assumptions and reduction in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise Funds.
- The Sewer Fund's total net position for 2020 increased by \$96.3 million, or 14.2% compared to 2019 due to an excess of revenues over expenses

- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by \$773.7 million (net position) at December 31, 2020. Net position comprises \$931.0 million of net investment in capital assets, \$205.7 million of restricted for capital projects, and (\$363.0) million of unrestricted.
- Depreciable capital asset additions, net, for 2020 were \$300.4 million, primarily due to the completion of sewer construction and rehabilitation projects.

## **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, liabilities, and deferred inflows using the accrual basis of accounting. The difference between assets, deferred outflows, liabilities and deferred inflows is reported as net position. The increase or decrease in net position may serve as an indicator, over time, 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 and related financing, and investing activities. These statements present the cash received and disbursed, the net increase or decrease in cash and cash equivalents for the year, and the cash and cash equivalents balance at year-end.

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

The required supplementary information section presents the schedule of changes in the net pension liability and related ratios and the schedule of contributions.

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

#### **FINANCIAL ANALYSIS**

At December 31, 2021, the Sewer Fund's financial position continues to be strong with total assets and deferred outflows of \$3,650.3 million, total liabilities and deferred inflows of \$2,787.1 million, and net position of \$863.2 million. A comparative condensed summary of the Sewer Fund's net position at December 31, 2021, 2020, and 2019, is as follows:

	Net Position		
(In thousands)	2021 2020 2019		
Current assets Restricted and other assets—noncurrent	\$ 548,961 \$ 548,532 577,84 950 43,684 55,23	12	
Utility plant—net	3,085,400 2,994,162 2,889,84	+3	
Total assets	3,635,311 3,586,378 3,522,90	03	
Deferred outflows	14,973 18,511 22,25	59	
Total assets and deferred outflows	\$ 3,650,284 \$ 3,604,889 \$ 3,545,16	<u>52</u>	
Current liabilities	\$ 340,917 \$ 284,190 \$ 319,18	31	
Pension liability	432,335 426,455 460,17		
Long-term liabilities	<u>1,965,471</u> <u>2,038,330</u> <u>1,997,30</u>	<u>)5</u>	
Total liabilities	2,738,723 2,748,975 2,776,65	59	
Deferred inflows	48,369 82,204 91,09	92	
Total liabilities and deferred inflows	<u>\$ 2,787,092</u>	<u>51</u>	
Net position:			
Net investment in capital assets	\$ 1,062,584 \$ 931,047 \$ 862,06	55	
Restricted for capital projects	171,985 205,696 139,61	18	
Unrestricted	(371,377) (363,033) (324,27	<u>72</u> )	
Total net position	<u>\$ 863,192</u>	<u>11</u>	

### 2021

Current assets remained the same with a slight increase of \$0.4 million (0.08%) which was primarily due to a slight decrease in cash and cash equivalents as payments to vendors were processed more rapidly compared to the prior year, and a slight increase in accounts receivable, which was offset by a decrease in investments and due from other funds as more liquid assets were moved to investments to obtain a higher long-term interest rate. Noncurrent restricted investments and other assets decreased by \$42.7 million (97.8%) and utility plant—net increased by \$91.2 million (3.1%) due primarily to capital activities for sewer construction and rehabilitation projects funded by the restricted investments. During 2021, the Sewer Fund lined an additional 48.8 miles of sewers.

Current liabilities increased by \$56.7 million (20.0%), which was primarily due to a decrease in accounts payable as payments were processed more expeditiously, offset by an increase in accrued liabilities and due to other funds and current portion of long-term debt due to planned increases in activity in the capital

program, which increased debt service payments. Long term debt decreased by \$72.9 million (3.6%) due to the issuance of Illinois Environmental Protection Agency (IEPA) loans. Net pension liability in the amount of \$432.3 million increased \$5.9 million (1.4%) compared to 2020 primarily as a result of changes in assumptions and increase in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise Funds.

Deferred outflows decreased by \$3.5 million (19.1%) and deferred inflows decreased by \$33.8 million (41.2%) during 2021 compared with 2020 due to amortization and the changes in assumptions during 2020.

As of December 31, 2021, total net position was \$863.2 million, an increase of \$89.5 million (11.6%) from 2020.

## 2020

Current assets decreased by \$29.3 million (5.1%) due to a decrease in cash and cash equivalents and accounts receivable, which was offset by an increase in investments and due from other funds as more liquid assets were moved to investments to achieve better investment returns. Noncurrent restricted investments and other assets decreased by \$11.5 million (20.9%) and utility plant—net increased by \$104.3 million (3.6%) due primarily to capital activities for sewer construction and rehabilitation projects funded by the restricted investments. During 2020, the Sewer Fund lined an additional 30.7 miles of sewers.

Current liabilities decreased by \$35.0 million (11.0%), which was primarily due to a decrease in unearned revenue, accounts payable, accrued liabilities offset by due to other funds and current portion of long-term debt. Long term debt increased by \$41.0 million (2.1%) due to the issuance of Illinois Environmental Protection Agency (IEPA) loans. Net pension liability in the amount of \$426.5 million decreased \$33.7 million (7.3%) compared to 2019 primarily as a result of changes in assumptions and reduction in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise Funds.

Deferred outflows decreased by \$3.7 million (16.8%) and deferred inflows decreased by \$8.9 million (9.8%) compared with 2019 due to the difference between 2020 projected and actual earnings on pension plan investments.

As of December 31, 2020, total net position was \$773.7 million, an increase of \$96.3 million (14.2%) from 2019.

A summary of revenues, expenses, and changes in net position for the years ended December 31, 2021, 2020, and 2019, is as follows:

	Revenues, Expenses, and Changes in Net Positio		
(In thousands)	2021	2020	2019
Revenues:			
Operating revenues:			
Sewer service—net	\$365,217	\$333,475	\$350,053
Other operating revenues	1,052	484	1,023
Total operating revenues	366,269	333,959	351,076
Operating expenses:			
Repairs	44,066	47,398	41,614
General Fund reimbursements	55,937	54,467	53,688
Pension expense (Note 6)	(4,979)	(23,853)	3,266
Maintenance	25,861	24,405	22,958
Engineering	5,328	4,776	3,515
Administrative and general	13,891	12,320	12,367
Depreciation and amortization	55,749	53,140	52,933
Total operating expenses	195,853	172,653	190,341
Operating income	170,416	161,306	160,735
Nonoperating revenues	2,165	12,128	11,737
Nonoperating expenses	(83,099)	(80,466)	(80,112)
Total nonoperating expenses/revenues	(80,934)	(68,338)	(68,375)
Income before capital grants	89,482	92,968	92,360
Capital grants		3,331	(5)
Change in net position	89,482	96,299	92,355
Not position beginning of year	772 710	677 411	EOE OEG
Net position beginning of year	773,710	677,411	585,056
Net position end of year	\$863,192	\$773,710	\$677,411

## 2021

Net sewer service revenues for the years ended 2021 and 2020 were \$365.2 million and \$333.5 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2021 and 2020 was \$1.1 million and \$0.5 million, respectively. The increase in 2021 net sewer service revenue of \$31.7 million is primarily due to an increase in pumpage and decrease is calculation for provision for doubtful accounts due to the full year implementation of the Utility Billing Relief (UBR) Program, which provides financial relief to low-income households through payment plans and allows the ability to write off legacy accounts receiving upon completion of the Program. In addition, a rate increase of 1.10% during 2021 based on the annual CPI adjustment.

Pension expense decreased to negative \$5.0 million in 2021 from a negative \$23.9 million in 2020 associated with an increase in the pension expense due to changes in assumptions and increase in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise Funds.

Nonoperating revenues decreased \$13.3 million compared to 2020 primarily as a result of the completion of the Community Development Block Grant – Disaster Recovery Program related to the 2013 flooding.

### 2020

Net sewer service revenues for the years ended 2020 and 2019 were \$333.5 million and \$350.1 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2020 and 2019 was \$484 thousand and \$1.0 million, respectively. The decrease in 2020 net sewer service revenue of \$17.6 million is primarily due to decrease in pumpage and penalty relief from the Utility Billing Relief program. There was a rate increase of 2.45% during 2020.

Pension expense decreased to negative \$23.9 million in 2020 from \$3.3 million in 2019 associated with a decrease in the pension expense due to changes in assumptions and reduction in the allocation of pension costs to the Sewer Fund compared to the Governmental and certain Enterprise Funds.

Nonoperating revenues increased \$3.7 million compared to 2019 primarily as a result of proceeds from community development block grant.

A comparative summary of the Sewer Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2021, 2020, and 2019, is as follows:

	Op	erating Exper	ises
(In thousands)	2021	2020	2019
Repairs	\$ 44,066	\$ 47,398	\$ 41,614
Pension	(4,979)	(23,853)	3,266
General Fund reimbursements	55,937	54,467	53,688
Maintenance	25,861	24,405	22,958
Engineering	5,328	4,776	3,515
Administrative and general	13,891	12,320	12,367
Operating expenses before depreciation and			
amortization	140,104	119,513	137,408
Depreciation and amortization	55,749	53,140	52,933
Total operating expenses	\$ 195,853	\$172,653	\$ 190,341

## 2021

Overall, operating expenses before depreciation and amortization for 2021 increased by \$20.6 million 17.2% in 2021 primarily due to increase in pension expense as discussed above. Depreciation and amortization slightly increased due to an increase in utility plant assets.

#### 2020

Overall, operating expenses before depreciation and amortization for 2020 decreased by \$17.9 million (13.0%) in 2020 primarily due to reduction in pension expense as discussed above. Depreciation and amortization slightly increased due to an increase in utility plant.

A comparative summary of the Sewer Fund's cash flows for the years ended December 31, 2021, 2020, and 2019, is as follows:

		Cash Flows	
(In thousands of dollars)	2021	2020	2019
Cash from activities:			
Operating	\$ 241,058	\$ 210,506	\$ 203,191
Capital and related financing	(283,993)	(257,940)	(233,675)
Noncapital financing activities	-	-	-
Investing	51,721	40,065	(80,551)
Net change in cash and cash equivalents	8,786	(7,369)	(111,035)
Cash and cash equivalents:			
Beginning of year	128,239	135,608	246,643
End of year	\$ 137,025	\$ 128,239	\$ 135,608

## 2021

As of December 31, 2021, the Sewer Fund's unrestricted and restricted cash and cash equivalents of \$137.0 million represented an increase of \$8.8 million from December 31, 2021, as compared to the decrease of \$7.4 million from December 31, 2019 to December 31, 2020, primarily due to investment related activities in 2021. Total unrestricted cash and cash equivalents at December 31, 2021 and 2020, was \$26.5 million and \$4.8 million, respectively.

#### 2020

As of December 31, 2020, the Sewer Fund's unrestricted and restricted cash and cash equivalents of \$128.2 million represented a decrease of \$7.4 million from December 31, 2020, as compared to the decrease of \$111.0 million from December 31, 2018 to December 31, 2019, primarily due to investment related activities in 2020. Total unrestricted cash and cash equivalents at December 31, 2020 and 2019, was \$4.8 million and \$11.8 million, respectively.

## UTILITY PLANT AND DEBT ADMINISTRATION

#### 2021

At the end of 2021 and 2020, the Sewer Fund had net utility plant of \$3,085.4 million and \$2,994.2 million, respectively. During 2021, the Sewer Fund had capital additions being depreciated of \$100.6 million, and completed projects totaling \$41.5 million were transferred from construction in progress to applicable facilities and structures capital accounts.

## 2020

At the end of 2020 and 2019, the Sewer Fund had net utility plant of \$2,994.2 million and \$2,889.8 million, respectively. During 2020, the Sewer Fund had capital additions being depreciated of \$300.4 million, and completed projects totaling \$169.6 million were transferred from construction in progress to applicable facilities and structures capital accounts.

The Sewer Fund's net utility plant at December 31, 2021, 2020, and 2019, is summarized as follows:

	Net Utility Plant at Year-End		
(In thousands)	2021	2020	2019
Utility plant not depreciated: Land and land rights Construction in progress	\$ 560 138,006	\$ 560 72,682	\$ 560 196,790
Total utility plant not depreciated	138,566	73,242	197,350
Utility plant being depreciated: Facilities and structures Furniture and equipment	3,726,958 33,668	3,645,972 33,757	3,367,515 33,810
Total utility plant being depreciated	3,760,626	3,679,729	3,401,325
Less accumulated depreciation: Facilities and structures Furniture and equipment	(784,722) (29,070)	(731,358) (27,451)	(683,150) (25,682)
Total accumulated depreciation	(813,792)	(758,809)	(708,832)
Utility plant being depreciated—net	2,946,834	2,920,920	2,692,493
Utility plant—net	\$3,085,400	\$2,994,162	\$2,889,843

The Sewer Fund's capital activities are funded through Sewer Fund revenue bonds, Illinois Environmental Protection Agency Loans, 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, 2021, 2020, and 2019, is summarized as follows:

	Long-Term (	<b>Dutstanding Del</b>	ot at Year-End
(In thousands)	2021	2020	2019
Revenue bonds Add interest accretion on Series 1998	\$1,895,795	\$1,953,134	\$1,895,495
capital appreciation bonds Unamortized net bond discount/premium	68,806 81,926	73,356 89,361	75,114 97,004
Outstanding debt—net	\$2,046,527	\$2,115,851	\$2,067,613

The Sewer Fund's revenue bonds at December 31, 2021, have underlying credit ratings with each of the three major rating agencies as follows:

	Moody's Investor Services	Standard & Poor's	Fitch Ratings	Kroll
Senior Lien Wastewater Revenue Bonds	Baa2	A+	NR	NR
Junior Lien Wastewater Revenue Bonds	Baa3	Α	A-	AA-

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

At December 31, 2021, the Sewer Fund was in compliance with the debt covenants as stated within the bond ordinances. Additional information on certain of the Sewer Fund's debt covenants is presented in Note 4 of the notes to the basic financial statements.

## **REQUESTS FOR INFORMATION**

This financial report is designed to provide the reader with a general overview of the 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.

## STATEMENTS OF NET POSITION AS OF DECEMBER 31, 2021 AND 2020 (In thousands)

	2021	2020		2021	2020
ASSETS			LIABILITIES		
CURRENT ASSETS:			CURRENT LIABILITIES:		
Cash and cash equivalents (Note 2)	\$ 26,480	\$ 4,822	Accounts payable	\$ 3,965	\$ 2,389
Investments (Note 2)	196,379	233,885	Due to other City funds	82,739	47,589
Accounts receivable—net of allowance for doubtful accounts			Accrued liabilities unrestricted	57,737	53,252
of approximately \$151,940 in 2021 and \$144,651 in 2020	109,904	98,578	Liabilities payable from restricted assets:		
Due from other City funds	18,303	28,528	Accounts payable	31,917	47,832
Inventories	1,035	854	Accrued liabilities	43,177	14,345
Cash and cash equivalents—restricted (Note 2)	110,545	123,417	Current portion of long-term debt (Note 4)	81,056	77,521
Investments—restricted (Note 2)	85,432	57,543	Interest payable	40,326	41,262
Interest receivable—restricted (Note 2)	883	905			
			Total current liabilities	340,917	284,190
Total current assets	548,961	548,532			
			NONCURRENT LIABILITIES:		
NONCURRENT ASSETS:			Net pension liability (Note 6)	432,335	426,455
Investments—restricted (Note 2)		42,682	Long-term debt—net of current maturities (Note 4)	1,965,471	2,038,330
Other assets	950	1,002	Total noncurrent liabilities	2,397,806	2,464,785
Utility plant (Note 5):			Total liabilities	2,738,723	2,748,975
Land and land rights	560	560			
Facilities and structures	3,726,959	3,645,972	DEFERRED INFLOWS (Note 9)	48,369	82,204
Furniture and equipment	33,668	33,757			
Construction in progress	138,006	72,682	NET POSITION (Note 1):		
			Net investment in capital assets	1,062,584	931,047
Total utility plant	3,899,193	3,752,971	Restricted for capital projects	171,985	205,696
			Unrestricted	(371,377)	(363,033)
Less accumulated depreciation	(813,793)	(758,809)			
			Total net position	863,192	773,710
Utility plant—net	3,085,400	2,994,162			
Total noncurrent assets	3,086,350	3,037,846			
Total assets	3,635,311	3,586,378			
DEFERRED OUTFLOWS (Note 9)	14,973	18,511			
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$3,650,284	\$3,604,889	TOTAL	\$3,650,284	\$3,604,889
TO THE HOSE TO HID DELICITIED OUT LOWS	7 3,030,204	7 3,004,003	IOIAL	7 3,030,204	7 3,004,003

See notes to basic financial statements.

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (In thousands)

	2021	2020
OPERATING REVENUES:		
Sewer service:		
Sewer service—gross Less—provision for doubtful accounts	\$377,514 (12,297)	\$356,267 (22,792)
Less—provision for doubtful accounts	(12,237)	(22,732)
Sewer service—net	365,217	333,475
Other	1,052	484
Total operating revenues	366,269	333,959
OPERATING EXPENSES:		
Repairs	44,066	47,398
General Fund reimbursements	55,937	54,467
Pension expense (Note 6)	(4,979)	(23,853)
Maintenance	25,861	24,405
Engineering	5,328	4,776
Administrative and general	13,891	12,320
Total operating expenses before depreciation and amortization	140,104	119,513
Depreciation and amortization	55,749	53,140
Total operating expenses	195,853	172,653
OPERATING INCOME	170,416	161,306
NONOPERATING REVENUE (EXPENSES):		
Investment income (loss)	(733)	8,381
Interest expense	(82,979)	(80,346)
Other	2,898	3,747
Total nonoperating expenses—net	(80,814)	(68,218)
TRANSFERS OUT	(120)	(120)
CAPITAL GRANTS		3,331
CHANGE IN NET POSITION	89,482	96,299
TOTAL NET POSITION—Beginning of year	773,710	677,411
TOTAL NET POSITION—End of year	\$863,192	\$773,710

See notes to basic financial statements.

## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (In thousands)

	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES: Received from customers Transactions with other city funds Payments to vendors Payments to employees	\$ 354,944 (30,621) (29,443) (53,822)	\$ 329,434 (38,244) (29,509) (51,175)
Net cash provided by operating activities	241,058	210,506
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES: Acquisition and construction of capital assets Proceeds from issuance of bonds Interest paid on revenue bonds Proceeds from Community Development	(130,995) 10,742 (95,658)	(225,715) 121,325 (86,048)
Block Grant Principal paid on bonds	(68,082)	3,331 (70,833)
Net cash provided in capital and related financing activities	(283,993)	(257,940)
CASH FLOWS FROM INVESTING ACTIVITIES: Sales and purchases of investments—net Investment interest  Net cash provided by (used in) investing activities	48,877 2,844 51,721	33,123 6,942 40,065
NET CHANGE IN CASH AND CASH EQUIVALENTS	8,786	(7,369)
CASH AND CASH EQUIVALENTS—Beginning of year	128,239	135,608
CASH AND CASH EQUIVALENTS—End of year	\$ 137,025	\$ 128,239
		(Continued)

## STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (In thousands)

\$ 26,480 110,545	\$ 4,822 123,417
\$ 137,025	\$ 128,239
12,297 10,225 (23,622) (180) 4,486	\$ 161,306 53,140 (40,972) 22,792 (5,863) (14,355) (122) 9,094 38,448
	(12,962)
	\$ 170,545 \$ 137,025 \$ 170,416 \$ 55,749 (24,917) 12,297 10,225 (23,622) (180)

## SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS:

Property additions in 2021 and 2020 of \$75,094 and \$62,177, respectively, have outstanding accounts payable and accrued liabilities.

The accretion adjustment of Series 1998 capital appreciation bonds for the years ended December 31, 2021 and 2020, were \$4,948 and \$5,390, respectively.

The fair value adjustment gain (loss) to investments for 2021 and 2020 were \$400.6 thousand and \$2,889 million, respectively.

See notes to basic financial statements.

(Concluded)

# NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (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 are limited to those authorized by the Code. Investments authorized by the Code include, but are not limited to, 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 (see Note 2). The City is prohibited by ordinance from investing in derivative instruments, as defined, without City Council approval.

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.

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

Investments, generally, may not have a maturity in excess of 30 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 investments with maturities of three months or less when purchased.

Accounts Receivable—The Sewer Fund accounts receivable is comprised of 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. In 2021, the Sewer Fund fully implemented the UBR Program, providing financial relief to low-income households by establishing payment plans and writing off past due legacy accounts receivable balances upon completion of the Program. The impact of this program was realized in 2021, resulting in a decrease in the provision of doubtful accounts.

**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 acquisition cost. 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
Furniture and equipment
Sewer rehabilitation

75 years 5–20 years 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 unamortized loss on bond refundings, differences between estimated and actual investment earnings related to pensions, and changes in actuarial assumptions related to pensions, and other pension related changes.

**Deferred Inflows**—Deferred inflows represent the differences between projected and actual actuarial experience and changes in assumptions related to pensions.

**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.

**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 Insurance Costs, Bond Premiums Discounts, and Refunding Transactions**—Bond insurance costs and bond premiums 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.

**Capitalized Interest**—The Sewer Fund prospectively adopted GASB 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* ("GASB 89") as of January 1, 2021. Prior to the adoption of GASB 89, interest expense was capitalized during construction of those capital projects that were paid for from the bond proceeds and were being amortized over the depreciable life of the related assets on a straight-line basis. Subsequent to the adoption of GASB 89, interest expense on construction bond proceeds was expensed as incurred.

**Capital Grants**—Capital grants are reported as contributed revenue in the statements of revenues, expenses, and changes in net position and are recognized when the related capital expenditure is incurred.

**Revenue Recognition**—Sewer service revenue is billed as 100% of the City's water billings and is recorded as revenue when the water is consumed by the customers. Of the accounts receivable balances, \$34.0 million and \$31.2 million represent revenue recognized on sewer service that had not

yet been billed to customers at December 31, 2021 and 2020, respectively. In 2020, the Sewer Fund changed its billing for unmetered accounts from billing every 6 months in advance to monthly billing, which eliminated the recording of unearned revenue.

**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, pension expense, administrative expenses, and depreciation and amortization on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

**Debt**—Debt is defined as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. For disclosure purposes, debt does not include leases, except for contracts reported as financed purchase of the underlying asset, or accounts payable.

## Adopted Accounting Standards—

GASB Statement	Impact
GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period ("GASB 89")	Establishes accounting requirements for interest cost incurred before the end of a construction period. The Sewer Fund adopted GASB 89 as of and for the year ended December 31, 2021. There was no material impact to the basic financial statements upon adoption.
GASB Statement No. 92, Omnibus 2020 ("GASB 92")	Clarifies multiple financial reporting topics included in multiple GASB statements. The Sewer Fund adopted GASB 92 as of and for the year ended December 31, 2021. There was no material impact to the basic financial statements upon adoption.
GASB Statement No. 99, Omnibus 2022 ("GASB 99")	Clarifies multiple financial reporting topics included in multiple GASB statements. Certain portions of the statement are effective and implemented for the year ended December 31, 2021 including: extension of the use of LIBOR, accounting for SNAP distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63. There was no material impact to the basic financial statements upon adoption. The remainder of the statement is applicable to the years ended December 31, 2023 and December 31, 2024 as noted below.

**Upcoming Accounting Standards**—GASB has issued the following pronouncements that may affect the future financial position, results of operations, cash flows, or financial presentation of the Sewer Fund upon implementation. Management has not yet evaluated the effect of implementation of these standards.

GASB Accounting Standard	Required Year of Adoption
GASB Statement No. 87, Leases ("GASB 87")	2022
GASB Statement No. 91, Conduit Debt Obligations ("GASB 91")	2022
GASB Statement No. 93, Replacement of Interbank Offered Rates ("GASB 93")	2022
GASB Statement No. 94, Public-Private and Public-Public Partnerships and Availability Payment Arrangements ("GASB 94")	2023
GASB Statement No. 96, Subscription-based Information Technology Arrangements ("GASB 96")	2023
GASB Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans ("GASB 97")- Remaining provision	2022
GASB Statement No. 99, Omnibus 2022 ("GASB 99") – Remaining provisions	2023 & 2024
GASB Statement No. 100, Accounting Changes and Error Corrections – An Amendment of GASB Statement No. 62	2024
GASB Statement No. 101, Compensated Absences	2024

## 2. RESTRICTED AND UNRESTRICTED CASH EQUIVALENTS AND INVESTMENTS

**Cash Equivalents and Investments**—As of December 31, 2021, the Sewer Fund had the following cash equivalents and investments (in thousands):

	Maturities (in Years)						
	More						
	Less than 1	1–5	6–10	than 10	Fair Value		
Agency Bonds	\$ -	\$ 45,301	\$ 2,880	\$ -	\$ 48,181		
Commercial paper	107,716	-	-	-	107,716		
Corporate bonds	-	747	57,881	-	58,628		
Money Market Funds	103,864	-	-	-	103,864		
Municipal Bonds	22,651	26,219	_	-	48,870		
Supernational Bonds	-	49,944			49,944		
Total	\$234,231	\$122,211	\$60,761	<u>\$ -</u>	\$417,203		

As of December 31, 2020, the Sewer Fund had the following cash equivalents and investments (in thousands):

	Maturities (in Years)						
	Less than 1	1–5	6–10	than 10	Fair Value		
Agency Bonds	\$ -	\$ -	\$10,813	\$ -	\$ 10,813		
Commercial paper	146,557	-	-	-	146,557		
Corporate bonds	30,044	29,838	-	-	59,882		
Money Market Funds	110,401	-	_	-	110,401		
Municipal Bonds	33,414	86,221	_	-	119,635		
US Government	14,994	-	-	-	14,994		
					<u> </u>		
Total	\$335,410	\$116,059	\$10,813	\$ -	\$462,282		

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.

**Investment Fair Value Measurements**—The Sewer Fund categorizes the fair value measurements of its investments based the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation techniques used to measure fair value.

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets

Level 2—Observable inputs other than quoted market prices, and

Level 3—Unobservable Inputs

The investments measured at fair value as of December 31, 2021 and 2020, were (dollars in thousands):

		2021			2020	
-	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Supernational Bonds Corporate bonds Municipal bonds Agency bonds	\$ - - - -	\$ 49,944 58,628 48,870 48,181	\$ - - -	\$ - - - -	\$ - 59,882 115,685 10,813	\$ - - -
Total investments at fair value	\$ -	\$ 205,623	<u>\$ -</u>	<u>\$ -</u>	\$ 186,380	<u>\$ -</u>

Investments that are valued through other observable inputs (Level 2), are valued using methods that include, but are not limited to, model processes, benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing.

Money market investments and participating interest-earning investment contracts that have a remaining maturity at the time of purchase of one year or less and are held by governments other than the external investment pools are measured at amortized cost and are not reflected in the table above. The total of these investments at amortized cost for Sewer are \$211.6 million and \$275.9 million as of December 31, 2021 and 2020, respectively.

**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 30 years from the date of purchase. Certain other investments are held in accordance with the specific provisions of applicable ordinances.

**Credit Risk**—With regard to credit risk, the Code limits the investments in securities to:

- (1) Interest-bearing general obligations of the United States and the State of Illinois;
- (2) United States treasury bills and other non-interest bearing general obligations of the United States or United States government agencies when offered for sale at a price below the face value of same, so as to afford the City a return on such investment in lieu of interest;
- (3) Tax anticipation warrants, municipal bonds, notes, commercial paper or other instruments representing a debt obligation issued by the City;
- (4) Commercial paper which: (1) at the time of purchase, is rated in the two highest classifications by at least two accredited ratings agencies; and (2) matures not more than 270 days after the date of purchase;
- (5) Reverse repurchase agreement if: (1) the term does not exceed 90 days; and (2) the maturity of the investment acquired with the proceeds of the reverse repurchase agreement does not exceed the expiration date of the reverse repurchase agreement; Reverse repurchase agreements may be transacted with primary dealers and financial institutions, provided that the City has on file a master repurchase agreement;
- (6) Certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance; provided that any amount of the deposit in excess of the federal deposit insurance shall be collateralized as noted in Custodial Credit Risk—Cash and Certificates of Deposit below;
- (7) Bankers acceptance of banks whose senior obligations, at the time of purchase, are rated in either the AAA or AA rating categories by at least two accredited ratings agencies;
- (8) Tax-exempt securities exempt from federal arbitrage provisions applicable to investments of proceeds of the City's tax-exempt debt obligations;
- (9) Domestic money market mutual funds regulated by and in good standing with the Securities and Exchange Commission; provided that such money market mutual funds' portfolios are limited to investments authorized by this section;
- (10) Any other suitable investment instrument permitted by state laws governing municipal investments generally, subject to the reasonable exercise of prudence in making investments of public funds;
- (11) Except where otherwise restricted or prohibited, a non-interest-bearing savings account, non-interest-bearing checking account or other non-interest bearing demand account established in a national or state bank, or a federal or state savings and loan association, when, in the determination of the treasurer, the placement of such funds in the non-interest bearing account is used as compensating balances to offset fees associated with that account that will result in cost savings to the City;

- (12) Bonds of companies organized in the United States with assets exceeding \$500,000,000 that, at the time of purchase, are rated investment grade by at least two accredited ratings agencies;
- (13) Debt instruments of international financial institutions, including but not limited to the World Bank and the International Monetary Fund, that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating, or equivalent rating. For purposes of this subsection, an "international financial institution" means a financial institution that has been established or chartered by more than one country and the owners or shareholders are generally national governments or other international institutions such as the United Nations;
- (14) United States dollar denominated debt instruments of foreign sovereignties that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating or equivalent rating;
- (15) Interest-bearing bonds of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois, of any other state, or of any political subdivision or agency of the State of Illinois or of any other state, whether the interest earned thereon is taxable or tax-exempt under federal law. The bonds shall be registered in the name of the city or held under a custodial agreement at a bank. The bonds shall be rated, at the time of purchase, not less than A-, or equivalent rating, by at least two accredited rating agencies with nationally recognized expertise in rating bonds of states and their political subdivisions;
- (16) Bonds registered and regulated by the Securities and Exchange Commission and for which the full faith and credit of the State of Israel is pledged for payment; provided that the bonds have an Arating or above or equivalent rating by at least two accredited ratings agencies;
- (17) Bonds, notes, debentures, or other similar obligations of agencies of the United States rated.

Total holdings across all funds held by the Sewer Fund shall have no less than an overall average rating of Aa1 on a quarterly basis, as rated by two accredited rating agencies. A schedule summarizing the Sewer Fund's exposure to credit risk as of December 31, 2021 and 2020, is as follows (in thousands):

Quality Rating	2021	2020
Aaa/AAA	\$202,735	\$125,930
A-1/P-1	43,027	126,485
A-2/P-2	64,689	35,065
Aa/AA	48,870	126,734
A/A	11,427	32,169
BBB	46,455	15,823
Not Rated		76
Total	<u>\$417,203</u>	\$462,282

**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 public fund deposits, depository institutions are to maintain collateral pledges on City deposits and certificates of deposit during the term of the deposit.

For certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance or demand deposits in banks or savings and loan associations designed as municipal depositories which are insured by federal deposit insurance, any amount of the deposit in excess of the federal deposit insurance shall be either: (1) fully collateralized at least 100% by: (i) marketable U.S. government securities marked to market at least monthly; (ii) bonds, notes, or other securities constituting the direct and general obligation of any agency or instrumentality of the United States; or (iii) bonds, notes or other securities constituting a direct and general obligation of any county, township, city, village, incorporated town, municipal corporation, or school district of the State of Illinois or of any other state, or of any political subdivision or agency of the State of Illinois or any other state which are rated in either the AAA or AA rating categories by at least two accredited ratings agencies and maintaining such rating during the term of such investments; (2) 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 and maintaining such rating during the term of such investment; or (3) fully collateralized at least 100% by an irrevocable letter of credit issued in favor of the City of Chicago by the Federal Home Loan Bank, provided that the Federal Home Loan Bank's shortterm debt obligations are rated in the highest rating category by at least one accredited ratings agency throughout the term of the certificate of deposit or deposit.

The collateral required to secure City funds must be held in safekeeping and pursuant to collateral agreements which would prohibit release or substitution of pledged assets without proper written notification and authorization of the City Treasurer. The final maturity of acceptable collateral pledged shall not exceed 120 months.

The bank balance of cash and certificates of deposit with the City's various municipal depositories was \$107.1 million. 96.6% of the bank balance was either insured or collateralized with securities held by City agents in the City's name. \$3.6 million was uncollateralized at December 31, 2021, and thus was subject to custodial credit risk.

A schedule summarizing the investments reported in the basic financial statements as of December 31, 2021 and 2020, is as follows (in thousands):

	2021	2020
Per Note 2: Investments—Sewer Fund Investments—City Treasurer pooled fund	\$417,203 	\$462,282 
	\$417,203	\$462,282
Per financial statements:		
Restricted investments—current	\$ 85,432	\$ 57,543
Restricted investments—noncurrent	-	42,682
Unrestricted investments	196,379	233,885
Investments included as cash and cash equivalents on the statements of net position	135,392	128,172
	\$417,203	\$462,282

#### 3. 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, 1998A Wastewater Capital Appreciation Bonds and the Senior Lien 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 Reserve Account**—For each series, an amount equal to the least of (i) the maximum annual debt service requirement; (ii) 10% of the original principal amount, less original issue discount; or (iii) 125% of the average annual debt service requirement. The required balance 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.

Wastewater Revenue Bonds, Series 2017, 2015, 2014, 2012, 2010, 2008, 2001 (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.

**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 City to be used for any lawful purpose of the Sewer Fund.

For accounts established by ordinances with balances, the amounts as of December 31, 2021 and 2020, are as follows (in thousands):

	2021	2020
Construction	\$ 33,781	\$ 64,045
Bond principal and interest	121,382	118,783
Sewer rate stabilization	40,814	40,814
Total	\$195,977	\$223,642

The 2021 and 2020 Sewer rate stabilization balance above includes a fair value adjustment of \$400.6 thousand and \$2,889 thousand, respectively.

At December 31, 2021 and 2020, management was not aware of any instances of noncompliance with the above terms of the ordinances.

## 4. LONG-TERM DEBT

As of December 31, 2021 and 2020, long-term debt consisted of the following (in thousands):

, , <b>,</b>	0.	,
	2021	2020
\$62,423 Series 1998A Wastewater Transmission Revenue Bonds issued April 7, 1998, due through 2028; interest at 4.55% to 5.0%	\$ 27,634	\$ 31,792
\$73,100 Series 2001 Wastewater Transmission Revenue Bonds issued December 6, 2001, due through 2030; interest at 4.0% to 5.5%	37,525	37,755
\$332,230 Series 2008C Wastewater Transmission Revenue Bonds (2004A Refunded) issued October 16, 2008, due through 2039; interest rate at 4.0% to 5.0%	257,790	271,630
\$250,000 Series 2010B Wastewater Transmission Revenue Bonds issued November 16, 2010, due through 2040; interest 6.9%	250,000	250,000
\$1,546 Illinois Environmental Protection Agency Loan Agreement signed May 28, 2008, due through 2027; interest at 2.50%	545	630
\$276,470 Series 2012 Wastewater Transmission Revenue Bonds issued September 13, 2012, due through 2042; interest at 3.0% to 5.0%	232,185	238,590
\$15,000 Illinois Environmental Protection Agency Loan Agreement signed January 20, 2010, due through 2031; interest at 0%	7,268	8,033
\$17,812 Illinois Environmental Protection Agency Loan Agreement signed October 8, 2010, due through 2032; interest at 1.25%	10,576	11,468
\$17,564 Illinois Environmental Protection Agency Loan Agreement signed September 22, 2011, due through 2033; interest at 1.25%	10,870	11,744
\$15,000 Illinois Environmental Protection Agency Loan Agreement signed October 2, 2012, due through 2034; interest at 2.295%	10,506	11,192
\$292,405 Series 2014 Wastewater Transmission Revenue Bonds issued September 22, 2014, due through 2044; interest at 3.0% to 5.0%	260,510	266,455
\$87,080 Series 2015 Bonds issued October 19, 2015 due through January 1, 2039; interest at 2.59% to 6.04%	77,540	80,060
\$54,170 Illinois Environmental Protection Agency Loan Agreement signed October 22, 2013, due through 2035; interest at 1.93%	40,923	43,446
\$56,198 Illinois Environmental Protection Agency Loan Agreement signed October 8, 2014, due through 2036; interest at 1.99%	43,902	46,489
\$4,291 Illinois Environmental Protection Agency Loan Agreement signed January 22, 2016, due through 2036; interest at 1.86%	3,450	3,648
\$6,703 Illinois Environmental Protection Agency Loan Agreement signed November 4, 2016, due through 2037; interest at 1.75%	5,670	5,975
\$180,590 Series 2017A Wastewater Transmission Revenue Bonds issued June 21, 2017, due through 2052; interest at 4.0% to 5.25%	175,970	178,335
\$215,485 Series 2017B Wastewater Transmission Revenue Bonds issued June 21, 2017, due through 2044; interest at 5.0%	183,175	195,340

(Continued)

		2021		2020
\$63,808 Illinois Environmental Protection Agency Loan Agreement signed May 17, 2016, due through 2038; interest at 1.86%	\$	54,398	\$	57,191
\$27,370 Illinois Environmental Protection Agency Loan Agreement signed May 16, 2017, due through 2038; interest at 1.75%		24,012		25,215
\$17,942 Illinois Environmental Protection Agency Loan Agreement signed Apr 5, 2018, due through 2039; interest at 1.76%		16,181		16,694
\$59,960 Illinois Environmental Protection Agency Loan Agreement signed Apr 5, 2018, due through 2039; interest at 1.76%		54,441		57,166
\$26,084 Illinois Environmental Protection Agency Loan Agreement signed May 25, 2018 due through 2039; interest at 1.76%		24,466		25,573
\$30,490 Illinois Environmental Protection Agency Loan Agreement signed March 18, 2019 due through 2040; interest at 1.84%		29,364		29,781
\$58,706 Illinois Environmental Protection Agency Loan Agreement signed December 14, 2020 due through 2040; interest at 1.84%		56,894		48,932
Total revenue bonds	1	,895,795	1	,953,134
Add accretion of Series 1998A Capital Appreciation Bonds Add unamortized net bond premium (discount) Less current portion (payable from restricted assets)		68,806 81,926 (81,056)		73,356 89,361 (77,521)
Long-term portion—net	\$1	,965,471	\$2	,038,330

Long-term debt during the years ended December 31, 2021 and 2020, changed as follows (dollars in thousands):

(Concluded)

	Balance January 1,	A 1 Pre		Balance December 31,	Due within One
	2021	Additions	Reductions	2021	Year
Revenue bonds and loans Accretion of Series 1998	\$ 1,953,134	\$ 10,742	\$ (68,081)	\$ 1,895,795	\$ 71,300
capital appreciation bonds	73,356	4,948	(9,498)	68,806	9,756
Unamortized net discount/premium	89,361		<u>(7,435</u> )	81,926	
Total revenue bonds and loans	\$ 2,115,851	\$ 15,690	\$ (85,014)	\$ 2,046,527	\$ 81,056
	Balance			Balance	Due within
	Balance January 1, 2020	Additions	Reductions	Balance December 31, 2020	Due within One Year
Revenue bonds and loans Accretion of Series 1998	January 1,	<b>Additions</b> \$ 121,325	<b>Reductions</b> \$ (63,686)	December 31,	One
Accretion of Series 1998 capital appreciation bonds	January 1, 2020 \$ 1,895,495 75,114		\$ (63,686) (7,148)	December 31, 2020 \$ 1,953,134 73,356	One Year
Accretion of Series 1998	January 1, 2020 \$ 1,895,495	\$ 121,325	\$ (63,686)	December 31, 2020 \$ 1,953,134	One Year \$ 68,023

Interest expense includes amortization of the loss on bond refunding for 2021 and 2020 of \$.5 million and \$2.1 million; less amortization of net bond discount/premium of \$7.4 million and \$7.6 million, respectively; and accretion of Series 1998A capital appreciation bonds of \$4.9 million and \$5.4 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 and 115% of the annual subordinate lien debt service requirement and annual debt service requirement for the fiscal year on aggregate outstanding debt service on any outstanding IEPA loans, wastewater line of credit and commercial paper notes. The above requirements were met for 2021 and 2020.

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 2021, the charge for sewer service was increased and was an amount equal to 100% of the gross amount charged for water service, whether such water service is metered or nonmetered. The rate charged for water effective June 1, 2021 increased to \$30.79 per 1,000 cubic feet.

Issuance of Debt—A loan agreement was signed on December 14, 2020, with the Illinois Environment Protection Agency of a 5-year rehabilitation program conducted throughout the city. Approximately 26,900 lineal feet of 12-to-60-inch diameter sewer main will replace existing, aging sewer main as part of the continuation of the city's 3-year sewer lining contract which was awarded in 2016. Activities associated with this loan consist of lining approximately 42 miles of sewer main throughout the city. The amount drawn from this loan agreement by the Sewer fund in 2021 and 2020 was \$9.8 million and \$48.9 million, respectively. Total funds drawn from this loan are \$58.7 million. The loan agreement has an interest rate of 1.84% with a maturity from April 9, 2021 to April 9, 2040.

A loan agreement was signed on March 18, 2019, with the Illinois Environment Protection Agency as part of a 5-year rehabilitation program conducted throughout the city. Approximately 9 miles of 12-to-60-inch diameter sewer main will replaced existing, aging sewer main. The amount drawn from this loan agreement by the Sewer fund in 2021 and 2020 was \$.7 million and \$29.8 million, respectively. Total funds drawn from this loan are \$30.5 million. The loan agreement has an interest rate of 1.84% with a maturity from April 7, 2021 to October 7, 2040.

A loan agreement was signed on April 5, 2018, with the Illinois Environment Protection Agency as part of a 5 year rehabilitation program conducted throughout the city. Approximately 26,900 lineal feet of 12 to 60 inch diameter sewer main will replaced existing, aging sewer main. The amount drawn from the loan agreement by the Sewer fund in 2020 and 2019 was \$1.1 million and \$16.5 million, respectively. In 2021, the Sewer Fund drew an additional \$.3 million. Total funds drawn from this loan are \$17.9 million. The loan agreement has an interest rate of 1.76% with a maturity from October 26, 2019 to April 26, 2039.

Following is a schedule of debt service requirements to maturity (in thousands):

December 31	Principal	Interest	Total Debt Service
2022	\$ 71,300	\$ 93,513	\$ 164,813
2023	73,864	90,995	164,859
2024	76,531	88,367	164,898
2025	89,666	75,333	164,999
2026	74,283	90,633	164,916
2027–2031	427,926	349,823	777,749
2032–2036	517,104	205,104	722,208
2037–2041	401,571	82,804	484,375
2042–2046	106,635	21,065	127,700
2047–2051	46,460	6,933	53,393
2052–2053	10,455	209	10,664
Total	\$1,895,795	\$1,104,779	\$3,000,574

**Debt Covenants**—The ordinances authorizing the issuance of outstanding Wastewater Transmission Revenue Bonds provide for the creation of separate accounts into which monies will be deposited, as appropriate. The ordinances require that net revenues available for bonds, as adjusted, shall each fiscal year be at least equal to: (A) 115% of the aggregate debt service requirement for the fiscal year on the outstanding senior lien bonds, plus (B) the sum of the aggregate annual debt service requirements for the fiscal year on the outstanding second lien bonds, plus (C) 115% of the aggregate outstanding debt service requirements for the fiscal year on the outstanding IEPA loans, plus (D) annual debt service requirement for the fiscal year on aggregate outstanding debt service on any outstanding wastewater line of credit and commercial paper notes. This requirement was met at December 31, 2021.

5. UTILITY PLANT

During the years ended December 31, 2021 and 2020, utility plant changed as follows (in thousands):

	Balance January 1, 2021	Additions	Disposals and Transfers	Balance December 31, 2021
Utility plant not depreciated: Land and land rights Construction in progress	\$ 560 72,682	\$ - 106,851	\$ - <u>(41,527</u> )	\$ 560 138,006
Total utility plant not depreciated	73,242	106,851	(41,527)	138,566
Utility plant being depreciated: Facilities and structures Furniture and equipment  Total utility plant being depreciated	3,645,972 33,757 3,679,729	100,580	(19,594) (89) (19,683)	3,726,958 33,668 3,760,626
Less accumulated depreciation: Facilities and structures Furniture and equipment	(731,358) (27,451)	(53,788) (1,619)	424	(784,722) (29,070)
Total accumulated depreciation	(758,809)	(55,407)	424	(813,792)
Utility plant being depreciated—net	2,920,920	45,173	(19,259)	2,946,834
Utility plant—net	\$ 2,994,162	\$ 152,024	\$ (60,786)	\$ 3,085,400

	Balance January 1, 2020	Additions	Disposals and Transfers	Balance December 31, 2020
Utility plant not depreciated: Land and land rights Construction in progress	\$ 560 196,790	\$ - 66,432	\$ - (190,540)	\$ 560 72,682
Total utility plant not depreciated	197,350	66,432	(190,540)	73,242
Utility plant being depreciated: Facilities and structures Furniture and equipment  Total utility plant being depreciated	3,367,515 33,810 3,401,325	300,426	(21,969) (53) (22,022)	3,645,972 33,757 3,679,729
Less accumulated depreciation: Facilities and structures Furniture and equipment	(683,150) (25,682)	(49,195) (1,769)	987	(731,358) (27,451)
Total accumulated depreciation	(708,832)	(50,964)	987	(758,809)
Utility plant being depreciated—net	2,692,493	249,462	(21,035)	2,920,920
Utility plant—net	\$ 2,889,843	\$ 315,894	<u>\$ (211,575</u> )	\$ 2,994,162

#### 6. PENSION PLANS

Plan Description—Eligible Sewer Fund employees participate in one of two single-employer defined benefit pension plans (Plans). These Plans are: the Municipal Employees' Annuity and Benefit Fund of Chicago (Municipal Employees'); and the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Laborers'). The Plans are administered by individual retirement boards of trustees comprised of City officials or their designees and of trustees elected by plan members. Certain employees of the Chicago Board of Education participate in the Municipal Employees' Fund or the Laborers' and Retirement Board Employees' Annuity and Benefit Fund. Each plan issues a publicly available financial report that includes financial statements and required supplementary information that can be obtained at www.meabf.org and www.labfchicago.org.

Benefits Provided—The Plans provide retirement, disability, and death benefits as established by State law. Benefits generally vest after 10 years of credited service. Employees qualify for an unreduced retirement age minimum formula annuity based on a combination of years of service and age of retirement. Employees may also receive a reduced retirement age minimum formula annuity if they do not meet the age and service requirements for the unreduced retirement age annuity. The requirements of age and service are different for employees depending on when they first became members of their respective Plans. For all the Plans, employees who became members before January 1, 2011, are considered Tier 1 Employees. For those employees who became members on or after January 1, 2011, but before July 6, 2017, are considered Tier 2 Employees. For those employees who became members on or after July 6, 2017, are considered Tier 3 Employees. Public Act 100-0023 (P.A. 100-0023), which established the requirements for Tier 3 employees, includes a provision for Tier 2 employees to elect to be considered as Tier 3 employees. The annuity is computed by multiplying

the final average salary by a percentage ranging from 2.2% to 2.5% 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 for participants who are Tier 1 Employees and any eight consecutive years within the last 10 years of credited service for participants who are Tier 2 Employees or Tier 3 Employees.

Benefit terms provide for annual adjustments to each employee's retirement allowance subsequent to the employees' retirement date. For Tier 1 Employees, the annual adjustments for Municipal Employees' and Laborers' are 3.0%, compounded, for annuitants born before January 1, 1966, and 1.5%, simple, born after January 1, 1966, or later. For Tier 2 Employees and Tier 3 Employees, the annual adjustments are equal to the lesser of 3.0% and 50% of CPI-U of the original benefit.

*Employees Covered by Benefit Terms*—At December 31, 2021, the following City employees were covered by the benefit terms:

	Municipal Employees'	Laborers'	Total
Inactive employees or beneficiaries currently receiving benefits	25,683	3,568	29,251
Inactive employees entitled to but not yet receiving benefits Active employees	21,304 32,925	1,473 2,602	22,777 35,527
Total number of members	79,912	7,643	87,555

Contributions—For the Municipal Employees' and Laborers' Plans, Public Act 100-0023 (P.A. 100-0023) was enacted on July 6, 2017. P.A. 100-0023 requires the City to contribute specific amounts to the Municipal Employees' and the Laborers' Plans in the aggregate amounts as follows: in payment year 2019, \$392.0 million; in payment year 2020, \$481.0 million; in payment year 2021, \$571.0 million; and in payment year 2022, \$660.0 million. Additionally, P.A. 100-0023 requires that beginning in payment year 2023, the City's annual contributions to MEABF and LABF each be an amount actuarially determined to be sufficient to produce a funding level of 90% by the year end of 2058.

The City's contributions are budgeted in the same year as the applicable levy year for the property taxes funding the contributions. The City's contributions are then paid to the pension funds in the following year (which is when the levy property taxes are collected and paid to the City by the Cook County Treasurer). The Sewer Fund's proportion of the contribution was determined based on the rates of Sewer Fund's salaries within each corresponding pension plan to the total budgeted salaries for 2021 and 2020.

The contribution to the two pension plans from the Sewer Fund was \$19.9 million and \$17.1 million for the years ended December 31, 2021 and 2020, respectively.

Net Pension Liability, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions—At December 31, 2021 and 2020, the Sewer Fund reported a liability of \$432.3 million and \$426.5 million, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2021 and 2020, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

**Changes in Actuarial Assumptions**—Changes in the municipal bond rate resulted in a decrease in the single discount rate for Laborers'. See discount rate section below.

The change in the single discount rate and other assumptions increased the net pension liability by \$2.5 million for Laborers'. These changes are being amortized into expense/(benefit) over a 4 year period for Laborers'.

The Sewer Fund's proportion of the net pension liability was determined based on the rates of budgeted Sewer Fund's salaries within each corresponding pension plan to the total budgeted salaries for 2021 and 2020. At December 31, 2021 and 2020, the Sewer Fund's proportion was 1.8% and 1.8% of the Municipal Employees' Plan and 11.5% and 11.3%, respectively, of the Laborers' Plan.

For the years ended December 31, 2021 and 2020, the Sewer Fund recognized pension expense/(benefit) of (\$5.0) million and (\$23.9) million, respectively.

At December 31, 2021 and 2020, the Sewer Fund reported total deferred outflows of resources of \$8.7 million and \$8.4 million, respectively, and deferred inflows of resources of \$20.9 million and \$42.3 million, respectively, related to pensions from the following sources:

Municipal Employees' (dollars in thousands):

	2021		202	20
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience Changes of assumptions Net difference between projected and actual earnings on pension plan	\$3,181 -	\$ - -	\$2,316 -	\$ 638 26,687
investments		4,649		1,825
Total	<u>\$3,181</u>	\$4,649	\$2,316	\$ 29,150

Amounts reported as deferred outflows of resources and deferred inflows of resources related to Municipal Employees' pensions will be recognized in pension expense/(benefit) as follows:

\$ 873
(1,244)
(232)
(865)
\$ (1,468)

Laborers' (dollars in thousands):

	2021		2021 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience Changes of assumptions Net difference between projected and	\$ 78 5,434	\$ 4,073 61	\$ 487 5,640	\$ 2,124 379
actual earnings on pension plan investments		12,096		10,690
Total	\$5,512	\$16,230	\$6,127	\$13,193

Amounts reported as deferred outflows of resources and deferred inflows of resources related to Laborers' pensions will be recognized in pension benefit as follows:

Years Ended December 31	
2022	\$ (852)
2023	(5,190)
2024	(3,399)
2025	(1,277)
2026	<del>-</del>
Total	<u>\$(10,718)</u>

Deferred Inflows and Related to Changes in Proportionate Share of Contributions—For the years ended December 31, 2021 and 2020, the Sewer Fund reported pension charge/(benefit) of (\$7.9 million) (\$8.1 million), respectively, related to changes in proportionate share of contributions. As of December 31, 2021 and 2020, the Sewer Fund reported deferred inflows of \$27.5 million and \$39.9 million, respectively, and deferred outflows of \$2.5 million and \$5.8 million, respectively, related to changes in its proportionate share of contributions. This deferred amount will be recognized as a pension charge/(benefit) over a period of four years.

**Actuarial Assumptions**—The total pension liability in the December 31, 2021 and 2020, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	Municipal Employees'	Laborers'
Inflation	2.50 %	2.25 %
Salary increases	3.5 %–7.75 % (a)	3.00 % (b)
Investment rate of return	7.00 % (c)	7.25 % (c)

<sup>(</sup>a) (1.50%–6.5% for 2020–2022), varying by years of service

<sup>(</sup>b) Plus a service—based increase in the first 9 years

<sup>(</sup>c) Net of investment expense

Pension Plan		Mortality Table Name	Mortality Improvement
Municipal Employees'	Post Retirement	RP-2014 Healthy Annuitant Mortality Table	Generational—Scale MP- 2016
	Pre-Retirement	RP-2014 Employee Mortality Table	Generational—Scale MP- 2016
Laborers'	Post Retirement	Pub-2010 Amount-weighted Below-median Income General Healthy Retiree Mortality Tables, Sex Distinct	Generational—Scale MP- 2020 2-dimensional
	Pre-Retirement	Pub-2010 Amount-weighted Below-median Income General Employee Mortality Tables, Sex Distinct	Generational—Scale MP- 2020 2-dimensional

The actuarial assumptions used in the December 31, 2021, valuation were adjusted based on the results of actuarial experience study for the periods:

Municipal Employees'—January 1, 2012—December 31, 2016

Laborers'—January 1, 2017–December 31, 2019

The long term expected rate of return on pension plan investments was determined using the building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class as of December 31, 2021 and 2020, are summarized in the following table:

		Long-Term	Expected		
	Target Al	location	Real Rate of Return		
	Municipal		Municipal		
2021	Employees'	Laborers'	Employees'	Laborers'	
Asset class:					
Domestic equity	26.0 %	- %	7.4 %	- %	
U.S. equity	-	25.0	-	5.3	
Non U.S. equity	-	20.0	-	5.3	
Global equity	5.0	-	6.8	-	
Global low volatility equity	-	5.0	0	4.3	
Infrastructure	2.0	-	7.0	-	
International equity	17.0	-	7.4	-	
Fixed income	25.0	20.0	2.0	(0.8)	
Hedge funds	10.0	10.0	5.6	2.8	
Private debt	-	3.0	0	7.1	
Private equity	5.0	4.0	11.4	8.8	
Real estate	10.0	10.0	5.8	4.2	
Other Investments		3.0	-	4.7	
Total	100.0 %	100.0 %			

	Target All	Long-Term Expected Real Rate of Return		
	Municipal	Target Allocation  Municipal		ne tain
2020	Employees'	Laborers'	Municipal Employees'	Laborers'
Asset class:				
Domestic equity	26.0 %	- %	7.3 %	- %
U.S. equity	-	25.0	-	5.3
Non U.S. equity	-	20.0	-	5.3
Global equity	5.0	-	7.5	-
Global low volatility equity	-	5.0	-	4.2
Infrastructure	2.0	-	7.3	-
International equity	17.0	-	7.5	-
Fixed income	25.0	20.0	2.3	(1.2)
Hedge funds	10.0	10.0	5.5	2.8
Private debt	-	3.0	-	7.4
Private equity	5.0	4.0	10.8	9.1
Real estate	10.0	10.0	6.0	3.4
Private real assets		3.0	-	4.9
Total	100.0 %	100.0 %		

#### **Discount Rate**

Municipal Employees'—The Single discount rate used to measure the total pension liability as of December 31, 2021 and 2020, was 7%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made according to the contribution rate applicable for each member's tier and that employer contributions will be made as specified by Public Act 100-0023. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Laborers'—A Single Discount Rate of 6.77% and 6.84% was used to measure the total pension liability as of December 31, 2021 and 2020, respectively. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.25% as of December 31, 2021 and 2020, and a municipal bond rate of 1.84% and 2.00% as of December 31, 2021 and 2020, respectively (based on the rate closest to but not later than the measurement date of the "20-Year Municipal GO AA Index" rate from Fidelity Index). The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at under the statutory funding policy. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2074 (for the 2021 valuation) and the year 2073 (for the 2020 valuation). As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2074 (for the 2021 valuation) and the year 2073 (for the 2020 valuation, and the municipal bond rate was applied to all benefit payments after that date.

## Sensitivity of the Sewer Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

**Municipal Employees'**—The following presents the Sewer Fund's allocated share of the net pension liability as of December 31, 2021 and 2020, calculated using the discount rate of 7%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate (dollars in thousands):

	Current				
Net Pension Liability		1%		Discount	1%
December 31, 2021	ı	Decrease		Rate	Increase
Municipal Employees' discount rate		6.00 %		7.00 %	8.00 %
Municipal Employees' net pension liability	\$	292,746	\$	252,089	\$218,288
				Current	
Net Pension Liability		1%		Discount	1%
December 31, 2020		Decreas	se	Rate	Increase
Municipal Employees' discount rate		6.0	0 %	7.00 %	8.00 %
Municipal Employees' net pension liability		\$286,21	5	\$ 246,437	\$213,378

**Laborers'**—The following presents the Sewer Fund's allocated share of the net pension liability as of December 31, 2021 and 2020, calculated using the discount rate of 6.77% and 6.84%, respectively, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate (dollars in thousands):

	Current					
Net Pension Liability	1%	Discount	1%			
December 31, 2021	Decrease	Rate	Increase			
Laborers' discount rate	5.77 %	6.77 %	7.77 %			
Laborers' net pension liability	\$219,703	\$180,246	\$147,127			
		Current				
Net Pension Liability	1%	Discount	1%			
December 31, 2020	Decrease	Rate	Increase			
Laborers' discount rate	5.84 %	6.84 %	7.84 %			
Laborers' net pension liability	\$218,535	\$180,018	\$147,702			

**Pension Plan Fiduciary Net Position**—Detailed information about the pension plan's fiduciary net position is available in the separately issued Pension Plan's financial reports.

## 7. 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 \$50.9 million and \$30.6 million in 2021 and 2020, respectively.

#### 8. 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 and by a third-party administrator for workers' compensation. Such claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities in the basic financial statements.

Uninsured claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate for claims that have been incurred, but not reported. Changes in the claims liability amount for the years ended December 31, 2021 and 2020, are as follows (in thousands):

	2021	2020
Balance—January 1 Claims incurred on current and prior-year events Claims paid on current and prior-year events	\$ 30,757 15,755 (12,791)	\$ 23,183 21,532 (13,958)
Balance — December 31	\$ 33,721	\$ 30,757

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, 2021 and 2020, the Sewer Fund entered into contracts with outstanding commitments of approximately \$78.6 million and \$256.9 million, respectively, for construction projects.

#### 9. DEFERRED OUTFLOWS/INFLOWS OF RESOURCES

	2021 (In tho	2020 usands)
Deferred outflows of resources: Deferred outflows from pension activities Changes in proportionate share of pension contribution Unamortized deferred bond refunding costs	\$ 8,694 2,465 3,814	\$ 8,443 5,754 4,314
Total deferred outflows of resources	<u>\$ 14,973</u>	\$ 18,511
Deferred inflows of resources: Deferred inflows from pension activities Changes in proportionate share of pension contribution	\$ (20,880) (27,489)	\$ (42,344) (39,860)
Total deferred inflows of resources	\$ (48,369)	\$ (82,204)

Please refer to Note 6 Pension Plans—Deferred Outflows related to activities and changes in proportionate share of contributions sections.

#### **10. SUBSEQUENT EVENTS**

The Sewer Fund has evaluated subsequent events through June 29, 2022, the date the basic financial statements were available to be issued and concluded no subsequent events have occurred that would require recognition that have not already been recognized or that require disclosure that have not already been disclosed.

\* \* \* \* \* \*

REQUIRED SUPPLEMENTARY INFORMATION

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS LAST SEVEN FISCAL YEARS (Dollars in thousands)

Municipal Employees'	2021	2020	2019	2018	2017	2016	2015
TOTAL PENSION LIABILITY:							
Service cost*	\$ 246,066	\$ 236,302	\$ 228,465	\$ 223,528	\$ 572,534	\$ 619,743	\$ 226,816
Interest	1,228,905	1,190,694	1,159,253	1,123,348	915,711	878,369	909,067
Benefit changes	-	-	-	-	-	-	2,140,009
Differences between expected and							
actual experience	121,988	100,938	16,676	95,540	(177,755)	(127,119)	(109,835)
Assumption changes	-	-	-	-	(7,431,191)	(578,920)	8,711,755
Benefit payments including refunds	(1,010,191)	(973,478)	(952,652)	(916,198)	(888,174)	(859,672)	(826,036)
Net change in total pension liability	586,768	554,456	451,742	526,218	(7,008,875)	(67,599)	11,051,776
Total pension liability—beginning	17,814,812	17,260,356	16,808,614	16,282,396	23,291,271	23,358,870	12,307,094
Total pension liability—ending (a)	18,401,580	17,814,812	17,260,356	16,808,614	16,282,396	23,291,271	23,358,870
PLAN FIDUCIARY NET POSITION:							
Contributions—employer	573,198	496,992	418,269	349,574	261,764	149,718	149,225
Contributions—employee	163,411	157,798	146,645	138,400	134,765	130,391	131,428
Net investment income (loss)	498,299	335,403	560,940	(204,975)	610,515	281,419	114,025
Benefit payments including refunds of							
employee contribution	(1,010,191)	(973,478)	(952,652)	(916,198)	(888,174)	(859,672)	(826,036)
Administrative expenses	(6,687)	(7,118)	(6,740)	(6,639)	(6,473)	(7,056)	(6,701)
Other	<u> </u>				5,394		
Net change in plan fiduciary net position	218,030	9,597	166,462	(639,838)	117,791	(305,200)	(438,059)
Plan fiduciary net position—beginning	4,090,239	4,080,642	3,914,180	4,554,018	4,436,227	4,741,427	5,179,486
Plan fiduciary net position—ending (b)	4,308,269	4,090,239	4,080,642	3,914,180	4,554,018	4,436,227	4,741,427
NET PENSION LIABILITY—Ending (a) - (b)	\$ 14,093,311	\$ 13,724,573	\$ 13,179,714	\$ 12,894,434	\$ 11,728,378	\$ 18,855,044	\$ 18,617,443
PLAN FIDUCIARY NET POSITION AS A							
PERCENTAGE OF THE TOTAL PENSION LIABILITY	23.41 %	22.96 %	23.64 %	23.29 %	27.97 %	19.05 %	20.30 %
ALLOCATED COVERED PAYROLL **	\$ 35,795	\$ 33,432	\$ 36,266	\$ 35,136	\$ 34,446	\$ 32,293	\$ 32,146
EMPLOYER'S NET PENSION LIABILITY AS A							
PERCENTAGE OF ALLOCATED COVERED PAYROLL	704.25 %	737.13 %	731.07 %	743.37 %	695.41 %	1,144.85 %	1,132.81 %
ALLOCATED NET PENSION LIABILITY	\$ 252,089	\$ 246,437	\$ 265,128	\$ 261,188	\$ 239,542	\$ 369,711	\$ 364,150
ALLOCATED PERCENTAGE	1.79 %	1.80 %	2.01 %	2.03 %	2.04 %	1.96 %	1.96 %

Note: Beginning with fiscal year 2015, the City will accumulate ten years of data.

(Continued)

<sup>\*</sup> Includes pension plan administrative expense
\*\* Allocated covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll during fiscal year
\*\*\* The Schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS LAST SEVEN FISCAL YEARS

(Dollars in thousands)

Laborers'	2021	2020	2019	2018	2017	2016	2015
TOTAL PENSION LIABILITY:							
Service cost *	\$ 40,411	\$ 39,216	\$ 38,522	\$ 40,801	\$ 80,232	\$ 82,960	\$ 38,389
Interest	192,343	191,099	188,347	183,135	154,047	150,166	153,812
Benefit changes		-	-	-	150	-	384,033
Differences between expected and actual							
experience	(31,083)	(18,992)	(8,820)	15,143	(62,178)	(30,428)	(46,085)
Assumption changes	21,870	44,034	32,846	(11,788)	(1,074,754)	(62,905)	1,175,935
Benefit payments including refunds	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Pension plan administrative expense	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Net change in total pension liability	47,190	82,685	82,245	63,297	(1,063,538)	(18,970)	1,549,710
Total pension liability—beginning	2,858,334	2,775,649	2,693,404	2,630,107	3,693,645	3,712,615	2,162,905
Total pension liability—ending (a)	2,905,524	2,858,334	2,775,649	2,693,404	2,630,107	3,693,645	3,712,615
PLAN FIDUCIARY NET POSITION:							
Contributions—employer	84,969	73,744	59,346	47,844	35,457	12,603	12,412
Contributions—employee	17,637	18,064	18,143	17,837	17,411	17,246	16,844
Net investment income (loss)	138,105	163,057	184,027	(75,219)	207,981	57,997	(22,318)
Benefit payments including refunds of							
employee contribution	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Administrative expenses	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Other				661		-	
Net change in plan fiduciary net position	64,360	82,193	92,866	(172,871)	99,814	(70,917)	(149,436)
Plan fiduciary net position—beginning	1,269,742	1,187,549	1,094,683	1,267,554	1,167,740	1,238,657	1,388,093
Plan fiduciary net position—ending (b)	1,334,102	1,269,742	1,187,549	1,094,683	1,267,554	1,167,740	1,238,657
NET PENSION LIABILITY—Ending (a) · (b)	\$ 1,571,422	\$ 1,588,592	\$ 1,588,100	\$ 1,598,721	\$ 1,362,553	\$ 2,525,905	\$ 2,473,958
PLAN FIDUCIARY NET POSITION AS A							
PERCENTAGE OF THE TOTAL PENSION LIABILITY	45.92 %	44.42 %	42.78 %	40.64 %	48.19 %	31.61 %	33.36 %
ALLOCATED COVERED PAYROLL**	\$ 24,331	\$ 23,479	\$ 25,989	\$ 25,462	\$ 23,415	\$ 24,328	\$ 24,808
EMPLOYER'S NET PENSION LIABILITY AS A							
PERCENTAGE OF ALLOCATED COVERED PAYROLL	740.81 %	766.71 %	750.49 %	755.96 %	653.68 %	1,213.47 %	1,208.15 %
ALLOCATED NET PENSION LIABILITY	\$ 180,246	\$ 180,018	\$ 195,045	\$ 192,479	\$ 153,060	\$ 295,214	\$ 299,722
ALLOCATED PERCENTAGE	11.47 %	11.33 %	12.28 %	12.04 %	11.23 %	11.69 %	12.22 %

Note: Beginning with fiscal year 2015, the City will accumulate ten years of data.

(Concluded)

<sup>\*</sup>Includes pension plan administrative expense.

\*\*Allocated Covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll during fiscal year

\*\*The Schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS LAST TEN YEARS (Dollars in thousands)

Municipal Employees'		Contributions in Relation to the			Contributions as
	Actuarially	Actuarially			a percentage of
Years Ended	Determined	Determined	Contribution	Covered	Covered
December 31	Contributions	Contribution	Deficiency	Payroll*	Payroll
2012	\$ 690,823	\$148,859	\$541,964	\$1,590,794	9.36 %
2013	820,023	148,197	671,826	1,580,289	9.38
2014	839,039	149,747	689,292	1,602,978	9.34
2015	677,200	149,225	527,975	1,643,481	9.08
2016	961,770	149,718	812,052	1,646,939	9.09
2017	1,005,457	261,764	743,693	1,686,533	15.52
2018	1,049,916	349,574	700,342	1,734,596	20.15
2019	1,117,388	418,269	699,119	1,802,790	23.20
2020	1,167,154	496,992	670,162	1,861,905	26.69
2021	1,218,361	573,198	645,163	2,001,181	28.64

<sup>\*</sup> Covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during fiscal year.

The Schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

Laborers'	Actuarially	Contributions in Relation to the Actuarially			Contributions as a percentage of
Years Ended	Determined	Determined	Contribution	Covered	Covered
December 31	Contributions *	Contribution	Deficiency	Payroll**	Payroll
2012	\$ 77,566	\$ 11,853	\$ 65,713	\$ 198,790	5.96 %
2013	106,199	11,583	94,616	200,352	5.78
2014	106,019	12,161	93,858	202,673	6.00
2015	79,851	12,412	67,439	204,773	6.06
2016	117,033	12,603	104,430	208,155	6.05
2017	124,226	35,457	88,769	208,442	17.01
2018	129,247	47,844	81,403	211,482	22.62
2019	148,410	59,346	89,064	211,608	28.05
2020	155,794	73,744	82,050	207,195	35.59
2021	155,245	84,969	70,276	212,122	40.06

<sup>\*</sup>The LABF Statutory Funding does not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded liability using dollar payments and a 30 year open amortization period.

The Schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

(Continued)

<sup>\*\*</sup> Covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during fiscal year.

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS

Actuarial Methods and Assumptions	Municipal Employees'	Laborers'
Actuarial valuation date	December 31, 2021 (a)	December 31, 2021 (b)
Actuarial cost method Asset valuation method	Entry age normal 5-yr. Smoothed Market	Entry age normal 5-yr. Smoothed Market
Actuarial assumptions: Inflation	2.50 %	2.25 %
Salary increases Investment rate of return	3.50-7.75% (c) 7.0 % (e)	3.00 % (d) 7.25 % (f)
Retirement age Mortality Other information	(g) (i) (k)	(h) (j) (l)

<sup>(</sup>a) Actuarially determined contribution amount is determined as of December 31, with appropriate interest to the end of the year.

- For employees first hired prior to January 1, 2011, rates of retirement are based on the recent experience of the Fund (effective December 31, 2017).
  - For employees first hired on or after January 1, 2011 and before July 6, 2017, rates of retirement for each age from 62 to 80 were used (effective December 31, 2011).
  - For employees first hired on or after July 6, 2017, rates of retirement for each age from 60 to 80 were used (effective December 31, 2018).
- (h) Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2020, valuation pursuant to an experience study of the period January 1, 2017 through December 31, 2019.
- Post Retirement Mortality: scaling factors of 109% for males and 108% for females of the Pub-2010 amount-weighted below mi income general healthy retiree mortality tables, sex distinct, with generational mortality improvement using MP-2020 2 dime morality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements. Pre Retirement Mortality: Scaling factors of 111% for males, and 115% for females of the PUB 2010 amount weighted below me income General Employee Mortality Tables, sex distinct, with generational mortality improvement using MP-2020 2-dimension mortality improvement scales recently released by SOA. This assumption provides a margin for mortality improvements.
- (k) Other Assumptions: Same as those used in December 31, 2021, actuarial funding valuations.
- (1) The actuarial valuation is based on the statutes in effect as of December 31, 2021.

(Concluded)

<sup>(</sup>b) Actuarially determined contribution rates are calculated as of December 31, which is 12 months prior to the end of the fiscal year in which contributions are reported.

 $<sup>\</sup>stackrel{\text{(c)}}{}$  (1.50%–6.50% for 2021–2023), varying by years of service.

<sup>(</sup>d) Plus a service-based increase consistent with bargaining contracts.

<sup>(</sup>e) Net of investment expense.

<sup>(</sup>f) Net of investment expense, including inflation.

**STATISTICAL DATA** 

#### 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 and sewer sales charge.

**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.

STATISTICAL DATA
NET POSITION BY COMPONENT
TEN YEARS ENDED DECEMBER 31, 2012–2021
(In thousands)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
NET POSITION: Net investment in										
capital assets Restricted for	\$448,414	\$481,946	\$520,627	\$ 559,715	\$ 648,644	\$ 735,564	\$ 827,773	\$ 862,065	\$ 931,047	\$1,062,584
capital projects Unrestricted	50,014 60,436	73,858 78,509	111,333 102,794	116,107 (299,584)	117,295 (353,467)	116,376 (364,239)	115,576 (358,293)	139,618 (324,272)	205,696 (363,033)	171,985 (371,377)
TOTAL	\$558,864	\$634,313	\$734,754	\$ 376,238	\$ 412,472	\$ 487,701	\$ 585,056	\$ 677,411	\$ 773,710	\$ 863,192

<sup>\*</sup> Amounts were restated due to the implementation of GASB 65.

 $<sup>^{\</sup>ast\ast}$  Amounts were restated due to the implementation of GASB 68.

STATISTICAL DATA
CHANGES IN NET POSITION
TEN YEARS ENDED DECEMBER 31, 2012–2021
(In thousands)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
OPERATING REVENUES:										
Sewer sales	\$252,943	\$291,110	\$337,657	\$ 390,924	\$384,140	\$377,286	\$380,822	\$373,902	\$356,267	\$377,514
Provision for doubtful accounts	-	(12,461)	(16,557)	(16,154)	(16,320)	(20,813)	(12,611)	(23,849)	(22,792)	(12,297)
Other operating revenues	969	1,180	1,128	1,107	1,146	1,150	1,492	1,023	484	1,052
Total operating revenues	253,912	279,829	322,228	375,877	368,966	357,623	369,703	351,076	333,959	366,269
OPERATING EXPENSES:										
Repairs	35,708	38,910	40,435	42,131	36,408	41,881	43,654	41,614	47,398	44,066
General Fund reimbursements	31,709	32,144	36,740	40,007	50,760	47,522	51,188	53,688	54,467	55,937
Pension expense	-	-	-	187,593	104,864	34,397	18,938	3,266	(23,853)	(4,979)
Maintenance	21,819	23,004	24,374	25,322	21,941	24,660	24,909	22,958	24,405	25,861
Engineering	3,085	3,267	3,336	3,299	2,158	2,466	3,664	3,515	4,776	5,328
Administrative and general	21,254	12,008	14,394	12,337	11,801	12,591	13,472	12,367	12,320	13,891
Total operating expenses before										
depreciation and amortization	113,575	109,333	119,279	310,689	227,932	163,517	155,825	137,408	119,513	140,104
Depreciation and amortization	27,735	31,280	36,701	40,444	40,734	48,171	48,504	52,933	53,140	55,749
Total operating expenses	141,310	140,613	155,980	351,133	268,666	211,688	204,329	190,341	172,653	195,853
OPERATING INCOME	112,602	139,216	166,248	24,744	100,300	145,935	165,374	160,735	161,306	170,416
NON-OPERATING REVENUES (EXPENSES):										
Interest Income	1,021	(4,965)	2,984	2,600	1,025	4,348	2,436	11,663	8,381	(733)
Interest expense	(54,601)	(63,513)	(69,620)	(83,656)	(81,722)	(81,359)	(77,619)	(79,992)	(80,346)	(82,979)
Other	(192)	2,173	791	1,321	112	6	5,010	74	3,747	2,898
Transfer outs	-	-	-	-	(120)	(120)	(120)	(120)	(120)	(120)
Grants	2,500	2,500	-	-	16,639	6,419	2,274	(5)	3,331	-
Swap termination fee	38	38	38	(70,243)						
	(51,234)	(63,767)	(65,807)	(149,978)	(64,066)	(70,706)	(68,019)	(68,380)	(65,007)	(80,934)
CHANGE IN NET POSITION	61,368	75,449	100,441	(125,234)	36,234	75,229	97,355	92,355	96,299	89,482
TOTAL NET POSITION—Beginning of year	504,277	558,864	634,313	501,472	376,238	412,472	487,701	585,056	677,411	773,710
TOTAL NET POSITION—End of year	\$565,645	\$634,313	\$734,754	\$ 376,238	\$412,472	\$487,701	\$585,056	\$677,411	\$773,710	\$863,192

<sup>\*</sup>Amounts were restated due to the implementation of GASB 65

 $<sup>^{\</sup>ast\ast}$  Amounts were restated due to the implementation of GASB 68

STATISTICAL DATA
HISTORICAL FINANCIAL OPERATIONS
TEN YEARS ENDED DECEMBER 31, 2012–2021
(In thousands)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
OPERATING REVENUES:										
Sewersales	\$252,943	\$291,110	\$337,657	\$390,924	\$384,140	\$377,286	\$380,822	\$373,902	\$356,267	\$377,514
Less provision for bad debt	-	(12,461)	(16,557)	(16,154)	(16,320)	(20,813)	(12,611)	(23,849)	(22,792)	(12,297)
Other operating revenue	969	1,180	1,128	1,107	1,146	1,150	1,492	1,023	484	1,052
Total operating revenues	253,912	279,829	322,228	375,877	368,966	357,623	369,703	351,076	333,959	366,269
OPERATING EXPENSES:										
Repairs	35,708	38,910	40,435	42,131	36,408	41,881	43,654	41,614	47,398	44,066
Maintenance	21,819	23,004	24,374	25,322	21,941	24,660	24,909	22,958	24,405	25,861
Administrative and general	21,254	12,008	14,394	12,337	11,801	12,591	13,472	12,367	12,320	13,891
General Fund reimbursements (1)	31,709	32,144	36,740	227,600	155,624	81,919	70,126	56,954	30,614	50,958
Engineering	3,085	3,267	3,336	3,299	2,158	2,466	3,664	3,515	4,776	5,328
Total operating expenses	113,575	109,333	119,279	310,689	227,932	163,517	155,825	137,408	119,513	140,104
NONOPERATING REVENUES	867	(2,754)	3,813	3,921	1,137	4,354	7,446	11,737	12,128	2,165
NET REVENUES—As defined	\$141,204	\$167,742	\$206,762	\$ 69,109	\$142,171	\$198,460	\$221,324	\$225,405	\$226,574	\$228,330

Source: City of Chicago Comptroller's Office.

#### Note 1:

<sup>(1)</sup> Of the \$(5.0) million of pension expense for 2021, \$19.9 million is the portion of the City's pension contribution payable in 2021 to the pension funds and allocable to the Sewer Fund. The remaining portion of the pension expense for 2021 (i.e. \$(24.9) million) is recognized on the income statement of the Sewer Fund for 2021 pursuant to GASB 68. Accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

STATISTICAL DATA FIVE LARGEST CUSTOMERS (In thousands)

					Amoun	t of Sales				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Department of										
Aviation	\$1,927	\$2,165	\$1,857	\$3,634	\$4,498	\$4,025	\$4,504	\$5,198	\$3,138	\$3,343
Humboldt Park	1,179	1,393	1,307	-	-	759	-	-	-	-
WR Grace and	_,	_,,	_,							
Company	-	-	-	-	-	-	589	-	1,314	1,322
Calumet Park	-	635	652	-	-	-	-	-	-	-
CPD—Lincoln Park	745	1,418	-	1,344	1,267	1,325	675	771	1,169	1,679
Cook County										
Sheriff	-	1,141	-	-	846	-	-	-	-	-
University of										
Chicago—HCC	1,428	-	-	-	-	-	-	-	-	-
Uniquema	-	-	680	551	-	-	-	622	590	-
Ford Motor Co	-	-	695	928	912	995	1,311	1,304	1,499	-
University of										1,377
Illinois at										1,383
Chicago	1,647	-	-	834	-	-	-	-	-	-
Hometown					546	<u>551</u>	560	567		
	\$6,926	\$6,752	\$5,191	\$7,291	\$8,069	\$7,655	\$7,639	\$8,462	\$7,710	\$9,104
			<u> </u>	<u> </u>	<u> </u>	<u> </u>				<u> </u>

## STATISTICAL DATA CUSTOMERS BY COMPONENT (In thousands)

		Amount of Sales												
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021				
Residential Industrial/	\$178,399	\$195,542	\$233,830	\$266,878	\$246,997	\$242,899	\$248,622	\$243,311	\$242,255	\$250,148				
commercial Governmental	57,598 17,915	74,696 22,052	82,811 22,318	95,473 29,680	109,655 28,634	99,620 35,917	98,054 35,638	93,167 38,447	84,473 30,023	91,412 37,006				
	\$253,912	\$292,290	\$338,959	\$392,031	\$385,286	\$378,436	\$382,314	\$374,925	\$356,751	\$378,566				

#### STATISTICAL DATA RECENT SEWER SERVICE RATES

Effective Date	Gross Water Rate per 1,000 Gallons	Gross Water Rate per 1,000 Cubic Feet	Sewer Rate Percent of Water Bill	Per 1000 Cubic Feet
January 1, 2011	\$ 2.01	\$ 15.00	86 %	13
January 1, 2012	2.51	18.75	89	17
January 1, 2013	2.88	21.56	92	20
January 1, 2014	3.31	24.80	96	24
January 1, 2015	3.81	28.52	100	29
January 1, 2016	3.81	28.52	100	29
June 1, 2017	3.88	29.04	100	29
June 1, 2018	3.95	29.49	100	29
June 1, 2019	3.98	29.73	100	30
June 1, 2020	4.08	30.46	100	30
June 1, 2021	4.13	30.79	100	30

STATISTICAL DATA
SEWER SYSTEM ACCOUNTS
TEN YEARS ENDED DECEMBER 31, 2012–2021
(Unaudited)

	V				
Years Ended December 31	Non- Metered	Metered	Total	Evennet	Sewer
December 31	Wetered	Metered	IOLAI	Exempt	Accounts
2012	290,863	205,097	495,960	61,502	434,458
2013	273,426	220,759	494,185	62,393	431,792
2014	250,304	241,304	491,608	62,856	428,752
2015	227,801	266,284	494,085	64,781	429,304
2016	206,913	287,351	494,264	67,130	427,134
2017	190,276	303,877	494,153	66,995	427,158
2018	180,608	313,758	494,366	66,982	427,384
2019	178,348	316,262	494,610	66,889	427,721
2020	177,641	316,783	494,424	63,608	430,816
2021	176,931	317,398	494,329	62,680	431,649

STATISTICAL DATA
REVENUE BOND COVERAGE
TEN YEARS ENDED DECEMBER 31, 2012–2021
(In thousands)

Combined Senior Lien and Second Lien Debt Service Calculation	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
REVENUES AVAILABLE FOR BONDS:  Net revenues—as defined Pension expense other than contribution (Note 1) Transfer to sewer rate stabilization account Other available funds (Note 2)	\$ 141,204 - 5,000 19,215	\$ 167,742 - 3,000 65,298	\$ 206,762 - - 103,864	\$ 69,109 183,165 - 108,498	\$ 142,171 100,447 - 133,501	\$ 198,460 24,921 1,281 200,990	\$ 221,324 6,191 - 221,509	\$ 225,405 (12,572) - 234,799	\$ 226,574 (40,972) - 255,980	\$ 228,330 (24,917) - 263,437
Net revenues available for bonds	155,419	230,040	310,626	360,772	376,119	423,090	449,024	447,632	441,582	466,850
PRIOR LIEN DEBT SERVICE REQUIREMENT										
NET REVENUES AVAILABLE FOR BONDS	155,419	230,040	310,626	360,772	376,119	423,090	449,024	447,632	441,582	466,850
DEBT SERVICE REQUIREMENTS: Senior lien debt service requirement	9,231							10,525	13,654	13,720
Senior lien debt service coverage (1.15 required)	17							43	32	34
DEBT SERVICE REQUIREMENTS: 2000 second lien bonds 2001 second lien bonds 2001A second lien bonds 2004A and B second lien bonds 2008A second lien bonds 2008A second lien bonds 2008C second lien bonds IEPA Loans 2010A & B second lien bonds 2012A & B second lien bonds 2014 second lien bonds 2015 second lien bonds	5,036 1,886 17,301 15,184 11,537 2,732 665 21,036	6,923 26,910 15,201 8,650 2,786 866 21,039 17,485	6,935 27,102 15,210 11,536 3,346 2,916 21,054 17,486 3,292	6,942 27,242 12,358 11,534 14,725 3,309 21,627 17,483 19,127	6,947 - 12,364 11,535 31,907 4,934 21,646 17,485 19,180	6,951 - 2,734 8,031 31,809 10,612 21,654 17,480 19,188 6,902	6,957 - - - 4,421 32,023 12,933 21,785 17,482 19,192 6,849	6,964 - - - - 4,448 24,375 18,117 17,245 17,477 19,192 6,810	2,304 - - - - 30,775 21,727 17,250 17,482 19,215 7,012	2,304 - - - - 24,445 27,387 17,250 17,482 19,215 6,915
2017A & B second lien bonds		-				16,751	25,634	28,045	29,484	29,483
Second lien debt service requirement  COMBINED SENIOR AND SECOND LIEN DEBT  SERVICE REQUIREMENTS	75,377 \$ 84,608	99,860	108,877 \$ 108,877	134,347 \$ 134,347	125,999 \$ 125,999	\$ 142,112	147,276 \$ 147,276	\$ 153,198	\$ 158,903	144,481 \$ 158,201
COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE (1.15 REQUIRED)	1.84	2.30	2.85	2.69	2.99	2.98	3.05	2.92	2.78	2.95
SEWER RATE STABILIZATION ACCOUNT YEAR-END BALANCE	\$ 29,629	\$ 32,629	\$ 32,629	\$ 32,629	\$ 32,629	\$ 32,196	\$ 36,902	\$ 36,902	\$ 40,814	\$ 40,814
Total population served	2,695,598	2,695,598	2,695,598	2,695,598	2,695,598	2,695,598	2,695,598	2,695,598	2,695,598	2,746,388
Total revenue bonds and notes	\$1,363,774	\$1,369,459	\$1,638,935	\$1,686,178	\$1,692,820	\$1,861,381	\$1,893,561	\$1,895,495	\$1,953,134	\$1,895,795
Total debt per customer served	\$ 506	\$ 508	\$ 608	\$ 626	\$ 628	\$ 691	\$ 702	\$ 703	\$ 725	\$ 690

Source: City of Chicago Comptroller's Office.

Note

<sup>(1)</sup> Of the \$(5.0) million of pension expense for 2021, \$19.9 million is the portion of the City's pension contribution payable in 2021 to the pension funds and allocable to the Sewer Fund. The remaining portion of the pension expense for 2021 (i.e. \$(24.9) million) is recognized on the income statement of the Sewer Fund for 2021 pursuant to GASB 68 but is not due and payable by the City during 2021; accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

<sup>(2)</sup> As provided in the Ordinance, Gross Revenues remaining in any period after providing sufficient funds for Operations and Maintenance Costs, for paying required debt service on all bonds and notes secured by Sewer System revenues, for paying any required amounts into any other accounts established for any bonds or notes secured by Sewer System revenues and to make any deposits into the Sewer Rate Stabilization Account ("Other Available Funds"), can be applied to debt service for any future period.

STATISTICAL DATA LONG-TERM DEBT TEN YEARS ENDED DECEMBER 31, 2012–2021 (In thousands)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
First lien Second lien Subordinate lien—IEPA loan	\$ 43,928 1,290,296 29,550	\$ 35,168 1,284,355 49,936	\$ 35,168 1,541,690 62,077	\$ 35,168 1,592,010 59,000	\$ 35,168 1,548,696 108,956	\$ 35,168 1,660,490 165,723	\$ 35,168 1,527,810 330,583	\$ 35,168 1,562,610 297,717	\$ 31,792 1,518,165 403,177	\$ 27,634 1,474,695 393,466
Total revenue bonds and notes	1,363,774	1,369,459	1,638,935	1,686,178	1,692,820	1,861,381	1,893,561	1,895,495	1,953,134	1,895,795
Unamortized premium (discount) Unamortized deferred loss	37,701 -	34,707 -	61,306	83,551 -	77,642 -	113,074	104,893 -	97,004 -	89,361 -	81,926 -
Accretion of Series 1998 CAB	41,151	45,272	49,615	54,194	59,018	64,105	69,465	75,114	73,356	68,806
Sub-total	78,852	79,979	110,921	137,745	136,660	177,179	174,358	172,118	162,717	150,732
Total revenue bonds payable—net of unamortized premium (discount)	\$1,442,626	<u>\$1,449,438</u>	<u>\$1,749,856</u>	\$1,823,923	<u>\$1,829,480</u>	\$2,038,560	\$2,067,919	\$2,067,613	<u>\$2,115,851</u>	\$ 2,046,527

Source: City of Chicago Comptroller's Office.

STATISTICAL DATA
CAPITAL IMPROVEMENT PROGRAM
2022–2026
(In thousands)

Years	Amount
2022	\$ 280,998
2023 2024	227,292 235,842
2025 2026	236,231 238,669
Total	<u>\$1,219,032</u>

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.

# STATISTICAL DATA FULL-TIME EQUIVALENT SEWER FUND EMPLOYEES BY FUNCTION TEN YEARS ENDED DECEMBER 31, 2012–2021

Function	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Agency management Capital design and	4	4	4	4	4	4	5	5	4	4
construction services	23	24	26	24	24	25	26	26	27	26
Inspection services	18	18	16	18	24	24	24	24	24	24
System installation System maintenance	8	8	8	9	9	8	8	8	8	8
and evaluations Communications and	523	523	521	521	515	426	412	412	368	358
coordination	17	16	16	15	15	13	13	13	8	8
	593	593	591	591	591	500	488	488	439	428

The Sewer Fund intends to provide ten years of information as it becomes available.

Source: City of Chicago's 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, Program and Budget Summary.

Note: Schedule includes only Department of Water Management employees.

#### STATISTICAL DATA OPERATING INDICATORS BY FUNCTION

	2019	2020	2021
Catch basins repaired	2,686	1,742	1,974

# STATISTICAL DATA CAPITAL ASSET STATISTICS BY FUNCTION (In miles)

	2019	2020	2021
Sewers lined	64.6	30.7	48.8
New construction	26.5	17.8	12.3

# STATISTICAL DATA POPULATION OF SERVICE AREA LAST SIX CENSUS PERIODS

Years	Population
1970	3,369,357
1980	3,005,072
1990	2,783,726
2000	2,896,016
2010	2,695,598
2020	2,746,388

Source: U.S. Department of Commerce—Census Bureau.

# STATISTICAL DATA PRINCIPAL EMPLOYERS (NONGOVERNMENT) CURRENT YEAR AND NINE YEARS AGO

	<b>2021</b> <sup>(1)</sup>			2012 <sup>(1)</sup>			
	Number of		Percentage of Total City	Number of		Percentage of Total City	
Employer	Employees	Rank	Employment	Employees	Rank	Employment	
Amazon.Com, Inc.	27,050	1	2.17 %				
Advocate Aurora Health Care	25,906	2	2.08				
Northwestern Memorial Healthcare	24,053	3	1.93				
University of Chicago	20,781	4	1.67				
Walmart Inc	18,500	5	1.48				
Walgreens Boots Alliance Inc.	16,817	6	1.35	2,789	10	0.26 %	
JPMorgan Chase & Co (4)	14,583	7	1.17	8,168	1	0.76	
United Continental Holdings Inc. (5)	13,171	8	1.06	7,521	2	0.70	
Amita Health	13,051	9	1.05	-		-	
Jewel-Osco <sup>(6)</sup>	10,892	10	0.87	4,572	5	0.43	
Accenture LLP	-		-	5,590	3	0.52	
Northern Trust	-		-	5,448	4	0.51	
Ford Motor Company	_		-	4,187	6	0.39	
Bank of America NT & SA (7)	-		-	3,811	7	0.36	
ABM Janitorial Midwest, INC	-		-	3,398	8	0.32	
American Airlines	-		-	3,078	9	0.29	

#### NOTES:

<sup>(1)</sup> Source: Reprinted with permission from the February 21, 2022, issue of Crain's Chicago Business.
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<sup>(2)</sup> Source: Bureau of Labor Statistics data used in calculation of Total City Employment.

<sup>(3)</sup> Source: City of Chicago, Department of Revenue, Employer's Expense Tax Returns.

Prior to 2014, the source for information was the City of Chicago, Bureau of Revenue Tax-Division report which is no longer available.

<sup>&</sup>lt;sup>(4)</sup> JP Morgan & Co. formerly known as J.P. Morgan Chase

<sup>(5)</sup> United Continental Holdings Inc. formerly known as United Airlines

<sup>(6)</sup> Jewel-Osco formerly know as Jewel Food Stores, Inc.

<sup>(7)</sup> Bank of America NT & SA formerly known as Bank of America NT.

#### STATISTICAL DATA POPULATION AND INCOME STATISTICS

Year	Population <sup>(1)</sup>	Median Age <sup>(2)</sup>	Number of Households <sup>(2)</sup>	City Employment	Unemployment Rate <sup>(3)</sup>	Per Capita Income <sup>(4)</sup>	Total Income
2012	2,695,598	33.2	1,054,488	1,144,896	8.9	\$48,305	\$ 130,210,861,390
2013	2,695,598	33.5	1,062,029	1,153,725	8.3	49,071	132,275,689,458
2014	2,695,598	33.9	1,031,672	1,264,234	5.7	50,690	136,639,862,620
2015	2,695,598	34.2	1,053,229	1,273,727	5.7	53,886	145,254,993,828
2016	2,695,598	34.4	1,053,986	1,282,117	5.4	55,621	149,931,856,358
2017	2,695,598	34.6	1,047,695	1,289,325	4.7	58,315	157,193,797,370
2018	2,695,598	34.9	1,077,886	1,288,755	4.0	61,089	164,671,386,222
2019	2,695,598	35.2	1,080,345	1,286,484	3.2	65,306	176,038,722,988
2020	2,695,598	34.8	1,081,143	1,165,441	8.2	67,671	182,413,812,258
2021	2,746,388	N/A (5)	N/A <sup>(5)</sup>	1,247,060	4.1	N/A (5)	N/A <sup>(5)</sup>

#### Notes:

Data not available for 2021

Due to Covid-19 protocols the U.S. Census Bureau - American Community Survey (ACS), 1-year data for Median Age and Number of Households are not available for 2020. The reported values above are from the AC 5-year data.

<sup>(1)</sup> Source: U.S. Census Bureau.

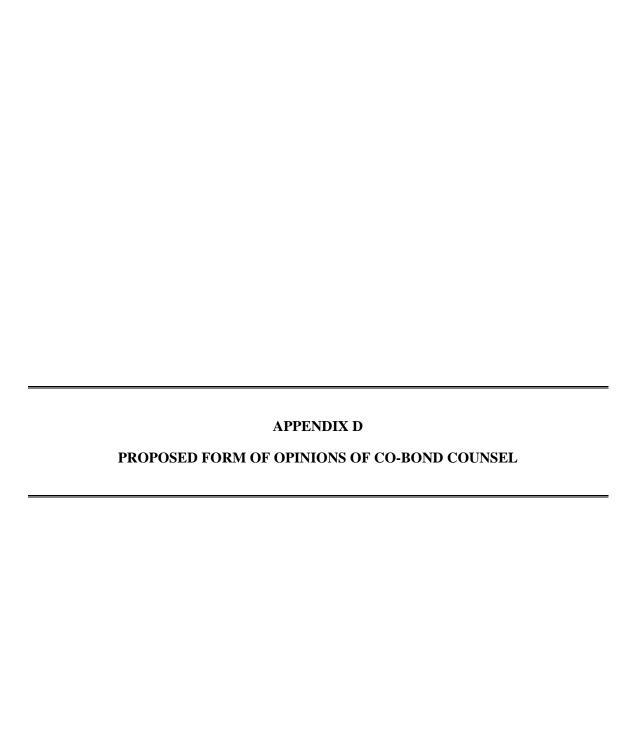
<sup>(2)</sup> Source: U. S. Census Bureau—American Community Survey data estimates.

<sup>&</sup>lt;sup>(3)</sup> Source: Bureau of Labor Statistics 2021, Unemployment rate for Chicago-Naperville-Illinois Metropolitan Area.

<sup>(4)</sup> Source: U.S. Department of Commerce, Bureau of Economic Analysis, Per Capita Personal Income for Chicago-Naperville-Illinois Metropolitan Area.

<sup>(5)</sup> N/A means not available at time of publication.







#### [LETTERHEAD OF ARENTFOX SCHIFF LLP] [LETTERHEAD OF GOLDEN HOLLEY JAMES LLP]

May 11, 2023

City of Chicago Chicago, Illinois

The Underwriters listed on Annex I hereto

Amalgamated Bank of Chicago, as trustee under the Indenture defined below Chicago, Illinois

Re: CITY OF CHICAGO SECOND LIEN WASTEWATER TRANSMISSION REVENUE BONDS, PROJECT SERIES 2023A AND REFUNDING SERIES 2023B

#### Ladies and Gentlemen:

We have served as Co-Bond Counsel to the City of Chicago (the "City") in connection with the issuance by the City of its (i) \$260,105,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2023A (the "Series 2023A Bonds") and (ii) \$192,470,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2023B (the "Series 2023B Bonds" and, together with the Series 2023A Bonds, the "Series 2023 Bonds").

The Series 2023 Bonds are being issued pursuant to the constitutional home rule powers of the City. The Series 2023 Bonds were authorized under an ordinance duly adopted by the City Council of the City (the "City Council") on June 27, 2018, as amended by an ordinance duly adopted by the City Council on October 27, 2021, and as amended by an ordinance duly adopted by the City Council on November 7, 2022 (as so amended, the "Bond Ordinance"). The Series 2023 Bonds are being issued under a Master Indenture of Trust, dated as of May 1, 2023 (the "Master Indenture"), securing City of Chicago Second Lien Wastewater Transmission Revenue Bonds, and a First Supplemental Indenture, dated as of May 1, 2023 (the "First Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each by and between the City and Amalgamated Bank of Chicago, as trustee (the "Trustee"). Capitalized terms used and not otherwise defined herein have the respective meanings ascribed thereto in the Indenture.

The proceeds from the sale of the Series 2023A Bonds are expected to be used to (i) finance or reimburse the City for certain programs and projects for the Sewer System, (ii) pay capitalized interest on the Series 2023A Bonds and (iii) pay costs of issuance of the Series 2023A Bonds. The proceeds from the sale of the Series 2023B Bonds are expected to be used to (i) refund certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City and (ii) pay costs of issuance of the Series 2023B Bonds.

The Series 2023 Bonds are dated the date of this opinion letter and bear interest from their date of delivery and mature on January 1 and bear interest, payable beginning on January 1, 2024, and semiannually thereafter on January 1 and July 1, in each of the years and at the respective principal amounts and rates per annum set forth in the First Supplemental Indenture. The Series 2023 Bonds are subject to optional redemption and mandatory sinking fund redemption prior to maturity as provided in the First Supplemental Indenture.

City of Chicago Underwriters of the Series 2023 Bonds Amalgamated Bank of Chicago May 11, 2023 Page 3 of 3

In our capacity as Co-Bond Counsel, we have examined a certified copy of the record of proceedings of the City relating to the issuance of the Series 2023 Bonds, together with certificates of certain officers of the City, the Trustee and the purchasers of the Series 2023 Bonds as to various factual matters and such other certificates, documents, records and matters of law as we have deemed necessary for the purpose of rendering the opinions hereinafter set forth.

Based upon this examination, and subject to the limitations stated below, we are of the opinion that, under existing law:

- 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.
- 2. The Indenture has been duly authorized, executed and delivered by the City. Assuming the due authorization, execution and delivery of the Indenture by the Trustee, the Indenture is in full force and effect and is valid and binding upon the City.
- 3. The Series 2023 Bonds are valid and legally binding limited obligations of the City. The Series 2023 Bonds, together with the City's Outstanding Second Lien Bonds and any Second Lien Parity Bonds which may be issued from time to time in the future, have a claim for payment, as to principal, redemption premium, if any, and interest, solely from the Second Lien Bond Revenues that are derived from the Net Revenues Available for Bonds in the City's Sewer Revenue Fund derived by the City from its ownership and operation of the Sewer System. The Second Lien Bond Revenues have been irrevocably pledged to the payment of the Series 2023 Bonds on a parity with the Outstanding Second Lien Bonds and any Second Lien Parity Bonds that the City may issue from time to time in the future in accordance with the applicable provisions of the Indenture. The Series 2023 Bonds, together with the City's Outstanding Second Lien Bonds and any Second Lien Parity Bonds issued from time to time in the future, are also secured by and payable from any amounts on deposit in the Second Lien Construction Account. The Series 2023 Bonds do not have a claim for payment from taxes of the City.
- 4. The Bond Ordinance and the Indenture create a valid pledge of the Trust Estate, 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 Indenture.
- 5. Interest on the Series 2023 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 the compliance by the City with its covenant in the Indenture to comply with all requirements which must be met in order for interest on the Series 2023 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 Series 2023 Bonds could be included in gross income for federal income tax purposes retroactive to the date the Series 2023 Bonds are issued. Interest on the Series 2023 Bonds is not an item of tax preference for calculation of an alternative minimum tax for individuals under present law. For taxable years beginning after December 31, 2022, interest on the Series 2023 Bonds will be taken into account in computing the alternative minimum tax imposed on certain corporations under the Code to the extent that such interest is included in the "adjusted financial statement income" of such corporations. Ownership of the Series 2023 Bonds may result

City of Chicago Underwriters of the Series 2023 Bonds Amalgamated Bank of Chicago May 11, 2023 Page 4 of 3

in other federal tax consequences to certain taxpayers, and we express no opinion regarding any such collateral consequences arising with respect to the Series 2023 Bonds.

6. Interest on the Series 2023 Bonds is not exempt from present State of Illinois income taxes.

The opinions contained in paragraphs 1, 2 and 3 above are qualified to the extent that the rights of registered owners of the Series 2023 Bonds and the enforceability of the Bond Ordinance, the Indenture and the Series 2023 Bonds may be limited by bankruptcy, insolvency, moratorium, reorganization, receivership, arrangements, fraudulent conveyances or other laws affecting creditors' rights generally or as to the availability of any particular remedy. Enforcement of provisions of the Bond Ordinance, the Indenture or the Series 2023 Bonds 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.

Except as stated in paragraphs 5 and 6 above, we express no opinion as to any other federal, state, local or foreign tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Series 2023 Bonds. Furthermore, we express no opinion as to any federal, state, local or foreign tax consequences with respect to the Series 2023 Bonds, or the interest thereon, if any action is taken with respect to Series 2023 Bonds or the proceeds thereof upon the advice or approval of other counsel. 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 Series 2023 Bonds not to be included in gross income for federal income tax purposes under present law.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the City.

We have not been engaged nor have we undertaken to review the accuracy, completeness or sufficiency of any offering materials relating to the Series 2023 Bonds, and we express no opinion herein as to the accuracy, adequacy or completeness of the Official Statement or other offering materials relating to the Series 2023 Bonds.

The opinions expressed herein may be relied upon by the addressees and may not be relied upon by any other person without our prior written consent. The opinions expressed herein represent our legal judgment based upon our review of the law and the facts that we deem relevant to render such opinions and are not a guaranty of a result. The opinions expressed herein are given as of the date hereof, and we assume no obligation to revise or supplement such opinions to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Very truly yours,

#### ANNEX I

Stifel, Nicolaus & Company, Incorporated Chicago, Illinois

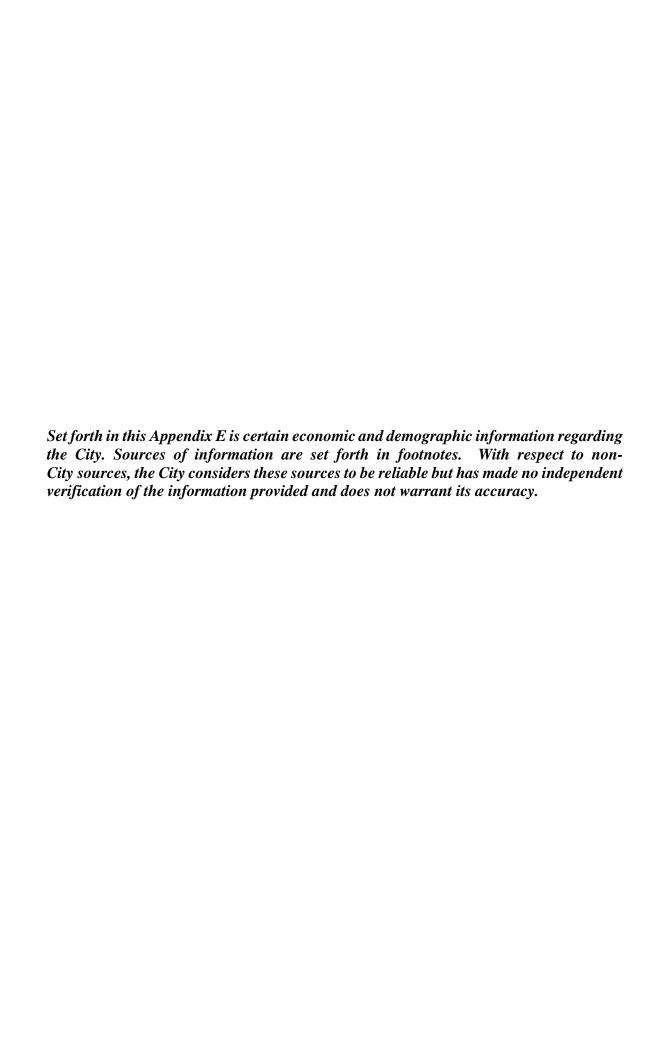
PNC Capital Markets LLC Philadelphia, Pennsylvania

#### ANNEX I

Stifel, Nicolaus & Company, Incorporated 1 North Wacker Drive, 34<sup>th</sup> Floor Chicago, Illinois 60606 PNC Capital Markets LLC 1600 Market Street, 21<sup>st</sup> Floor Philadelphia, Pennsylvania 19103



# APPENDIX E INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS



## **ECONOMY**

The Chicago metropolitan area has a population of approximately 9.5 million people, with over 4.9 million employees. The City's workforce is spread across a diverse array of industries. With \$770 billion GDP (up 10.3% since 2020 according to the U.S. Bureau of Economic Analysis), Chicago metro area economy is 19<sup>th</sup> largest in the world, exceeding Sweden, Turkey and Poland's economies.

The Chicago metropolitan area's largest industry sectors by employment include trade, transportation and utilities; professional and business services; education and health services; government; leisure and hospitality; and manufacturing.<sup>3</sup> The regional economy is extremely diverse with no employment sector representing greater than 20% of the total.

TABLE 1. CHICAGO AREA EMPLOYMENT BY SECTOR (IN THOUSANDS) (FEBRUARY, 2023)<sup>4</sup>

		Change from February 2022		
Sector	Employees	Number	Percent	
TOTAL NONFARM	4,673.1	93.0	2.0%	
Mining and Logging	1.5	0.1	7.1	
Construction	163.6	4.5	2.8	
Manufacturing	408.8	6.7	1.7	
Trade, Transportation and Utilities	958.4	10.1	1.1	
Information	77.9	-1.1	-1.4	
Financial Activities	312.5	-2.0	-0.6	
Professional and Business Services	834.5	-6.6	-0.8	
Education and Health Services	752.6	31.9	4.4	
Leisure and Hospitality	446.4	39.7	9.8	
Other Services	193.7	6.3	3.4	
Government	523.2	3.4	0.7	

## **POPULATION**

Chicago is home to more than 2.7 million people who live in more than one million households.<sup>5</sup> According to the 2020 Census, the City's population is up 1.9 percent compared to the 2010 Census, increasing as a percent of the State population, which has a positive impact on certain revenue streams including water and wastewater revenue, local utility taxes, recreation taxes, PPRT, and business taxes.<sup>6</sup> The population of the United States, the State of Illinois, Cook County and the City for the census years 1980 to 2020 is shown in Table 2.

U.S. Census Bureau, "Metropolitan and Micropolitan Statistical Areas Population Totals and Components of Change: 2020-2021, <a href="https://www.census.gov/data/datasets/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html">https://www.census.gov/data/datasets/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html</a>.

U.S. Bureau of Labor Statistics, "Civilian labor force and unemployment by state and metropolitan area," https://www.bls.gov/news.release/metro.t01.htm (update released April 5, 2023).

<sup>5</sup> U.S. Bureau of Labor Statistics, "Chicago Area Economic Summary, Updated October 4, 2022," https://www.bls.gov/regions/midwest/summary/blssummary\_chicago.pdf.

<sup>&</sup>lt;sup>4</sup> U.S. Bureau of Labor Statistics, "Chicago Area Employment" <a href="https://www.bls.gov/regions/midwest/news-release/areaemployment-chicago.htm">https://www.bls.gov/regions/midwest/news-release/areaemployment-chicago.htm</a>; released April 5, 2023.

<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau, "Resident population from decennial census."

<sup>6</sup> See Footnote 5.

TABLE 2. POPULATION (1980-2020)<sup>1</sup>

Year	United States	State of Illinois	Cook County	Chicago
1980	226,545,805	11,427,409	5,253,655	3,005,072
1990	248,709,873	11,430,602	5,105,067	2,783,726
2000	281,421,906	12,419,293	5,376,741	2,896,016
2010	308,745,538	12,830,632	5,194,675	2,695,598
2020	331,449,281	12,812,508	5,275,541	2,746,388

Among the seven most populous cities in the U.S., Chicago has the highest share of residents age 25 and over with a college degree at 41.7%. during the period from 2017 to 2021.<sup>2</sup>

## PER CAPITA INCOME AND WAGES

The per capita personal income (estimated annual earnings) for the United States, the State of Illinois, Cook County and the Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area (the "**Chicago MSA**") is set forth in Table 3, for the years 2012 through 2021.<sup>3</sup>

- Illinois: Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will Counties;
- Indiana: Jasper, Lake, Newton and Porter Counties; and
- Wisconsin: Kenosha County.

<sup>&</sup>lt;sup>1</sup> See Footnote 5.

www.census.gov/quickfacts/fact/table/chicagocityillinois,US/PST045221.

<sup>&</sup>lt;sup>3</sup> The Chicago MSA comprises the following counties:

TABLE 3. PER CAPITA INCOME (2012-2021)<sup>1</sup>

Year	United States <sup>2</sup>	State of Illinois <sup>3</sup>	Chicago MSA <sup>4</sup>	Cook County <sup>5</sup>
2012	44,548	46,029	48,804	45,697
2013	44,798	47,047	49,647	48,198
2014	46,887	49,238	52,501	49,399
2015	48,725	51,443	55,170	52,956
2016	49,613	52,036	55,800	55,700
2017	51,550	53,611	57,586	56,137
2018	53,786	56,536	60,938	57,966
2019	56,250	58,438	63,024	61,972
2020	59,763	62,139	66,474	63,971
2021	64,117	67,165	71,992	67,558

Median household income in the Chicago MSA in 2021 was \$78,166, compared to \$72,205 in the State of Illinois and \$69,717 in the United States.<sup>6</sup>

#### **EMPLOYMENT**

Total employment for the State of Illinois, the Chicago MSA, Cook County and the City for the years 2012 through 2022 is set forth in Table 4.

U.S. Bureau of Economic Analysis, Local Area Personal Income last updated: November 16, 2022 <a href="https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas.">https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas.</a> On November 14, 2019, the U.S. Bureau of Economic Analysis revised the statistics for 1998 through 2017. The figures presented here reflect the revised data and thus are not consistent with the City's past disclosure documents for its general obligation bonds.

U.S. Bureau of Economic Analysis, Table SAINC1, <a href="https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table">https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table">https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html">https://apps.bea.gov/itable/index.html</a>?appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html">https://appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html">https://appid=70&stepnum=40&Major Area=3&State=00000&Area=00000&Table</a> <a href="https://apps.bea.gov/itable/index.html">https://apps.bea.gov/itable/index.html</a> <a href="https

U.S. Bureau of Economic Analysis, Table SAINC1, https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\_Area=3&State=00000&Area=17000&Table Id=21&Statistic=3&Drill=1.

U.S. Bureau of Economic Analysis, Table CAINC1, https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\_Area=5&State=17000&Area=16980&Table Id=20&Statistic=3&Drill=1.

<sup>5</sup> U.S. Bureau of Economic Analysis, Table CAINC1, https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\_Area=4&State=17000&Area=17031&Table Id=20&Statistic=3&Drill=1.

<sup>6</sup> U.S. Census Bureau, https://data.census.gov/table?g=0100000US 0400000US17\_310XX00US16980&tid=ACSDT1Y2021.B19013&tp =true

TABLE 4. EMPLOYMENT (2012-2022) (IN THOUSANDS)<sup>1</sup>

Year	State of Illinois <sup>2</sup>	Chicago MSA <sup>3</sup>	Cook County <sup>4</sup>	Chicago <sup>5</sup>
2012	5,989	4,447	2,406	1,232
2013	5,961	4,466	2,418	1,238
2014	6,052	4,541	2,456	1,257
2015	6,120	4,597	2,481	1,271
2016	6,173	4,649	2,500	1,282
2017	6,238	4,731	2,551	1,312
2018	6,282	4,766	2,561	1,320
2019	6,309	4,793	2,579	1,331
2020	5,781	4,386	2,351	1,216
2021	5,936	4,507	2,412	1,247
2022	6,142	4,701	2,526	1,306

The annual unemployment rates for the United States, the State of Illinois, Cook County, the Chicago MSA and the City are set forth in Table 5 for the years 2012 through 2022.

TABLE 5. ANNUAL UNEMPLOYMENT RATES (2012-2022)<sup>6</sup>

Year	United States <sup>7</sup>	State of Illinois	Chicago MSA	Cook County	Chicago
2012	8.1	9.0	9.1	9.7	10.0
2013	7.4	9.1	9.1	9.7	10.1
2014	6.2	7.2	7.2	7.6	7.9
2015	5.3	6.0	6.0	6.3	6.7
2016	4.9	5.9	5.8	6.2	6.5
2017	4.4	4.9	4.9	5.1	5.4
2018	3.9	4.4	4.1	4.2	4.4
2019	3.7	4.0	3.9	3.9	4.1
2020	8.1	9.2	9.5	10.4	11.2
2021	5.4	6.1	6.2	7.1	7.6
2022	3.8	4.8	4.7	5.2	5.4

U.S. Bureau of Labor Statistics, "Local Area Unemployment Statistics," data expressed as average of 12-month data, except for 2022, which is an average of January - August 2022.

<sup>&</sup>lt;sup>2</sup> U.S. Bureau of Labor Statistics, https://data.bls.gov/timeseries/LAUST170000000000003.

<sup>&</sup>lt;sup>3</sup> U.S. Bureau of Labor Statistics, <a href="https://data.bls.gov/timeseries/LAUMT171698000000003">https://data.bls.gov/timeseries/LAUMT1716980000000003</a>.

<sup>&</sup>lt;sup>4</sup> U.S. Bureau of Labor Statistics, <a href="https://data.bls.gov/timeseries/LAUCN1703100000000003">https://data.bls.gov/timeseries/LAUCN17031000000000003</a>.

U.S. Bureau of Labor Statistics, <a href="https://data.bls.gov/timeseries/LAUCT1714000000000003">https://data.bls.gov/timeseries/LAUCT171400000000000003</a>.

<sup>&</sup>lt;sup>6</sup> See Footnote 15.

<sup>&</sup>lt;sup>7</sup> U.S. Bureau of Labor Statistics, <a href="https://data.bls.gov/timeseries/LNU04000000">https://data.bls.gov/timeseries/LNU04000000</a>.

The percentage of total (non-farm) employment by major industry sector for the Chicago Metropolitan Division, State of Illinois and the United States for January 2023 is shown in Table 6. Note that totals may not sum due to rounding.

TABLE 6. PERCENTAGE OF TOTAL NON-FARM EMPLOYMENT BY MAJOR INDUSTRY SECTOR (JANUARY 2023)

Sector	United States <sup>1</sup>	Illinois <sup>2</sup>	Chicago Metropolitan Division <sup>3</sup>
Trade, Transportation and Utilities	18.6%	20.0%	20.4%
Education and Health Services	16.1	15.6	16.5
Professional and Business Services	14.7	16.0	18.9
Government	14.5	13.2	10.7
Leisure and Hospitality	10.6	9.7	9.5
Manufacturing	8.4	9.4	7.4
Financial Activities	5.9	6.6	7.3
Construction	5.1	3.8	3.2
Other Services	3.8	4.1	4.2
Information	2.0	1.5	1.9
Mining and Logging	0.4	0.1	0.0
TOTAL	100.0%	100.0%	100.0%

U.S. Bureau of Labor Statistics, "Current Employment Statistics (National)," http://www.bls.gov/web/empsit/ceseeb1a.htm.

<sup>&</sup>lt;sup>2</sup> U.S. Bureau of Labor Statistics, <a href="http://www.bls.gov/regions/midwest/illinois.htm">http://www.bls.gov/regions/midwest/illinois.htm</a>.

U.S. Bureau of Labor Statistics, <a href="http://www.bls.gov/regions/midwest/il\_chicago\_md.htm">http://www.bls.gov/regions/midwest/il\_chicago\_md.htm</a>. The Chicago Metropolitan Division is a Census-defined area within the Chicago MSA. As of 2021, the Chicago Metropolitan Division consists of Cook, DuPage, McHenry, Will, Kendall, and Grundy counties. Kane County is part of the Elgin Metropolitan Division, Lake (IN), Porter, Jasper, and Newton counties are part of the Gary Metropolitan Division, and Lake (IL) and Kenosha counties are part of Kenosha-Lake County Metropolitan Division.

## **EMPLOYERS**

The Chicago MSA has thirty-five Fortune 500 and thirty-two S&P 500 headquarters, as shown in Table 7. The list is based on the 2022 Fortune 500 list and the current S&P 500 listing.

TABLE 7. FORTUNE 500 AND S&P 500 COMPANIES HEADQUARTERED IN THE CHICAGO MSA  $(2022)^1$ 

Fortune Rank	S&P Rank	Company	Headquarters Location
18	249	Walgreens Boots Alliance	Deerfield, IL
38	142	Archer Daniels Midland	Chicago, IL
60	78	Boeing	Chicago, IL
63	19	AbbVie	North Chicago, IL
66	211	Allstate	Northbrook, IL
73	-	Caterpillar	Deerfield, IL
86	33	Abbott Laboratories	Abbott Park, IL
99	211	Exelon	Chicago, IL
117	-	US Foods Holding	Rosemont, IL
121	87	Mondelez International	Chicago, IL
139	244	Kraft Heinz	Chicago, IL and Pittsburgh, PA
146	398	United Airlines Holdings	Chicago, IL
152	31	McDonald's	Chicago, IL
166	275	CDW	Lincolnshire, IL
185	-	Jones Lang LaSalle	Chicago, IL
202	-	Tenneco	Lake Forest, IL
252	115	Illinois Tool Works	Glenview, IL
281	250	Discover Financial Services	Riverwoods, IL
283	388	LKQ	Chicago, IL
284	263	W.W. Grainger	Lake Forest, IL
292	256	Baxter International	Deerfield, IL
331	349	Conagra Brands	Chicago, IL
352	445	Molson Coors Beverage	Chicago, IL
369	-	Univar Solutions	Downers Grove, IL
376	-	Old Republic International	Chicago, IL
402	292	Ulta Beauty	Bolingbrook, IL
422	183	Arthur J. Gallagher	Rolling Meadows, IL
423	170	Motorola Solutions	Chicago, IL
433	323	Dover	Downers Grove, IL
441	423	Packaging Corp. of America	Lake Forest, IL
444	474	Fortune Brands Home & Security	Deerfield, IL
475	-	Camping World Holdings	Lincolnshire, IL
476	-	Ingredion	Westchester, IL
492	315	CF Industries Holdings	Deerfield, IL
493	329	Northern Trust	Chicago, IL
553	395	Zebra Technologies	Lincolnshire, IL
636	119	CME Group	Chicago, IL
711	345	Ventas	Chicago, IL
753	412	CBOE Global Markets	Chicago, IL
887	347	IDEX	Northbrook, IL

In 2020, there were 327 corporate facility investment projects in the Chicago MSA; in 2021, there were 441 such projects.<sup>2</sup>

All data other than S&P 500 Rankings from *Fortune* Magazine: <a href="https://fortune.com/fortune500">https://fortune.com/fortune500</a>. S&P 500 rankings from Slickcharts: <a href="https://www.slickcharts.com/sp500">https://www.slickcharts.com/sp500</a>. Kraft Heinz maintains co-headquarters, one of which is located in the City.

<sup>&</sup>lt;sup>2</sup> Site Selection Magazine, issues ranking Chicago MSA the "Top Metro" for new and expanded corporate facilities.

Of particular note, in 2021 and 2022, four Fortune 500 companies, the Kimberly-Clark Corporation ("**Kimberly-Clark**"), Discover Financial Services ("**Discover**"), the Kellogg Company (d.b.a. Kellogg's) ("**Kellogg's**"), and Alphabet Inc. subsidiary, Google LLC ("**Google**"), announced significant expansions in the Chicago metropolitan area.

- In 2021, Kimberly-Clark announced the relocation of their North American commercial center to the City's Fulton Market. The relocation is expected to add 250 jobs to the 90 jobs Kimberly-Clark already had in the City.<sup>1</sup>
- In 2021, Discover opened a call center in the City's Southside neighborhood of Chatham in a redeveloped, formerly abandoned Target shopping center. The call center, which currently employs approximately 500, is expected to house 1,000 employees by 2024. The Discover Chatham facility, which is expected to hire most workers from within a 5-mile radius of the facility, has received the highest customer ratings among call centers in Discover's operation since opening.<sup>2</sup>
- In June 2022, Kellogg's announced they would be splitting their company into three business units, with its snack division being globally headquartered in the City. The snack division is Kellogg's largest business unit, generating \$11.4 billion of the company's \$14.2 billion of revenue in 2021.<sup>3</sup>
- In July 2022, Google announced it will move into the Thompson Center, occupying its full 1.2 million square feet. This expansion builds on their current footprint in Fulton Market, where they employ nearly 2,000 people. Thousands of new Google jobs are expected to be located at the Thompson Center over time, with redevelopment expected to be completed by 2026.

In addition to the Fortune 500 and S&P 500 companies headquartered in the Chicago MSA, there are many companies not on those two lists that are located in or near the City. World Business Chicago ("**WBC**"), the City's public-private economic development agency, notes that there are more than 400 major corporate headquarters, offices or facilities located in the Chicago MSA.<sup>5</sup> Furthermore, WBC calculates that there were 173 pro-Chicago decisions (either corporate relocations or expansions) in 2021, and 145 in 2022 as of November 3, 2022, which brought nearly 20,000 jobs, that in turn have created an additional 30,000 jobs.<sup>6</sup>

- https://news.wttw.com/2022/07/27/google-buys-thompson-center-will-preserve-much-loved-loathed-loop-landmark; https://www.wbez.org/stories/google-to-buy-renovate-chicagos-thompson-center/24ef61cb-466e-4728-a646-50df996a6eb1.
- World Business Chicago. <a href="http://www.worldbusinesschicago.com">http://www.worldbusinesschicago.com</a>.
- 6 https://worldbusinesschicago.com/app/uploads/2022/11/Dashboard-v90.3.pdf.

https://www.chicagotribune.com/columns/ryan-ori/ct-biz-kimberly-clark-adding-250-jobs-ryan-ori-20210414-sc3ofe3lcvgr712c44usnebzpy-story.html.

https://news.wttw.com/2022/11/12/one-year-discover-s-chatham-customer-care-center-still-banking-community; https://blockclubchicago.org/2022/08/02/closed-target-store-in-chatham-re-opens-as-a-discover-customer-center-with-a-promise-of-1000-jobs/ https://chicago.suntimes.com/business/2021/9/20/22676556/discover-chatham-call-center-highest-customer-service-ratings-financial-company-credit-cards.

https://news.wttw.com/2022/06/21/kellogg-split-3-companies-corporate-hq-high-growth-snacks-company-coming-chicago.

In addition, the City has been recognized with the following accolades or rankings:

- #1 most diversified economy of the largest U.S. metros by employment;<sup>1</sup>
- Named "Top Metro" for 9<sup>th</sup> year in a row by Site Selection Magazine (2021);
- #1 startup ecosystem for female founders and the largest percentage of womenfounded startups in the world;<sup>2</sup>
- #1 city for highest venture capital multiple on invested capital (\$9.8 billion in growth capital in 2021, nearly \$7 billion which is venture capital, double that of 2020);<sup>3</sup>
- #2 largest transportation and logistics sector in the country;<sup>4</sup>
- #2 host to top 250 conventions in 2022; <sup>5</sup>
- #1 U.S. city for foreign direct investment and #1 U.S. city for corporate expansion and growth per IBM Global Location Trends for 8 and 9 consecutive years, respectively;
- #2 largest metropolitan statistical area in the U.S. as of July 2022 in terms of employees in manufacturing occupations with 417,000 employees;<sup>6</sup>
- #2 ranking in "The 53 Best Cities in the World in 2022" by Time Out Media;<sup>7</sup>
- Voted "Best Big City in the U.S." for 6th year in a row by Condé Nast (2022);<sup>8</sup>
- McCormick Place is the largest convention center in North America.<sup>9</sup>

<sup>1</sup> https://infograph.venngage.com/pl/e9UPAnslJ0O.

https://startupgenome.com/fr/articles/chicago-top-ecosystem-for-female-founders.

World Business Chicago.

https://worldbusinesschicago.com/app/uploads/2022/10/April-2022-Logistics-Tech-WBC-Chicago-Business-Bulletin.pdf.

<sup>&</sup>lt;sup>5</sup> <u>https://www.simpleviewinc.com/blog/stories/post/destinations-to-host-the-mint-top-250-conventions-in-2022/.</u>

<sup>6</sup> https://www.bls.gov/regions/midwest/news-release/areaemployment\_chicago.htm.

https://www.timeout.com/chicago/news/chicago-is-officially-the-2nd-best-city-in-the-world-071222.

https://www.cntraveler.com/gallery/best-cities-us; https://www.marketwatch.com/story/this-big-city-is-americas-favorite-for-a-sixth-straight-year-says-conde-nast-traveler-11664912813.

https://www.mccormickplace.com/.

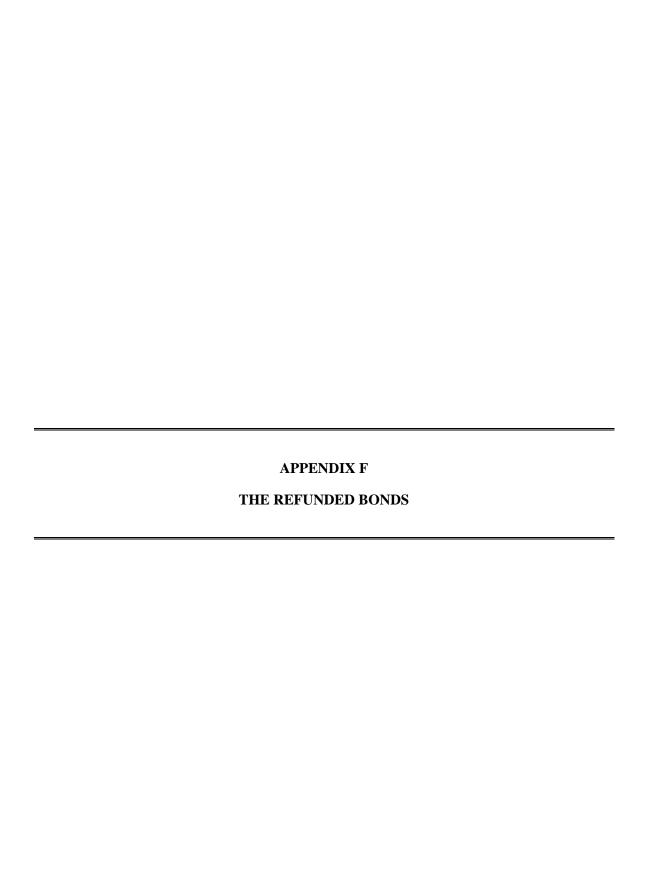
The non-governmental employers employing the greatest number of workers in the Chicago MSA as of the end of 2020 are set forth in Table 8.

TABLE 8. LARGEST NON-GOVERNMENTAL EMPLOYERS IN CHICAGO MSA (2020)<sup>1</sup>

Employer	Number of Employees	Percentage of Total Employment
Amazon.com Inc	27,050	2.17%
Advocate Aurora Healthcare	25,906	2.08
Northwestern Memorial Healthcare	24,053	1.93
University of Chicago	20,781	1.67
Walmart Inc	18,500	1.48
Walgreens Boots Alliance Inc	16,817	1.35
JPMorgan Chase & Co	14,583	1.17
United Continental Holdings Inc.	13,171	1.06
Amita Health	13,051	1.05
Jewel-Osco	10,892	0.87

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The following table sets forth the maturity, interest rate, principal amount, redemption date and price for each maturity of the Refunded Bonds.

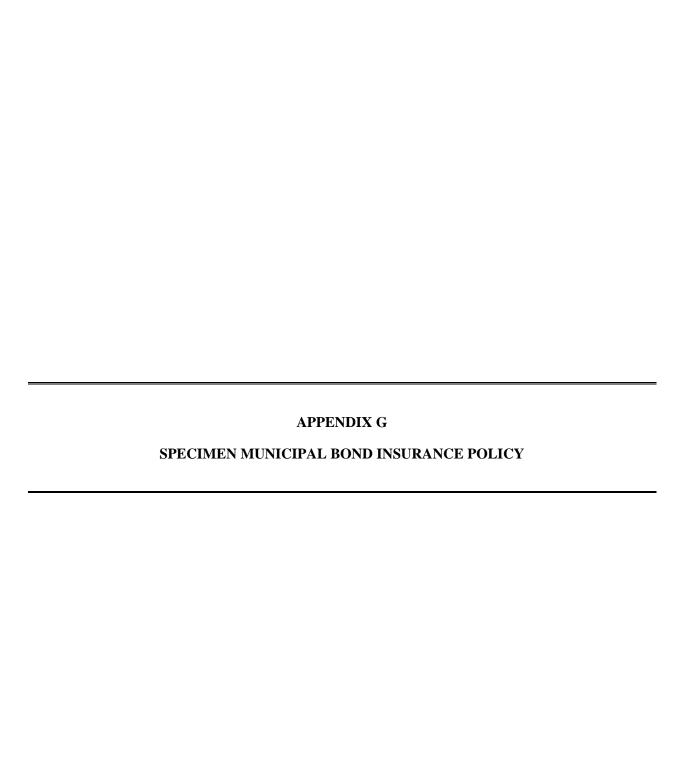
			Principal Amount			
Prior Bond	Maturity	Interest	of Prior Bonds	Redemption	Redemption	
Issue	(January 1)	Rate	Refunded	Date	Price	CUSIP <sup>†</sup>
Series 2012	2024	5.000%	\$7,375,000	June 12, 2023	100%	167727TL0
Series 2012	2025	5.000%	\$7,740,000	June 12, 2023	100%	167727TM8
Series 2012	2026	5.000%	\$8,130,000	June 12, 2023	100%	167727TN6
Series 2012	2027	5.000%	\$8,535,000	June 12, 2023	100%	167727UE4
Series 2012	2028	5.000%	\$8,960,000	June 12, 2023	100%	167727TP1
Series 2012	2029	5.000%	\$9,410,000	June 12, 2023	100%	167727TQ9
Series 2012	2030	5.000%	\$9,880,000	June 12, 2023	100%	167727TR7
Series 2012	2031	4.000%	\$10,375,000	June 12, 2023	100%	167727TS5
Series 2012	2032	4.000%	\$10,790,000	June 12, 2023	100%	167727TT3
Series 2012	2033	4.000%	\$11,220,000	June 12, 2023	100%	167727UF1
Series 2012	2034	4.000%	\$11,670,000	June 12, 2023	100%	167727UG9
Series 2012	2035	4.000%	\$12,135,000	June 12, 2023	100%	167727UH7
Series 2012	2037*	5.000%	\$25,875,000	June 12, 2023	100%	167727UJ3
Series 2012	2042*	4.000%	\$20,000,000**	June 12, 2023	100%	167727TU0
Series 2012	2042*	5.000%	\$51,365,000	June 12, 2023	100%	167727UK0

<sup>\*</sup>Term Bonds; Final Maturity.

<sup>\*\*</sup>Reflects a partial refunding, as the sinking fund installment of \$5,000,000 due January 1, 2038 is not being refunded.

<sup>&</sup>lt;sup>†</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP numbers have been assigned by an independent company not affiliated with the City. Neither the City nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness as included herein.









# MUNICIPAL BOND INSURANCE POLICY

ISSUER: Policy No: -N

BONDS: \$ in aggregate principal amount of Effective Date:

Premium: \$

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest, then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owner shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which recovered from been such Owner pursuant

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United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.



A subsidiary of Assured Guaranty Municipal Holdings Inc. 1633 Broadway, New York, N.Y. 10019 (212) 974-0100

Form 500NY (5/90)

