

**City of Chicago  
Department of Water Management  
Sewer Fund**

**Annual Comprehensive Financial Report  
For the Years Ended December 31, 2020 and 2019**



**Lori E. Lightfoot, Mayor  
Jennie Huang Bennett, Chief Financial Officer  
Reshma Soni, City Comptroller  
Andrea Cheng, Commissioner**

**Sewer Fund**  
An Enterprise Fund of  
The City of Chicago

**Annual Comprehensive Financial Report  
For the Year Ended December 31, 2020 and 2019**



Prepared By:  
The Department of Water Management  
Bureau of Administrative Support

**2020 ANNUAL COMPREHENSIVE FINANCIAL REPORT  
OF THE CHICAGO SEWER FUND**

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**PART I**

**INTRODUCTORY SECTION**

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**DEPARTMENT OF WATER MANAGEMENT  
CITY OF CHICAGO**

June 30, 2021

To the Honorable Mayor Lori E. Lightfoot,  
Members of the City Council and Citizens of the City of Chicago:

I am pleased to submit to you the Annual Comprehensive Financial Report (ACFR) for the City of Chicago Department of Water Management, Sewer Fund, for the year ended December 31, 2020. Responsibility for both the accuracy of the data and completeness and fairness of the presentation, including all disclosures, rests with management. The purpose of the ACFR is to provide complete and accurate information, which complies with the requirements of the Municipal Code of the City of Chicago.

The ACFR is presented in four sections: introductory, financial, required supplemental information and statistical. The financial section includes management's discussion and analysis (MD & A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

**REPORTING ENTITY**

The Department of Water Management, Sewer Fund, has been accounted for as a separate enterprise fund of the City of Chicago (City) which operates and maintains the City's Sewer system. Effective January 1, 2003 the Sewer Department merged with the Water Department to form the Department of Water Management. The Sewer system collects and transports sanitary and industrial waste and storm water to the interceptor sewers of the Metropolitan Water Reclamation District of Greater Chicago. The system provides sewage and drainage collection and conveyance through over 4,400 miles of sewers and a service area of roughly 230 square miles inhabited by approximately 2.7 million people.

**ECONOMIC CONDITION AND OUTLOOK**

The Sewer Fund's primary source of revenue is a sewer service charge which is set by City ordinance. The sewer service charge is billed through the water usage charge on customer billings. The sewer service charge covers the costs of operations, maintenance and debt service. Because of its rate structure, sewer fund revenue is largely dependent upon water usage. As of June 1, 2020, the sewer service charge is set at 100 percent of the water service charge and the metered water rate is set at \$30.46 per 1,000 per cubic feet. There are no large industrial or commercial users that account for more than five percent of sewer system revenues.

It is not expected that there will be a significant change in the population base of the City that would lead to a significant change in revenues.

## **MAJOR INITIATIVES**

The Department of Water Management's, Sewer Division's Five-Year Capital Improvement Program (CIP) for the years 2021 – 2025 is forecasted to be approximately \$1.1 billion. The Sewer Fund's five-year CIP addresses the aggressive efforts to increase the renewal and replacement of the Sewer System's infrastructure and continues to focus on two major areas: sewer replacement and sewer lining.

The Department of Water Management, Sewer Fund, will continue infrastructure renewal by replacing 22 miles of new sewers and lining 42 miles of existing sewers and lining approximately 5,000 structures in 2021. The Chicago Department of Water Management estimates spending \$119.8 million on new sewers, \$47.1 million in lining existing sewers and \$10 million in lining catch basins and manholes structures to prevent failures leading to cave-ins in the street.

The Department of Water Management plans to begin the preliminary design of the Regional Sewer Improvements – Area 4 in 2021. Area 4 is the sewer system generally south of 87<sup>th</sup> Street to the southern City-limits. This project will consist of a regional combined sewer tunnel to provide relief to the local sewer system during rain events.

The Department of Water Management may revise the list of specific improvements and revise cost allocations among improvements, as well as make substitutions to meet current needs and to provide for the efficient operation of the Sewer System.

A master plan for large trunk sewer improvements to provide regional solutions to the sewer system was completed in 2013. The plan continued to be reviewed and refined throughout 2016. A request for proposals was issued in 2016 to start Phase I design of the regional solutions and the selection process was completed. Contract negotiation are ongoing. In 2017, the Department of Water Management completed development of the Full Pipe Model which includes essentially all sewer mains in the City. The Full Pipe Model provides the ability to identify hydraulic deficiencies of small and large sized sewers, develop CIP candidates to improve local and trunk sewers, quantify the impact of green infrastructure, and support other system operation and management activities.

In all, the 5-year CIP is reevaluated annually updated to ensure that areas of the City with the greatest need are given priority.

Utility Billing Relief - During the summer of 2020, the City launched the Utility Billing Relief Program (UBR) to provide low-income City of Chicago residents with a reduced rate on their water, sewer, and water-sewer tax as well as debt relief for those who demonstrate they can manage the reduced rate bills for one year. The program allows a 50% reduced rate on water, sewer, and water-sewer tax; no late payment penalties or debt collection activity including water shut-off and debt forgiveness after successfully completing one year with no past due balance for those who meet the eligibility requirements. The UBR Program is part of a series of reforms pursued by Mayor Lightfoot and the City Council to address regressive fines, fees and billing practices that have disproportionately created hardships for vulnerable residents. In addition, to address the financial impact of the COVID-19 pandemic, the City offered deferrals on utility bills during the months of April-July with payments deferred to August 1. This provided much needed relief for residents without impacting the revenues for the Sewer Fund during 2020.

## **PROPRIETARY OPERATIONS**

The Department of Water Management, Sewer Fund, is responsible for implementing and maintaining an internal control structure to ensure the integrity of the Sewer Fund's operations and to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America.

The internal control structure is designed to provide that the assets, resources and operations of the Department of Water Management, Sewer Fund, are handled in a manner that protects against waste, theft or neglect that may hinder the financial operations of the Sewer Fund. The objective of these controls is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatement. This objective is being met by adequate supervision of employees, segregation of duties and multiple approval and budgetary controls over all expenditures.

The Sewer Fund's budget is developed and implemented along with the City's annual budget based upon an analysis of its historical operations and maintenance costs. The Commissioner of the Department of Water Management recommends the final proposed budget to the Budget Director. After approval by the Budget Director, the proposed budget is recommended to the Mayor for submission to the City Council for its approval following public hearings.

The budget process is designed to ensure that the Department of Water Management, Sewer Fund, will have adequate funding to meet its operational objectives. The Department of Water Management, Sewer Fund, cannot by law exceed the level of funding as established by the City Council-approved budget. The Budget Director uses an allotment system to manage each department's expenditures against its respective annual appropriation.

The Budget Director, through the allotment system, has the authority to institute economic measures for the Department of Water Management, Sewer Fund, to ensure that its expenditures do not exceed its revenue collections. The Sewer Fund uses encumbrances to control expenditures by preventing appropriated dollars from being used for any purpose other than that for which they have been legally appropriated.

## **DEBT ADMINISTRATION**

The Department of Water Management, Sewer Fund, issues bonds to finance its capital improvement program. The City has covenanted to establish, maintain and collect at all times fees, charges and rates sufficient to produce net revenues available for bonds equal to at least 115 percent of current annual debt service requirements on the outstanding senior lien bonds and equal to at least 100 percent of the maximum annual senior and second lien debt service requirement. The City conducts an annual review of the sewer service charge to ensure that sufficient revenue is being generated to comply with the rate covenant. The ordinances authorizing the issuance of revenue bonds provide for the creation of separate accounts into which net revenues, as defined, or bond proceeds are to be credited, as appropriate. Any net revenues remaining after providing sufficient funds for all required deposits into bond accounts may be transferred to the Sewer Rate Stabilization Account to be used for any lawful purpose of the Sewer Fund.

The Department of Water Management, Sewer Fund, has entered into continuing disclosure undertakings with respect to bonds issued after July 3, 1995. The Sewer Fund has provided

certain annual financial information disclosure for its revenue bonds in the statistical section of this report.

## **LONG TERM FINANCIAL PLANNING**

The Department of Water Management, Sewer Fund's, capital activities are funded through the Sewer Fund revenue bonds and Sewer Fund revenue. The Department of Water Management, Sewer Fund, has realized savings through advance refunding as interest rates have changed.

## **INDEPENDENT AUDIT**

City ordinances require the Department of Water Management's, Sewer Fund, financial statements to be audited by independent certified public accountants. The audit was conducted by Deloitte & Touche LLP and a consortium of Chicago-based of minority and women-owned certified public accounting firms. An unmodified audit opinion rendered by Deloitte & Touche, LLP, is included in the financial section of this report.

## **AWARD**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to Chicago Department of Water Management - Sewer Fund, an Enterprise Fund of the City of Chicago, for its CAFR, now referred to as ACFR for the fiscal year ended December 31, 2019.

This was the twenty fifth year that the government has achieved this prestigious award, which is the highest form of recognition for excellence in state and local government financial reporting. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized ACFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

The Certificate of Achievement is valid for a period of one year only. I believe our current report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

## **ACKNOWLEDGMENTS**

This report could not have been prepared without the dedication and effective assistance of the entire staff of the Department of Water Management and the Department of Finance. I wish to express my appreciation to them, and particularly those who contributed directly to the preparation of this report.

Respectfully submitted,



**ANDREA R. H. CHENG, PH.D., P.E.**

Commissioner





Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Sewer Fund, an Enterprise Fund  
of the City of Chicago, Illinois**

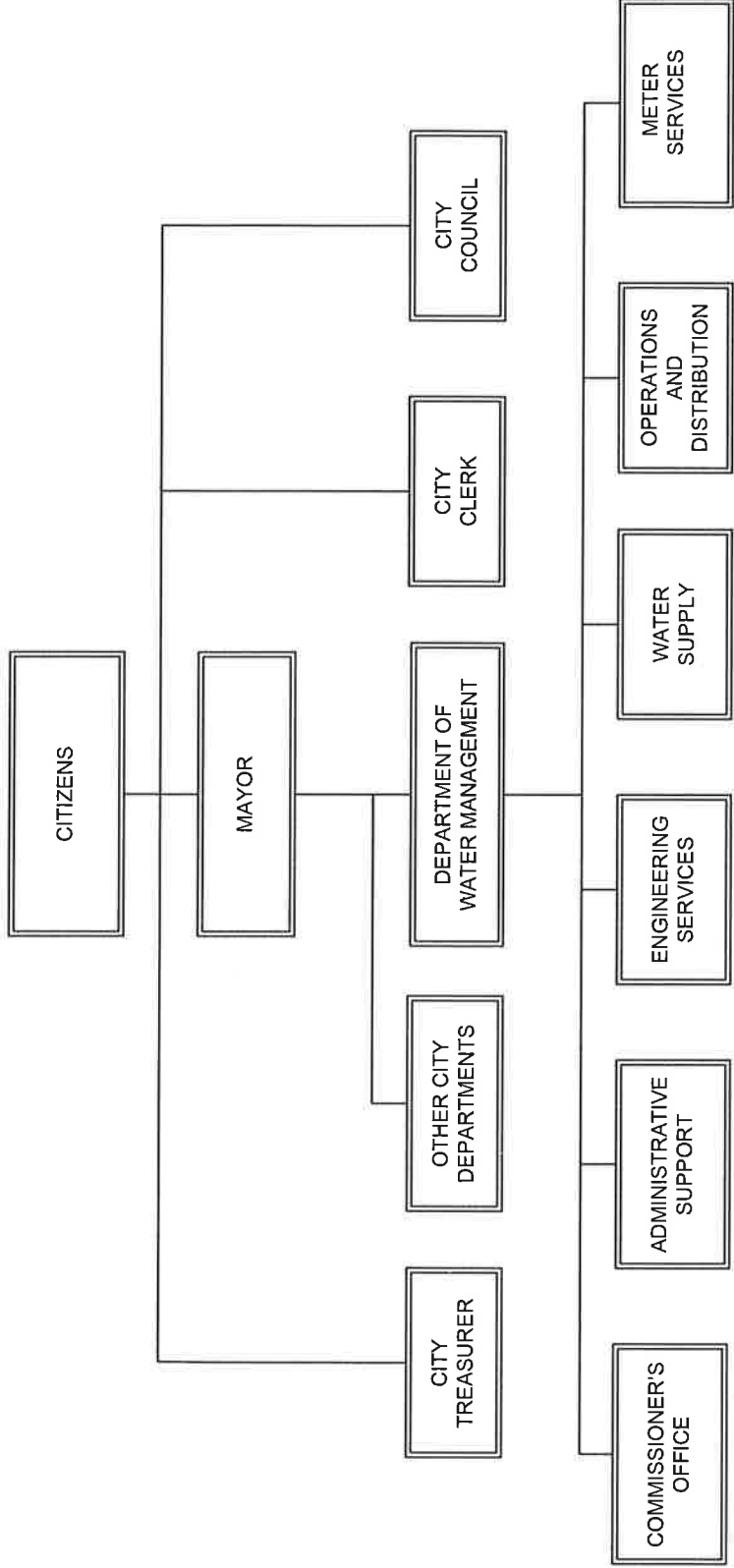
For its Comprehensive Annual  
Financial Report  
For the Fiscal Year Ended

December 31, 2019

*Christopher P. Morill*

Executive Director/CEO

CITY OF CHICAGO  
 DEPARTMENT OF WATER MANAGEMENT  
 As of 12/31/20



List of Principal Officials

Lori Lightfoot Mayor  
 Randy Conner Commissioner

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**PART II**  
**FINANCIAL SECTION**

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## **INDEPENDENT AUDITORS' REPORT**

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

### **Report on the Financial Statements**

We have audited the accompanying 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, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Sewer Fund's basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

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

### **Auditors' Responsibility**

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

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

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

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Sewer Fund, as of December 31, 2020 and 2019, and the changes in its financial position, and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## **Emphasis of Matter**

As discussed in Note 1 to the basic financial statements, the basic financial statements referred to above present only the Sewer Fund, an enterprise fund of the City, and do not purport to, and do not, present the financial position of the City as of December 31, 2020 and 2019, changes in its financial position, or, where applicable, its cash flows, thereof, in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

## **Other Matters**

### ***Required Supplementary Information***

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

### ***Other Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Sewer Fund's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

*Deloitte & Touche LLP*

June 30, 2021

# CITY OF CHICAGO, ILLINOIS

## SEWER FUND

### MANAGEMENT'S DISCUSSION AND ANALYSIS

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The following discussion and analysis of the City of Chicago, Illinois (the "City"), Sewer Fund (the "Sewer Fund") financial performance provides an introduction and overview of the Sewer Fund's basic financial activities for the fiscal years ended December 31, 2020 and 2019. Please read this discussion in conjunction with the Sewer Fund's basic financial statements and the notes to basic financial statements following this section.

On March 11, 2020, the World Health Organization characterized the outbreak of a strain of the novel coronavirus ("COVID-19") as a pandemic in the face of the global spread of the virus. The COVID-19 pandemic has dramatically altered the behavior of businesses and people in a manner that is having negative effects on global and local economies.

The Sewer Fund provides an essential service and continued to operate throughout this pandemic. As such, the Sewer Fund did not experience a decline in revenues or business interruption.

#### FINANCIAL HIGHLIGHTS

##### **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.

##### **2019**

- Operating gross revenues for 2019 decreased by \$7.4 million (33.5%). This decrease is primarily due to decrease in pumpage and increase in bad debt expense as compared to prior-year gross operating revenues. There was a rate increase of 0.82% during 2019.

- Operating expenses before depreciation and amortization decreased by \$18.4 million (11.8%) as compared to 2018 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 2019 increased by \$92.4 million, or 15.8% compared to 2018.
- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by \$677.4 million (net position) at December 31, 2019. Net position comprises \$862.1 million of net investment in capital assets, \$139.6 million of restricted for capital projects, and (\$324.3) million of unrestricted.
- Depreciable capital asset additions, net, for 2019 were \$130.8 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 are prepared on a cash basis and present the cash received and disbursed, the net increase or decrease in cash and cash equivalents for the year, and the cash and cash equivalents balance at year-end.

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

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 unaudited debt-service coverage calculations and includes certain unaudited information related to the Sewer Fund's historical financial and nonfinancial operating results and capital activities.

## FINANCIAL ANALYSIS

At December 31, 2020, the Sewer Fund's financial position continues to be strong with total assets and deferred outflows of \$3,604.9 million, total liabilities and deferred inflows of \$2,831.2 million, and net position of \$773.7 million. A comparative condensed summary of the Sewer Fund's net position at December 31, 2020, 2019, and 2018, is as follows:

(In thousands)	Net Position		
	2020	2019	2018
Current assets	\$ 548,532	\$ 577,848	491,064
Restricted and other assets—noncurrent	43,684	55,212	157,648
Utility plant—net	<u>2,994,162</u>	<u>2,889,843</u>	<u>2,735,369</u>
Total assets	3,586,378	3,522,903	3,384,081
Deferred outflows	<u>18,511</u>	<u>22,259</u>	<u>75,820</u>
Total assets and deferred outflows	<u>\$ 3,604,889</u>	<u>\$ 3,545,162</u>	<u>\$ 3,459,901</u>
Current liabilities	\$ 284,190	\$ 319,181	\$ 254,076
Pension liability	426,455	460,173	453,667
Long-term liabilities	<u>2,038,330</u>	<u>1,997,305</u>	<u>2,005,573</u>
Total liabilities	2,748,975	2,776,659	2,713,316
Deferred inflows	<u>82,204</u>	<u>91,092</u>	<u>161,529</u>
Total liabilities and deferred inflows	<u>\$ 2,831,179</u>	<u>\$ 2,867,751</u>	<u>\$ 2,874,845</u>
Net position:			
Net invested in capital assets	\$ 931,047	\$ 862,065	\$ 827,773
Restricted for capital projects	205,696	139,618	115,576
Unrestricted	<u>(363,033)</u>	<u>(324,272)</u>	<u>(358,293)</u>
Total net position	<u>\$ 773,710</u>	<u>\$ 677,411</u>	<u>\$ 585,056</u>

### 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.

### **2019**

Current assets increased by \$86.8 million (17.7%) due to an increase in investments and due from other funds, which were offset by a decrease in cash and cash equivalents and accounts receivable. Noncurrent restricted investments and other assets decreased by \$102.4 million (65.0%) and utility plant—net increased by \$154.5 million (5.7%) due primarily to capital activities for sewer construction and rehabilitation projects funded by the restricted investments. During 2019, the Sewer Fund lined an additional 64.6 miles of sewers.

Current liabilities increased by \$65.1 million (25.6%), which was primarily due to an increase in accounts payable, due to other funds, accrued liabilities, and current portion of long term debt, with unearned revenue remaining fairly consistent. Long-term liabilities decreased by \$8.3 million (0.4%). Net pension liability in the amount of \$460.2 million increased \$6.5 million (1.4%) compared to 2018 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 \$53.6 million (70.6%) and deferred inflows decreased by \$70.4 million (43.6%) compared with 2018 due to the difference between 2019 projected and actual earnings on pension plan investments.

As of December 31, 2019, total net position was \$677.4 million, an increase of \$92.4 million (15.8%) from 2018.

A summary of revenues, expenses, and changes in net position for the years ended December 31, 2020, 2019, and 2018, is as follows:

(In thousands)	<b>Revenues, Expenses, and Changes in Net Position</b>		
	<b>2020</b>	<b>2019</b>	<b>2018</b>
Revenues:			
Operating revenues:			
Sewer service—net	\$ 333,475	\$ 350,053	\$ 368,211
Other operating revenues	<u>484</u>	<u>1,023</u>	<u>1,492</u>
Total operating revenues	<u>333,959</u>	<u>351,076</u>	<u>369,703</u>
Operating expenses:			
Repairs	47,398	41,614	43,654
General Fund reimbursements	54,467	53,688	51,188
Pension expense (Note 6)	(23,853)	3,266	18,938
Maintenance	24,405	22,958	24,909
Engineering	4,776	3,515	3,664
Administrative and general	12,320	12,367	13,472
Depreciation and amortization	<u>53,140</u>	<u>52,933</u>	<u>48,504</u>
Total operating expenses	<u>172,653</u>	<u>190,341</u>	<u>204,329</u>
Operating income	<u>161,306</u>	<u>160,735</u>	<u>165,374</u>
Nonoperating revenues	12,128	11,737	7,446
Nonoperating expenses	<u>(80,466)</u>	<u>(80,112)</u>	<u>(77,739)</u>
Total nonoperating expenses/revenues	<u>(68,338)</u>	<u>(68,375)</u>	<u>(70,293)</u>
Income before capital grants	92,968	92,360	95,081
Capital grants	<u>3,331</u>	<u>(5)</u>	<u>2,274</u>
Change in net position	96,299	92,355	97,355
Net position beginning of year	<u>677,411</u>	<u>585,056</u>	<u>487,701</u>
Net position end of year	<u>\$ 773,710</u>	<u>\$ 677,411</u>	<u>\$ 585,056</u>

## **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.

**2019**

Net sewer service revenues for the years ended 2019 and 2018 were \$350.1 million and \$368.2 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2019 and 2018 was \$1.0 million and \$1.5 million, respectively. The decrease in 2019 net sewer service revenue of \$18.6 million is primarily due to decrease in pumpage and increase in bad debt expense compared to prior year. There was a rate increase of 0.82% during 2019.

Pension expense decreased to \$3.3 million from \$18.9 million in 2018 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 by \$4.3 million compared to 2018 primarily as a result of an increase in investment income during 2019.

A comparative summary of the Sewer Fund’s operating expenses, as classified in the basic financial statements, for the years ended December 31, 2020, 2019, and 2018, is as follows:

(In thousands)	Operating Expenses		
	2020	2019	2018
Repairs	\$ 47,398	\$ 41,614	\$ 43,654
Pension	(23,853)	3,266	18,938
General Fund reimbursements	54,467	53,688	51,188
Maintenance	24,405	22,958	24,909
Engineering	4,776	3,515	3,664
Administrative and general	<u>12,320</u>	<u>12,367</u>	<u>13,472</u>
Operating expenses before depreciation and amortization	119,513	137,408	155,825
Depreciation and amortization	<u>53,140</u>	<u>52,933</u>	<u>48,504</u>
Total operating expenses	<u>\$ 172,653</u>	<u>\$ 190,341</u>	<u>\$ 204,329</u>

**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.

**2019**

Overall, operating expenses before depreciation and amortization for 2019 decreased by \$18.4 million (11.8%) in 2019 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, 2020, 2019, and 2018, is as follows:

(In thousands of dollars)	Cash Flows		
	2020	2019	2018
Cash from activities:			
Operating	\$ 210,506	\$ 203,191	\$ 219,847
Capital and related financing	(257,940)	(233,675)	(289,955)
Noncapital financing activities	-	-	4,931
Investing	<u>40,065</u>	<u>(80,551)</u>	<u>148,822</u>
Net change in cash and cash equivalents	(7,369)	(111,035)	83,645
Cash and cash equivalents:			
Beginning of year	<u>135,608</u>	<u>246,643</u>	<u>162,998</u>
End of year	<u>\$ 128,239</u>	<u>\$ 135,608</u>	<u>\$ 246,643</u>

### **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, 2019, 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.

### **2019**

As of December 31, 2019, the Sewer Fund's unrestricted and restricted cash and cash equivalents of \$135.6 million represented a decrease of \$111.0 million from December 31, 2018, as compared to the increase of \$83.6 million from December 31, 2017 to December 31, 2018, primarily due to investment related activities in 2019. Total unrestricted cash and cash equivalents at December 31, 2019 and 2018, was \$11.8 million and \$73.1 million, respectively.

## **UTILITY PLANT AND DEBT ADMINISTRATION**

### **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.

### **2019**

At the end of 2019 and 2018, the Sewer Fund had net utility plant of \$2,889.8 million and \$2,735.4 million, respectively. During 2019, the Sewer Fund had capital additions being depreciated of \$130.8 million, and completed projects totaling \$19.5 million were transferred from construction in progress to applicable facilities and structures capital accounts.

The Sewer Fund's net utility plant at December 31, 2020, 2019, and 2018, is summarized as follows:

(In thousands)	Net Utility Plant at Year-End		
	2020	2019	2018
Utility plant not depreciated:			
Land and land rights	\$ 560	\$ 560	\$ 560
Construction in progress	<u>72,682</u>	<u>196,790</u>	<u>91,925</u>
Total utility plant not depreciated	<u>73,242</u>	<u>197,350</u>	<u>92,485</u>
Utility plant being depreciated:			
Facilities and structures	3,645,972	3,367,515	3,270,584
Furniture and equipment	<u>33,757</u>	<u>33,810</u>	<u>33,473</u>
Total utility plant being depreciated	<u>3,679,729</u>	<u>3,401,325</u>	<u>3,304,057</u>
Less accumulated depreciation:			
Facilities and structures	(731,358)	(683,150)	(636,620)
Furniture and equipment	<u>(27,451)</u>	<u>(25,682)</u>	<u>(24,553)</u>
Total accumulated depreciation	<u>(758,809)</u>	<u>(708,832)</u>	<u>(661,173)</u>
Utility plant being depreciated—net	<u>2,920,920</u>	<u>2,692,493</u>	<u>2,642,884</u>
Utility plant—net	<u>\$ 2,994,162</u>	<u>\$ 2,889,843</u>	<u>\$ 2,735,369</u>

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, 2020, 2019, and 2018, is summarized as follows:

(In thousands)	Long-Term Outstanding Debt at Year-End		
	2020	2019	2018
Revenue bonds	\$ 1,953,134	\$ 1,895,495	\$ 1,893,561
Add interest accretion on Series 1998 capital appreciation bonds	73,356	75,114	69,465
Unamortized net bond discount/premium	<u>89,361</u>	<u>97,004</u>	<u>104,893</u>
Outstanding debt—net	<u>\$ 2,115,851</u>	<u>\$ 2,067,613</u>	<u>\$ 2,067,919</u>

The Sewer Fund's revenue bonds at December 31, 2020, 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	A	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.

In July 2020, Fitch Rating downgraded the Second Lien Sewer Revenue Bonds from AA- to A- due to a criteria change.

At December 31, 2020, 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.

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## BASIC FINANCIAL STATEMENTS

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**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATEMENTS OF NET POSITION  
AS OF DECEMBER 31, 2020 AND 2019  
(In thousands)**

	2020	2019		2020	2019
<b>ASSETS</b>			<b>LIABILITIES</b>		
CURRENT ASSETS:			CURRENT LIABILITIES:		
Cash and cash equivalents (Note 2)	\$ 4,822	\$ 11,818	Accounts payable	\$ 2,389	\$ 3,144
Investments (Note 2)	233,885	206,370	Due to other City funds	47,589	32,355
Accounts receivable—net of allowance for doubtful accounts of approximately \$144,651 in 2020 and \$125,683 in 2019	98,578	107,016	Unearned revenue	-	12,954
Due from other City funds	28,528	22,665	Accrued liabilities unrestricted	53,252	44,168
Inventories	854	732	Liabilities payable from restricted assets:		
Cash and cash equivalents—restricted (Note 2)	123,417	123,790	Accounts payable	47,832	76,664
Investments—restricted (Note 2)	57,543	102,770	Accrued liabilities	14,345	37,636
Interest receivable—restricted (Note 2)	<u>905</u>	<u>2,687</u>	Current portion of long-term debt (Note 4)	77,521	70,308
			Interest payable	<u>41,262</u>	<u>41,952</u>
Total current assets	<u>548,532</u>	<u>577,848</u>	Total current liabilities	<u>284,190</u>	<u>319,181</u>
NONCURRENT ASSETS:			NONCURRENT LIABILITIES:		
Investments—restricted (Note 2)	<u>42,682</u>	<u>54,107</u>	Net pension liability (Note 6)	426,455	460,173
Other assets	<u>1,002</u>	<u>1,105</u>	Long-term debt—net of current maturities (Note 4)	<u>2,038,330</u>	<u>1,997,305</u>
Utility plant (Note 5):			Total noncurrent liabilities	<u>2,464,785</u>	<u>2,457,478</u>
Land and land rights	560	560	Total liabilities	<u>2,748,975</u>	<u>2,776,659</u>
Facilities and structures	3,645,972	3,367,515	DEFERRED INFLOWS (Note 9)	<u>82,204</u>	<u>91,092</u>
Furniture and equipment	33,757	33,810	NET POSITION (Note 1):		
Construction in progress	<u>72,682</u>	<u>196,790</u>	Net investment in capital assets	931,047	862,065
Total utility plant	3,752,971	3,598,675	Restricted for capital projects	205,696	139,618
Less accumulated depreciation	<u>(758,809)</u>	<u>(708,832)</u>	Unrestricted	<u>(363,033)</u>	<u>(324,272)</u>
Utility plant—net	<u>2,994,162</u>	<u>2,889,843</u>	Total net position	773,710	677,411
Total noncurrent assets	<u>3,037,846</u>	<u>2,945,055</u>			
Total assets	3,586,378	3,522,903			
DEFERRED OUTFLOWS (Note 9)	<u>18,511</u>	<u>22,259</u>			
TOTAL ASSETS AND DEFERRED OUTFLOWS	<u>\$3,604,889</u>	<u>\$3,545,162</u>	TOTAL	<u>\$3,604,889</u>	<u>\$3,545,162</u>

See notes to basic financial statements.



**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION  
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019  
(In thousands)**

	<b>2020</b>	<b>2019</b>
OPERATING REVENUES:		
Sewer service:		
Sewer service—gross	\$ 356,267	\$ 373,902
Less—provision for doubtful accounts	<u>(22,792)</u>	<u>(23,849)</u>
Sewer service—net	333,475	350,053
Other	<u>484</u>	<u>1,023</u>
Total operating revenues	<u>333,959</u>	<u>351,076</u>
OPERATING EXPENSES:		
Repairs	47,398	41,614
General Fund reimbursements	54,467	53,688
Pension expense (Note 6)	(23,853)	3,266
Maintenance	24,405	22,958
Engineering	4,776	3,515
Administrative and general	<u>12,320</u>	<u>12,367</u>
Total operating expenses before depreciation and amortization	119,513	137,408
Depreciation and amortization	<u>53,140</u>	<u>52,933</u>
Total operating expenses	<u>172,653</u>	<u>190,341</u>
OPERATING INCOME	<u>161,306</u>	<u>160,735</u>
NONOPERATING REVENUE (EXPENSES):		
Investment income	8,381	11,663
Interest expense	(80,346)	(79,992)
Other	<u>3,747</u>	<u>74</u>
Total nonoperating expenses—net	<u>(68,218)</u>	<u>(68,255)</u>
TRANSFERS OUT	<u>(120)</u>	<u>(120)</u>
CAPITAL GRANTS	<u>3,331</u>	<u>(5)</u>
CHANGE IN NET POSITION	96,299	92,355
TOTAL NET POSITION—Beginning of year	<u>677,411</u>	<u>585,056</u>
TOTAL NET POSITION—End of year	<u>\$ 773,710</u>	<u>\$ 677,411</u>

See notes to basic financial statements.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019  
(In thousands)**

	<b>2020</b>	<b>2019</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Received from customers	\$ 329,434	\$ 353,790
Transactions with other City funds	(38,244)	(72,995)
Payments to vendors	(29,509)	(27,242)
Payments to employees	<u>(51,175)</u>	<u>(50,362)</u>
Net cash provided by operating activities	<u>210,506</u>	<u>203,191</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Acquisition and construction of capital assets	(225,715)	(147,493)
Proceeds from issuance of bonds	121,325	65,308
Interest paid on revenue bonds	(86,048)	(88,111)
(Payments to) proceeds from Community Development Block Grant	3,331	(5)
Principal paid on bonds	<u>(70,833)</u>	<u>(63,374)</u>
Net cash used in capital and related financing activities	<u>(257,940)</u>	<u>(233,675)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Sales and purchases of investments—net	33,123	(88,160)
Investment interest	<u>6,942</u>	<u>7,609</u>
Net cash provided by (used in) investing activities	<u>40,065</u>	<u>(80,551)</u>
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(7,369)</b>	<b>(111,035)</b>
<b>CASH AND CASH EQUIVALENTS—Beginning of year</b>	<b><u>135,608</u></b>	<b><u>246,643</u></b>
<b>CASH AND CASH EQUIVALENTS—End of year</b>	<b><u>\$ 128,239</u></b>	<b><u>\$ 135,608</u></b>

(Continued)

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019  
(In thousands)**

	<b>2020</b>	<b>2019</b>
RECONCILIATION TO CASH AND CASH EQUIVALENTS REPORTED ON THE STATEMENTS OF NET POSITION:		
Unrestricted	\$ 4,822	\$ 11,818
Restricted	<u>123,417</u>	<u>123,790</u>
<b>TOTAL</b>	<b><u>\$ 128,239</u></b>	<b><u>\$ 135,608</u></b>
RECONCILIATION OF OPERATING INCOME TO CASH FLOWS FROM OPERATING ACTIVITIES:		
Operating income	\$ 161,306	\$ 160,735
Adjustments to reconcile:		
Depreciation and amortization	53,140	52,933
Pension expense other than contribution	(40,972)	(12,572)
Provision for uncollectible accounts	22,792	23,849
Changes in assets and liabilities:		
Due from other City funds	(5,863)	(2,589)
Accounts receivable	(14,355)	(21,436)
Inventories	(122)	57
Accrued liabilities	9,094	2,939
Accounts payable and due to other City funds	38,448	(1,025)
Unearned revenue	<u>(12,962)</u>	<u>300</u>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>	<b><u>\$ 210,506</u></b>	<b><u>\$ 203,191</u></b>

**SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS:**

Property additions in 2020 and 2019 of \$62,177 and \$114,301, respectively, have outstanding accounts payable and accrued liabilities.

The accretion adjustment of Series 1998 capital appreciation bonds for the years ended December 31, 2020 and 2019, were \$5,390 and \$5,649, respectively.

The fair value adjustment gain (loss) to investments for 2020 and 2019 were \$2,889 and \$1,097, respectively.

See notes to basic financial statements.

(Concluded)

# CITY OF CHICAGO, ILLINOIS

## SEWER FUND

### NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In thousands)

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#### 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.

**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	75 years
Furniture and equipment	5–20 years
Sewer rehabilitation	50 years

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

**Deferred Outflows**—Deferred outflows represent 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**—Interest expense is capitalized during construction of those capital projects that are paid for from the bond proceeds and are being amortized over the depreciable life of the related assets on a straight-line basis. Interest expense capitalized for 2020 and 2019 totaled \$4.7 million and \$3.8 million, respectively.

**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, \$31.2 million and \$31.2 million represent revenue recognized on sewer service that had not yet been billed to customers at December 31, 2020 and 2019, 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 deferred 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. 84, <i>Fiduciary Activities</i> (“GASB 84”)	Improves the guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The Sewer Fund adopted GASB 84 for the fiscal year ended December 31, 2020 and there was no impact to the Sewer Fund’s financial statements.
GASB Statement No. 88, <i>Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements</i> (“GASB 88”)	Improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. The Sewer Fund adopted GASB 88 for the fiscal year ended December 31, 2020, which required additional disclosures included in the debt footnote (see Note 4).
GASB Statement No. 90, <i>Majority Equity Interests an amendment of GASB Statements No. 14 and No. 61</i> (“GASB 90”)	Improves the consistency and comparability of reporting a government’s majority equity interest in a legally separate organization and the relevance of financial statement information for certain component units. The Sewer Fund adopted GASB 90 for the fiscal year ended December 31, 2020 and there was no impact to the Sewer Fund’s financial statements.
GASB Statement No. 83, <i>Certain Asset Retirement Obligations</i> (“GASB 83”)	Addresses accounting and financial reporting for certain asset retirement obligations (AROs). A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets will have to recognize a liability based on the guidance in this statement. GASB 83 also requires disclosure of information about the nature of a government’s AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets. The Sewer Fund adopted GASB 83 for the fiscal year ended December 31, 2020 and there was no impact to the Sewer Fund’s financial statements.

GASB Statement	Impact
GASB Statement No. 92, <i>Omnibus 2020</i> ("GASB 92")	Aims to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB statements. More comparable reporting will improve the usefulness of information for users of state and local government financial statements. Certain elements of GASB 92 were effective in fiscal year 2020 and the adoption of the certain elements had no impact on the financial statements. The remainder of GASB 92 will be effective for the Sewer Fund beginning with its year ending December 31, 2022.

**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, <i>Leases</i> ("GASB 87")	2022
GASB Statement No. 89, <i>Accounting for Interest Cost Incurred before the End of a Construction Period</i> ("GASB 89")	2021
GASB Statement No. 91, <i>Conduit Debt Obligations</i> ("GASB 91")	2022
GASB Statement No. 93, <i>Replacement of Interbank Offered Rates</i> ("GASB 93")	2022
GASB Statement No. 94, <i>Public-Private and Public-Public Partnerships and Availability Payment Arrangements</i> ("GASB 94")	2023
GASB Statement No. 96, <i>Subscription-based Information Technology Arrangements</i> ("GASB 96")	2023



## 2. RESTRICTED AND UNRESTRICTED CASH EQUIVALENTS AND INVESTMENTS

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

	<b>Maturities (in Years)</b>				<b>Fair Value</b>
	<b>Less than 1</b>	<b>1–5</b>	<b>6–10</b>	<b>More than 10</b>	
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
<b>Total</b>	<b><u>\$ 335,410</u></b>	<b><u>\$ 116,059</u></b>	<b><u>\$ 10,813</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 462,282</u></b>

As of December 31, 2019, the Sewer Fund had the following cash equivalents and investments (in thousands):

	<b>Maturities (in Years)</b>				<b>Fair Value</b>
	<b>Less than 1</b>	<b>1–5</b>	<b>6–10</b>	<b>More than 10</b>	
U.S. treasuries	\$ 54,378	\$ -	\$ -	\$ -	\$ 54,378
U.S. agencies	-	4,697	9,982	-	14,679
Short-term investments	54,329	-	-	-	54,329
Commercial paper	-	-	-	-	-
Corporate bonds	97,867	54,814	-	-	152,681
Certificates of deposits and other short term	122,110	-	-	-	122,110
Municipal bonds	32,117	67,767	740	-	100,624
<b>Total</b>	<b><u>\$ 360,801</u></b>	<b><u>\$ 127,278</u></b>	<b><u>\$ 10,722</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 498,801</u></b>

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, 2020 and 2019, were (dollars in thousands):

	2020			2019		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
U.S. agencies	\$ -	\$ -	\$ -	\$ -	\$ 14,679	\$ -
Corporate bonds	-	59,882	-	-	121,827	-
Municipal bonds	-	115,685	-	-	98,059	-
Agency bonds	-	10,813	-	-	-	-
Total investments at fair value	<u>\$ -</u>	<u>\$ 186,380</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 234,565</u>	<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 \$275.9 million and \$264.2 million as of December 31, 2020 and 2019, respectively.

During 2019, the City separated the pooled funds relating to The Sewer Fund into its segregate fund. As a result, The Sewer Fund shared no pooled funds with the City as of December 31, 2020 and 2019.

**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 \$1.0 billion that, at the time of purchase, are rated not less than A-, or equivalent rating, 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 A-rating 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, at the time of purchase, no less than AAA by at least two accredited rating agencies.

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, 2020 and 2019, is as follows (in thousands):

Quality Rating	2020	2019
Aaa/AAA*	\$ 125,930	\$ 205,967
A-1/P-1	126,485	51,270
A-2/P-2	35,065	3,059
Aa/AA	126,734	180,526
A/A	32,169	57,979
BBB	15,823	-
Not Rated	<u>76</u>	<u>-</u>
Total	<u>\$ 462,282</u>	<u>\$ 498,801</u>

**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, any amount of the deposit in excess of the federal deposit insurance shall be either: (1) fully collateralized at least 102% 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 102% 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 of the certificate of 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 \$725.3 million. 99.4% of the bank balance was either insured or collateralized with securities held by City agents in the City’s name. \$4.6 million was uncollateralized at December 31, 2020, and thus was subject to custodial credit risk.

A schedule summarizing the investments reported in the basic financial statements as of December 31, 2020 and 2019, is as follows (in thousands):

	2020	2019
Per Note 2:		
Investments—Sewer Fund	\$ 462,282	\$ 498,801
Investments—City Treasurer pooled fund	<u>-</u>	<u>-</u>
	<u>\$ 462,282</u>	<u>\$ 498,801</u>
Per financial statements:		
Restricted investments—current	\$ 57,543	\$ 102,770
Restricted investments—noncurrent	42,682	54,107
Unrestricted investments	233,885	206,370
Investments included as cash and cash equivalents on the statements of net position	<u>128,172</u>	<u>135,554</u>
	<u>\$ 462,282</u>	<u>\$ 498,801</u>

### 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, 2020 and 2019, are as follows (in thousands):

	<b>2020</b>	<b>2019</b>
Construction	\$ 64,045	\$ 131,504
Bond principal and interest	118,783	112,260
Sewer rate stabilization	<u>40,814</u>	<u>36,902</u>
Total	<u>\$ 223,642</u>	<u>\$ 280,666</u>

The 2020 and 2019 Sewer rate stabilization balance above includes a fair value adjustment of \$1,394 thousand and \$123 thousand, respectively.

At December 31, 2020 and 2019, management was not aware of any instances of noncompliance with the above terms of the ordinances.

#### 4. LONG-TERM DEBT

As of December 31, 2020 and 2019, long-term debt consisted of the following (in thousands):

	2020	2019
\$62,423 Series 1998A Wastewater Transmission Revenue Bonds issued April 7, 1998, due through 2028; interest at 4.55% to 5.0%	\$ 31,792	\$ 35,168
\$73,100 Series 2001 Wastewater Transmission Revenue Bonds issued December 6, 2001, due through 2030; interest at 4.0% to 5.5%	37,755	42,390
\$167,635 Series 2008A Wastewater Transmission Revenue Bonds issued November 18, 2008, due through 2038; interest at 3.5% to 5.5%	-	4,300
\$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%	271,630	283,575
\$275,865 Series 2010A & B Wastewater Transmission Revenue Bonds issued November 16, 2010, due through 2040; interest at 2.0% to 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%	630	713
\$276,470 Series 2012 Wastewater Transmission Revenue Bonds issued September 13, 2012, due through 2042; interest at 3.0% to 5.0%	238,590	244,710
\$15,000 Illinois Environmental Protection Agency Loan Agreement signed January 20, 2010, due through 2031; interest at 0%	8,033	8,798
\$17,812 Illinois Environmental Protection Agency Loan Agreement signed October 8, 2010, due through 2032; interest at 1.25%	11,468	12,349
\$17,564 Illinois Environmental Protection Agency Loan Agreement signed September 22, 2011, due through 2033; interest at 1.25%	11,744	12,607
\$15,000 Illinois Environmental Protection Agency Loan Agreement signed October 2, 2012, due through 2034; interest at 2.295%	11,192	11,863
\$292,405 Series 2014 Wastewater Transmission Revenue Bonds issued September 22, 2014, due through 2044; interest at 3.0% to 5.0%	266,455	272,165
\$87,080 Series 2015 Bonds issued October 19, 2015 due through January 1, 2039; interest at 2.59% to 6.04%	80,060	82,480
\$54,170 Illinois Environmental Protection Agency Loan Agreement signed October 22, 2013, due through 2035; interest at 1.93%	43,446	45,921
\$56,198 Illinois Environmental Protection Agency Loan Agreement signed October 8, 2014, due through 2036; interest at 1.99%	46,489	49,026
\$4,291 Illinois Environmental Protection Agency Loan Agreement signed January 22, 2016, due through 2036; interest at 1.86%	3,648	3,842
\$6,703 Illinois Environmental Protection Agency Loan Agreement signed November 4, 2016, due through 2037; interest at 1.75%	5,975	6,258
\$180,590 Series 2017A Wastewater Transmission Revenue Bonds issued June 21, 2017, due through 2052; interest at 4.0% to 5.25%	178,335	180,590
\$215,485 Series 2017B Wastewater Transmission Revenue Bonds issued June 21, 2017, due through 2044; interest at 5.0%	195,340	202,400

(Continued)

	2020	2019
\$63,808 Illinois Environmental Protection Agency Loan Agreement signed May 17, 2016, due through 2038; interest at 1.86%	\$ 57,191	\$ 59,933
\$27,370 Illinois Environmental Protection Agency Loan Agreement signed May 16, 2017, due through 2038; interest at 1.75%	25,215	24,356
\$17,684 Illinois Environmental Protection Agency Loan Agreement signed Apr 5, 2018, due through 2039; interest at 1.76%	16,694	16,274
\$59,960 Illinois Environmental Protection Agency Loan Agreement signed Apr 5, 2018, due through 2039; interest at 1.76%	57,166	45,777
\$26,084 Illinois Environmental Protection Agency Loan Agreement signed May 25, 2018 due through 2039; interest at 1.76%	25,573	-
\$29,781 Illinois Environmental Protection Agency Loan Agreement signed March 18, 2019 due through 2040; interest at 1.84%	29,781	-
\$48,932 Illinois Environmental Protection Agency Loan Agreement signed December 14, 2020 due through 2040; interest at 1.84%	<u>48,932</u>	<u>-</u>
Total revenue bonds	1,953,134	1,895,495
Add accretion of Series 1998A Capital Appreciation Bonds	73,356	75,114
Add unamortized net bond premium (discount)	89,361	97,004
Less current portion (payable from restricted assets)	<u>(77,521)</u>	<u>(70,308)</u>
Long-term portion—net	<u>\$ 2,038,330</u>	<u>\$ 1,997,305</u>

(Concluded)

Long-term debt during the years ended December 31, 2020 and 2019, changed as follows (dollars in thousands):

	Balance January 1, 2020	Additions	Reductions	Balance December 31, 2020	Due within One Year
Revenue bonds and loans	\$ 1,895,495	\$ 121,325	\$ (63,686)	\$ 1,953,134	\$ 68,023
Accretion of Series 1998 capital appreciation bonds	75,114	5,390	(7,148)	73,356	9,498
Unamortized net discount/premium	<u>97,004</u>	<u>-</u>	<u>(7,643)</u>	<u>89,361</u>	<u>-</u>
Total revenue bonds and loans	<u>\$ 2,067,613</u>	<u>\$ 126,715</u>	<u>\$ (78,477)</u>	<u>\$ 2,115,851</u>	<u>\$ 77,521</u>
	Balance January 1, 2019	Additions	Reductions	Balance December 31, 2019	Due within One Year
Revenue bonds and loans	\$ 1,893,561	\$ 65,308	\$ (63,374)	\$ 1,895,495	\$ 63,160
Accretion of Series 1998 capital appreciation bonds	69,465	5,649	-	75,114	7,148
Unamortized net discount/premium	<u>104,893</u>	<u>-</u>	<u>(7,889)</u>	<u>97,004</u>	<u>-</u>
Total revenue bonds and loans	<u>\$ 2,067,919</u>	<u>\$ 70,957</u>	<u>\$ (71,263)</u>	<u>\$ 2,067,613</u>	<u>\$ 70,308</u>



Interest expense includes amortization of the loss on bond refunding for 2020 and 2019 of \$2.1 million and \$2.2 million; less amortization of net bond discount/premium of \$7.6 million and \$7.9 million, respectively; and accretion of Series 1998A capital appreciation bonds of \$5.4 million and \$5.6 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 2020 and 2019.

**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 2020, 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, 2020, increased to \$30.46 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 be replaced 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 2020 was \$48.9 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 be replaced existing, aging sewer main. The amount drawn from this loan agreement by the Sewer fund in 2020 was \$29.8 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 May 25, 2018, with the Illinois Environment Protection Agency as part of a 5-year sewer rehabilitation program conducted throughout the City of Chicago. The amount drawn from the loan agreement by the Sewer fund in 2020 was \$26.1 million. The loan agreement has an interest rate of 1.76% with a maturity from July 15, 2020 to January 15, 2040.

A loan agreement was signed on April 5, 2018, with the Illinois Environment Protection Agency as part of a continuation of the City's 3-year sewer lining contract which was awarded in 2016. The amount drawn from the loan agreement by the Sewer fund in 2019 was \$46.5 million. In 2020, the Sewer Fund drew an additional \$13.4 million. Total funds drawn from this loan are \$59.9 million. The loan agreement has an interest rate of 1.76% with a maturity from December 19, 2019 to December 19, 2038.

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 be replaced existing, aging sewer main. The amount drawn from

the loan agreement by the Sewer fund in 2019 was \$16.5 million. In 2020, the Sewer Fund drew an additional \$1.1 million. Total funds drawn from this loan are \$17.6 million. The loan agreement has an interest rate of 1.76% with a maturity from October 26, 2019 to April 26, 2039.

A loan agreement signed on May 16, 2017, with the Illinois Environment Protection Agency as part of a 5-year rehabilitation program conducted throughout the city. Approximately 27,600 linear feet of 12 to 60 inch diameter sewer main will replace existing aging sewer main. The total funds drawn from this loan agreement are \$27.4 million which included \$1.9 million drawn in 2020. The loan agreement has an interest rate of 1.75% with the maturity dates of May 7, 2019 to November 7, 2038.

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

<b>December 31</b>	<b>Principal</b>	<b>Interest</b>	<b>Total Debt Service</b>
2021	\$ 68,023	\$ 95,348	\$ 163,371
2022	70,811	93,319	164,130
2023	73,366	90,810	164,176
2024	76,023	88,191	164,214
2025	89,149	75,167	164,316
2026–2030	405,389	385,031	790,420
2031–2035	501,130	228,260	729,390
2036–2040	467,418	105,225	572,643
2041–2045	136,805	27,101	163,906
2046–2050	44,510	8,878	53,388
2051–2052	20,510	828	21,338
Total	<u>\$1,953,134</u>	<u>\$1,198,158</u>	<u>\$3,151,292</u>

**Defeased Bonds**—Defeased bonds have been removed from the balance sheet because the related assets have been placed in irrevocable trusts, and together with interest earned thereon, will provide amounts sufficient for payment of all principal and interest. There were no outstanding defeased bonds as of December 31, 2020.

**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, 2020.

## 5. UTILITY PLANT

During the years ended December 31, 2020 and 2019, utility plant changed as follows (in thousands):

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

	Balance January 1, 2019	Additions	Disposals and Transfers	Balance December 31, 2019
Utility plant not depreciated:				
Land and land rights	\$ 560	\$ -	\$ -	\$ 560
Construction in progress	<u>91,925</u>	<u>124,369</u>	<u>(19,504)</u>	<u>196,790</u>
Total utility plant not depreciated	<u>92,485</u>	<u>124,369</u>	<u>(19,504)</u>	<u>197,350</u>
Utility plant being depreciated:				
Facilities and structures	3,270,584	129,784	(32,853)	3,367,515
Furniture and equipment	<u>33,473</u>	<u>984</u>	<u>(647)</u>	<u>33,810</u>
Total utility plant being depreciated	<u>3,304,057</u>	<u>130,768</u>	<u>(33,500)</u>	<u>3,401,325</u>
Less accumulated depreciation:				
Facilities and structures	(636,620)	(47,781)	1,251	(683,150)
Furniture and equipment	<u>(24,553)</u>	<u>(1,776)</u>	<u>647</u>	<u>(25,682)</u>
Total accumulated depreciation	<u>(661,173)</u>	<u>(49,557)</u>	<u>1,898</u>	<u>(708,832)</u>
Utility plant being depreciated—net	<u>2,642,884</u>	<u>81,211</u>	<u>(31,602)</u>	<u>2,692,493</u>
Utility plant—net	<u>\$ 2,735,369</u>	<u>\$ 205,580</u>	<u>\$ (51,106)</u>	<u>\$ 2,889,843</u>

## 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](http://www.meabf.org) and [www.labfchicago.org](http://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, 2020, the following City employees were covered by the benefit terms:

	<b>Municipal Employees’</b>	<b>Laborers’</b>	<b>Total</b>
Inactive employees or beneficiaries currently receiving benefits	25,471	3,646	29,117
Inactive employees entitled to but not yet receiving benefits	20,139	1,486	21,625
Active employees	<u>31,327</u>	<u>2,564</u>	<u>33,891</u>
	<u>76,937</u>	<u>7,696</u>	<u>84,633</u>

**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 2020 and 2019.

The contribution to the two pension plans from the Sewer Fund was \$17.1 million and \$15.7 million for the years ended December 31, 2020 and 2019, respectively.

**Net Pension Liability, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**—At December 31, 2020 and 2019, the Sewer Fund reported a liability of \$426.5 million and \$460.2 million, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2020 and 2019, 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 \$5.0 million for Laborers'. These changes are being amortized into expense 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 2020 and 2019. At December 31, 2020 and 2019, the Sewer Fund's proportion was 1.8% and 2.0% of the Municipal Employees' Plan and 11.3% and 12.3%, respectively, of the Laborers' Plan.

For the years ended December 31, 2020 and 2019, the Sewer Fund recognized pension expense of a negative \$23.9 million and \$3.3 million, respectively.

At December 31, 2020 and 2019, the Sewer Fund reported total deferred outflows of resources of \$8.4 million and \$5.4 million, respectively, and deferred inflows of resources of \$42.3 million and \$90.8 million, respectively, related to pensions from the following sources:

Municipal Employees' (dollars in thousands):

	2020		2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 2,316	\$ 638	\$ 1,422	\$ 1,942
Changes of assumptions	-	26,687	-	62,125
Net difference between projected and actual earnings on pension plan investments	-	1,825	-	1,027
Total	\$ 2,316	\$ 29,150	\$ 1,422	\$ 65,094

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:

**Years Ended  
December 31**

2021	\$(27,192)
2022	1,198
2023	(928)
2024	88
Total	\$(26,834)

Laborers' (dollars in thousands):

	2020		2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 487	\$ 2,124	\$ 972	\$ 1,893
Changes of assumptions	5,640	379	3,044	19,351
Net difference between projected and actual earnings on pension plan investments	-	10,690	-	4,430
Total	<u>\$6,127</u>	<u>\$13,193</u>	<u>\$4,016</u>	<u>\$25,674</u>

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**

2021	\$ (2,125)
2022	620
2023	(3,666)
2024	<u>(1,895)</u>
Total	<u>\$ (7,066)</u>

**Deferred Inflows Related to Changes in Proportionate Share of Contributions**—For the years ended December 31, 2020 and 2019, the Sewer Fund reported pension benefit of \$8.1 million \$3.2 million, respectively, related to changes in proportionate share of contributions. As of December 31, 2020 and 2019, the Sewer Fund reported deferred inflows of \$39.9 million and \$0.3 million, respectively, and deferred outflows of \$5.8 million and \$10.4 million, respectively, related to changes in its proportionate share of contributions. This deferred amount will be recognized as a pension (benefit)/charge over a period of four years.

**Actuarial Assumptions**—The total pension liability in the December 31, 2020 and 2019, 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)

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

(b) Plus a service—based increase in the first 9 years

(c) Net of investment expense

Post-retirement mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table (Blue Collar mortality table for Laborers') with generational mortality improvement scales using MP-2016 for Municipal Employees' and MP-2017 for Laborers'. Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table (Blue Collar mortality table for Laborers').

The actuarial assumptions used in the December 31, 2020 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, 2012–December 31, 2016

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, 2020 and 2019, are summarized in the following table:

2020	Target Allocation		Long-Term Expected Real Rate of Return	
	Municipal 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	<u>100.0 %</u>	<u>100.0 %</u>		



2019	Target Allocation		Long-Term Expected Real Rate of Return	
	Municipal Employees'	Laborers'	Municipal Employees'	Laborers'
Asset class:				
Domestic equity	26.0 %	- %	5.1 %	- %
U.S. equity	-	25.0	-	5.3
Non U.S. equity	-	20.0	-	5.3
Global equity	5.0	-	5.3	-
Global low volatility equity	-	5.0	-	4.4
Infrastructure	2.0	-	5.1	-
International equity	17.0	-	5.3	-
Fixed income	25.0	20.0	0.1	(0.3)
Hedge funds	10.0	10.0	3.3	2.8
Private debt	-	3.0	-	7.6
Private equity	5.0	4.0	8.6	8.8
Real estate	10.0	10.0	3.8	3.7
Private real assets	-	3.0	-	5.1
Total	<u>100.0 %</u>	<u>100.0 %</u>		

#### Discount Rate

**Municipal Employees'**—The Single discount rate used to measure the total pension liability as of December 31, 2020 and 2019, was 7.0%. 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 6.84% and 7.00% was used to measure the total pension liability as of December 31, 2020 and 2019, respectively. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.25% as of December 31, 2020 and 2019, and a municipal bond rate of 2.00% and 2.75% as of December 31, 2020 and 2019, 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 2073 (for the 2020 and 2019 valuations). As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2073, 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, 2020 and 2019, calculated using the discount rate of 7.0%, 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):

<b>Net Pension Liability December 31, 2020</b>	<b>Current</b>		
	<b>1% Decrease</b>	<b>Discount Rate</b>	<b>1% Increase</b>
Municipal Employees’ discount rate	6.00 %	7.00 %	8.00 %
Municipal Employees’ net pension liability	\$ 286,215	\$ 246,437	\$ 213,378

<b>Net Pension Liability December 31, 2019</b>	<b>Current</b>		
	<b>1% Decrease</b>	<b>Discount Rate</b>	<b>1% Increase</b>
Municipal Employees’ discount rate	6.00 %	7.00 %	8.00 %
Municipal Employees’ net pension liability	\$ 308,585	\$ 265,128	\$ 229,052

**Laborers’**—The following presents the Sewer Fund’s allocated share of the net pension liability as of December 31, 2020 and 2019, calculated using the discount rate of 6.84% and 7.00%, 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):

<b>Net Pension Liability December 31, 2020</b>	<b>Current</b>		
	<b>1% Decrease</b>	<b>Discount Rate</b>	<b>1% Increase</b>
Laborers’ discount rate	5.84 %	6.84 %	7.84 %
Laborers’ net pension liability	\$ 218,535	\$ 180,018	\$ 147,702

<b>Net Pension Liability December 31, 2019</b>	<b>Current</b>		
	<b>1% Decrease</b>	<b>Discount Rate</b>	<b>1% Increase</b>
Laborers’ discount rate	6.00 %	7.00 %	8.00 %
Laborers’ net pension liability	\$ 235,610	\$ 195,045	\$ 161,060

**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 \$30.6 million and \$56.9 million in 2020 and 2019, 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, 2020 and 2019, are as follows (in thousands):

	<b>2020</b>	<b>2019</b>
Balance—January 1	\$ 23,183	\$ 22,550
Claims incurred on current and prior-year events	21,532	13,456
Claims paid on current and prior-year events	<u>(13,958)</u>	<u>(12,823)</u>
Balance—December 31	<u>\$ 30,757</u>	<u>\$ 23,183</u>

The City purchases annuity contracts from commercial insurers to satisfy certain liabilities; accordingly, no liability is reported for those claims. Property and casualty risks for the Sewer Fund are transferred to commercial insurers. Claims have not exceeded the purchased insurance coverage in the past three years.

At December 31, 2020 and 2019, the Sewer Fund entered into contracts with outstanding commitments of approximately \$256.9 million and \$94.3 million, respectively, for construction projects.

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

	<b>2020</b>	<b>2019</b>
	<b>(In thousands)</b>	
Deferred outflows of resources:		
Deferred outflows from pension activities	\$ 8,443	\$ 5,438
Changes in proportionate share of pension contribution	5,754	10,393
Unamortized deferred bond refunding costs	<u>4,314</u>	<u>6,428</u>
 Total deferred outflows of resources	 <u>\$ 18,511</u>	 <u>\$ 22,259</u>
 Deferred inflows of resources:		
Deferred inflows from pension activities	\$ (42,344)	\$ (90,768)
Changes in proportionate share of pension contribution	<u>(39,860)</u>	<u>(324)</u>
 Total deferred inflows of resources	 <u>\$ (82,204)</u>	 <u>\$ (91,092)</u>

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 30, 2021, 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.

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**REQUIRED SUPPLEMENTARY INFORMATION**

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**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

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

<b>Municipal Employees'</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>TOTAL PENSION LIABILITY:</b>						
Service cost*	\$ 236,302	\$ 228,465	\$ 223,528	\$ 572,534	\$ 619,743	\$ 226,816
Interest	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	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	<u>(973,478)</u>	<u>(952,652)</u>	<u>(916,198)</u>	<u>(888,174)</u>	<u>(859,672)</u>	<u>(826,036)</u>
Net change in total pension liability	554,456	451,742	526,218	(7,008,875)	(67,599)	11,051,776
Total pension liability—beginning	<u>17,260,356</u>	<u>16,808,614</u>	<u>16,282,396</u>	<u>23,291,271</u>	<u>23,358,870</u>	<u>12,307,094</u>
Total pension liability—ending <sup>(a)</sup>	<u>17,814,812</u>	<u>17,260,356</u>	<u>16,808,614</u>	<u>16,282,396</u>	<u>23,291,271</u>	<u>23,358,870</u>
<b>PLAN FIDUCIARY NET POSITION:</b>						
Contributions—employer	496,992	418,269	349,574	261,764	149,718	149,225
Contributions—employee	157,798	146,645	138,400	134,765	130,391	131,428
Net investment income (loss)	335,403	560,940	(204,975)	610,515	281,419	114,025
Benefit payments including refunds of employee contribution	(973,478)	(952,652)	(916,198)	(888,174)	(859,672)	(826,036)
Administrative expenses	(7,118)	(6,740)	(6,639)	(6,473)	(7,056)	(6,701)
Other		-	-	5,394	-	-
Net change in plan fiduciary net position	9,597	166,462	(639,838)	117,791	(305,200)	(438,059)
Plan fiduciary net position—beginning	<u>4,080,642</u>	<u>3,914,180</u>	<u>4,554,018</u>	<u>4,436,227</u>	<u>4,741,427</u>	<u>5,179,486</u>
Plan fiduciary net position—ending <sup>(b)</sup>	<u>4,090,239</u>	<u>4,080,642</u>	<u>3,914,180</u>	<u>4,554,018</u>	<u>4,436,227</u>	<u>4,741,427</u>
NET PENSION LIABILITY—Ending <sup>(a) - (b)</sup>	<u>\$ 13,724,573</u>	<u>\$ 13,179,714</u>	<u>\$ 12,894,434</u>	<u>\$ 11,728,378</u>	<u>\$ 18,855,044</u>	<u>\$ 18,617,443</u>
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	<u>22.96 %</u>	<u>23.64 %</u>	<u>23.29 %</u>	<u>27.97 %</u>	<u>19.05 %</u>	<u>20.30 %</u>
ALLOCATED COVERED PAYROLL**	<u>\$ 33,432</u>	<u>\$ 36,266</u>	<u>\$ 35,136</u>	<u>\$ 34,446</u>	<u>\$ 32,293</u>	<u>\$ 32,146</u>
EMPLOYER'S NET PENSION LIABILITY AS A PERCENTAGE OF ALLOCATED COVERED-EMPLOYEE PAYROLL	<u>737.13 %</u>	<u>731.07 %</u>	<u>743.37 %</u>	<u>695.41 %</u>	<u>1,144.85 %</u>	<u>1,132.81 %</u>
ALLOCATED NET PENSION LIABILITY	<u>\$ 246,437</u>	<u>\$ 265,128</u>	<u>\$ 261,188</u>	<u>\$ 239,542</u>	<u>\$ 369,711</u>	<u>\$ 364,150</u>
ALLOCATED PERCENTAGE	<u>1.80 %</u>	<u>2.01 %</u>	<u>2.03 %</u>	<u>2.04 %</u>	<u>1.96 %</u>	<u>1.96 %</u>

\* 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.

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

(Continued)

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

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

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

\* 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.

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

(Concluded)

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

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

Municipal Employees'	Contributions in				Contributions as a percentage of
	Actuarially	Actuarially	Contribution	Covered	
Years Ended	Determined	Determined	Contribution	Covered	Covered
December 31	Contributions	Contribution	Deficiency	Payroll*	Payroll
2011	\$ 611,756	\$ 147,009	\$ 464,747	\$ 1,605,993	9.15 %
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

\* 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'	Contributions in				Contributions as a percentage of
	Actuarially	Actuarially	Contribution	Covered	
Years Ended	Determined	Determined	Contribution	Covered	Covered
December 31	Contributions*	Contribution	Deficiency	Payroll**	Payroll
2011	\$ 57,259	\$ 12,779	\$ 44,480	\$ 195,238	6.55 %
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

\* 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.

\*\* 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.

(Continued)



# CITY OF CHICAGO, ILLINOIS SEWER FUND

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS

Actuarial Methods and Assumptions	Municipal Employees'	Laborers'
Actuarial valuation date	December 31, 2020 (a)	December 31, 2020 (b)
Actuarial cost method	Entry age normal	Entry age normal
Asset valuation method	5-yr. Smoothed Market	5-yr. Smoothed Market
Actuarial assumptions:		
Inflation	2.50 %	2.25 %
Salary increases	3.50 %–7.75 % (c)	3.00 % (d)
Investment rate of return	7.0 % (e)	7.25 % (f)
Retirement age	(g)	(h)
Mortality	(i)	(j)
Other information	(k)	(l)

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

(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.

(c) (1.50%–6.50% for 2021–2023), varying by years of service.

(d) Plus a service-based increase consistent with bargaining contracts.

(e) Net of investment expense.

(f) Net of investment expense, including inflation.

(g) 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, actuarial pursuant to an experience study of the period January 1, 2012 through December 31, 2016.

(i) Post-retirement mortality rates were based on the RP-2014 Healthy Annuitant Mortality Tables, set forward two years for males and one year for females, and projected generationally using scale MP-2016. Pre-retirement mortality rates, was based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.

(j) Post Retirement Mortality: Scaling factors of 117% for males, and 102% for females of the RP-2014 Blue Collar Healthy Annuitant mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales. No adjustment is made for post-disabled mortality. Pre Retirement Mortality: Scaling factors of 109% for males, and 103% for females of the RP-2014 Blue Collar mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales.

(k) Other Assumptions: Same as those used in December 31, 2020, actuarial funding valuations.

(l) The actuarial valuation is based on the statutes in effect as of December 31, 2020.

(Concluded)

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**PART III**  
**STATISTICAL SECTION**  
**(UNAUDITED)**

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## STATISTICAL DATA (UNAUDITED)

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.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
NET POSITION BY COMPONENT  
TEN YEARS ENDED DECEMBER 31, 2011–2020 (UNAUDITED)  
(In thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NET POSITION:										
Net investment in capital assets	\$ 448,720	\$ 448,414	\$ 481,946	\$ 520,627	\$ 559,715	\$ 648,644	\$ 735,564	\$ 827,773	\$ 862,065	\$ 931,047
Restricted for capital projects	24,610	50,014	73,858	111,333	116,107	117,295	116,376	115,576	139,618	205,696
Unrestricted	<u>25,588</u>	<u>60,436</u>	<u>78,509</u>	<u>102,794</u>	<u>(299,584)</u>	<u>(353,467)</u>	<u>(364,239)</u>	<u>(358,293)</u>	<u>(324,272)</u>	<u>(363,033)</u>
TOTAL	<u>\$ 498,918</u>	<u>\$ 558,864</u>	<u>\$ 634,313</u>	<u>\$ 734,754</u>	<u>\$ 376,238</u>	<u>\$ 412,472</u>	<u>\$ 487,701</u>	<u>\$ 585,056</u>	<u>\$ 677,411</u>	<u>\$ 773,710</u>
			*			**				

\* Amounts were restated due to the implementation of GASB 65.

\*\* Amounts were restated due to the implementation of GASB 68.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
CHANGES IN NET POSITION  
TEN YEARS ENDED DECEMBER 31, 2011–2020 (UNAUDITED)  
(In thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPERATING INCOME:										
Operating revenues	\$ 203,349	\$ 253,912	\$ 279,829	\$ 322,228	\$ 375,877	\$ 368,966	\$ 357,623	\$ 369,703	\$ 351,076	\$ 333,959
Operating expenses	113,930	113,575	109,333	119,279	310,689	227,932	163,517	155,825	137,408	119,513
Depreciation and amortization	25,074	27,187	31,280	36,701	40,444	40,734	48,171	48,504	52,933	53,140
Total operating income	64,345	113,150	139,216	166,248	24,744	100,300	145,935	165,374	160,735	161,306
NONOPERATING EXPENSES—Net	<u>(51,793)</u>	<u>(55,704)</u>	<u>(66,267)</u>	<u>(65,807)</u>	<u>(149,978)</u>	<u>(80,705)</u>	<u>(77,125)</u>	<u>(70,293)</u>	<u>(68,375)</u>	<u>(68,338)</u>
INCOME (LOSS) BEFORE CAPITAL GRANTS	12,552	57,446	72,949	100,441	(125,234)	19,595	68,810	95,081	92,360	92,968
CAPITAL GRANTS	<u>1,864</u>	<u>2,500</u>	<u>2,500</u>	<u>-</u>	<u>-</u>	<u>16,639</u>	<u>6,419</u>	<u>2,274</u>	<u>(5)</u>	<u>3,331</u>
CHANGE IN NET POSITION	<u>\$ 14,416</u>	<u>\$ 59,946</u>	<u>\$ 75,449</u>	<u>\$ 100,441</u>	<u>\$ (125,234)</u>	<u>\$ 36,234</u>	<u>\$ 75,229</u>	<u>\$ 97,355</u>	<u>\$ 92,355</u>	<u>\$ 96,299</u>
			*			**				

\* Amounts were restated due to the implementation of GASB 65.

\*\* Amounts were restated due to the implementation of GASB 68.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
HISTORICAL FINANCIAL OPERATIONS  
TEN YEARS ENDED DECEMBER 31, 2011–2020 (UNAUDITED)  
(In thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPERATING REVENUES:										
Sewer sales	\$202,323	\$252,943	\$291,110	\$337,657	\$390,924	\$384,140	\$377,286	\$380,822	\$373,902	\$356,267
Less provision for bad debt	-	-	(12,461)	(16,557)	(16,154)	(16,320)	(20,813)	(12,611)	(23,849)	(22,792)
Other operating revenue	<u>1,026</u>	<u>969</u>	<u>1,180</u>	<u>1,128</u>	<u>1,107</u>	<u>1,146</u>	<u>1,150</u>	<u>1,492</u>	<u>1,023</u>	<u>484</u>
Total operating revenues	<u>203,349</u>	<u>253,912</u>	<u>279,829</u>	<u>322,228</u>	<u>375,877</u>	<u>368,966</u>	<u>357,623</u>	<u>369,703</u>	<u>351,076</u>	<u>333,959</u>
OPERATING EXPENSES:										
Repairs	38,805	35,708	38,910	40,435	42,131	36,408	41,881	43,654	41,614	47,398
Maintenance	23,655	21,819	23,004	24,374	25,322	21,941	24,660	24,909	22,958	24,405
Administrative and general	18,802	21,254	12,008	14,394	12,337	11,801	12,591	13,472	12,367	12,320
General Fund reimbursements <sup>(1)</sup>	29,124	31,709	32,144	36,740	227,600	155,624	81,919	70,126	56,954	30,614
Engineering	<u>3,544</u>	<u>3,085</u>	<u>3,267</u>	<u>3,336</u>	<u>3,299</u>	<u>2,158</u>	<u>2,466</u>	<u>3,664</u>	<u>3,515</u>	<u>4,776</u>
Total operating expenses	<u>113,930</u>	<u>113,575</u>	<u>109,333</u>	<u>119,279</u>	<u>310,689</u>	<u>227,932</u>	<u>163,517</u>	<u>155,825</u>	<u>137,408</u>	<u>119,513</u>
NONOPERATING REVENUES	<u>2,870</u>	<u>867</u>	<u>(2,754)</u>	<u>3,813</u>	<u>3,921</u>	<u>1,137</u>	<u>4,354</u>	<u>7,446</u>	<u>11,737</u>	<u>12,128</u>
NET REVENUES—As defined	<u>\$ 92,289</u>	<u>\$141,204</u>	<u>\$167,742</u>	<u>\$206,762</u>	<u>\$ 69,109</u>	<u>\$142,171</u>	<u>\$198,460</u>	<u>\$221,324</u>	<u>\$225,405</u>	<u>\$226,574</u>

Source: City of Chicago Comptroller's Office.

Note 1:

<sup>(1)</sup> Of the \$(23.9) million of pension expense for 2020, \$17.1 million is the portion of the City's pension contribution payable in 2020 to the pension funds and allocable to the Sewer Fund. The remaining portion of the pension expense for 2020 (i.e. \$(41.0) million) is recognized on the income statement of the Sewer Fund for 2020 pursuant to GASB 68. Accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
FIVE LARGEST CUSTOMERS (UNAUDITED)  
(In thousands)**

	Amount of Sales									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Department of Aviation	\$ 1,593	\$ 1,927	\$ 2,165	\$ 1,857	\$ 3,634	\$ 4,498	\$ 4,025	\$ 4,504	\$ 5,198	\$ 3,138
Humboldt Park	1,842	1,179	1,393	1,307	-	-	759	-	-	-
WR Grace and Company	-	-	-	-	-	-	-	589	-	1,314
Calumet Park	316	-	635	652	-	-	-	-	-	-
CPD—Lincoln Park	310	745	1,418	-	1,344	1,267	1,325	675	771	1,169
Cook County Sheriff	-	-	1,141	-	-	846	-	-	-	-
University of Chicago—HCC	339	1,428	-	-	-	-	-	-	-	-
Uniquema	-	-	-	680	551	-	-	-	622	590
Ford Motor Co	-	-	-	695	928	912	995	1,311	1,304	1,499
University of Illinois at Chicago	-	1,647	-	-	834	-	-	-	-	-
Hometown	-	-	-	-	-	546	551	560	567	-
	<u>\$ 4,400</u>	<u>\$ 6,926</u>	<u>\$ 6,752</u>	<u>\$ 5,191</u>	<u>\$ 7,291</u>	<u>\$ 8,069</u>	<u>\$ 7,655</u>	<u>\$ 7,639</u>	<u>\$ 8,462</u>	<u>\$ 7,710</u>

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
CUSTOMERS BY COMPONENT (UNAUDITED)  
(In thousands)**

	Amount of Sales									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential	\$ 139,598	\$ 178,399	\$ 195,542	\$ 233,830	\$ 266,878	\$ 246,997	\$ 242,899	\$ 248,622	\$ 243,311	\$ 242,255
Industrial/ commercial	50,915	57,598	74,696	82,811	95,473	109,655	99,620	98,054	93,167	84,473
Governmental	<u>12,836</u>	<u>17,915</u>	<u>22,052</u>	<u>22,318</u>	<u>29,680</u>	<u>28,634</u>	<u>35,917</u>	<u>35,638</u>	<u>38,447</u>	<u>30,023</u>
	<u>\$ 203,349</u>	<u>\$ 253,912</u>	<u>\$ 292,290</u>	<u>\$ 338,959</u>	<u>\$ 392,031</u>	<u>\$ 385,286</u>	<u>\$ 378,436</u>	<u>\$ 382,314</u>	<u>\$ 374,925</u>	<u>\$ 356,751</u>



**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
RECENT SEWER SERVICE RATES  
(Unaudited)**

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<b>Effective Date</b>	<b>Gross Water Rate per 1,000 Gallons</b>	<b>Gross Water Rate per 1,000 Cubic Feet</b>	<b>Sewer Rate Percent of Water Bill</b>	<b>Per 1000 Cubic Feet</b>
January 1, 2010	\$ 2.01	\$ 15.00	86 %	13
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

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
SEWER SYSTEM ACCOUNTS  
TEN YEARS ENDED DECEMBER 31, 2011–2020  
(Unaudited)**

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Years Ended December 31	Water Accounts				Sewer Accounts
	Non- Metered	Metered	Total	Exempt	
2011	304,519	192,304	496,823	65,903	430,920
2012	290,863	205,097	495,960	61,502	434,458
2013	273,426	220,759	494,185	62,393	431,792
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

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
REVENUE BOND COVERAGE  
TEN YEARS ENDED DECEMBER 31, 2011–2020 (UNAUDITED)  
(In thousands)**

<b>Combined Senior Lien and Second Lien Debt Service Calculation</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>REVENUES AVAILABLE FOR BONDS:</b>										
Net revenues—as defined	\$ 92,289	\$ 141,204	\$ 167,742	\$ 206,762	\$ 69,109	\$ 142,171	\$ 198,460	\$ 221,324	\$ 225,405	\$ 226,574
Pension expense other than contribution (Note 1)	-	-	-	-	183,165	100,447	24,921	6,191	(12,572)	(40,972)
Transfer to sewer rate stabilization account	-	5,000	3,000	-	-	-	1,281	-	-	-
Other available funds (Note 2)	<u>17,755</u>	<u>19,215</u>	<u>65,298</u>	<u>103,864</u>	<u>108,498</u>	<u>133,501</u>	<u>200,990</u>	<u>221,509</u>	<u>234,799</u>	<u>255,980</u>
Net revenues available for bonds	110,044	155,419	230,040	310,626	360,772	376,119	423,090	449,024	447,632	441,582
PRIOR LIEN DEBT SERVICE REQUIREMENT	-	-	-	-	-	-	-	-	-	-
NET REVENUES AVAILABLE FOR BONDS	<u>110,044</u>	<u>155,419</u>	<u>230,040</u>	<u>310,626</u>	<u>360,772</u>	<u>376,119</u>	<u>423,090</u>	<u>449,024</u>	<u>447,632</u>	<u>441,582</u>
<b>DEBT SERVICE REQUIREMENTS:</b>										
Senior lien debt service requirement	<u>15,287</u>	<u>9,231</u>	-	-	-	-	-	-	10,525	13,654
Senior lien debt service coverage (1.15 required)	<u>7</u>	<u>17</u>	-	-	-	-	-	-	<u>42.53</u>	<u>32.34</u>
<b>DEBT SERVICE REQUIREMENTS:</b>										
2000 second lien bonds	-	-	-	-	-	-	-	-	-	-
2001 second lien bonds	6,920	5,036	6,923	6,935	6,942	6,947	6,951	6,957	6,964	2,304
2001A second lien bonds	2,055	1,886	-	-	-	-	-	-	-	-
2004A and B second lien bonds	17,448	17,301	26,910	27,102	27,242	-	-	-	-	-
2006A and B second lien bonds	8,765	15,184	15,201	15,210	12,358	12,364	2,734	-	-	-
2008A second lien bonds	11,537	11,537	8,650	11,536	11,534	11,535	8,031	4,421	4,448	-
2008C second lien bonds	485	2,732	2,786	3,346	14,725	31,907	31,809	32,023	24,375	30,775
IEPA Loans	383	665	866	2,916	3,309	4,934	10,612	12,933	18,117	21,727
2010A & B second lien bonds	19,332	21,036	21,039	21,054	21,627	21,646	21,654	21,785	17,245	17,250
2012A & B second lien bonds	-	-	17,485	17,486	17,483	17,485	17,480	17,482	17,477	17,482
2014 second lien bonds	-	-	-	3,292	19,127	19,180	19,188	19,192	19,192	19,215
2015 second lien bonds	-	-	-	-	-	-	6,902	6,849	6,810	7,012
2017A & B second lien bonds	-	-	-	-	-	-	16,751	25,634	28,045	29,484
Second lien debt service requirement	<u>66,925</u>	<u>75,377</u>	<u>99,860</u>	<u>108,877</u>	<u>134,347</u>	<u>125,999</u>	<u>142,112</u>	<u>147,276</u>	<u>142,673</u>	<u>145,249</u>
COMBINED SENIOR AND SECOND LIEN DEBT SERVICE REQUIREMENTS	<u>\$ 82,212</u>	<u>\$ 84,608</u>	<u>\$ 99,860</u>	<u>\$ 108,877</u>	<u>\$ 134,347</u>	<u>\$ 125,999</u>	<u>\$ 142,112</u>	<u>\$ 147,276</u>	<u>\$ 153,198</u>	<u>\$ 158,903</u>
COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE (1.15 REQUIRED)	<u>1.34</u>	<u>1.84</u>	<u>2.30</u>	<u>2.85</u>	<u>2.69</u>	<u>2.99</u>	<u>2.98</u>	<u>3.05</u>	<u>2.92</u>	<u>2.78</u>
SEWER RATE STABILIZATION ACCOUNT YEAR-END BALANCE	<u>\$ 25,703</u>	<u>\$ 29,629</u>	<u>\$ 32,629</u>	<u>\$ 32,629</u>	<u>\$ 32,629</u>	<u>\$ 32,629</u>	<u>\$ 32,196</u>	<u>\$ 36,902</u>	<u>\$ 36,902</u>	<u>\$ 40,814</u>
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	2,695,598
Total revenue bonds and notes	<u>\$ 1,112,089</u>	<u>\$ 1,363,774</u>	<u>\$ 1,369,459</u>	<u>\$ 1,638,935</u>	<u>\$ 1,686,178</u>	<u>\$ 1,692,820</u>	<u>\$ 1,861,381</u>	<u>\$ 1,893,561</u>	<u>\$ 1,895,495</u>	<u>\$ 1,953,134</u>
Total debt per customer served	<u>\$ 413</u>	<u>\$ 506</u>	<u>\$ 508</u>	<u>\$ 608</u>	<u>\$ 626</u>	<u>\$ 628</u>	<u>\$ 691</u>	<u>\$ 702</u>	<u>\$ 703</u>	<u>\$ 725</u>

Source: City of Chicago Comptroller's Office.

Note:

- (1) Of the \$(23.9) million of pension expense for 2020, \$17.1 million is the portion of the City's pension contribution payable in 2020 to the pension funds and allocable to the Sewer Fund. The remaining portion of the pension expense for 2020 (i.e. \$(41.0) million) is recognized on the income statement of the Sewer Fund for 2020 pursuant to GASB 68 but is not due and payable by the City during 2020; accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.
- (2) 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.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
LONG-TERM DEBT  
TEN YEARS ENDED DECEMBER 31, 2011–2020 (UNAUDITED)  
(In thousands)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
First lien	\$ 57,988	\$ 43,928	\$ 35,168	\$ 35,168	\$ 35,168	\$ 35,168	\$ 35,168	\$ 35,168	\$ 35,168	\$ 31,792
Second lien	1,041,436	1,290,296	1,284,355	1,541,690	1,592,010	1,548,696	1,660,490	1,527,810	1,562,610	1,518,165
Subordinate lien—IEPA loan	<u>12,665</u>	<u>29,550</u>	<u>49,936</u>	<u>62,077</u>	<u>59,000</u>	<u>108,956</u>	<u>165,723</u>	<u>330,583</u>	<u>297,717</u>	<u>403,177</u>
Total revenue bonds and notes	<u>1,112,089</u>	<u>1,363,774</u>	<u>1,369,459</u>	<u>1,638,935</u>	<u>1,686,178</u>	<u>1,692,820</u>	<u>1,861,381</u>	<u>1,893,561</u>	<u>1,895,495</u>	<u>1,953,134</u>
Unamortized premium (discount)	16,142	37,701	34,707	61,306	83,551	77,642	113,074	104,893	97,004	89,361
Unamortized deferred loss	(32,276)	-	-	-	-	-	-	-	-	-
Accretion of Series 1998 CAB	<u>37,242</u>	<u>41,151</u>	<u>45,272</u>	<u>49,615</u>	<u>54,194</u>	<u>59,018</u>	<u>64,105</u>	<u>69,465</u>	<u>75,114</u>	<u>73,356</u>
Sub-total	<u>21,108</u>	<u>78,852</u>	<u>79,979</u>	<u>110,921</u>	<u>137,745</u>	<u>136,660</u>	<u>177,179</u>	<u>174,358</u>	<u>172,118</u>	<u>162,717</u>
Total revenue bonds payable—net of unamortized premium (discount)	<u>\$1,133,197</u>	<u>\$1,442,626</u>	<u>\$1,449,438</u>	<u>\$1,749,856</u>	<u>\$1,823,923</u>	<u>\$1,829,480</u>	<u>\$2,038,560</u>	<u>\$2,067,919</u>	<u>\$2,067,613</u>	<u>\$2,115,851</u>

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

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
CAPITAL IMPROVEMENT PROGRAM  
2021–2025 (UNAUDITED)  
(In thousands)**

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<b>Years</b>	<b>Amount</b>
2021	\$ 229,309
2022	236,664
2023	224,763
2024	228,085
2025	<u>230,438</u>
Total	<u>\$1,149,259</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.

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
FULL-TIME EQUIVALENT SEWER FUND EMPLOYEES BY FUNCTION  
TEN YEARS ENDED DECEMBER 31, 2011–2020  
(Unaudited)**

Function	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Agency management	5	4	4	4	4	4	4	5	5	4
Capital design and construction services	23	23	24	26	24	24	25	26	26	27
Inspection services	18	18	18	16	18	24	24	24	24	24
System installation	8	8	8	8	9	9	8	8	8	8
System maintenance and evaluations	521	523	523	521	521	515	426	412	412	368
Communications and coordination	<u>26</u>	<u>17</u>	<u>16</u>	<u>16</u>	<u>15</u>	<u>15</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>8</u>
	<u>601</u>	<u>593</u>	<u>593</u>	<u>591</u>	<u>591</u>	<u>591</u>	<u>500</u>	<u>488</u>	<u>488</u>	<u>439</u>

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

Source: City of Chicago's 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, Program and Budget Summary.

Note: Schedule includes only Department of Water Management employees.

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
OPERATING INDICATORS BY FUNCTION  
(Unaudited)**

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	<b>2018</b>	<b>2019</b>	<b>2020</b>
Catch basins repaired	<u>2,872</u>	<u>2,686</u>	<u>1,742</u>

**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
CAPITAL ASSET STATISTICS BY FUNCTION (UNAUDITED)  
(In miles)**

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	<b>2018</b>	<b>2019</b>	<b>2020</b>
Sewers lined	44.5	64.6	30.7
New construction	21.8	26.5	17.8



**CITY OF CHICAGO, ILLINOIS  
SEWER FUND**

**STATISTICAL DATA  
POPULATION OF SERVICE AREA  
LAST FIVE CENSUS PERIODS  
(Unaudited)**

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<b>Years</b>	<b>Population</b>
1970	3,369,357
1980	3,005,072
1990	2,783,726
2000	2,896,016
2010	2,695,598
2020	2,695,598

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

# CITY OF CHICAGO, ILLINOIS SEWER FUND

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

Employer	2020 <sup>(1)</sup>			2011 <sup>(1)</sup>		
	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
Advocate Aurora Health Care	26,335	1	2.26 %			%
Northwestern Memorial Healthcare	21,999	2	1.89			
University of Chicago	18,732	3	1.61			
Walmart Inc	16,711	4	1.43			
Amazon.Com, Inc.	16,610	5	1.43			
Amita Health	14,282	6	1.23			
JPMorgan Chase & Co (4)	13,750	7	1.18	7,993	1	0.77%
Walgreen Boots Alliance Inc.	13,377	8	1.15	4,429	7	0.43
United Continental Holdings Inc. (5)	11,059	9	0.95	6,366	2	0.62
Jewel-Osco	10,754	10	0.92	4,799	5	0.46
Northern Trust				5,485	3	0.53
Bank of America NT & SA (7)				4,557	6	0.44
Accenture LLP				5,014	4	0.48
CVS Corporation				4,159	8	0.40
ABM Janitorial Midwest, INC				3,629	9	0.35
Ford Motor Company				3,410	10	0.33

### NOTES:

<sup>(1)</sup> Source: Reprinted with permission from the February 22, 2021 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>(4)</sup> Source: United Continental Holdings Inc. formerly known as United Airlines.ent.

<sup>(5)</sup> JP Morgan & Co. formerly know as J.P. Morgan Chase.

<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.

# CITY OF CHICAGO, ILLINOIS SEWER FUND

## STATISTICAL DATA POPULATION AND INCOME STATISTICS (Unaudited)

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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
2011	2,695,598	33.2	1,048,222	1,120,402	9.3	\$45,977	\$123,935,509,246
2012	2,695,598	33.0	1,030,746	1,144,896	8.9	48,305	130,210,861,390
2013	2,695,598	33.5	1,062,029	1,153,725	8.3	49,071	132,275,689,458
2014	2,695,598	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	5.4	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	N/A (5)	N/A (5)	1,165,441	8.2	N/A (5)	N/A (5)

Notes:

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

<sup>(2)</sup> Source: U. S. Census Bureau—American Community Survey data estimates.  
Data not available for 2020

<sup>(3)</sup> Source: Bureau of Labor Statistics 2020, 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.