

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

**Annual Comprehensive Financial Report**  
**For the Year Ended December 31, 2022**



**Brandon Johnson, Mayor**  
**Jill Jaworski, Chief Financial Officer**  
**Reshma Soni, City Comptroller**  
**Andrea R.H. Cheng, Ph.D., Commissioner**

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

**Annual Comprehensive Financial Report  
For the Year Ended December 31, 2022**



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

**2022 ANNUAL COMPREHENSIVE FINANCIAL REPORT  
OF THE CHICAGO WATER FUND**

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**PART I**

**INTRODUCTORY SECTION**

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CITY OF CHICAGO

DEPARTMENT OF WATER MANAGEMENT

June 30, 2023

To the Honorable Mayor Brandon Johnson  
Members of the City Council and Residents 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 (DWM) Water Fund for the year ended December 31, 2022. Responsibility for both the accuracy of the data and completeness and fairness of the presentation, including all disclosures, rests with DWM management. The purpose of the ACFR is to provide complete and accurate information in compliance with the requirements of the Municipal Code of the City of Chicago.

The ACFR is presented in three sections: Introductory, Financial, 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 DWM Water Fund is a separate enterprise fund of the City of Chicago (City) which funds operations and maintenance of the City's water system. On January 1, 2003, the Water Department merged with the Sewer Department to form the Department of Water Management. The water system purifies and distributes water to the City's residential and commercial businesses, and suburban customers. The water system provides water intake, filtration and treatment. Water is then distributed through over 4,245 miles of mains which covers a service area of roughly 806 square miles and is inhabited by approximately 5.3 million people or 44% of the state of Illinois.

### **ECONOMIC CONDITION AND OUTLOOK**

The Water Fund's primary source of revenue is a water service charge which is set by City ordinance. The water service charge covers the costs of operations, maintenance and debt service.

As of January 1, 2023, the metered water rate is set at \$32.33 per 1,000 cubic feet or \$4.33 per 1,000 gallons. The metered rate is also applicable to the system's suburban customers. It is not expected that there will be a significant change in the population, either industrial or suburban that would lead to a significant change in revenues. Effective June 1, 2023, the rate increased to \$33.95 per 1,000 cubic feet or \$4.55 per 1,000 gallons.

## MAJOR INITIATIVES

Five-Year Capital Improvement Program - DWM's, Water Division's Five-Year Capital Improvement Program (CIP) for the years 2023 – 2027 is forecasted to be approximately \$3.3 billion. The CIP addresses the renewal and replacement of the water system's infrastructure and continues to focus on three major areas: purification plants, pumping stations, and water distribution system.

The primary capital expenditures are for the annual water main replacement program that now include lead service line replacements and meters. The department is planning to continue water main installation; however, the department is currently evaluating the mileage of water mains to be replaced in 2023 based on the changing nature of the program.

There are approximately 400,000 lead water service lines within the City of Chicago and affect many different programs within the CIP. In addition to the water main replacement program, DWM has multiple other programs to replace lead service lines. Voluntary programs include the Homeowner-Initiated Program, the Equity Program, and the Daycare Program. Required programs include the Breaks and Leaks Program.

The CIP includes work for the rehabilitation and upgrade of the two purification plants. At the Sawyer Water Purification Plant, the work will include replacement of the phosphate feed system and outdated boiler systems; filter underdrain replacement; and filter building roof replacement. At the Jardine Water Purification Plant work includes the replacement of the phosphate feed system; installation of sediment force main; HVAC improvements; and the upgrade of existing filter consoles.

The Five-year CIP also includes design and construction work on three of the department's steam powered pumping stations to convert them to electric power. During this period, construction will continue on the Central Park Pumping Station project while the Western Avenue Pumping Station and Mayfair Pumping Station projects will begin the design phase. Additionally, the 5-year CIP includes work for upgrades of pumps and motors at various existing electric powered stations.

DWM 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 most efficient operation of the water system. The Five-Year CIP is reevaluated on an ongoing basis and updated annually in coordination with the Office of Budget and Management 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 Chicago residents with a reduced rate on their water, sewer and water-sewer tax. 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 the City of Chicago to address regressive fines, fees and billing practices that have disproportionately created hardships for vulnerable residents.

## PROPRIETARY OPERATIONS

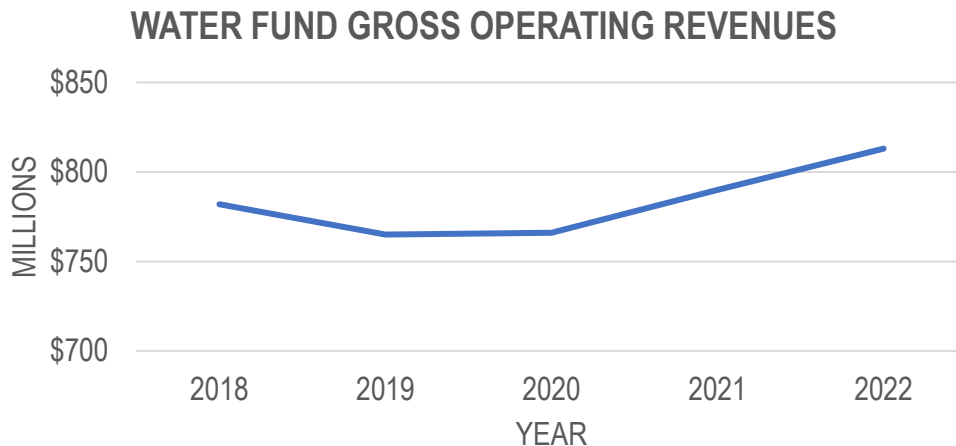
The DWM Water Fund is responsible for implementing and maintaining an internal control structure to ensure the integrity of the Water Fund's operations and to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America. The internal control structure is designed to provide reasonable, rather than absolute assurance that the assets, resources and operations of the DWM Water Fund are handled in a manner that protects against waste, theft or neglect that may hinder or impair the financial operations of the Water Fund and are free from any material misstatements. This objective is being met by adequate supervision of employees, segregation of duties and multiple approval and budgetary controls over all expenditures.

The Water 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 DWM Commissioner recommends the final proposed budget to the City's 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 DWM Water Fund will have adequate funding to meet its operational objectives. By law the Water Fund cannot exceed the level of funding as established by the City Council's approved budget. The City's Budget Director uses an allotment system to manage each department's expenditures against its respective annual appropriation. Through the allotment system, the City's Budget Director has the authority to institute economic measures for the DWM Water Fund, to ensure that its expenditures do not exceed its revenue collections. The Water Fund uses encumbrances to control expenditures by preventing appropriated dollars from being used for any purpose other than that which they have been legally appropriated.

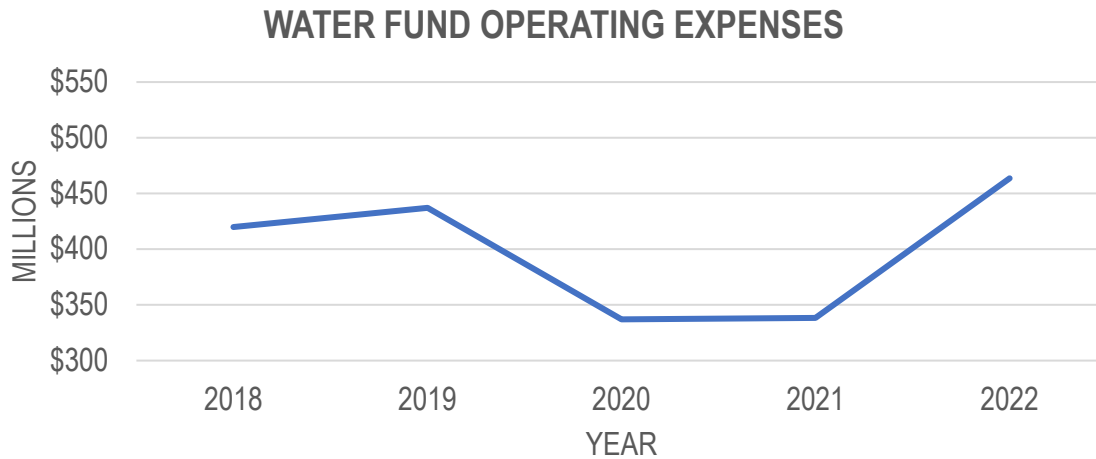
## OPERATING REVENUES

Gross operating revenue for 2022 increased by \$22.0 million (2.8%) compared to 2021 operating revenues. This increase is primarily due to increases in water fees from a water rate increase of 5% effective June 1, 2022, and a slight increase in water pumpage, and other operating revenues. Below is a graph representing gross operating revenues for the years 2018 through 2022.



## OPERATING EXPENSES

Operating expenses before depreciation and amortization for 2022 increased by \$125.3 million (37.0%) compared to 2021 mainly due to an increase in pension benefit resulting from current year net inflow and outflow, pension activities due to the changes in actuarial assumptions, and an increase in provision for doubtful accounts. During this ongoing period of inflation, the Water Fund expenses have increased. Below is a graph representing operating expenses for the years 2018 through 2022.



## DEBT ADMINISTRATION

The DWM Water Fund issues bonds to finance its capital improvements program. The City has covenanted to establish, maintain and collect at all times the fees, charges and rates sufficient to produce net revenues available for bonds, as adjusted, at least equal the greater of (A) 120 percent of the aggregate current annual debt service on the senior lien revenue bonds, or (B) the sum of the aggregate current annual debt service on the senior lien revenue bonds plus 110 percent of the aggregate current annual second lien revenue bonds debt service, and that the City management maintain all covenant reserve account balances at specified amounts. The City conducts an annual review of the water service charge to ensure revenue is being generated to comply with the covenant. The ordinances authorizing the issuances 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 Water Rate Stabilization Fund to be used for any lawful purpose of the Water Fund. The DWM Water Fund has provided certain annual financial information disclosure for its revenue bonds in the Statistical Section of this report.



## **LONG TERM FINANCIAL PLANNING**

The DWM Water Fund's capital activities are funded through Water Fund revenue bonds and Water fund revenue. The DWM Water Fund has realized savings through advance refunding as interest rates have changed.

## **INDEPENDENT AUDIT**

City ordinances require the DWM Water Fund financial statements to be audited by independent certified accountants. The audit was conducted by Deloitte & Touche, LLP and a consortium of Chicago-based 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**

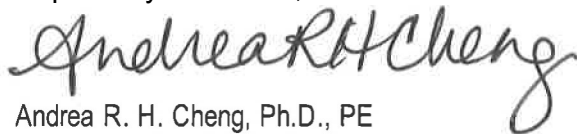
The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Water Fund, an Enterprise Fund of the City of Chicago, for its ACFR, for the fiscal year ended December 31, 2021. This was the twenty-third year that the government unit 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 must publish an easily readable and efficiently organized ACFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. I believe that our current ACFR 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 Department of Water Management and Department of Finance. I wish to express my appreciation to them, and particularly those who contributed directly to the preparation of the report.

Respectfully submitted,



Andrea R. H. Cheng, Ph.D., PE  
Commissioner



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

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

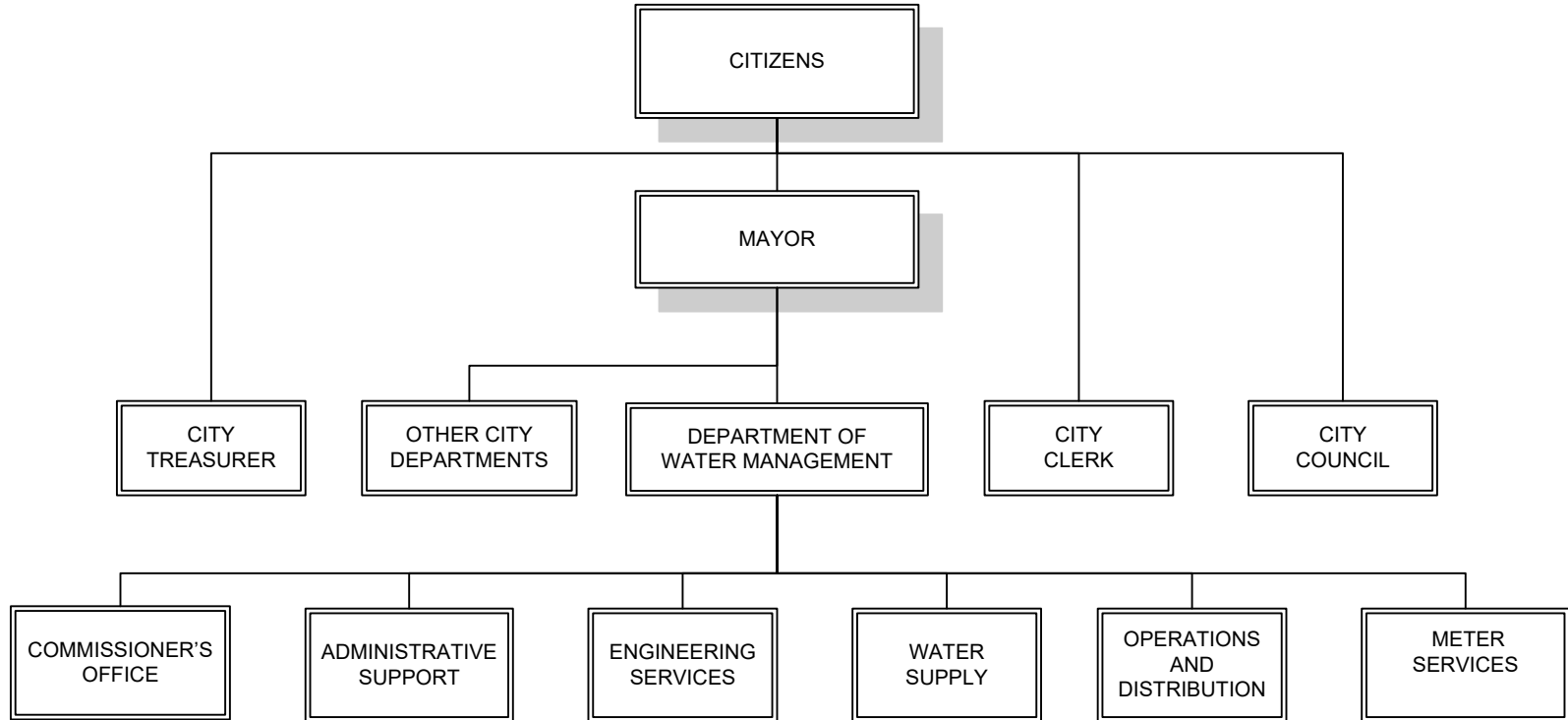
For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

December 31, 2021

*Christopher P. Morill*

Executive Director/CEO

CITY OF CHICAGO  
DEPARTMENT OF WATER MANAGEMENT  
As of 12/31/22



List of Principal Officials

Brandon Johnson      Mayor  
Andrea Cheng        Commissioner

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

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## INDEPENDENT AUDITOR'S REPORT

To the Honorable Brandon Johnson, Mayor  
and Members of the City Council  
City of Chicago, Illinois

### Report on the Audit of the Financial Statements

#### *Opinion*

We have audited the financial statements of the Water Fund ("Water Fund"), an enterprise fund of the City of Chicago, Illinois (the "City"), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Water Fund's basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Water Fund of the City of Chicago, as of December 31, 2022, and the respective changes in financial position, and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### *Basis for Opinion*

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

#### *Emphasis of Matters*

As discussed in Note 1, the basic financial statements present only the Water Fund, an enterprise fund of the City, and do not purport to, and do not, present fairly the financial position of the City as of December 31, 2022, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As discussed in Note 1, the Water Fund presented its financial statements to reflect the effects of the adoption of Governmental Accounting Standards Board Statement No. 87, *Leases*, on January 1, 2022. Our opinion is not modified with respect to this matter.

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

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

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

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

In performing an audit in accordance with GAAS, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Water Fund's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

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

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

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

### ***Supplementary Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Water Fund's basic financial statements. The additional supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records

used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

***Other Information***

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory section and statistical section but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

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

*Deloitte & Touche LLP*

June 30, 2023

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### MANAGEMENT'S DISCUSSION AND ANALYSIS

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The following discussion and analysis of the City of Chicago, Illinois (the "City"), Water Fund's ("Water Fund") financial performance provides an introduction and overview of the Water Fund's financial activities for the year ended December 31, 2022. Please read this discussion in conjunction with the Water Fund's basic financial statements and the notes to basic financial statements following this section.

#### FINANCIAL HIGHLIGHTS

- Gross operating revenues for 2022 increased by \$22.0 million compared to 2021 gross operating revenues. This increase is primarily due to increases in water fees of \$21.5 million resulting from a water rate increase of 5% effective June 1, 2022, offset by the conversion of non-metered to metered accounts which reduced billing for customers and other operating revenues of \$0.4 million.
- Operating expenses before depreciation and amortization for 2022 increased by \$107.4 million compared to 2021 mainly due to pension activities due to the changes in actuarial assumptions, and an increase central service reimbursements and purification costs due to an overall increase in prices globally, offset by a decrease in accounting and customer service accounts from prior year implementation costs of updated technology and programs.
- The Water Fund's net position at December 31, 2022, was \$2,081.9 million. This is an increase of \$80.4 million over net position at December 31, 2021.
- Utility plant additions in 2022 were \$176.3 million due to the continuing capital improvement program upgrades.
- In 2022, the Water Fund implemented GASB Statement No. 87, *Leases* ("GASB 87"). Due to this implementation the Water Fund had a right to use asset of \$97.8 million and a lease liability of \$97.0 million as of December 31, 2022. The Water Fund does not have any lessor agreements.

#### OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

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

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

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



The statement of cash flows reports how cash and cash equivalents are provided and used by the Water Fund's operating, capital financing, and investing activities. This statement presents 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 the additional supplementary and statistical data. The additional supplementary information section presents the schedule of utility plan and the statistical data section presents unaudited debt service coverage calculation and includes certain information related to the Water Fund's historical financial and nonfinancial operating results and capital activities.

## FINANCIAL ANALYSIS

At December 31, 2022, the Water Fund's financial position continued to be strong with total assets and deferred outflows of \$6,411.0 million, total liabilities and deferred inflows of \$4,329.1 million, and net position of \$2,081.9 million. A comparative condensed summary of the Water Fund's net position at December 31, 2022 and 2021, is as follows (in thousands):

	<b>Net Position</b>	
	<b>2022</b>	<b>2021</b>
Current assets	\$ 1,032,089	\$ 905,470
Restricted and other assets—noncurrent	99,862	2,268
Utility plant—net	<u>5,202,711</u>	<u>5,128,500</u>
Total assets	6,334,662	6,036,238
Deferred outflows	<u>76,385</u>	<u>44,315</u>
Total assets and deferred outflows	<u>\$ 6,411,047</u>	<u>\$ 6,080,553</u>
Current liabilities	\$ 673,554	\$ 444,355
Long-term liabilities	<u>3,560,118</u>	<u>3,518,421</u>
Total liabilities	4,233,672	3,962,776
Deferred inflows	<u>95,429</u>	<u>116,259</u>
Total liabilities and deferred inflows	<u>\$ 4,329,101</u>	<u>\$ 4,079,035</u>
Net position:		
Net investment in capital assets	\$ 2,849,430	\$ 2,746,413
Restricted for capital projects	22	3
Unrestricted	<u>(767,506)</u>	<u>(744,898)</u>
Total net position	<u>\$ 2,081,946</u>	<u>\$ 2,001,518</u>

Current assets of \$1,032.1 million at December 31, 2022, increased by \$126.6 million (14.0%) over 2021 due to increases in unrestricted investments of \$63.7 million (13.7%), resulting from the transfer of cash to unrestricted investments to obtain higher long term investment earnings, net accounts receivable of \$22.7 million (11.5%), and due from other city funds of \$15.8 million (30.7%).

The increase in current liabilities of \$229.2 million (51.6%) during 2022 is due to increases in due to other City funds of \$208.9 million (404.8%) related to timing differences in cash used for payments, current portion of long-term debt of \$6.3 million (5.7%) due to the planned increases in debt service payments related to the capital program, and the addition of the current portion of the lease liability of \$23.8 million.

Deferred outflows increased by \$32.1 million (72.4%) and deferred inflows decreased by \$20.8 million (17.9%) during 2022 due to the change in pension actuarial assumptions.

At December 31, 2022, net position was \$2,081.9 million, an increase of \$80.4 million (4.0%) over 2021.

The primary sources of the Water Fund’s operating revenues are water usage charges. These revenues fund all Water Fund operating expenses, fund deposits, capital construction, and debt service requirements. A comparative condensed summary of the Water Fund’s revenues, expenses, and changes in net position for the years ended December 31, 2022 and 2021 is as follows (in thousands):

	<b>Revenues, Expenses, and Changes in Net Position</b>	
	<b>2022</b>	<b>2021</b>
Operating revenues:		
Water sales—net	\$ 752,235	\$ 748,590
Other operating revenues	<u>27,579</u>	<u>27,135</u>
Total operating revenues	<u>779,814</u>	<u>775,725</u>
Operating expenses	430,484	323,105
Depreciation and amortization	<u>110,978</u>	<u>86,877</u>
Total operating expenses	<u>541,462</u>	<u>409,982</u>
Net operating income	<u>238,352</u>	<u>365,743</u>
Nonoperating revenues (loss)	(64,537)	3,771
Nonoperating expenses	<u>(90,967)</u>	<u>(93,990)</u>
Net non operating revenue (loss)	(155,504)	(90,219)
Transfers out	<u>(2,420)</u>	<u>(2,420)</u>
Change in net position	80,428	273,104
Net position—beginning of year	<u>2,001,518</u>	<u>1,728,414</u>
Net position—end of year	<u>\$ 2,081,946</u>	<u>\$ 2,001,518</u>

Water sales—net and other operating revenues comprise the Water Fund’s \$779.8 million operating revenues. The increase in 2022 total operating revenues of \$4.1 million (0.5%) from 2021 was primarily due to an increase in water sales—net of \$3.6 million (0.5%) resulting from a 5% increase in water rate effective June 1, 2022, offset by the increase in provision for doubtful accounts of about \$17.9 million (117.5%). This increase was due to greater number of receivables were more than one year aged; the Water Fund estimates that 100% of outstanding receivables over 365 days old are uncollectible.

In 2022, net non-operating loss of \$155.5 million was composed of net interest income/loss, interest expense, online convenience fees for water fees payments and net revenue that relates to constructions done by Department of Water Management for other City departments and private companies. The increase in net non-operating loss of \$65.3 million is mainly due to investment losses due to the impacts of the global market volatility.

A comparative summary of the Water Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2022 and 2021, is as follows (in thousands):

	<b>Operating Expenses</b>	
	<b>2022</b>	<b>2021</b>
Source of supply	\$ 213	\$ 102
Power and pumping	45,319	45,167
Purification	73,519	62,334
Transmission and distribution	61,766	74,791
Customer accounting and collection	22,886	26,521
Administrative and general	14,197	14,933
Central services and general fund reimbursements	145,162	133,128
Pension expense	<u>67,422</u>	<u>(33,871)</u>
Operating expenses before depreciation and amortization	430,484	323,105
Depreciation and amortization	<u>110,978</u>	<u>86,877</u>
Total operating expenses	<u>\$ 541,462</u>	<u>\$ 409,982</u>

Operating expenses before depreciation and amortization for the year ended 2022 increased by \$107.4 million from the year ended 2021 primarily due to increases in combined pension expenses of \$101.3 million due to changes in pension assumptions and investment losses due to the global market volatility and purification of \$11.2 million, central services and general fund reimbursement of \$12.0 million all due to the global market impact on commodity and labor costs. Depreciation and amortization increased by \$24.1 million due to the impact of the implementation of GASB 87, which reclassified lessee activity.

A comparative summary of the Water Fund's cash flows for the years ended December 31, 2022 and 2021, is as follows (in thousands of dollars):

	<b>Cash Flows</b>	
	<b>2022</b>	<b>2021</b>
Cash from activities:		
Operating	\$ 539,568	\$ 394,110
Capital and related financing	(387,591)	(367,406)
Investing	<u>(120,414)</u>	<u>(56,280)</u>
Net change in cash and cash equivalents	31,563	(29,576)
Cash and cash equivalents:		
Beginning of year	<u>65,222</u>	<u>94,798</u>
End of year	<u>\$ 96,785</u>	<u>\$ 65,222</u>

As of December 31, 2022, the Water Fund's cash and cash equivalents of \$96.8 million increased by \$31.6 million from December 31, 2021, mainly due to the timing difference in payments to vendors; offset by cash outflows of \$120.4 million from investing activities and \$387.6 million from capital and related financing activities mainly used in acquisition and construction of capital assets. Cash of \$17.0 million was

provided by issuance of Illinois Environmental Protection Agency (IEPA) loans during 2022. Total cash and cash equivalents at December 31, 2022, are composed of unrestricted and restricted cash and cash equivalents of \$14.6 million and \$82.2 million, respectively.

#### UTILITY PLANT AND DEBT ADMINISTRATION

At the end of 2022 and 2021, the Water Fund had \$5,202.7 million and \$5,128.5 million, respectively, invested in utility plant, net of accumulated depreciation. During 2022, the Water Fund expended \$176.3 million on capital activities. This included \$0.3 million for structures and improvements, \$96.9 million for distribution plant, \$6.2 million for equipment, and \$72.9 million for construction in progress.

During 2022, net completed projects totaling \$71.1 million were transferred from construction in progress to applicable capital accounts. The major completed project was installation and replacements of water mains (\$57.8 million) and meter save projects (\$8.5 million).

The Water Fund's utility plant at December 31, 2022 and 2021, is summarized as follows (in thousands):

	<b>Net Utility Plant at Year-End</b>	
	<b>2022</b>	<b>2021</b>
Utility plant not depreciated:		
Land and land rights	\$ 16,483	\$ 16,483
Construction in progress	<u>450,246</u>	<u>451,161</u>
Total utility plant not depreciated	<u>466,729</u>	<u>467,644</u>
Utility plant being depreciated:		
Structures and improvements	610,422	609,850
Distribution plant	4,793,914	4,645,293
Equipment	<u>869,567</u>	<u>860,777</u>
Total utility plant being depreciated	6,273,903	6,115,920
Less accumulated depreciation:		
Structures and improvements	(272,461)	(263,848)
Distribution plant	(767,052)	(712,242)
Equipment	<u>(498,408)</u>	<u>(478,974)</u>
Total accumulated depreciation	<u>(1,537,921)</u>	<u>(1,455,064)</u>
Total utility plant being depreciated—net	<u>4,735,982</u>	<u>4,660,856</u>
Total utility plant—net	<u>\$ 5,202,711</u>	<u>\$ 5,128,500</u>

The Water Fund's capital activities are funded through Water Fund revenue bonds, Illinois Environmental Protection Agency (IEPA) loans and Water Fund revenue. Additional information on the Water Fund's capital assets is presented in Note 5 of the notes to basic financial statements.

The Water Fund's long-term liabilities at December 31, 2022 and 2021, are summarized as follows (in thousands):

	<b>Long-Term Liabilities at Year-End</b>	
	<b>2022</b>	<b>2021</b>
Revenue bonds and notes payable	\$ 2,286,957	\$ 2,341,421
Add:		
Bond discount/premium	<u>116,304</u>	<u>132,072</u>
Total revenue bonds/notes payable—net	2,403,261	2,473,493
Less current bonds/notes payable	<u>(116,655)</u>	<u>(110,324)</u>
Total long-term revenue bonds/notes payable—net	2,286,606	2,363,169
Water pipe extension certificates	<u>1,577</u>	<u>1,577</u>
Total long-term liabilities	<u>\$ 2,288,183</u>	<u>\$ 2,364,746</u>

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

The Water Fund's revenue bonds at December 31, 2022, have underlying credit ratings with each of the four major rating agencies as follows:

	<b>Moody's</b>	<b>Standard &amp; Poor's</b>	<b>Fitch Ratings</b>	<b>Kroll</b>
Second Lien Water Revenue Bonds	Baa1	A	A	AA

In November 2022, Moody's upgraded the Second Lien Water Revenue Bonds to Baa1 from Baa2.

At December 31, 2022, the Water Fund was in compliance with the debt covenants as stated within the bond ordinances. Additional information on certain of the Water Fund's debt covenants is presented in Note 4 of the notes to the basic financial statements.

### **Requests for Information**

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

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## **BASIC FINANCIAL STATEMENTS**

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**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENT OF NET POSITION  
AS OF DECEMBER 31, 2022  
(In thousands)**

**ASSETS**

CURRENT ASSETS:

Cash and cash equivalents (Note 2)	\$ 14,587
Investments (Note 2)	527,213
Accounts receivable—net of allowance for doubtful accounts of approximately \$243,200 in 2022	220,606
Interest receivable	4,563
Due from other City funds	67,226
Inventories	25,142
Cash and cash equivalents—restricted	82,198
Investments—restricted	90,532
Interest receivable—restricted	<u>22</u>
 Total current assets	 <u>1,032,089</u>

NONCURRENT ASSETS:

Right to use asset (Note 10)	97,768
Other assets	2,094
Utility plant (Note 5):	
Land and land rights	16,483
Structures and improvements	610,422
Distribution plant	4,793,914
Equipment	869,567
Construction in progress	<u>450,246</u>
 Total utility plant	 6,740,632
 Less accumulated depreciation	 <u>(1,537,921)</u>
 Utility plant—net	 <u>5,202,711</u>
 Total noncurrent assets	 5,302,573
 <b>DEFERRED OUTFLOWS (Note 9)</b>	 <u>76,385</u>

TOTAL ASSETS AND DEFERRED OUTFLOWS \$ 6,411,047

See notes to basic financial statements.

**LIABILITIES**

CURRENT LIABILITIES:

Accounts payable	\$ 27,428
Due to other City funds	260,519
Accrued liabilities	189,086
Lease liability - current	23,769
Liabilities payable from restricted assets:	
Accounts payable	38,385
Interest payable	17,712
Current portion of long-term debt (Note 4)	<u>116,655</u>
 Total current liabilities	 <u>673,554</u>

NONCURRENT LIABILITIES:

Long-term debt—net of current maturities (Note 4)	2,286,606
Net pension liability (Note 6)	1,198,672
Lease liability (Note 10)	73,263
Water pipe extension certificates	<u>1,577</u>
 Total noncurrent liabilities	 <u>3,560,118</u>
 Total liabilities	 <u>4,233,672</u>

**DEFERRED INFLOWS (Note 9)**

95,429

NET POSITION (Note 1):

Net investment in capital assets	2,849,430
Restricted for capital projects	<u>22</u>
 Unrestricted	 <u>(767,506)</u>
 Total net position	 <u>2,081,946</u>

TOTAL LIABILITIES, DEFERRED INFLOWS, AND NET POSITION \$6,411,047



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2022  
(In thousands)**

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OPERATING REVENUES:	
Water sales:	
Water sales	\$ 785,327
Less provision for doubtful accounts	<u>(33,092)</u>
Water sales—net	752,235
Other operating revenues	<u>27,579</u>
Total operating revenues	<u>779,814</u>
OPERATING EXPENSES:	
Source of supply	213
Power and pumping	45,319
Purification	73,519
Transmission and distribution	61,766
Customer accounting and collection	22,886
Administrative and general	14,197
Central services and general fund reimbursements	145,162
Pension expense (Note 6)	<u>67,422</u>
Total operating expenses before depreciation and amortization	<u>430,484</u>
OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION	349,330
DEPRECIATION AND AMORTIZATION	<u>110,978</u>
OPERATING INCOME	<u>238,352</u>
NONOPERATING REVENUES (EXPENSES):	
Interest income (loss)	(66,924)
Interest expense	(90,967)
Other	<u>2,387</u>
Total nonoperating expenses—net	<u>(155,504)</u>
TRANSFERS OUT	<u>(2,420)</u>
CHANGE IN NET POSITION	80,428
TOTAL NET POSITION—Beginning of year	<u>2,001,518</u>
TOTAL NET POSITION—End of year	<u>\$ 2,081,946</u>

See notes to basic financial statements.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENT OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2022  
(In thousands)**

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CASH FLOWS FROM OPERATING ACTIVITIES:	
Received from customers	\$ 757,128
Transactions with other City funds	20,753
Payments to vendors	(77,049)
Payments to employees	<u>(161,264)</u>
Net cash provided by operating activities	<u>539,568</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:	
Acquisition and construction of capital assets	(164,007)
Interest paid	(107,580)
Proceeds from issuance of bonds and IEPA loans	17,036
Principal paid on leases	(25,101)
Principal paid on bonds	(110,326)
Construction reimbursements	<u>2,387</u>
Net cash used in capital and related financing activities	<u>(387,591)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:	
Sales and purchases of investments—net	(134,781)
Investment interest	<u>14,367</u>
Net cash (Used in) provided by investing activities	<u>(120,414)</u>
NET CHANGE IN CASH AND CASH EQUIVALENTS	31,563
CASH AND CASH EQUIVALENTS—Beginning of year	<u>65,222</u>
CASH AND CASH EQUIVALENTS—End of year	<u>\$ 96,785</u>
RECONCILIATION OF CASH AND CASH EQUIVALENTS REPORTED IN THE STATEMENTS OF NET POSITION:	
Unrestricted	\$ 14,587
Restricted	<u>82,198</u>
TOTAL	<u>\$ 96,785</u>

(Continued)

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2022 (In thousands)

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#### RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:

Operating income	\$ 238,352
Adjustments to reconcile:	
Depreciation and amortization	86,612
Amortization of right-of-use asset	24,366
Provision for doubtful accounts	33,092
Changes in assets, deferred outflows, liabilities, and deferred inflows:	
Accounts receivable	(55,778)
Inventories	(3,086)
Due from other City funds	(18,214)
Unrestricted accounts payable	(2,240)
Due to other City funds	208,915
Accrued liabilities	35,452
Deferred inflows	<u>(7,903)</u>

NET CASH PROVIDED BY OPERATING ACTIVITIES \$ 539,568

#### SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS:

Property additions in 2022 of \$38,385 are in accounts payable.

The fair value adjustment (loss)/gain to investments for 2022 was (\$84.1 million).

See notes to basic financial statements.

(Concluded)

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2022

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#### 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

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

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

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

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

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

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

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

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

Investments 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, 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 Water Fund values its investments at fair value or amortized cost as applicable. U.S. government securities purchased at a price other than par with a maturity of less than one year are reported at amortized cost.

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

Investments generally may not have a maturity in excess of 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 certificates of deposit and other investments with maturities of three months or less when purchased.

**Accounts Receivable**—The Water Fund’s accounts receivable is comprised of billings and collections for water 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 Water Fund and consist mainly of employee benefits, self-insured risks, and administrative expenses.

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

**Utility Plant**—Utility plant is recorded at cost or, for donated assets at acquisition value. Utility plant is defined by the Water 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. Depreciation is provided using the straight-line method and begins in the year following the year of acquisition or completion. Estimated useful lives are as follows:

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

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

**Deferred Outflows**—Deferred outflows represent unamortized loss on bond refunding, the differences between estimated and actual investment earnings related to pensions, and changes in actuarial assumptions related to pensions.

**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 consist of assets for which constraints are placed thereon by external parties (such as lenders and grantors) and laws, regulations, and enabling legislation reduced by liabilities and deferred inflows of resources related to those assets. Unrestricted consists of the net amount of all other assets, deferred outflows, liabilities, and deferred inflows not categorized as either of the above.

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

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

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

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

**Capitalized Interest**—Interest expense on construction bond proceeds was expensed as incurred.

**Revenue Recognition**—Revenue from water sales is recognized when the water is consumed by customers. Of the accounts receivable balances, \$77.3 million represent revenue recognized on water sales, which had not yet been billed to customers as of December 31, 2022.

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

Operating expenses include the cost of sales and services, 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.

**Leases**—The Water Fund follows GASB Statement No. 87, *Leases*, which defines the leasing arrangement as the right to use an underlying asset as a lessor or lessee.

As lessee, the Water Fund recognizes a lease liability and an intangible right of use lease asset at the beginning of a lease unless the lease is considered a short-term lease or transfers ownership of the underlying asset. As there is no implicit rate per the lease agreements, the right of use lease asset is measured based on the net present value of the future lease payments at inception using the incremental borrowing rate. Remeasurement of a lease liability occurs when there is a change in the lease term and/or other changes that are likely to have a significant impact on the lease liability. The Water Fund calculates the amortization of the discount on the lease liability and reports that amount as outflows of resources. Payments are allocated first to accrued interest liability and then to the lease liability.

**Adopted Accounting Standards**

GASB Statement	Impact
GASB Statement No. 87, <i>Leases</i> (“GASB 87”)	This statement will better meet the information needs of financial statement users by improving accounting and financial reporting for leases. The statement introduces a single lease model that defines a lease as a contract that conveys control of the right to use another entity’s nonfinancial asset (the underlying asset) as specified in the contract for a period of time in an exchange or exchange-like transaction. A lessor recognizes a lease receivable and a deferred inflow of resources, and a lessee recognizes a lease payable and an intangible right-to-use lease asset. The Water Fund adopted GASB 87 as of January 1, 2022, which resulted in right-of-use assets and lease liability of \$122.1 million. The adoption of GASB 87 had no impact on the beginning net position.
GASB Statement No. 91, <i>Conduit Debt Obligations</i> (“GASB 91”)	Establishes a single method of reporting conduit debt obligations by issuers and clarifies associated accounting requirements. The Water Fund adopted GASB 91 as of and for the year ended December 31, 2022. There was no material impact to the basic financial statements upon adoption.
GASB Statement No. 93, <i>Replacement of Interbank Offered Rates</i> (“GASB 93”)—Remaining provisions	Addresses accounting and financial reporting implications that result from the replacement of an interbank offered rate (IBOR). The Water Fund adopted GASB 93 as of and for the year ended December 31, 2022. There was no material impact to the basic financial statements upon adoption.
GASB Statement No. 97, <i>Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans</i>	Requires that a Section 457 plan be classified as either a pension plan or another employee benefit plan depending on whether the plan meets the definition of a pension plan. The Water Fund adopted the remaining provisions of GASB 97 as of and for the year ended December 31, 2022. There was no material impact to the basic financial statements upon adoption.

GASB Statement	Impact
("GASB 97")—Remaining provisions	

**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 Water 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. 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
GASB Statement No. 99, Omnibus 2022 ("GASB 99")—Remaining provisions.	2023 & 2024
GASB Statement No. 100, <i>Accounting Change and Error Corrections—An Amendment of GASB Statement No. 62</i> ("GASB 100")	2024
GASB Statement No. 101, <i>Compensated Absences</i> ("GASB 101")	2024

## 2. RESTRICTED AND UNRESTRICTED CASH EQUIVALENTS AND INVESTMENTS

**Cash Equivalents and Investments**—The Water Fund’s cash equivalents and investments as of December 31, 2022, are as follows (in thousands):

	Maturities (In Years)				Fair Value
	Less Than 1	1–5	6–10	More Than 10	
Agency bonds	\$ -	\$ 13,765	\$ -	\$ -	\$ 13,765
Commercial paper	73,895	-	-	-	73,895
Money market funds	80,074	-	-	-	80,074
Corporate bonds	12,202	114,229	244,448	27,632	398,511
Municipal bonds	6,985	38,648	42,206	39,909	127,748
Corporate ABS	-	5,733	-	-	5,733
Agency MBS	-	-	-	14,789	14,789
Total	<u>\$ 173,156</u>	<u>\$ 172,375</u>	<u>\$ 286,654</u>	<u>\$ 82,330</u>	<u>\$ 714,515</u>

**Investment Fair Value Measurements**—The City 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, 2022, were (in thousands):

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Agency bonds	\$ -	\$ 13,765	\$ -
Agency MBS	-	14,789	-
Corporate bonds	-	389,471	-
Municipal bonds	-	120,763	-
Corporate ABS	-	5,733	-
	<u>\$ -</u>	<u>\$ 544,521</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.

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

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 the Water Fund are \$170.0 million as of December 31, 2022.

**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 of Chicago;
- 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 or demand deposits in banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance; provided that any amount of the deposit in excess of the federal deposit insurance shall be collateralized as noted in Custodial Credit Risk—Cash and Certificates of Deposit below;
- 7) Bankers acceptance of banks whose senior obligations, at the time of purchase, are rated in either the AAA or AA rating categories by at least two accredited ratings agencies;
- 8) Tax-exempt securities exempt from federal arbitrage provisions applicable to investments of proceeds of the City's tax-exempt debt obligations;
- 9) Domestic money market mutual funds regulated by and in good standing with the Securities and Exchange Commission; provided that such money market mutual funds' portfolios are limited to investments authorized by this section;
- 10) Any other suitable investment instrument permitted by state laws governing municipal investments generally, subject to the reasonable exercise of prudence in making investments of public funds;
- 11) Except where otherwise restricted or prohibited, a non-interest-bearing savings account, non-interest-bearing checking account or other non-interest-bearing demand account established in a national or state bank, or a federal or state savings and loan association, when, in the determination of the treasurer, the placement of such funds in the non-interest bearing account is used as compensating balances to offset fees associated with that account that will result in cost savings to the City;
- 12) Bonds of companies organized in the United States with assets exceeding \$500.0 million that, at the time of purchase, are rated investment grade by at least two accredited ratings agencies;
- 13) Debt instruments of international financial institutions, including but not limited to the World Bank and the International Monetary Fund, that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating, or equivalent rating. For purposes of this subsection, an "international financial institution" means a financial institution that has been established or chartered by more than one country and the owners or shareholders are generally national governments or other international institutions such as the United Nations;
- 14) United States dollar denominated debt instruments of foreign sovereignties that, at the time of purchase, are rated within four 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.

Total holdings across all funds held by the Water Fund shall have no less than an overall average rating of Aa on a quarterly basis, as rated by two accredited rating agencies. A schedule summarizing the Water Fund’s exposure to credit risk as of December 31, 2022, is as follows (in thousands):

**Quality Rating**

A/A	\$ 50,150
P1/A1	63,988
P2/A2	9,907
Aa/AA	82,356
Aaa/AAA*	210,556
Baa/BBB	<u>297,558</u>
 Total	 <u>\$ 714,515</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 to protect the City public fund deposits, depository institutions are to maintain collateral pledges on City deposits and certificates of deposit during the term of the deposit.

For certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance, or demand deposits in bank 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 either: (1) fully collateralized at least 100% by: (i) marketable U.S. government securities marked to market at least monthly; (ii) bonds, notes, or other securities constituting the direct and general obligation of any agency or instrumentality of the United States; or (iii) bonds, notes or other securities constituting a direct and general obligation of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois or of any other state, or of any political subdivision or agency of the State of Illinois or any other state which are rated in either the AAA or AA rating categories by at least two accredited ratings agencies and maintaining such rating during the term of such investments; (2) secured by a corporate surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the top rating category as rated by a nationally recognized statistical rating organization and maintaining such rating during the term of such investment; or (3) fully collateralized at least 100% by an irrevocable letter of credit issued in favor of the City of Chicago by the Federal Home Loan Bank, provided that the Federal Home Loan Bank’s 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 or deposit.

The collateral required to secure City funds must be held in safekeeping and pursuant to collateral agreements which would prohibit release or substitution of pledged assets without proper written

notification and authorization of the City Treasurer. The final maturity of acceptable collateral pledged shall not exceed 120 months.

The bank balance of cash and certificates of deposit with the City’s various municipal depositories was \$307.6 million. 100% of the bank balance was either insured or collateralized with securities held by City agents in the City’s name. There was no uncollateralized balance at December 31, 2022.

Investments reported in the basic financial statements as of December 31, 2022, are summarized as follows (in thousands):

Per Note 2:	
Investments—Water Fund	<u>\$ 714,515</u>
Per financial statements:	
Restricted investments—current	\$ 90,532
Unrestricted investments	527,213
Investments included as cash and cash equivalents on the statement of net position	<u>96,770</u>
	<u>\$ 714,515</u>

### 3. RESTRICTED ASSETS AND ACCOUNTS

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

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

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

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

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

Water Revenue Bonds, Series 2000, 2008, 2010A, 2010B, 2010C, 2012, 2014, 2016A-1, and Refunding Bonds, Series 2004 and 2001, 2017, 2017-2 (“Second Lien Revenue Bonds”):

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

**Second Lien Bonds Account**—On the date of issuance of any series of Second Lien Revenue Bonds that bear interest at a variable rate paying interest more than semiannually, an amount equal to the interest

payable during a six-month period will be transferred to a restricted account. The amount transferred will be calculated based on the maximum rate payable on such bonds.

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

For accounts established by ordinances with balances, the amounts at December 31, 2022, are as follows (in thousands):

Second Lien Revenue Bonds	\$ 48,524
Water rate stabilization	85,821
Construction	<u>38,385</u>
Total	<u>\$ 172,730</u>

The 2022 Water rate stabilization balance above includes a fair value adjustment of (\$5.4) million.

At December 31, 2022, management is not aware of any instances of noncompliance with the funding requirements and restrictions on assets as stated in the ordinances.

#### 4. LONG-TERM DEBT

Long-term debt as of December 31, 2022 consisted of the following (in thousands):

\$100,000 Series 2000 Second Lien Water Revenue Bonds, issued December 22, 1999, due 2030, converted to fixed rate on May 23, 2016; interest rate; interest at 5.0%	\$ 100,000
\$81,500 Series 2001 Second Lien Water Revenue Refunding Bonds, issued December 13, 2001, due 2030; interest at 3.0% to 5.75%	78,135
\$2,643 Illinois Environmental Protection Agency Loan Agreement, signed June 30, 2003, due 2025; interest at 2.57%	503
\$344,575 Series 2004 Second Lien Water Revenue Refunding Bonds, issued August 5, 2004, due through 2027, converted to fixed rate on May 23, 2016, interest at 2.0% to 5.0%	174,955
\$549,915 Series 2008 Second Lien Water Revenue Bonds, issued April 16, 2008, due through 2038; interest at 4.0% to 5.25%	51,195
\$313,580 Series 2010A-C Second Lien Water Revenue Bonds, issued November 10, 2010, due through 2040; interest at 2.0% to 6.742%	284,750
\$6,000 Illinois Environmental Protection Agency Loan Agreement, signed January 21, 2011, due 2031; interest at 1.25%	2,886
\$9,077 Illinois Environmental Protection Agency Loan Agreement, signed February 2, 2010, due 2031; noninterest bearing	4,103
\$399,445 Series 2012 Second Lien Water Revenue Bonds, issued May 17, 2012, due through 2042; interest at 4.0% to 5.0%	337,670

(Continued)

\$1,528 Illinois Environmental Protection Agency Loan Agreement, signed July 8, 2010, due 2032; interest at 1.25%	\$ 820
\$1,502 Illinois Environmental Protection Agency Loan Agreement, signed September 15, 2013, due 2032; interest at 1.25%	816
\$6,092 Illinois Environmental Protection Agency Loan Agreement, signed October 25, 2013, due 2032; interest at 1.25%	3,308
\$6,542 Illinois Environmental Protection Agency Loan Agreement, signed May 27, 2014, due 2034; interest at 2.295%	4,121
\$39,422 Illinois Environmental Protection Agency Loan Agreement, signed August 5, 2013, due 2034; interest at 1.93%	25,510
\$15,000 Illinois Environmental Protection Agency Loan Agreement, signed September 19, 2013, due 2034; interest at 1.93%	9,737
\$47,000 Illinois Environmental Protection Agency Loan Agreement, signed March 3, 2014, due 2035; interest at 1.995%	31,591
\$15,058 Illinois Environmental Protection Agency Loan Agreement, signed October 15, 2014, due 2035; interest at 1.995%	10,310
\$367,925 Series 2014 Second Lien Water Revenue Bonds, issued September 17, 2014, due 2044; interest at 3.0% to 5.0%	314,590
\$59,595 Series 2016A-1 Tax-Exempt Second Lien Water Revenue Bonds, issued May 23, 2016, due 2031; interest at 4.0% to 5.0%	59,595
\$62,179 Illinois Environmental Protection Agency Loan Agreement, signed May 18, 2016, due 2036; interest at 2.21%	45,951
\$44,668 Illinois Environmental Protection Agency Loan Agreement, signed May 27, 2014, due 2037; interest at 1.995%	35,247
\$19,584 Illinois Environmental Protection Agency Loan Agreement, signed November 17, 2015, due 2036; interest at 1.86%	14,464
\$199,355 Series 2017 Refunding Bonds, issued June 22, 2017, due 2036; interest at 5.0% to 5.25%	167,265
\$235,260 Series 2017-2 Refunding Bonds, issued December 21, 2017, due 2038; interest at 5.0%	191,565
\$81,147 Illinois Environmental Protection Agency Loan Agreement, signed June 3, 2016 due 2037; interest at 1.86%	64,933
\$40,782 Illinois Environmental Protection Agency Loan Agreement, signed July 21, 2016 due 2038; interest at 1.86%	32,875

(Continued)

\$22,491 Illinois Environmental Protection Agency Loan Agreement, signed December 13, 2016 due 2037; interest at 1.64%	\$ 17,969
\$28,761 Illinois Environmental Protection Agency Loan Agreement, signed August 18, 2016 due 2039; interest at 1.86%	24,333
\$5,460 Illinois Environmental Protection Agency Loan Agreement, signed May 11, 2017 due 2039; interest at 1.64%	4,753
\$106,077 Illinois Environmental Protection Agency Loan Agreement, signed April 13, 2018 due 2039; interest at 1.76%	91,624
\$11,420 Illinois Environmental Protection Agency Loan Agreement, signed June 21, 2018 due 2039; interest at 1.76%	9,951
\$37,139 Illinois Environmental Protection Agency Loan Agreement, signed July 26, 2017 due 2041; interest at 1.64%	35,571
\$55,861 Illinois Environmental Protection Agency Loan Agreement, signed July 2, 2018 due 2042; interest at 1.76%	<u>55,861</u>
	2,286,957
Less current portion of long-term debt	(116,655)
Add unamortized bond discount/premium—net	<u>116,304</u>
Long-term portion—net	<u>\$2,286,606</u>
	(Concluded)

Long-term debt during the year ended December 31, 2022 changed as follows (in thousands):

	Balance January 1, 2022	Additions	Reductions	Balance December 31, 2022	Due within One Year
Revenue bonds and loans	\$ 2,341,421	\$ 55,861	\$ (110,325)	\$ 2,286,957	\$ 116,655
Unamortized bond discount/ premium—net	<u>132,072</u>	<u>-</u>	<u>(15,768)</u>	<u>116,304</u>	<u>-</u>
Total	<u>\$ 2,473,493</u>	<u>\$ 55,861</u>	<u>\$ (126,093)</u>	<u>\$ 2,403,261</u>	<u>\$ 116,655</u>

Interest expense includes amortization of the deferred loss on bond refunding for 2022 of \$2.0 million; net of amortization of bond premium of \$15.8 million.

**Rate Increases**—Water rates are set by ordinance and established in an amount designed to pay the costs of Water Fund operations and capital improvements, including any related debt service. Effective June 30, 2021, the water rate was set at \$30.79 per 1,000 cubic feet and was increased to \$32.33 per 1,000 cubic feet effective June 1, 2022.



**Issuance of Debt**—On July 2, 2018, a loan agreement was signed with the Illinois Environmental Protection Agency for a project that consists of the replacement of the outdated steam driven pumps at the City’s Central Park Pumping Station with modern electrical system. Amounts initially drawn from this agreement are classified as advances until repayment terms are established. Once repayment terms are established, the total advances are converted to long-term debt. During the year ended December 31, 2022, the total funds drawn from this loan agreement is \$55.9 million. The loan agreement has an interest rate of 1.76% with maturity dates from May 21, 2023 to November 21, 2042.

A schedule of bond and note debt service requirements to maturity at December 31, 2022, is as follows (in thousands):

<b>Years Ending December 31</b>	<b>Principal</b>	<b>Interest</b>	<b>Total Debt Service</b>
2023	\$ 116,655	\$ 101,849	\$ 218,504
2024	121,796	96,954	218,750
2025	131,188	91,970	223,158
2026	137,200	86,349	223,549
2027	143,259	80,318	223,577
2028–2032	648,127	310,038	958,165
2033–2037	570,275	181,861	752,136
2038–2042	374,197	60,694	434,891
2043–2047	<u>44,260</u>	<u>3,347</u>	<u>47,607</u>
Total	<u>\$ 2,286,957</u>	<u>\$ 1,013,380</u>	<u>\$ 3,300,337</u>

**Debt Covenants**—The ordinances authorizing the issuance of outstanding Water Revenue Bonds require that net revenues available for bonds, as adjusted shall each fiscal year at least equal the greater of (i) 120% of the aggregate debt service requirement for the fiscal year on all the outstanding senior lien bonds, or (ii) the sum of (A) aggregate debt service requirements for the fiscal year on the outstanding senior lien bonds, plus (B) 110% of the aggregate debt service requirements for the fiscal year on of the outstanding second lien bonds, plus (C) 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 water commercial paper notes, plus (E) annual debt service requirement on any outstanding water line of credit. This requirement was met at December 31, 2022.

## 5. UTILITY PLANT

Utility plant changed during the year ended December 31, 2022 as follows (in thousands):

	Balance— January 1, 2022	Additions	Disposals, Adjustments and Transfers	Balance— December 31, 2022
Utility plant not depreciated:				
Land and land rights	\$ 16,483	\$ -	\$ -	\$ 16,483
Construction in progress	<u>451,161</u>	<u>72,903</u>	<u>(73,818)</u>	<u>450,246</u>
Total utility plant not depreciated	<u>467,644</u>	<u>72,903</u>	<u>(73,818)</u>	<u>466,729</u>
Utility plant being depreciated:				
Structures and improvements	609,850	276	296	610,422
Distribution plant	4,645,293	96,882	51,738	4,793,913
Equipment	<u>860,777</u>	<u>6,241</u>	<u>2,550</u>	<u>869,568</u>
Total utility plant being depreciated	<u>6,115,920</u>	<u>103,399</u>	<u>54,584</u>	<u>6,273,903</u>
Less accumulated depreciation:				
Structures and improvements	(263,848)	(8,612)	-	(272,460)
Distribution plant	(712,242)	(55,105)	295	(767,052)
Equipment	<u>(478,974)</u>	<u>(20,515)</u>	<u>1,080</u>	<u>(498,409)</u>
Total accumulated depreciation	<u>(1,455,064)</u>	<u>(84,232)</u>	<u>1,375</u>	<u>(1,537,921)</u>
Utility plant being depreciated—net	<u>4,660,856</u>	<u>19,167</u>	<u>55,959</u>	<u>4,735,982</u>
Utility plant—net	<u>\$ 5,128,500</u>	<u>\$ 92,070</u>	<u>\$ (17,859)</u>	<u>\$ 5,202,711</u>

As of December 31, 2022, the total amount of right-to-use lease assets by major class, and the related accumulated amortization, disclosed separately from other capital assets, is as follows (in thousands):

	Balance January 1, 2022	Additions	Deductions	Balance December 31, 2022
Leased assets being amortized:				
Leased—building	\$ 1,206	\$ -	\$ -	\$ 1,206
Leased—equipment	<u>120,928</u>	<u>-</u>	<u>-</u>	<u>120,928</u>
Total leased assets not depreciated	<u>122,134</u>	<u>-</u>	<u>-</u>	<u>122,134</u>
Less accumulated amortization:				
Leased—building	-	(254)	-	(254)
Leased—equipment	<u>-</u>	<u>(24,112)</u>	<u>-</u>	<u>(24,112)</u>
Total accumulated amortization	<u>-</u>	<u>(24,366)</u>	<u>-</u>	<u>(24,366)</u>
Total, net of accumulated amortization	<u>\$ 122,134</u>	<u>\$ (24,366)</u>	<u>\$ -</u>	<u>\$ 97,768</u>

## 6. PENSION PLANS

**Plan Description**—Eligible Water employees participate in one of two single-employer defined benefit pension plans (the “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 the Plans, employees who became members before January 1, 2011 are considered Tier 1 Employees. 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, 2022, 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	25,894	3,527	29,421
Inactive employees entitled to but not yet receiving benefits	22,586	1,388	23,974
Active employees	<u>35,369</u>	<u>2,624</u>	<u>37,993</u>
	<u>83,849</u>	<u>7,539</u>	<u>91,388</u>

**Contributions**—For the Municipal Employees’ and Laborers’ Plans, Public Act 100-0023 (P.A. 100-0023) was enacted on July 06, 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; in payment year 2022, \$660.0 million.

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 Water Fund’s proportion of the contribution was determined based on the rates of Water Fund’s salaries within each corresponding pension plan to the total budgeted salaries for 2022.

The contribution to the two pension plans from the Water Fund was \$77.3 million for the year ended December 31, 2022.

**Net Pension Liability, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**—At December 31, 2022, the Water Fund recorded a liability of \$1,198.7 million for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates.

**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 decreased the net pension liability by (\$16.5) million for Laborers’. These changes are being amortized into expense over a 4-year period for Laborers’.

The Water Fund’s proportion of the net pension liability was determined based on the rates of Water Fund’s salaries within each corresponding pension plan to the total budgeted salaries for 2022. At

December 31, 2022, the Water Fund's proportion was 6.2% of the Municipal Employees' plan and 15.1% of the Laborer's plan.

For the year ended December 31, 2022, the Water Fund recognized pension expenses of \$67.4 million.

At December 31, 2022, the Water Fund reported total deferred outflows of resources of \$58.7 million and deferred inflows of resources of \$19.1 million related to pensions from the following sources:

Municipal Employees' (dollars in thousands):

	<b>Deferred Outflows of Resources</b>
Differences between expected and actual experience	\$ 10,708
Changes of assumptions	7,167
Net difference between projected and actual earnings on pension plan investments	<u>20,308</u>
Total	<u>\$ 38,183</u>

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**

2023	\$ 7,255
2024	10,774
2025	8,572
2026	<u>11,582</u>
Total	<u>\$ 38,183</u>

Laborers' (dollars in thousands):

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ -	\$ 6,366
Changes of assumptions	3,490	12,718
Net difference between projected and actual earnings on pension plan investments	<u>16,986</u>	<u>-</u>
Total	<u>\$ 20,476</u>	<u>\$ 19,084</u>

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

**Years Ended  
December 31**

2023	\$ (4,005)
2024	(1,646)
2025	1,148
2026	<u>5,895</u>
Total	<u>\$ 1,392</u>

***Deferred Outflow and Deferred Inflows Related to Changes in Proportionate Share of Contributions—***

For the year ended December 31, 2022, the Water Fund reported a pension benefit of \$35.6 million related to changes in its proportionate share of contributions. As of December 31, 2022, the Water Fund reported deferred inflows of \$76.3 million and deferred outflows of \$1.1 million related to changes in its proportionate share of contributions. These deferred amounts will be recognized as a pension (benefit)/charge over a period of four years.

***Actuarial Assumptions—***The total pension liability in the December 31, 2022 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	<b>Municipal Employees'</b>		<b>Laborers'</b>
Inflation	2.50 %		2.25 %
Salary increases	2.50–14.00 (a)		3.00 (b)
Investment rate of return	6.75 (c)		7.25 (c)

(a) Varying by years of service

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

(c) Net of investment expense

<b>Pension Plan</b>		<b>Mortality Table Name</b>	<b>Mortality Improvement</b>
Municipal Employees'	Post retirement	Pub G-2010 Retiree Amount-weighted Below Median mortality Tables (sex specific)	Generational—Scale MP-2021
	Beneficiary	PubG-2010 Contingent Survivor Table Amount-weighted Below Median Mortality table (sex specific)	Generational—Scale MP-2021
	Pre-retirement	PubG-2010 Employee Amount-weighted Below Median mortality table (sex specific)	Generational—Scale MP-2021
Laborers'	Post retirement	Pub-2010 Amount-weighted Below-median Income General Healthy Retiree Mortality Tables, Sex Distinct	Generational—Scale MP-2020 2-dimensional
	Pre-retirement	Pub-2010 Amount-weighted Below-median Income General Employee Mortality Tables, Sex Distinct	Generational—Scale MP-2020 2-dimensional

The mortality actuarial assumptions used in the December 31, 2022 valuation were based on the results of actuarial experience study for the period as noted below:

***Municipal Employees'***—January 1, 2017–December 31, 2021

**Laborers’**—January 1, 2017–December 31, 2019

The long term expected rate of return on pension plan investments was determined using the building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class as of December 31, 2022, is summarized in the following table:

2022	Target Allocation		Long-Term Expected Real Rate of Return	
	Municipal Employees	Laborers’	Municipal Employees	Laborers’
Asset class:				
Domestic equity	26.0 %	- %	7.1 %	- %
U.S. equity	-	25.0	-	5.2
Non U.S. equity	-	20.0	-	5.4
Global equity	5.0	-	6.8	-
Global low volatility equity	-	5.0	-	4.5
International equity	17.0	-	7.4	-
Fixed income	22.0	20.0	4.9	1.6
Hedge funds	10.0	10.0	5.3	3.1
Infrastructure	3.0	-	6.9	-
Private debt	4.0	3.0	10.1	8.2
Private equity	4.0	4.0	11.4	9.3
Real estate	9.0	10.0	6.8	4.5
Private real assets	-	3.0	-	4.8
Total	<u>100 %</u>	<u>100 %</u>		

**Discount Rate**

**Municipal Employees’**—The Single Discount Rate used to measure the total pension liability as of December 31, 2022 was 6.57 percent. 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 through the year 2078. Therefore, the long-term expected rate of return on pension plan investments of 6.75 percent was applied to projected benefits for all periods through 2077 and the municipal bond index rate of 3.72 percent was applied thereafter to determine total pension liability.

**Laborers’**—A Single Discount Rate of 7.13 percent was used to measure the total pension liability as of December 31, 2022. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.25 percent and a municipal bond rate of 4.05 percent (based on the daily rate closest to but not later than the measurement date of the Fidelity “20-Year Municipal GO AA 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 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 2076. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2076, and the municipal bond rate was applied to all benefit payments after that date.

Sensitivity of the Water Fund's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

**Municipal Employees'**—The following presents the Water Fund's allocated share of the net pension liability as of December 31, 2022, calculated using the discount rate of 6.57%, 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):

2022	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2022:			
Municipal Employees' discount rate	5.57 %	6.57 %	7.57 %
Municipal Employees' net pension liability	\$ 1,087,561	\$ 942,916	\$ 822,080

**Laborers'**—The following presents the Water Fund's allocated share of the net pension liability as of December 31, 2022, calculated using the discount rate of 7.13% 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):

2022	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2022:			
Laborers' discount rate	6.13 %	7.13 %	8.13 %
Laborers' net pension liability	\$ 304,312	\$ 255,756	\$ 214,847

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

## 7. RELATED-PARTY TRANSACTIONS

Included in operating expenses are reimbursements to the General Fund of the City for services provided by other City departments, employee fringe benefits, and certain payments made on behalf of the Water Fund. Such reimbursements amounted to \$169.9 million in 2022.

## 8. COMMITMENTS AND CONTINGENCIES

The Water Fund has certain contingent liabilities resulting from litigation, claims, or commitments incident to the ordinary course of business. Management expects that final resolution of these contingencies will not have a material adverse effect on the financial position or results of operations of the Water Fund.



The Water Fund provides workers' compensation benefits and employee health benefits under self-insurance programs administered by the City 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 of claims that have been incurred but not reported. Changes in the claims liability amounts for the year ended December 31, 2022 are as follows (in thousands):

Balance—January 1	\$ 67,160
Claims incurred on current and prior-year events	42,897
Claims paid on current and prior-year events	<u>(38,257)</u>
Balance—December 31	<u>\$ 71,800</u>

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

At December 31, 2022, the Water Fund entered into contracts with outstanding commitments of approximately \$124.9 million for construction projects.

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

	<u>2022</u> <u>(Dollars in thousands)</u>
Deferred outflows of resources:	
Deferred outflows from pension activities	\$ 58,657
Changes in proportionate share of pension contribution	1,062
Unamortized deferred bond refunding costs	<u>16,666</u>
Total deferred outflows of resources	<u>\$ 76,385</u>
Deferred inflows of resources:	
Deferred inflows from pension activities	\$(19,085)
Changes in proportionate share of pension contribution	<u>(76,344)</u>
Total deferred inflows of resources	<u>\$(95,429)</u>

Refer to Note 6 Pension Plans—Deferred Outflows Related to Pension Activities and to Changes in Proportionate Share of Contribution sections.

## 10. LEASES

As Lessee:

The Water Fund leases building and equipment under noncancelable operating leases. These leases have terms between one and 23 years. The long-term lease liability for the year ended December 31, 2022, is summarized as follows:

	Balance at January 1, 2022	Additions	Reductions	Balance at December 31, 2022	Current Portion
Lease liability	\$ 122,134	\$ -	\$ (25,101)	\$ 97,032	\$ 23,769

The expected future principal and interest payments that are included in the measurement of the lease liability as of December 31, 2022 are as follows (in thousands):

December 31	Principal	Interest	Amount
2023	\$ 23,769	\$ 3,492	\$ 27,261
2024	24,094	2,385	26,479
2025	23,974	1,457	25,431
2026	24,057	549	24,606
2027	219	48	267
2028–2032	169	203	372
2033–2037	243	154	397
2038–2042	307	88	395
2043–2045	200	13	213
Total	<u>\$97,032</u>	<u>\$ 8,389</u>	<u>\$105,421</u>

## 11. SUBSEQUENT EVENTS

The Water Fund has evaluated events occurring subsequent to December 31, 2022, and through June 30, 2023, the date the financial statements were available to be issued. The City did not identify any subsequent events to be disclosed apart from those discussed below.

On April 11, 2023, Standard and Poor’s Global Ratings (“S&P”) upgraded the rating on the City of Chicago Second Lien Water Revenue Bonds to ‘A+’ from ‘A’. The outlook is stable.

On April 19, 2023, Chicago City Council approved an agreement to supply water to the City of Joliet, IL. Water delivery is scheduled to begin in 2030.

In May 2023, the City sold its \$576,415,000 aggregate principal amount of Second Lien Water Revenue Bonds, comprising Project Series 2023A (the “Water 2023A Bonds”) and Refunding Series 2023B (the “Water 2023B Bonds”) and together with the Water 2023A Bonds, the “Water Series 2023AB Bonds”). The City issued the Water 2023AB Bonds on May 9, 2023. The Water 2023A Bonds were issued at interest rates of 5.00%, 5.25%, and 5.50% with mandatory sinking fund or maturity dates between November 1, 2045 and November 1, 2062. The Water 2023B Bonds were issued at interest rates of 4.00% and 5.00% with maturity dates between November 1, 2023 and November 1, 2040.

Proceeds of the Water 2023A Bonds were used to finance portions of certain Water System capital projects and to pay costs of issuance for the Water 2023A Bonds. Proceeds of the Water 2023B Bonds were used to finance portions of certain Water System capital projects, to refund certain outstanding Water Revenue Bonds, and to pay costs of issuance for the Water 2023B Bonds.

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**REQUIRED SUPPLEMENTARY INFORMATION**

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**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

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

Municipal Employees'	2022	2021	2020	2019	2018	2017	2016	2015
<b>TOTAL PENSION LIABILITY:</b>								
Service cost*	\$ 263,993	\$ 246,066	\$ 236,302	\$ 228,465	\$ 223,528	\$ 572,534	\$ 619,743	\$ 226,816
Interest	1,269,645	1,228,905	1,190,694	1,159,253	1,123,348	915,711	878,369	909,067
Benefit changes	-	-	-	-	-	-	-	2,140,009
Differences between expected and actual experience	84,258	121,988	100,938	16,676	95,540	(177,755)	(127,119)	(109,835)
Assumption changes	143,996	-	-	-	-	(7,431,191)	(578,920)	8,711,755
Benefit payments including refunds	<u>(1,055,585)</u>	<u>(1,010,191)</u>	<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	706,307	586,768	554,456	451,742	526,218	(7,008,875)	(67,599)	11,051,776
Total pension liability—beginning	<u>18,401,580</u>	<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>	<u>12,307,094</u>
Total pension liability—ending (a)	<u>19,107,887</u>	<u>18,401,580</u>	<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	959,550	573,198	496,992	418,269	349,574	261,764	149,718	149,225
Contributions—employee	176,339	163,411	157,798	146,645	138,400	134,765	130,391	131,428
Net investment income	(429,912)	498,299	335,403	560,940	(204,975)	610,515	281,419	114,025
Benefit payments including refunds of employee contribution	(1,055,585)	(1,010,191)	(973,478)	(952,652)	(916,198)	(888,174)	(859,672)	(826,036)
Administrative expenses	(6,873)	(6,687)	(7,118)	(6,740)	(6,639)	(6,473)	(7,056)	(6,701)
Other	-	-	-	-	-	5,394	-	-
Net change in plan fiduciary net position	(356,481)	218,030	9,597	166,462	(639,838)	117,791	(305,200)	(438,059)
Plan fiduciary net position—beginning	<u>4,308,269</u>	<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>	<u>5,179,486</u>
Plan fiduciary net position—ending (b)	<u>3,951,788</u>	<u>4,308,269</u>	<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 (a) - (b)	<u>\$15,156,099</u>	<u>\$14,093,311</u>	<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>20.68 %</u>	<u>23.41 %</u>	<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>\$ 134,766</u>	<u>\$ 123,388</u>	<u>\$ 123,184</u>	<u>\$ 129,976</u>	<u>\$ 123,292</u>	<u>\$ 119,698</u>	<u>\$ 109,644</u>	<u>\$ 111,282</u>
EMPLOYER'S NET PENSION LIABILITY AS A PERCENTAGE OF ALLOCATED COVERED-PAYROLL	<u>699.67 %</u>	<u>704.25 %</u>	<u>737.13 %</u>	<u>731.07 %</u>	<u>743.37 %</u>	<u>695.42 %</u>	<u>1,144.85 %</u>	<u>1,132.81 %</u>
ALLOCATED NET PENSION LIABILITY	<u>\$ 942,916</u>	<u>\$ 904,174</u>	<u>\$ 908,022</u>	<u>\$ 950,223</u>	<u>\$ 916,516</u>	<u>\$ 832,399</u>	<u>\$ 1,255,259</u>	<u>\$ 1,255,259</u>
ALLOCATED PERCENTAGE	<u>6.22 %</u>	<u>6.42 %</u>	<u>6.62 %</u>	<u>7.21 %</u>	<u>7.11 %</u>	<u>7.10 %</u>	<u>6.66 %</u>	<u>6.66 %</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

Ten year information will be provided prospectively starting with year 2015

(Continued)

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

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

Laborers'	2022	2021	2020	2019	2018	2017	2016	2015
<b>TOTAL PENSION LIABILITY:</b>								
Service cost *	\$ 39,331	\$ 40,411	\$ 39,216	\$ 38,522	\$ 40,801	\$ 80,232	\$ 82,960	\$ 38,389
Interest	193,347	192,343	191,099	188,347	183,135	154,047	150,166	153,812
Benefit changes	-	-	-	-	-	150	-	384,033
Differences between expected and actual experience	(27,236)	(31,083)	(18,992)	(8,820)	15,143	(62,178)	(30,428)	(46,085)
Assumption changes	(109,355)	21,870	44,034	32,846	(11,788)	(1,074,754)	(62,905)	1,175,935
Benefit payments including refunds	(177,162)	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Pension plan administrative expense	(3,607)	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Net change in total pension liability	(84,682)	47,190	82,685	82,245	63,297	(1,063,538)	(18,970)	1,549,710
Total pension liability—beginning	<u>2,905,524</u>	<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>	<u>2,162,905</u>
Total pension liability—ending (a)	<u>2,820,842</u>	<u>2,905,524</u>	<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	116,176	84,969	73,744	59,346	47,844	35,457	12,603	12,412
Contributions—employee	19,069	17,637	18,064	18,143	17,837	17,411	17,246	16,844
Net investment income	(161,680)	138,105	163,057	184,027	(75,219)	207,981	57,997	(22,318)
Benefit payments including refunds of employee contribution	(177,162)	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Administrative expenses	(3,607)	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Other	-	-	-	-	661	-	-	-
Net change in plan fiduciary net position	(207,204)	64,360	82,193	92,866	(172,871)	99,814	(70,917)	(149,436)
Plan fiduciary net position—beginning	<u>1,334,102</u>	<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>	<u>1,388,093</u>
Plan fiduciary net position—ending (b)	<u>1,126,898</u>	<u>1,334,102</u>	<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 (a) - (b)	<u>\$1,693,944</u>	<u>\$1,571,422</u>	<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>39.95 %</u>	<u>45.92 %</u>	<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>\$ 32,323</u>	<u>\$ 33,679</u>	<u>\$ 32,699</u>	<u>\$ 34,288</u>	<u>\$ 33,855</u>	<u>\$ 32,031</u>	<u>\$ 30,606</u>	<u>\$ 31,935</u>
EMPLOYER'S NET PENSION LIABILITY AS A PERCENTAGE OF ALLOCATED COVERED PAYROLL	<u>791.26 %</u>	<u>740.81 %</u>	<u>766.72 %</u>	<u>750.48 %</u>	<u>755.95 %</u>	<u>653.68 %</u>	<u>1,213.48 %</u>	<u>1,208.16 %</u>
ALLOCATED NET PENSION LIABILITY	<u>\$ 255,756</u>	<u>\$ 249,501</u>	<u>\$ 250,711</u>	<u>\$ 257,325</u>	<u>\$ 255,928</u>	<u>\$ 209,380</u>	<u>\$ 371,399</u>	<u>\$ 385,827</u>
ALLOCATED PERCENTAGE	<u>15.10 %</u>	<u>15.88 %</u>	<u>15.78 %</u>	<u>16.20 %</u>	<u>16.01 %</u>	<u>15.37 %</u>	<u>14.70 %</u>	<u>15.60 %</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

Ten year information will be provided prospectively starting with year 2015

(Concluded)

# CITY OF CHICAGO, ILLINOIS WATER FUND

## SCHEDULE OF CONTRIBUTIONS LAST TEN YEARS (Dollars are in thousands)

### Municipal Employees':

Years Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the			Contributions as a Percentage of Covered Payroll
		Actuarially Determined Contribution	Contribution Deficiency	Covered Payroll*	
2013	\$ 820,023	\$148,197	\$671,826	\$1,580,289	9.38 %
2014	839,039	149,747	689,292	1,602,978	9.34
2015	677,200	149,225	527,975	1,643,481	9.08
2016	961,770	149,718	812,052	1,646,939	9.09
2017	1,005,457	261,764	743,693	1,686,533	15.52
2018	1,049,916	349,574	700,342	1,734,596	20.15
2019	1,117,388	418,269	699,119	1,802,790	23.20
2020	1,167,154	496,992	670,162	1,861,905	26.69
2021	1,218,361	573,198	645,163	2,001,181	28.64
2022	1,262,413	959,550	302,863	2,166,182	44.30

\* 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':

Years Ended December 31	Actuarially Determined Contributions*	Contributions in Relation to the			Contributions as a Percentage of Covered Payroll**
		Actuarially Determined Contribution	Contribution Deficiency	Covered Payroll**	
2013	\$ 106,199	\$ 11,583	\$ 94,616	\$ 200,352	5.78 %
2014	106,019	12,161	93,858	202,673	6.00
2015	79,851	12,412	67,439	204,773	6.06
2016	117,033	12,603	104,430	208,155	6.05
2017	124,226	35,457	88,769	208,442	17.01
2018	129,247	47,844	81,403	211,482	22.62
2019	148,410	59,346	89,064	211,608	28.05
2020	155,794	73,744	82,050	207,195	35.59
2021	155,245	84,969	70,276	212,122	40.06
2022	153,023	116,176	36,847	214,083	54.27

\* 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

## WATER FUND

### SCHEDULE OF CONTRIBUTIONS LAST TEN YEARS (Dollars are in thousands)

Actuarial Methods and Assumptions	Municipal Employees'		Laborers'	
Actuarial valuation date	December 31, 2021	(a)	December 31, 2021	(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	7.00%	(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) Varying by years of service and employer.
- (d) Plus service based increases in the first 9 years.
- (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, 2022). For employees first hired on or after January 1, 2011 and before July 6, 2017, rates of retirement for each age from 62 to 80 were used (effective December 31, 2011). For employees first hired on or after July 6, 2017, rates of retirement for each age from 60 to 80 were used (effective December 31, 2018).
- (h) Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2020 valuation pursuant to an experience study of the period January 1, 2017 through December 31, 2019.
- (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 were based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.
- (j) Post Retirement Mortality: Scaling factors of 109% for males, and 108% for females of the Pub-2010 Amount-weighted Below-median Income General Healthy Retiree Mortality Tables, sex distinct with the generational mortality improvement using MP-2020 2-dimensional mortality improvement scales recently released by the SOA. This assumption provides a margin for mortality improvements.
- (k) Other assumptions: Same as those used in the December 31, 2021, actuarial funding valuations.
- (l) The actuarial valuation is based on the statutes in effect as of December 31, 2020.

(Concluded)



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**ADDITIONAL SUPPLEMENTARY INFORMATION**

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**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**ADDITIONAL SUPPLEMENTARY INFORMATION  
SCHEDULE OF UTILITY PLANT  
FOR THE YEAR ENDED DECEMBER 31, 2022  
(In thousands)**

	Assets				Accumulated Depreciation					Net Balance— December 31, 2022
	Balance— January 1, 2022	Additions	Adjustments/ Disposals	Transfers	Balance— December 31, 2022	Balance— January 1, 2022	Provision	Adjustments/ Disposals	Balance— December 31, 2022	
LAND AND LAND RIGHTS:										
Power and pumping	\$ 4,142	\$ -	\$ -	\$ -	\$ 4,142	\$ -	\$ -	\$ -	\$ -	\$ 4,142
Distribution reservoir	300	-	-	-	300	-	-	-	-	300
Purification	1,739	-	-	-	1,739	-	-	-	-	1,739
General and maintenance	10,302	-	-	-	10,302	-	-	-	-	10,302
Total land and land rights	16,483	-	-	-	16,483	-	-	-	-	16,483
STRUCTURES AND IMPROVEMENTS:										
Cribs	22,968	-	-	-	22,968	6,953	271	-	7,224	15,744
Lake and land tunnels	119,621	-	-	-	119,621	48,210	1,184	-	49,394	70,227
Intake structures	9,531	-	-	-	9,531	5,325	95	-	5,420	4,111
Power and pumping structures	146,058	190	-	83	146,331	48,244	1,898	-	50,142	96,189
Purification buildings	254,468	63	-	320	254,851	134,000	4,171	-	138,171	116,680
Distribution reservoirs	16,979	-	-	-	16,979	7,264	226	-	7,490	9,489
Offices, maintenance, and general	40,118	-	-	-	40,118	13,852	767	-	14,619	25,499
Contract retainage	107	23	(107)	-	23	-	-	-	-	23
Total structures and improvements	609,850	276	(107)	403	610,422	263,848	8,612	-	272,460	337,962
DISTRIBUTION PLANT:										
Mains and accessories	4,350,294	73,282	(334)	57,802	4,481,044	613,603	44,791	(295)	658,099	3,822,945
Meters and installations	264,321	-	-	8,477	272,798	86,684	10,060	-	96,744	176,054
Hydrants and valves	16,471	-	-	-	16,471	11,955	254	-	12,209	4,262
Contract retainage	14,207	23,600	(14,207)	-	23,600	-	-	-	-	23,600
Total distribution plant	4,645,293	96,882	(14,541)	66,279	4,793,913	712,242	55,105	(295)	767,052	4,026,861
EQUIPMENT:										
Power production	65,420	-	-	31	65,451	56,103	1,217	-	57,320	8,131
Pumping	301,036	-	-	185	301,221	153,608	8,895	-	162,503	138,718
Purification	441,006	2,203	-	4,176	447,385	222,145	9,768	-	231,913	215,472
Heavy machinery	21,874	-	(768)	-	21,106	20,520	40	(768)	19,792	1,314
Transportation	12,813	268	(320)	-	12,761	9,348	522	(312)	9,558	3,203
Miscellaneous	17,874	-	-	-	17,874	17,250	73	-	17,323	551
Contract retainage	754	3,770	(754)	-	3,770	-	-	-	-	3,770
Total equipment	860,777	6,241	(1,842)	4,392	869,568	478,974	20,515	(1,080)	498,409	371,159
Total structures and improvements, distribution plant, and equipment	6,115,920	103,399	(16,490)	71,074	6,273,903	1,455,064	84,232	(1,375)	1,537,921	4,735,982
CONSTRUCTION IN PROGRESS:										
Filtration plants	103,875	29,470	-	(4,664)	128,681	-	-	-	-	128,681
Pumping stations	82,614	8,004	-	(131)	90,487	-	-	-	-	90,487
Water mains	261,928	33,630	-	(66,279)	229,279	-	-	-	-	229,279
Contract retainage	2,744	1,799	(2,744)	-	1,799	-	-	-	-	1,799
Total construction in progress	451,161	72,903	(2,744)	(71,074)	450,246	-	-	-	-	450,246
TOTAL UTILITY PLANT	\$6,583,564	\$176,302	\$(19,234)	\$ -	\$6,740,632	\$1,455,064	\$84,232	\$(1,375)	\$1,537,921	\$5,202,711

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**PART III**

**STATISTICAL SECTION  
(UNAUDITED)**

## STATISTICAL DATA

The statistical data section includes selected financial and operating information, generally presented on a multiyear basis. Statistical section information is presented in five categories—financial trends, revenue capacity, debt capacity, operating, and demographic and economic information. Schedules in the statistical section are the following:

***Financial Trends Information***—These schedules contain trend information to help the reader understand how the Water Fund’s basic financial performance and well-being have changed over time.

***Revenue Capacity Information***—These schedules contain information to help the reader assess the Water Fund’s most significant local revenue source and water sales charge.

***Debt Capacity Information***—These schedules present information to help the reader assess the affordability of the Water Fund’s current levels of outstanding debt and the Water Fund’s ability to issue additional debt in the future.

***Operating Information***—These schedules contain service and infrastructure data to help the reader understand how the information in the Water Fund’s financial report relates to the services the Department of Water Management and the Water Fund and how it provides the activities it performs.

***Demographic and Economic Information***—These schedules offer demographic and economic indicators to help the reader understand where the environment within which the City’s financial activities take place.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
CHANGES IN NET POSITION  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(In millions)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>OPERATING REVENUES:</b>										
Water sales	\$ 620.5	\$ 693.1	\$ 773.8	\$ 760.6	\$ 749.8	\$ 754.8	\$ 737.9	\$ 743.8	\$ 763.8	\$ 785.3
Provision for doubtful accounts	-	(22.5)	(23.6)	(24.8)	(20.2)	(8.2)	(20.4)	(29.5)	(15.2)	(33.1)
Other operating revenues	16.6	22.1	19.2	25.6	29.4	27.4	26.9	22.2	27.1	27.6
Total operating revenues	<u>637.1</u>	<u>692.7</u>	<u>769.4</u>	<u>761.4</u>	<u>759.0</u>	<u>774.0</u>	<u>744.4</u>	<u>736.5</u>	<u>775.7</u>	<u>779.8</u>
<b>OPERATING EXPENSES:</b>										
Source of supply	0.1	0.3	0.2	0.1	0.1	0.2	0.4	0.2	0.1	0.2
Power and pumping	43.2	43.1	41.3	39.6	41.4	41.1	42.5	40.7	45.2	45.3
Purification	60.9	58.5	57.1	57.5	60.5	62.9	67.8	61.8	62.3	73.5
Transmission and distribution	29.5	43.7	37.3	39.2	39.6	59.7	71.8	71.7	74.8	61.8
Provision for doubtful accounts	25.4	-	-	-	-	-	-	-	-	-
Customer accounting and collection	11.6	11.9	14.7	15.3	18.2	22.1	27.2	27.0	26.5	22.9
Administrative and general	21.2	22.0	22.1	20.3	13.6	13.0	13.0	13.9	14.9	14.2
Central services and General Fund reimbursements	108.7	119.2	129.1	126.4	121.7	127.0	124.0	139.8	133.1	145.2
Pension expense	-	-	436.0	240.0	107.1	85.4	70.3	(47.9)	(33.8)	67.4
Total operating expenses	<u>300.6</u>	<u>298.7</u>	<u>737.8</u>	<u>538.4</u>	<u>402.2</u>	<u>411.4</u>	<u>417.0</u>	<u>307.2</u>	<u>323.1</u>	<u>430.5</u>
OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION	336.5	394.0	31.6	223.0	356.8	362.6	327.4	429.3	452.6	349.3
DEPRECIATION AND AMORTIZATION	<u>49.6</u>	<u>58.0</u>	<u>56.4</u>	<u>68.0</u>	<u>71.1</u>	<u>74.6</u>	<u>79.9</u>	<u>82.5</u>	<u>86.8</u>	<u>110.9</u>
OPERATING INCOME	<u>286.9</u>	<u>336.0</u>	<u>(24.8)</u>	<u>155.0</u>	<u>285.7</u>	<u>288.0</u>	<u>247.5</u>	<u>346.8</u>	<u>365.8</u>	<u>238.4</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>										
Interest income	0.4	(0.5)	3.1	0.6	10.3	5.1	21.0	17.0	1.7	(66.9)
Interest expenses	(92.2)	(98.8)	(106.1)	(107.9)	(108.3)	(91.3)	(97.0)	(95.9)	(94.0)	(91.0)
Swap termination fee	-	-	-	(101.7)	-	-	-	-	-	-
Other operating revenues	0.5	(0.5)	0.2	0.6	3.2	2.1	3.5	4.7	2.0	2.3
Total nonoperating expenses—net	<u>(91.3)</u>	<u>(99.8)</u>	<u>(102.8)</u>	<u>(208.4)</u>	<u>(94.8)</u>	<u>(84.1)</u>	<u>(72.5)</u>	<u>(74.2)</u>	<u>(90.3)</u>	<u>(155.6)</u>
TRANSFERS OUT	-	-	(0.6)	(2.4)	(2.1)	(2.4)	(2.7)	(2.4)	(2.4)	(2.4)
CHANGE IN NET POSITION	195.6	236.2	(128.2)	(55.8)	188.8	201.5	172.3	270.2	273.1	80.4
TOTAL NET POSITION—Beginning of year	<u>1,251.4</u>	<u>1,447.0</u>	<u>1,079.7</u>	<u>951.5</u>	<u>895.7</u>	<u>1,084.5</u>	<u>1,285.9</u>	<u>1,458.2</u>	<u>1,728.4</u>	<u>2,001.5</u>
TOTAL NET POSITION—End of year	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>	<u>\$ 951.5</u>	<u>\$ 895.7</u>	<u>\$ 1,084.5</u>	<u>\$ 1,285.9</u>	<u>\$ 1,458.2</u>	<u>\$ 1,728.4</u>	<u>\$ 2,001.5</u>	<u>2,081.9</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
NET POSITION BY COMPONENT  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(In millions)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NET POSITION:										
Net investment in capital assets	\$ 1,233.2	\$ 1,394.0	\$ 1,514.0	\$ 1,622.0	\$ 1,949.4	\$ 2,163.2	\$ 2,351.1	\$ 2,574.3	\$ 2,746.4	\$ 2,849.4
Restricted for capital projects	0.7	0.6	0.7	0.4	0.5	0.2	0.4	0.1	-	-
Unrestricted	<u>213.1</u>	<u>288.6</u>	<u>(563.2)</u>	<u>(726.7)</u>	<u>(865.4)</u>	<u>(877.5)</u>	<u>(893.3)</u>	<u>(846.0)</u>	<u>(744.9)</u>	<u>(767.5)</u>
TOTAL NET POSITION	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>	<u>\$ 951.5</u>	<u>\$ 895.7</u>	<u>\$ 1,084.5</u>	<u>\$ 1,285.9</u>	<u>\$ 1,458.2</u>	<u>\$ 1,728.4</u>	<u>\$ 2,001.5</u>	<u>\$ 2,081.9</u>

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

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
HISTORICAL FINANCIAL OPERATIONS  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(In millions)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING REVENUES:										
Water sales	\$ 620.5	\$ 693.1	\$ 773.8	\$ 760.6	\$ 749.8	\$ 754.8	\$ 737.9	\$ 743.8	\$ 763.8	\$ 785.3
Other operating revenues	<u>16.6</u>	<u>22.1</u>	<u>19.2</u>	<u>25.6</u>	<u>29.4</u>	<u>27.4</u>	<u>26.9</u>	<u>22.2</u>	<u>27.1</u>	<u>27.6</u>
Total operating revenues	<u>637.1</u>	<u>715.2</u>	<u>793.0</u>	<u>786.2</u>	<u>779.2</u>	<u>782.2</u>	<u>764.8</u>	<u>766.0</u>	<u>790.9</u>	<u>812.9</u>
OPERATING EXPENSES:										
Source of supply	0.1	0.3	0.2	0.1	0.1	0.2	0.4	0.2	0.1	0.2
Power and pumping	43.2	43.1	41.3	39.6	41.4	41.1	42.5	40.7	45.2	45.3
Purification	60.9	58.5	57.1	57.5	60.5	62.9	67.8	61.8	62.3	73.5
Transmission and distribution	29.5	43.7	37.3	39.2	39.6	59.7	71.8	71.7	74.8	61.8
Provision for doubtful accounts	25.4	22.5	23.6	24.8	20.2	8.2	20.4	29.5	15.2	33.1
Customer accounting and collection	11.6	11.9	14.7	15.3	18.2	22.1	27.2	27.0	26.5	22.9
Administrative and general	21.2	22.0	22.1	20.3	13.6	13.0	13.0	13.9	14.9	14.2
Central services and General Fund reimbursements	108.7	119.3	129.1	126.4	121.7	127.0	124.0	139.8	133.1	145.2
Pension expense	<u>-</u>	<u>-</u>	<u>436</u>	<u>240.0</u>	<u>107.1</u>	<u>85.4</u>	<u>70.3</u>	<u>(47.9)</u>	<u>(33.9)</u>	<u>67.4</u>
Total operating expenses	<u>300.6</u>	<u>321.3</u>	<u>761.4</u>	<u>563.2</u>	<u>422.4</u>	<u>419.6</u>	<u>437.4</u>	<u>336.7</u>	<u>338.2</u>	<u>463.6</u>
INTEREST INCOME (OTHER THAN FROM CONSTRUCTIONAL ACCOUNT)	<u>0.4</u>	<u>(0.5)</u>	<u>3.1</u>	<u>0.6</u>	<u>10.2</u>	<u>5.1</u>	<u>21.0</u>	<u>17.0</u>	<u>1.7</u>	<u>(66.9)</u>
NET REVENUES—As defined (Note 4)	<u>\$ 336.9</u>	<u>\$ 393.4</u>	<u>\$ 34.7</u>	<u>\$ 223.6</u>	<u>\$ 367.0</u>	<u>\$ 367.7</u>	<u>\$ 348.4</u>	<u>\$ 446.3</u>	<u>\$ 454.4</u>	<u>\$ 282.4</u>

Source: City of Chicago Department of Water Management and Comptroller's Office.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
WATER SYSTEM ACCOUNTS  
TEN YEARS ENDED DECEMBER 31, 2013–2022**

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<b>Years Ended December 31</b>	<b>Nonmetered</b>	<b>Metered</b>	<b>Total</b>
2013	273,426	220,759	494,185
2014	250,304	241,304	491,608
2015	227,801	266,284	494,085
2016	206,913	287,351	494,264
2017	190,276	303,877	494,153
2018	180,608	313,758	494,366
2019	178,348	316,262	494,610
2020	177,641	316,783	494,424
2021	176,931	317,398	494,329
2022	172,048	322,226	494,274



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
TEN LARGEST SUBURBAN CUSTOMERS  
FOR THE YEAR ENDED DECEMBER 31, 2022  
(In thousands)**

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<b>Customer</b>	<b>Amount of Sales</b>
Dupage Water Commission	\$ 117,434
Village of Oak Lawn	44,430
Northwest Suburban Municipal Joint Action Water Agency	45,422
Village of Bedford Park	29,727
Village of Melrose Park	12,989
City of Harvey	12,643
Town of Cicero	11,072
Village of McCook	9,209
Village of Alsip	8,294
City of Berwyn	<u>8,176</u>
Total	<u>\$ 299,396</u>

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
REVENUE BOND COVERAGE  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(In millions)**

**Prior Bonds Coverage Calculation**

**Combined prior Bonds, Senior Lien, and Second  
Lien Debt Service Calculation**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES AVAILABLE FOR BONDS:										
Net revenues—as defined (Note 4)	\$ 336.9	\$ 393.4	\$ 34.7	\$ 223.6	\$ 367.0	\$ 367.7	\$ 348.4	\$ 446.3	\$ 454.4	\$ 282.4
Pension expense other than contribution (Note) <sup>(1)</sup>	-	-	423	227.6	82.7	53.3	30.3	(92.3)	(84.2)	(9.9)
Transfer from (to) Water Rate Stabilization account	(13.5)	-	-	-	-	-	-	-	-	-
Other Available Funds (Note) <sup>(2)</sup>	146.2	176.4	236.1	421.7	515.7	451.8	445.0	467.1	424.0	461.1
<b>NET REVENUES AVAILABLE FOR BONDS</b>	<b>\$ 469.6</b>	<b>\$ 569.8</b>	<b>\$ 694.1</b>	<b>\$ 872.9</b>	<b>\$ 965.4</b>	<b>\$ 872.8</b>	<b>\$ 823.7</b>	<b>\$ 821.1</b>	<b>\$ 794.2</b>	<b>\$ 733.6</b>
DEBT SERVICE REQUIREMENTS:										
Senior debt service requirements <sup>(4)</sup>	\$ 21.5	\$ 21.5	\$ 21.5	\$ 21.5	\$ 15.6	\$ 15.6	\$ 7.6	\$ -	\$ -	\$ -
Senior debt service coverage ratio	21.8	26.5	32.3	40.6	61.9	55.9	109.1	-	-	-
Second lien debt service requirements	\$ 125.6	\$ 126.0	\$ 150.4	\$ 153.0	\$ 178.7	\$ 180.9	\$ 183.5	\$ 178.5	\$ 178.6	\$ 178.5
Subordinate lien debt service requirements	1.3	1.9	6.9	12.1	13.3	21.2	28.7	33.3	38.3	37.3
Total second and subordinate lien debt service requirements	\$ 126.9	\$ 127.9	\$ 157.3	\$ 165.1	\$ 192.0	\$ 202.1	\$ 212.2	\$ 211.8	\$ 216.9	\$ 215.8
<b>TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS</b>	<b>\$ 148.4</b>	<b>\$ 149.4</b>	<b>\$ 178.8</b>	<b>\$ 186.6</b>	<b>\$ 207.6</b>	<b>\$ 217.7</b>	<b>\$ 219.8</b>	<b>\$ 211.8</b>	<b>\$ 216.9</b>	<b>\$ 215.8</b>
<b>TOTAL COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE RATIO</b>	<b>3.2</b>	<b>3.8</b>	<b>3.9</b>	<b>4.7</b>	<b>4.7</b>	<b>4.0</b>	<b>3.7</b>	<b>3.9</b>	<b>3.7</b>	<b>3.4</b>
<b>WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE <sup>(3)</sup></b>	<b>\$ 88.4</b>	<b>\$ 88.4</b>	<b>\$ 91.2</b>	<b>\$ 91.2</b>	<b>\$ 90.5</b>	<b>\$ 89.4</b>	<b>\$ 91.2</b>	<b>\$ 93.2</b>	<b>\$ 91.7</b>	<b>\$ 85.8</b>
<b>TOTAL CUSTOMER ACCOUNTS SERVED (in thousands)</b>	<b>494.2</b>	<b>491.6</b>	<b>494.1</b>	<b>494.3</b>	<b>494.1</b>	<b>494.4</b>	<b>494.6</b>	<b>494.4</b>	<b>494.3</b>	<b>494.3</b>
<b>TOTAL LONG TERM DEBT (rounded)</b>	<b>\$ 1,997.0</b>	<b>\$ 2,382.0</b>	<b>\$ 2,391.0</b>	<b>\$ 2,468.0</b>	<b>\$ 2,401.0</b>	<b>\$ 2,457.0</b>	<b>\$ 2,398.0</b>	<b>\$ 2,409.0</b>	<b>\$ 2,341.4</b>	<b>\$ 2,287.0</b>
<b>LONG TERM DEBT PER CUSTOMER ACCOUNT SERVED</b>	<b>\$ 4,041</b>	<b>\$ 4,845</b>	<b>\$ 4,839</b>	<b>\$ 4,993</b>	<b>\$ 4,859</b>	<b>\$ 4,970</b>	<b>\$ 4,848</b>	<b>\$ 4,873</b>	<b>\$ 4,737</b>	<b>\$ 4,627</b>

Source: City of Chicago Comptroller's Office; U.S. Department of Commerce—Census Bureau

<sup>(1)</sup> \$77.3 million is the portion of the City's pension cash contribution payable in 2022 to the pension funds and allocable to the Water Fund.

This portion is included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

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

<sup>(3)</sup> The 2022 water rate stabilization balance includes a fair value adjustment of (\$5.4) million. A fair value adjustment was not included in 2016 and prior balances.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
LONG-TERM DEBT  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(In millions)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Senior lien bonds	\$ 49.0	\$ 37.5	\$ 26.2	\$ 15.0	\$ 9.6	\$ 4.6	\$ -	\$ -	\$ -	\$ -
Second lien bonds	1,921.6	2,258.6	2,222.3	2,261.8	2,142.7	2,070.8	1,920.2	1,920.2	1,841.9	1,759.7
Commercial paper	-	-	-	-	-	-	-	-	-	-
Subordinate lien—IEPA loan	<u>26.3</u>	<u>85.7</u>	<u>142.9</u>	<u>191.6</u>	<u>248.7</u>	<u>381.9</u>	<u>477.8</u>	<u>488.6</u>	<u>499.5</u>	<u>527.2</u>
Total long-term debt	1,996.9	2,381.8	2,391.4	2,468.4	2,401.0	2,457.3	2,398.0	2,408.8	2,341.4	2,286.9
Accretion of capital appreciation bonds	43.9	39.1	33.3	26.3	18.4	9.4	-	-	-	-
Unamortized bond discount/premium—net	66.9	97.0	91.3	161.2	205.6	185.9	166.9	148.9	132.1	116.3
Unamortized deferred loss on bond refunding	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$ 2,107.7</u>	<u>\$ 2,517.9</u>	<u>\$ 2,516.0</u>	<u>\$ 2,655.9</u>	<u>\$ 2,625.0</u>	<u>\$ 2,652.6</u>	<u>\$ 2,564.9</u>	<u>\$ 2,557.7</u>	<u>\$ 2,473.5</u>	<u>\$ 2,403.2</u>
Total customer accounts served (in thousands)	<u>494.2</u>	<u>491.6</u>	<u>494.1</u>	<u>494.3</u>	<u>494.1</u>	<u>494.4</u>	<u>494.6</u>	<u>494.4</u>	<u>494.3</u>	<u>494.3</u>
Long term debt per customer served	<u>\$ 4,265</u>	<u>\$ 5,122</u>	<u>\$ 5,092</u>	<u>\$ 5,373</u>	<u>\$ 5,313</u>	<u>\$ 5,365</u>	<u>\$ 5,186</u>	<u>\$ 5,173</u>	<u>\$ 5,004</u>	<u>\$ 4,862</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
CAPITAL IMPROVEMENT PROGRAM  
2023–2027  
(In thousands)**

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<b>Years</b>	<b>Amount</b>
2023	\$ 614,226
2024	592,407
2025	689,807
2026	724,622
2027	<u>697,790</u>
Total	<u>\$3,318,852</u>

Note: The information presented in the table above reflects the Water Fund’s expected allocation of resources to various projects, but does not necessarily represent an expectation of actual cash expenditures for these projects.

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
WATER SYSTEM PUMPAGE AND CAPACITY  
TEN YEARS ENDED DECEMBER 31, 2013–2022**

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<b>Years</b>	<b>Total Pumpage (MGD)</b>	<b>Average Daily Pumpage (MGD)</b>	<b>Maximum Daily Pumpage (MGD)</b>	<b>System's Rated Pumpage Capacity (MGD)</b>	<b>Maximum Daily Pumpage as % of Capacity</b>
2013	276,039	756	1,095	2,160	51
2014	274,552	752	1,023	2,160	47
2015	262,606	719	890	2,160	41
2016	255,872	701	934	2,160	43
2017	248,371	680	1,089	2,160	50
2018	249,845	685	859	2,160	40
2019	241,359	661	838	2,160	39
2020	234,426	641	842	2,160	39
2021	237,554	651	836	2,160	39
2022	238,072	652	873	2,160	40

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**MISCELLANEOUS STATISTICAL DATA  
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021**

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	<b>2022</b>	<b>2021</b>
AREA SERVED (In square miles):		
Chicago	228	228
125 suburbs	<u>578</u>	<u>578</u>
<b>TOTAL AREA SERVED</b>	<u><u>806</u></u>	<u><u>806</u></u>
WATER WORKS FACILITIES:		
Filtration plants	2	2
Continuous service capacity:		
South Water Filtration Plant (MGD)	720	720
Jardine Water Purification Plant (MGD)	1,440	1,440
Pumping stations—steam	3	3
Pumping stations—electric	9	9
Installed pumping capacity (MGD)	3,661	3,661
Crib intakes in service	2	2
Shore intakes (filtration plants)	2	2
Water supply tunnels (6 to 20 feet in diameter)—miles	64	64
DISTRIBUTION SYSTEM:		
Water mains (miles)	4,245	4,295
Fire hydrants	48,031	48,049
Valves	48,318	47,831

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
OPERATING INFORMATION BY FUNCTION  
TEN YEARS ENDED DECEMBER 31, 2013–2022  
(Number of employees)**

Function	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Administration	61	62	61	61	64	63	63	56	52	51
Agency management	37	34	36	36	35	37	37	35	31	36
Safety and security	16	26	27	27	21	21	21	53	52	51
Capital design and construction services	8	9	9	9	10	10	10	13	13	42
Engineering services	4	4	6	6	7	7	7	6	7	7
Inspection services	29	29	27	27	26	27	27	27	27	27
Water quality	47	47	47	47	46	45	58	53	50	52
Water pumping	222	220	214	214	215	213	213	205	200	203
Water treatment	336	334	344	344	343	343	343	343	324	328
Systems installation	75	76	75	75	65	65	65	62	56	41
Systems maintenance	542	527	520	520	471	449	449	425	411	416
Billings and customer service	50	48	46	46	45	45	45	38	35	44
Water meter installation and repair	<u>84</u>	<u>88</u>	<u>93</u>	<u>93</u>	<u>82</u>	<u>82</u>	<u>82</u>	<u>71</u>	<u>66</u>	<u>64</u>
Total	<u>1,511</u>	<u>1,504</u>	<u>1,505</u>	<u>1,505</u>	<u>1,430</u>	<u>1,407</u>	<u>1,420</u>	<u>1,387</u>	<u>1,324</u>	<u>1,362</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
POPULATION OF SERVICE AREA  
LAST FIVE CENSUS PERIODS**

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<b>Years</b>	<b>Chicago</b>		<b>Suburban Customers</b>		<b>Total</b>	<b>Number of Suburbs Served</b>
1990	2,783,726	(1)	1,589,557	(2)	4,373,283	95
2000	2,896,016	(1)	2,410,021		5,306,037	125
2010	2,695,598	(1)	2,600,496		5,296,094	125
2020	2,695,598	(1)	2,600,496		5,296,094	123

<sup>(1)</sup> U.S. Department of Commerce—Census Bureau.

<sup>(2)</sup> 23 suburban customers not included (under the DWC contract; fully served May 1, 1992) with a population of 610,478, which increases total population to 4,983,761.



# CITY OF CHICAGO, ILLINOIS WATER FUND

## STATISTICAL DATA PRINCIPAL EMPLOYERS (NONGOVERNMENT) FOR THE YEAR ENDED DECEMBER 31, 2022, AND NINE YEARS AGO

Employer	2022 <sup>(1)</sup>			2013 <sup>(3)</sup>		
	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
Amazon.Com, Inc.	28,994	1	2.20 %	-	-	- %
Advocate Aurora Health <sup>(4)</sup>	26,841	2	2.03	-	-	-
Northwest Memorial Healthcare	24,120	3	1.83	-	-	-
University of Chicago	21,618	4	1.64	-	-	-
Walgreen Boots Alliance Inc. <sup>(5)</sup>	17,344	5	1.31	2,869	9	0.26
Walmart Inc.	17,300	6	1.31	-	-	-
United Continental Holdings Inc <sup>(6)</sup>	15,565	7	1.18	8,199	2	0.75
JP Morgan & Co. <sup>(7)</sup>	14,293	8	1.08	8,499	1	0.78
NorthShore—Edward-Elmhurst Health <sup>(8)</sup>	14,216	9	1.08	-	-	-
Jewel-Osco <sup>(9)</sup>	11,436	10	0.87	4,441	6	0.41
Accenture LLP	-	-	-	5,821	3	0.53
Northern Trust	-	-	-	5,353	4	0.49
Ford Motor Company	-	-	-	5,103	5	0.47
ABM Janitorial Services—North Central	-	-	-	3,399	7	0.31
Bank of America NT & SA <sup>(10)</sup>	-	-	-	3,392	8	0.31
American Airlines	-	-	-	2,749	10	0.25

### Notes:

<sup>(1)</sup> Source: Reprinted with permission from the February 27, 2023 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 of the information was the City of Chicago, Bureau of Revenue-Tax Division Report which is no longer available.

<sup>(4)</sup> Advocate Health formerly known as Advocate Aurora Health

<sup>(5)</sup> In 2014, Walgreens purchased 55% of Alliance Boots forming Walgreens Boots Alliance, Inc.

<sup>(6)</sup> United Continental Holdings Inc. formerly known as United Airlines.

<sup>(7)</sup> JP Morgan & Co. formerly known as J.P. Morgan Chase.

<sup>(8)</sup> Northshore—Edward-Elmhurst Health formerly known as NorthShore University HealthSystem

<sup>(9)</sup> Jewel-Osco formerly known as Jewel Food Stores, Inc.

<sup>(10)</sup> Bank of America NT & SA formerly known as Bank of America NT.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
POPULATION AND INCOME STATISTICS  
TEN YEARS ENDED DECEMBER 31, 2013–2022**

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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
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	5.0	55,621	149,931,856,358
2017	2,695,598	34.6	1,047,695	1,289,325	4.7	58,315	157,193,797,370
2018	2,695,598	34.9	1,077,886	1,288,755	4.0	61,089	164,671,386,222
2019	2,695,598	35.2	1,080,345	1,286,484	3.2	65,306	176,038,722,988
2020	2,695,598	34.8	1,081,143	1,165,441	8.2	67,671	182,413,812,258
2021	2,746,388	35.8	1,139,537	1,247,060	4.1	71,992	197,717,964,896
2022	2,746,388	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>	1,319,764	4.2	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>

Notes:

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

<sup>(2)</sup> Source: U.S. Census Bureau-American Community Survey Data Estimate. Data Not Available for 2022.

<sup>(3)</sup> Source: Bureau of Labor of Statistics for 2022, 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.