FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO (A FIDUCIARY FUND OF THE CITY OF CHICAGO, ILLINOIS)

FINANCIAL STATEMENTS

DECEMBER 31, 2022 AND 2021

FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

DECEMBER 31, 2022 AND 2021

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REPORT OF INDEPENDENT AUDITORS

To the Board of Trustees of Firemen's Annuity and Benefit Fund of Chicago

Opinion

We have audited the accompanying financial statements of Firemen's Annuity and Benefit Fund of Chicago (the Plan), a fiduciary fund of the City of Chicago, Illinois, which comprise the combining statements of pension plan fiduciary net position and health insurance supplement plan net position, and the related combining statements of changes in pension plan fiduciary net positon and health insurance supplement plan net position as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of Firemen's Annuity and Benefit Fund of Chicago as of December 31, 2022 and 2021, and the changes in plan net position for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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. Management is also responsible 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.

In preparing financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' 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 generally accepted auditing standards 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, including omissions, 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 generally accepted auditing standards, we:

- Exercise professional judgement 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 Plan'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; and
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

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 the Management's Discussion and Analysis on pages 4 through 4e and the required supplementary information on pages 34 through 38 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.

Required Supplementary Information (continued)

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 Plan's basic financial statements. The accompanying supplementary information on pages 39 through 41 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Matters

Previously Audited Information

The Plan's financial statements as of and for the year ended December 31, 2020 were audited by other auditors whose report dated June 29, 2021 expressed an unmodified opinion on those financial statements. We have previously audited the basic financial statements for the years ended December 31, 2019, 2018, 2017, 2016, 2015, and 2014 (which are not presented herein), and we expressed unmodified opinions on those financial statements. In our opinion, the information on page 41 is fairly stated in all material respects in relation to the basic financial statements from which it has been derived.

Legacy Professionals LLP

Westchester, Illinois

June 21, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

DECEMBER 31, 2022 AND 2021

This section presents Management's Discussion and Analysis of the financial position and performance of the Firemen's Annuity and Benefit Fund of Chicago (the Plan) as of and for the year ended December 31, 2022 and 2021. This discussion is presented as an overview of the financial activities of the Plan and should be read in conjunction with the Plan's financial statements.

Overview of the Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's basic financial statements. The financial statements are prepared on an economic sources focus and accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) pronouncements. The basic components of the financial package are described below:

Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position provide a snapshot of account balances and net position held in trust for future benefit payments and any liabilities as of the Plan's year end. Over time, increases and decreases in net position may serve as a useful indicator of whether the financial position of the Plan is improving or deteriorating.

Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position show the revenues (additions) and expenses (deductions) during the year, where additions less deductions equal net increase (decrease) in net position. The net increase (decrease) in net position reports the change in net position as reported in the Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position of the prior year and the current year.

Notes to the Financial Statements provides additional information that is essential to achieving a better understanding of the data provided in the basic financial statements.

Required Supplementary Information provides schedules and related notes concerning actuarial information, funding progress, employer contributions, and investment returns.

Supplementary Information includes schedules of administrative expenses, investment expenses, additions by source, and deductions by type.

Financial Highlights

Plan Net Position

The condensed Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position reflect the resources available to pay benefits to members. A summary of the Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position is as follows:

Plan Net Position As of December 31,

						Current Ye Increase/(Decre	
		<u>2022</u>	<u>2021</u>	<u>2020</u>		<u>Dollars</u>	Percent
Assets:							
Receivables	\$	417,346,631	\$ 390,869,685	\$ 389,817,097	\$	26,476,946	6.8 %
Prepaid expenses		234,326	161,085	215,061		73,241	45.5 %
Investments, at fair value		948,840,304	1,084,632,830	925,885,010		(135,792,526)	-12.5 %
Collateral held for							
securities on loan		89,882,515	 108,665,402	 75,812,634		(18,782,887)	-17.3 %
Total assets	_	1,456,303,776	 1,584,329,002	 1,391,729,802	_	(128,025,226)	-8.1 %
Liabilities:							
Payables		8,725,433	9,265,679	7,030,688		(540,246)	-5.8 %
Securities lending collateral		89,882,515	 108,665,402	 75,812,634	_	(18,782,887)	-17.3 %
Total liabilities		98,607,948	 117,931,081	 82,843,322		(19,323,133)	-16.4 %
Plan net position	\$	1,357,695,828	\$ 1,466,397,921	\$ 1,308,886,480	\$	(108,702,093)	-7.4 %

Plan net position decreased by \$(108,702,093) or -7.4% from \$1,466,397,921 at December 31, 2021 to \$1,357,695,828 at December 31, 2022. Comparatively, plan net position increased by \$157,511,441 or 12.0% from \$1,308,886,480 at December 31, 2020 to \$1,466,397,921 at December 31, 2021.

The decrease in plan net position for the year ended December 31, 2022 was primarily due to a significant decrease in investment returns from the prior year. This decrease was offset by an increase in the receivable for employer contributions. Comparatively, the increase in plan net position for the year ended December 31, 2021 was primarily due to strong investment returns.

Changes in Plan Net Position

The Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position reflects the changes in the resources available to pay benefits to members. A summary of the Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position is as follows:

					ui
				Increase/(Decre	ease) in
	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>Dollars</u>	Percent
Additions:					
Employer contributions	\$ 399,860,000	\$ 368,350,000	\$ 369,455,023	\$ 31,510,000	8.6 %
Plan member contributions	53,030,821	52,268,136	54,414,653	762,685	1.5 %
Net investment income (loss)	(155,875,914)	129,301,406	104,987,077	(285,177,320)	-220.6 %
Net securities lending income	285,401	209,312	342,668	76,089	36.4 %
Other	5,623	7,711	49,999	(2,088)	-27.1 %
Total additions	297,305,931	550,136,565	529,249,420	(252,830,634)	-46.0 %
Deductions:					
Benefits	398,049,793	385,067,130	362,831,685	12,982,663	3.4 %
Administrative expenses	3,390,041	3,082,062	2,892,186	307,979	10.0 %
Annuitant healthcare subsidy	650,401	868,386	1,032,062	(217,985)	-25.1 %
Litigation settlement	-	-	99,103	-	0.0~%
Refunds of contributions	3,917,789	3,607,546	3,328,719	310,243	8.6 %
Total deductions	406,008,024	392,625,124	370,183,755	13,382,900	3.4 %
Net increase (decrease) in					
plan net position	<u>\$ (108,702,093</u>)	<u>\$ 157,511,441</u>	\$ 159,065,665	<u>\$ (266,213,534)</u>	-169.0 %

Changes in Plan Net Position For the Years Ended December 31,

Current Year

Additions to Plan Net Position

Total additions were \$297,305,931 in 2022, \$550,136,565 in 2021 and \$529,249,420 in 2020.

Employer contributions increased by \$31,510,000 or 8.6% from \$368,350,000 for the year ended December 31, 2021 to \$399,860,000 for the year ended December 31, 2022. Comparatively, employer contributions decreased by \$1,105,023 or -0.3% from \$369,455,023 for the year ended December 31, 2020 to \$368,350,000 for the year ended December 31, 2021. The increase in employer contributions for 2022 was due to funding requirements under the Illinois Compiled Statutes where the City is required to make level percent of pay contributions for plan years 2020 through 2055 that, along with member contributions and investment earnings, are expected to generate a projected funded ratio of 90% by the end of the 2055 plan year.

Additions to Plan Net Position (continued)

Plan member contributions increased by \$762,685 or 1.5% from \$52,268,136 for the year ended December 31, 2021 to \$53,030,821 for the year ended December 31, 2022. Comparatively, plan member contributions decreased by \$2,146,517 or -3.9% from \$54,414,653 for the year ended December 31, 2020 to \$52,268,136 for the year ended December 31, 2021. Plan member contributions remained relatively flat for the year ended December 31, 2022 as there were no significant changes in the contribution rate, the number of active participants, or average pensionable salary. Comparatively, the decrease in plan member contributions for the year ended December 31, 2021 was due to variations in the staffing levels in the Chicago Fire Department. Active participants were 4,767, 4,735 and 4,697 as of December 31, 2022, 2021 and 2020, respectively.

Net investment income (loss) decreased by \$(285,177,320) or -220.6% from net investment income of \$129,301,406 for the year ended December 31, 2021 to net investment (loss) of \$(155,875,914) the year ended December 31, 2022. Comparatively, net investment income increased by \$24,314,329 or 23.2% from net investment income of \$104,987,077 for the year ended December 31, 2020 to net investment income of \$129,301,406 for the year ended December 31, 2021. Investment earnings fluctuate primarily from the overall performance of the financial markets from year to year.

The Plan's realized return on investments for the year ended December 31, 2022 was -14.2% versus 14.9% for the year ended December 31, 2021 and 12.4% for the year ended December 31, 2020.

	<u>2022</u>	<u>2021</u>	<u>2020</u>
Domestic Equities	-17.4%	22.1%	22.5%
Benchmark	-19.2%	25.7%	20.9%
International Equities	-17.8%	12.3%	11.8%
Benchmark	-16.6%	8.5%	11.1%
Fixed income	-11.6%	-0.5%	8.8%
Benchmark	-13.0%	-1.5%	7.5%
Total Plan	-14.2%	14.9%	12.4%

Portfolio Rate of Return For the Years Ended December 31,

Deductions to Plan Net Position

Total deductions were \$406,008,024 in 2022, \$392,625,124 in 2021 and \$370,183,755 in 2020.

Benefits increased by \$12,982,663 or 3.4% from \$385,067,130 for the year ended December 31, 2021 to \$398,049,793 for the year ended December 31, 2022. Comparatively, benefits increased by \$22,235,445 or 6.1% from \$362,831,685 for the year ended December 31, 2020 to \$385,067,130 for the year ended December 31, 2021. In recent times, benefits have increased yearly due to several factors; a contractual healthcare incentive which has added annuitants above the expected number, cost of living increases, and new annuitants coming on the pension roll at higher rates than the annuitants that are being removed from the pension roll.

Administrative expenses and refunds of contributions have all remained at relatively constant amounts over the last three years.

Actuarial Information

Pension Benefits

Under GASB Statement No. 67, *Financial Reporting for Pension Plans*, the Plan's funding for pension benefits is as follows:

Funding for Pension Benefits For the Years Ended December 31,

	2022	<u>2021</u>	<u>2020</u>
Total pension liability Plan fiduciary net position City's net pension liability	\$ 7,216,409,422 <u>1,357,695,828</u> <u>\$ 5,858,713,594</u>	\$ 7,004,905,578 1,466,397,921 \$ 5,538,507,657	\$ 6,901,130,881 1,308,886,480 <u>\$ 5,592,244,401</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>18.81</u> %	<u>20.93</u> %	<u>18.97</u> %

Actuarial Information (continued)

Postemployment Healthcare Benefits

Under GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, the Plan's funding for postemployment healthcare benefits is as follows:

Funding for Postemployment Healthcare Benefits For the Years Ended December 31,

	2022	<u>2021</u>	<u>2020</u>
Total health insurance supplement liability Plan fiduciary net position City's health insurance supplement	\$ 8,336,979 - <u>\$ 8,336,979</u>	\$ 9,155,590 - <u>\$ 9,155,590</u>	\$ 8,975,148
Plan fiduciary net position as a percentage of the total health insurance supplement	<u>0.00</u> %	<u>0.00</u> %	<u>0.00</u> %

Contributions for postemployment healthcare benefits are made on a "pay-as-you-go" basis, resulting in a 0.00% funded ratio.

Contact Information

This financial report is designed to provide plan participants, retirees, beneficiaries, the employer and all other interested users with a complete, detailed, easy to understand financial portrait of the Plan at December 31, 2022. Comments, questions or concerns regarding this report or requests for additional information should be addressed to:

Kelly Weller, Executive Director Firemen's Annuity and Benefit Fund of Chicago 20 S. Clark Street, Suite 1400 Chicago, IL 60603

COMBINING STATEMENTS OF PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

December 31, 2022 and 2021

		2022			2021		
	Total	Pension	Health Insurance <u>Supplement</u>	Total	Pension	Health Insurance Supplement	
Assets							
Receivables							
Employer contributions - net	\$ 404,376,390	\$ 404,376,390	\$ -	\$ 379,447,327	\$ 379,447,327	\$ -	
Investment income	3,572,964	3,572,964	-	2,826,698	2,826,698	-	
Other	4,380,933	4,380,933	-	2,598,068	2,598,068	-	
Securities lending	33,105	33,105	-	29,102	29,102	-	
Unsettled trades	4,983,239	4,983,239	-	5,968,490	5,968,490		
Total receivables	417,346,631	417,346,631		390,869,685	390,869,685		
Prepaid expenses	234,326	234,326		161,085	161,085		
Investments							
Cash deposits and short-term investments	64,461,762	64,461,762	-	45,866,572	45,866,572	-	
Corporate bonds	99,469,642	99,469,642	-	103,638,635	103,638,635	-	
Equities	529,259,712	529,259,712	-	662,964,750	662,964,750	-	
Pooled funds	84,225,477	84,225,477	-	111,113,449	111,113,449	-	
Limited partnerships	69,397,114	69,397,114	-	60,239,714	60,239,714	-	
U.S. and Foreign Government obligations	102,026,597	102,026,597	-	100,809,710	100,809,710		
Total investments	948,840,304	948,840,304		1,084,632,830	1,084,632,830		
Collateral held for securities on loan	89,882,515	89,882,515		108,665,402	108,665,402		
Total assets	1,456,303,776	1,456,303,776		1,584,329,002	1,584,329,002		
LIABILITIES							
Accounts payable and accrued expenses	1,178,426	1,178,426	-	1,354,247	1,354,247	-	
Participant accounts	426,550	426,550	-	719,644	719,644	-	
Securities lending collateral	89,882,515	89,882,515	-	108,665,402	108,665,402	-	
Securities lending	8,258	8,258	-	7,253	7,253	-	
Unsettled trades	7,112,199	7,112,199		7,184,535	7,184,535	-	
Total liabilities	98,607,948	98,607,948		117,931,081	117,931,081		
NET POSITION							
Net position restricted for pensions	1,357,695,828	1,357,695,828	-	1,466,397,921	1,466,397,921	-	
Net position held in trust for health insurance supplement benefits		-,,,	-	-,,.,.,.,	-,,.,.,.,	-	
· · · · · · · · · · · · · · · · · · ·	\$ 1,357,695,828	\$ 1,357,695,828	\$ -	\$ 1,466,397,921	\$ 1,466,397,921	\$ -	

COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

YEARS ENDED DECEMBER 31, 2022 AND 2021

		2022		2021		
	Total	Pension	Health Insurance Supplement	Total	Pension	Health Insurance Supplement
Additions						
Contributions						
Employer contributions						
Statutory	\$ 398,194,000	\$ 397,543,599	\$ 650,401	\$ 366,684,000	\$365,815,614	\$ 868,386
Exempt rank funding	1,666,000	1,666,000		1,666,000	1,666,000	-
Total employer contributions	399,860,000	399,209,599	650,401	368,350,000	367,481,614	868,386
Plan member						
Annuities	52,888,400	52,888,400	-	52,126,030	52,126,030	-
Death benefits	142,421	142,421		142,106	142,106	
Total plan member contributions	53,030,821	53,030,821	-	52,268,136	52,268,136	
Investment income						
Net appreciation (depreciation) in fair value of investments	(176,650,618)	(176,650,618)	-	114,467,689	114,467,689	-
Interest	16,697,998	16,697,998	-	11,194,595	11,194,595	-
Dividends	12,263,657	12,263,657		11,637,334	11,637,334	
	(147,688,963)	(147,688,963)	-	137,299,618	137,299,618	-
Less investment expenses	(8,186,951)	(8,186,951)		(7,998,212)	(7,998,212)	
Net investment income (loss)	(155,875,914)	(155,875,914)	-	129,301,406	129,301,406	-
Securities lending						
Income	2,030,925	2,030,925	-	213,225	213,225	-
Borrower rebates	(1,650,734)	(1,650,734)	-	65,592	65,592	-
Management fees	(94,790)	(94,790)		(69,505)	(69,505)	
Net securities lending income	285,401	285,401	-	209,312	209,312	-
Gift Fund donations	3,180	3,180	-	3,180	3,180	-
Miscellaneous income	1,970	1,970	-	1,608	1,608	-
Tax levy interest	473	473		2,923	2,923	
Total additions	297,305,931	296,655,530	650,401	550,136,565	549,268,179	868,386

COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

YEARS ENDED DECEMBER 31, 2022 AND 2021

		2022			2021	
	Total	Pension	Health Insurance <u>Supplement</u>	Total	Pension	Health Insurance <u>Supplement</u>
Deductions						
Benefits						
Age and service benefits						
Employees	\$ 334,579,554	\$ 334,579,554	\$ -	\$ 320,989,338	\$ 320,989,338	\$ -
Spouses	39,427,011	39,427,011	-	39,392,185	39,392,185	-
Dependents	984,797	984,797		1,188,180	1,188,180	
Total age and service benefits	374,991,362	374,991,362		361,569,703	361,569,703	
Disability benefits						
Duty	15,591,454	15,591,454	-	15,198,633	15,198,633	-
Occupational	5,970,988	5,970,988	-	6,736,113	6,736,113	-
Ordinary	509,826	509,826		685,691	685,691	
Total disability benefits	22,072,268	22,072,268		22,620,437	22,620,437	
Gift Fund payments	244,100	244,100		99,190	99,190	
Death benefits	742,063	742,063		777,800	777,800	
Total benefits	398,049,793	398,049,793	-	385,067,130	385,067,130	-
Administrative expenses	3,390,041	3,390,041	-	3,082,062	3,082,062	-
Annuitant healthcare subsidy	650,401	-	650,401	868,386	-	868,386
Refunds of contributions	3,917,789	3,917,789		3,607,546	3,607,546	
Total deductions	406,008,024	405,357,623	650,401	392,625,124	391,756,738	868,386
Net increase (decrease)	(108,702,093)	(108,702,093)	-	157,511,441	157,511,441	-
NET POSITION						
Beginning of year	1,466,397,921	1,466,397,921		1,308,886,480	1,308,886,480	
End of year	<u>\$ 1,357,695,828</u>	<u>\$ 1,357,695,828</u>	<u>\$</u> -	<u>\$ 1,466,397,921</u>	<u>\$ 1,466,397,921</u>	<u>\$</u>

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2022 AND 2021

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity - Accounting principles generally accepted in the United States of America define a financial reporting entity as consisting of the primary government and its component units for which the primary government is financially accountable. Financial accountability includes appointing a voting majority of a component unit's governing board, the ability of a primary government to impose its will on the component unit, or a potential for a component unit to provide specific financial benefits to or impose specific financial burdens on the primary government. Firemen's Annuity and Benefit Fund of Chicago (the Plan) has determined that no other outside entity meets the above criteria and, therefore, no other entity has been included as a component unit in the Plan's financial statements.

Based on the above criteria, the Plan is considered to be a fiduciary fund of the City of Chicago, Illinois (the City) and is included in the City's financial statements.

Method of Accounting - The financial statements are presented using the accrual basis of accounting. Employer contributions are recognized as income pursuant to legal requirements as specified by the Illinois Compiled Statutes (the Statutes). Plan member contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Investments - Investments are reported at fair value, which generally represents reported market value as of the last business day of the year. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss.

Capital Assets - The Plan has set a capitalization threshold of \$100,000 for all capital asset types. As of December 31, 2022 and 2021, the Plan does not have any capital assets.

Estimates - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

Subsequent Events - Subsequent events have been evaluated through June 21, 2023, which is the date the financial statements were available to be issued.

NOTE 2. PLAN DESCRIPTION

The Plan was established in 1931 and is governed by legislation contained in the Statutes, particularly 40 ILCS, Act 5, Article 6 (the Article), which specifically and exclusively refers to the Plan. The Plan can be amended only by the Illinois Legislature. The Plan is a single-employer defined benefit pension plan with a defined contribution minimum. The Plan was established for the purpose of providing retirement and disability benefits for employees of the City of Chicago employed under the provisions of the Municipal Personnel Ordinance as fire service and for the dependents of such employees.

The Statutes authorize a Board of Trustees (the Board) of eight members to carry out the provisions of the Article. According to the Article, four members of the Board are ex officio and four are elected by the employee members of the Plan. The four ex officio members are the City Treasurer, the City Clerk, the City Comptroller and the Deputy Fire Commissioner. All members of the Board of Trustees are fiduciaries with respect to the Plan and are statutorily mandated to discharge their duties, as such, solely in the interest of the Plan's participants and beneficiaries.

The Board has the powers and duties required in the Article to collect all contributions due to the Plan, to invest the Plan's reserves, to have an annual audit, to appoint employees, to authorize or suspend payment of any benefit and to have exclusive original jurisdiction in all matters relating to or affecting the Plan. The Board approves its own budget prepared by the Plan's administrative staff. The Board is required annually to submit to the City Council of the City of Chicago a detailed report of the financial affairs and status of the reserves of the Plan. Provisions in other articles of 40 ILCS require the Board to submit its annual audit and actuarial valuation reports to the State of Illinois Department of Insurance, as well as another detailed annual report, the form and content of which are specified by the Department of Insurance.

The Plan provides retirement benefits, as well as, death and disability benefits. Tier 1 employees who reach compulsory retirement age of 63, and members not subject to compulsory retirement who attain age 63, with at least 10 years of service and less than 20 years of service are entitled to receive an annuity of 30% of average salary for the first ten years of service plus an additional 2% for each year in excess of 10 years with partial City contributions to a maximum of 50%.

At age 50 or more with 10 or more but less than 20 years of service, a Tier 1 employee is entitled to an annuity of the entire sum accumulated for age and service annuity from deductions from salary, plus 1/10 of the sum accumulated from contributions by the City for each completed year of service after the first 10 years. Tier 1 benefits are for participants who first become a fireman or paramedic under this Article prior to January 1, 2011.

Tier 2 employees who have attained age 50 with at least 10 years of service are entitled to receive a tier 2 monthly annuity upon application. The tier 2 monthly annuity is equal to 2.5 of final average salary for each completed year of service, subject to an annuity reduction factor of ½ of 1% for each month that the fireman's age at retirement is under age 55. For tier 2 employees, the final average salary is based on 96 consecutive months within the last 120 months, capped at \$106,800 indexed annually at the lesser of 3% or 50% of the Consumer Price Index (CPI-U). This annuity shall not exceed 75% of final average salary.

NOTE 2. PLAN DESCRIPTION (CONTINUED)

Tier 1 employees with at least 20 years of service are entitled to receive a minimum formula annuity upon attainment of age 50, of 50% of final average salary plus an additional amount equal to 2.5% of final average salary for each year of service or fraction thereof in excess of 20 years of service. For Tier 1 employees, final average salary is based on the highest average annual salary for any four consecutive years within the last ten years of service immediately preceding the date of retirement. This annuity shall not exceed 75% of the final average salary.

For Tier 1 employees, the monthly annuity is increased by 3% of the original annuity (simple). The increase begins the later of 1) the 1st of the month following the first anniversary of the date of retirement or 2) the 1st of the month after attainment of age 55 and each January 1st thereafter for life. For Tier 2 employees, the monthly annuity is increased by the lesser of 3% or ½ of the annual unadjusted percentage increase in the Consumer Price Index-U. The increase begins in January of the first payment date following the later of the attainment of age 60 or the first anniversary of the annuity start date.

Participants should refer to the applicable State Statutes for more complete information.

Any employee of the City employed under the provisions of the Municipal Personnel Ordinance as fire service is covered by the Plan. At December 31, 2022 and 2021, participation in the Plan consisted of the following:

	<u>2022</u>	<u>2021</u>
Retirees and beneficiaries currently receiving benefits	5,300	5,265
Terminated plan participants entitled to but not yet receiving benefits	139	154
Active plan participants	4,767	4,735
Total participants	10,206	10,154

NOTE 3. EMPLOYER'S PENSION LIABILITY

Net Pension Liability

The components of the City's net pension liability of the Plan for the years ended December 31, 2022 and 2021 are as follows:

	2022	<u>2021</u>
Total pension liability	\$ 7,216,409,422	\$ 7,004,905,578
Plan fiduciary net position	1,357,695,828	1,466,397,921
City's net pension liability	<u>\$ 5,858,713,594</u>	\$ 5,538,507,657
Plan fiduciary net position as a percentage		
of the total pension liability	<u>18.81</u> %	<u>20.93</u> %

See the schedule of changes in the City's net pension liability and related ratios in the required supplementary information for additional information related to the funded status of the Plan.

The actuarial assumptions used in the December 31, 2022 valuation were based on the results of an actuarial experience study conducted for the period of January 1, 2017 through December 31, 2021, and were adopted and became effective December 31, 2022.

The actuarial assumptions used in the December 31, 2021 valuation were based on the results of an actuarial experience study conducted for the period of January 1, 2012 through December 31, 2016, and were adopted and became effective December 31, 2018.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Net Pension Liability (continued)

The net pension liabilities were determined by actuarial valuations performed as of December 31, 2022 and 2021 using the following actuarial methods and assumptions:

Actuarial valuation date Actuarial cost method Asset valuation method	December 31, 2022 and 2021 Entry-Age Normal 5 year smoothed fair value
Actuarial assumptions: Inflation	2022 - 2.50% per year, 2021 - 2.25% per year
Salary increases	3.50% to 25.00% per year, varying by years of service
Investment rate of return	6.75% per year, net of investment expense
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition last updated pursuant to an experience study of the period January 1, 2017 through December 31, 2021 for 2022 an experience study of the period of January 1, 2012 through December 31, 2026 for 2021.
Post-retirement mortality	 2022 - PubS-2010 Retiree Amount-weighted Mortality Table, using 119% of rates for males and 100% of rates for females, projected generationally using scale MP-2021. 2021 - RP-2014 Blue Collar Healthy Annuitant Mortality Table, with scaling factors of 106% for males and 98% for females, projected generationally using scale MP-2017.
Disabled mortality	 2022 - PubS-2010 Disabled Retiree Amount-weighted Mortality Table projected generationally using scale MP-2021. 2021 - RP-2014 Blue Collar Healthy Annuitant Mortality Table, with scaling factors of 107% for males and 99% for females, projected generationally using scale MP-2017.
Pre-retirement mortality	 2022 - PubS-2010 Employee Amount-weighted Mortality Table, projected generationally using scale MP-2021. 2021 - RP-2014 Blue Collar Healthy Employee Mortality Table, with scaling factors of 92% for males and 100% for females, projected generationally using scale MP-2017.
Postretirement annuity increases	Tier 1 participants - 3.0% simple interest. Tier 2 participants - the lesser of 3.0% or one half of the increase in the Consumer Price Index.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Discount Rate

A discount rate of 6.75% was used to measure the total pension liability at December 31, 2022. The discount rate was based on an expected rate of return on Plan investments of 6.75% and a municipal bond rate of 3.72%. 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 99-0506. 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 Plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members throughout the projection period. Therefore, the long-term expected rate of return on Plan investments of 6.75% was applied to projected benefits for all periods. The municipal bond rate as of December 31, 2022 was based on the Bond Buyer 20-Bond Index of general obligation municipal bonds.

A discount rate of 6.75% was used to measure the total pension liability at December 31, 2021. The discount rate was based on an expected rate of return on Plan investments of 6.75% and a municipal bond rate of 2.06%. 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 99-0506. 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 Plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members throughout the projection period. Therefore, the long-term expected rate of return on Plan investments of 6.75% was applied to projected benefits for all periods. The municipal bond rate as of December 31, 2021 was based on the Bond Buyer 20-Bond Index of general obligation municipal bonds.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Discount Rate Sensitivity

The following is an analysis of the net pension liability's sensitivity to changes in the discount rate at December 31, 2022 and 2021. The following table presents the net pension liability of the City using the blended discount rate as well as the City's net pension liability calculated using a discount rate 1 percent lower and 1 percent higher than the current discount rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
	5.75%	6.75%	7.75%
City's Net Pension Liability -			
December 31, 2022	\$ 6,706,055,824	\$ 5,858,713,594	\$ 5,147,009,168
		Current	
	1% Decrease	Discount Rate	1% Increase
	5.75%	6.75%	7.75%
City's Net Pension Liability -			
December 31, 2021	\$ 6,378,443,450	\$ 5,538,507,657	\$ 4,835,562,875

NOTE 4. SUMMARY OF EMPLOYER FUNDING POLICIES

Covered employees are required to contribute 9.125% of their salary to the Plan. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with statutory interest.

The City, for its employer portion, is required by the Statutes to fund the Plan on an actuarial basis sufficient to produce a funding level of 90% by the year ended December 31, 2055. The City's yearly contribution is equal to no less than (1) the normal cost to the Plan, plus (2) an annual amount sufficient to bring the total assets of the Plan up to 90% of the total actuarial liabilities of the Plan by the end of fiscal year 2055, as annually updated and determined by an enrolled actuary employed by the Illinois Department of Insurance or by an enrolled actuary retained by the Plan or the City.

NOTE 5. RESERVES FOR ACTUARIAL LIABILITIES

The reserves for actuarial liabilities are based on an annual valuation submitted by the Plan's consulting actuary. The annual actuarial valuation establishes the reserves required for various statutory liabilities which arise from pension benefit schedules that are part of the current pension code legislation. The pension code legislation can be amended only by the Illinois Legislature.

The Prior Service Annuity Reserve is a reserve account for the accumulation of City contributions to provide for: a) employee and spouse annuities that are based on service performed before the Plan's effective date of July 1, 1931 and b) any excess in minimum annuity formula requirements over the amounts required for age and service annuities, and for spouse annuities.

The City Contribution Reserve is used to accumulate amounts contributed by the City to provide for annuities based on age and service of each employee and spouse. An individual account is maintained for each employee and spouse until the employee retires, at which time the individual account balances are transferred to the Annuity Payment Reserve.

The Annuity Payment Reserve receives the amounts transferred from the individual accounts in the City Contribution Reserve and the Salary Deduction Reserve when an employee retires and qualifies for an annuity. All age and service annuity payments are charged to this reserve.

The Salary Deduction Reserve is similarly used to accumulate deductions made from employee salaries for age and service annuities for the employee and spouse. Individual accounts are maintained until the employee retires or withdraws from service before qualifying for an annuity. At retirement, account balances are transferred to the Annuity Payment Reserve. If an eligible employee elects to take a refund of contributions instead of an annuity, the contribution refund is charged to this reserve.

The Death Benefit Reserve accumulates contributions from employees and the City for ordinary death benefits. All ordinary death benefits paid are charged to this reserve.

The Ordinary Disability Reserve accumulates contributions from employees and the City for ordinary disability benefits. All ordinary disability benefits paid are charged to this reserve.

The Supplementary Payment Reserve accumulates amounts to provide automatic annual postretirement increases to employee annuitants who retired before September 1, 1959 and amounts in excess of the original annuity grant due to increases in the minimum annuity.

The Gift Reserve accumulates donations to be used to provide an extra benefit to widowed spouse annuitants and orphaned child annuitants.

The Reserve (deficit) represents the difference between the actuarially determined present value of all future pension payments and the value of the Plan's present assets plus the present value of future contributions. A deficit indicates that additional assets will be needed to provide for future benefits, while a surplus indicates that present assets and future contributions exceed the expected requirements for future pension payments.

NOTE 5. RESERVES FOR ACTUARIAL LIABILITIES (CONTINUED)

Net position restricted for pensions as of December 31, 2022 and 2021 were comprised of the following reserve surplus (deficit) balances:

	2022	2021
Prior Service Annuity Reserve	\$ 3,150,648,177	\$ 3,081,129,056
City Contribution Reserve	842,453,990	820,409,697
Annuity Payment Reserve	1,421,572,092	1,393,001,272
Salary Deduction Reserve	694,784,583	676,192,093
Death Benefit Reserve (deficit)	(25,264,009)	(23,937,319)
Ordinary Disability Reserve	555,527	584,795
Supplementary Payment Reserve (deficit)	(303,988)	(284,692)
Gift Reserve	17,570,124	14,934,930
Reserve (deficit)	(4,744,320,668)	(4,495,631,911)
Total fiduciary net position		
for pension benefits	<u>\$ 1,357,695,828</u>	<u>\$ 1,466,397,921</u>

NOTE 6. INVESTMENTS

Investment Policies

The Board of Trustees is responsible for establishing reasonable and consistent investment objectives, policies and guidelines governing the investment of Plan assets in accordance with the Statutes. The Plan is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the "prudent person" provisions of the Statutes. All of the Plan's financial instruments are consistent with the permissible investments outlined in the Statutes and any index-linked financial instruments are limited to those indices that replicate the permissible investments outlined in the Statutes. During the years ended December 31, 2022 and 2021, there were no significant changes to the investment policies.

Long-Term Expected Rate of Return

The Plan's investment policies in accordance with the Statutes establish the following target allocation across asset classes:

		Long-term
	Target	Expected Real
Asset Class	Allocation	Rate of Return
Equity	57.00%	7.4%
Fixed income	22.00%	4.6%
Other investments	<u>21.00</u> %	6.5%
Total	<u>100.00</u> %	

The long-term expected real rate of return on the Plan's investments was determined using an asset allocation study conducted by the Plan's investment management consultant in which best estimate ranges of expected future real rates of return (net of investment expense and inflation) were developed for each major asset class. These ranges were 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. Best estimates or arithmetic real rates of return for each major asset class included in the Plan's target asset allocation are listed in the preceding table.

Annual Money-Weighted Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was -14.66% and 14.23% for the years ended December 31, 2022 and 2021, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. U.S. Government obligations or obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk and do not require disclosure of credit quality. The Plan establishes minimum investment rating guidelines for each investment manager based on their area of concentration and level of allowable risk. The following table presents a summarization at December 31, 2022 and 2021 of the lowest credit quality rating of investments in corporate bonds, foreign government obligations, short-term investments, and fixed income mutual funds as valued by Moody's Investors Service and/or Standard & Poor's, as applicable.

Credit Risk (continued)

Type of Investment	Rating	2022			<u>2021</u>
Cash deposits and short-term investments	Not Rated	\$	64,461,762	\$	45,866,572
Corporate bonds	Aaa/AAA	\$	11,648,313	\$	7,123,965
	Aa/AA		3,729,705		3,874,774
	A/A		15,558,329		16,063,887
	Baa/BBB		34,869,581		38,046,392
	Ba/BB		12,575,116		16,667,923
	B/B		4,478,499		5,847,344
	Caa/CCC		2,033,965		2,268,464
	Ca/CC		-		120,297
	C/C		193,914		120,488
	Not Rated		12,413,004		12,289,225
U.S. Governmen	t Guaranteed		1,969,216		1,215,876
		\$	99,469,642	<u>\$</u>	103,638,635
Pooled funds - fixed income	Not Rated	<u>\$</u>	35,021,119	\$	35,920,762
U.S. and Foreign Government	Aaa/AAA	\$	60,677,392	\$	51,785,701
obligations	Aa/AA		2,198,296		3,595,912
	A/A		437,292		1,206,887
	Baa/BBB		2,386,910		2,510,373
	Ba/BB		126,578		1,178,267
	B/B		149,456		-
	Caa/CCC		76,797		132,372
	Ca/CC		40,092		27,994
	Not Rated		1,359,146		2,757,502
U.S. Governmen	t Guaranteed		34,574,638		37,614,702
		\$	102,026,597	<u>\$</u>	100,809,710

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. Investments are diversified to minimize the risk of loss resulting from over-concentration of assets in a specific maturity period, a single issuer, or an individual class of securities. The Plan requires investment managers to display an overall level of interest rate risk that is consistent with the benchmark specified by the Plan. The following table presents a summarization of debt investments at December 31, 2022 and 2021 using the segmented time distribution method:

Type of Investment	Maturity	2022	<u>2021</u>
Cash deposits and short-term investments	Less than 1 year	\$ 64,461,762	\$ 45,866,572
Corporate bonds	Less than 1 year 1-6 years 6-10 years Over 10 years	\$ 2,941,094 50,360,159 18,084,271 28,084,118 \$ 99,469,642	\$ 3,711,282 38,419,391 25,111,312 36,396,650 \$ 103,638,635
Pooled funds - fixed income	Less than 1 year 1-6 years 6-10 years	\$ 2,701,082 21,619,955 <u>10,700,082</u> \$ 35,021,119	\$ - 35,920,762 - <u>\$ 35,920,762</u>
U.S. and Foreign Government obligations	Less than 1 year 1-6 years 6-10 years Over 10 years	\$ 10,123,019 40,183,701 17,313,000 <u>34,406,877</u> <u>\$ 102,026,597</u>	<pre>\$ 15,609,809 37,785,534 14,618,996 32,795,371 \$ 100,809,710</pre>

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Plan requires investment managers to invest in at least ten countries if investing in foreign obligations and/or equities. The Plan's exposure to foreign currency risk at December 31, 2022 and 2021 is as follows:

	Fair Value		I	Fair Value
	(USD)			(USD)
Type of Investment	<u>2022</u>		<u>2021</u>	
U.S. and Foreign Government obligations:				
Argentine peso	\$	28,524	\$	67,671
Brazilian real		-		981,213
Chinese yuan renminbi		73,536		161,714
Indian rupee		-		447,860
Indonesian rupiah		603,432		685,943
Japanese yen		-		321,672
Mexican peso		1,413,910		1,566,208
Russian ruble		247,711		936,204
U.S. dollar		99,659,484		95,641,225
	<u>\$ 1</u>	02,026,597	\$	100,809,710

Foreign Currency Risk (continued)

	Fair Value	Fair Value		
	(USD)	(USD)		
<u>Type of Investment</u>	2022	2021		
Equities:				
Australian dollar	\$ 4,449,286	\$ 5,237,007		
Brazilian real	5,260,910	5,288,897		
British pound	21,901,542	29,485,199		
Canadian dollar	7,269,128	6,923,592		
Chilean peso	759,656	335,226		
Chinese yuan renminbi	843,299	1,581,721		
Danish krone	3,501,044	4,691,842		
Egyptian pound	408,261	454,984		
European euro	45,883,364	56,974,929		
Hong Kong dollar	19,240,490	27,026,284		
Hungarian forint	385,241	529,484		
Indian rupee	9,836,808	8,943,445		
Indonesian rupiah	1,985,565	2,519,514		
Japanese yen	19,418,274	22,935,257		
Kuwaiti dinar	130,609	-		
Malaysian ringgit	724,116	725,760		
Mexican peso	3,051,016	3,000,701		
New Israeli shekel	103,716	-		
New Taiwan dollar	8,639,771	10,169,715		
New Zealand dollar	514,969	536,594		
Norwegian krone	456,309	453,823		
Philippines peso	140,163	177,211		
Polish zloty	793,902	976,409		
Qatari riyal	579,734	236,556		
Russian ruble	1,703,879	-		
Singapore dollar	2,035,233	1,686,059		
South African rand	2,026,980	1,993,425		
South Korean won	9,869,277	11,014,683		
Swedish krona	3,490,100	8,222,845		
Swiss franc	10,166,047	13,831,989		
Thailand baht	841,318	673,616		
Turkish lira	612,016	434,874		
United Arab Emirates dirham	723,603	-		
U.S. dollar	341,514,086	435,903,109		
	\$ 529,259,712	<u>\$ 662,964,750</u>		

Additional Investment Disclosures

During 2022 and 2021, net realized gain on investments sold, reflecting the difference between the proceeds received and cost value of securities sold, was \$6,427,452 and \$83,751,016 respectively. These amounts are included in the net appreciation (depreciation) in fair value of investments as reported on the statements of changes in pension plan fiduciary net position. The calculation of realized gains and losses is independent of the calculation of net appreciation (depreciation) in the fair value of plan investments. Investments purchased in a previous year and sold in the current year result in their realized gains and losses being reported in the current year and their net appreciation in plan assets being reported in both the current year and the previous year(s).

The Plan does not isolate that portion of net appreciation (depreciation) in fair value of investments resulting from changes in the foreign exchange rate on investments from fluctuations arising from changes in the market prices of the securities. Such fluctuations are included with net appreciation (depreciation) in fair value of investments. Net realized gains and (losses) on foreign currency transactions represent net exchange gains or losses on closed foreign currency contracts, disposition of foreign currencies, and the difference between the amount of investment income and foreign withholding taxes recorded on the Plan's books and the U.S. dollar equivalent amounts actually received or paid. Net unrealized gains and (losses) on foreign currency transactions arise from changes in the value of open foreign currency contracts and assets and liabilities other than investments at the year end, resulting from changes in the exchange rate.

NOTE 7. FAIR VALUE MEASUREMENTS

GASB Statement No. 72, *Fair Value Measurement and Application*, established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Basis of Fair Value Measurement

Level 1	Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities
Level 2	Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly
Level 3	Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The Plan has the following recurring fair value measurements as of December 31, 2022 and 2021:

		Fair Value Measurements at 12/31/2022 Using				Using	
			Quoted				
			Prices in				
			Active		Significant		
			Markets for		Other	-	nificant
			Identical		Observable		oservable
			Assets		Inputs		nputs
	 Total		(Level 1)		(Level 2)	(L	evel 3)
Investments by fair value level							
Cash deposits and short-term investments	\$ 51,861,000	\$	51,861,000	\$	-	\$	-
Corporate bonds	99,469,642		-		99,469,642		-
Equities	529,259,712		529,259,712		-		-
Pooled funds	28,856,824		28,856,824		-		-
U.S. and Foreign Government obligations	 102,026,597		1,476,282		100,550,315		-
	811,473,775	\$	611,453,818	\$	200,019,957	\$	-
· · · · · · · · · ·	107 0 4 4 500						
Investments measured at net asset value	 137,366,529						
Total investments at fair value	\$ 948,840,304						
			Fair Value Me	east	arements at 12/3	1/2021	Using
			Quoted	easu	arements at 12/3	1/2021	Using
			Quoted Prices in	east		1/2021	Using
			Quoted Prices in Active	easu	Significant		
			Quoted Prices in Active Markets for	easu	Significant Other	Sig	nificant
			Quoted Prices in Active Markets for Identical	easu	Significant Other Observable	Sig Unot	nificant
	Tatal		Quoted Prices in Active Markets for Identical Assets	easu	Significant Other Observable Inputs	Sig Unot I	nificant oservable nputs
	 Total		Quoted Prices in Active Markets for Identical		Significant Other Observable	Sig Unot I	nificant
Investments by fair value level	 Total		Quoted Prices in Active Markets for Identical Assets	<u></u>	Significant Other Observable Inputs	Sig Unot I	nificant oservable nputs
Investments by fair value level Cash deposits and short-term investments	\$ Total 21,184,940	\$	Quoted Prices in Active Markets for Identical Assets	<u></u>	Significant Other Observable Inputs	Sig Unot I	nificant oservable nputs
	\$		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs	Sig Unot I (L	nificant oservable nputs
Cash deposits and short-term investments	\$ 21,184,940		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)	Sig Unot I (L	nificant oservable nputs
Cash deposits and short-term investments Corporate bonds Equities Pooled funds	\$ 21,184,940 103,638,635 662,964,750 17,525,611		Quoted Prices in Active Markets for Identical Assets (Level 1) 21,184,940 - 662,964,750 17,525,611		Significant Other Observable Inputs (Level 2) - 103,638,635 - -	Sig Unot I (L	nificant oservable nputs
Cash deposits and short-term investments Corporate bonds Equities	\$ 21,184,940 103,638,635 662,964,750 17,525,611 100,809,710		Quoted Prices in Active Markets for Identical Assets (Level 1) 21,184,940 - 662,964,750 17,525,611 4,499,681		Significant Other Observable Inputs (Level 2) - 103,638,635 - - 96,310,029	Sig Unot I (L	nificant oservable nputs
Cash deposits and short-term investments Corporate bonds Equities Pooled funds	\$ 21,184,940 103,638,635 662,964,750 17,525,611		Quoted Prices in Active Markets for Identical Assets (Level 1) 21,184,940 - 662,964,750 17,525,611		Significant Other Observable Inputs (Level 2) - 103,638,635 - - 96,310,029	Sig Unot I (L	nificant oservable nputs
Cash deposits and short-term investments Corporate bonds Equities Pooled funds	\$ 21,184,940 103,638,635 662,964,750 17,525,611 100,809,710	\$	Quoted Prices in Active Markets for Identical Assets (Level 1) 21,184,940 - 662,964,750 17,525,611 4,499,681	\$	Significant Other Observable Inputs (Level 2) - 103,638,635 - - 96,310,029	Sig Unot (L \$	nificant oservable nputs

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

Level 1 Measurements

Cash deposits, equities, pooled funds, and U.S. Treasury securities are traded in active markets on national and international securities exchanges and are valued at closing prices on the measurement date.

Level 2 Measurements

Corporate bonds and U.S. Government and Foreign Government obligations are generally valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. To the extent that quoted prices are not available, fair value is determined based on a valuation model that include inputs such as interest rate yield curves and credit spreads. Securities traded in markets that are not considered active are valued based on quoted market prices, broker to dealer quotations, or alternative pricing sources with reasonable levels of price transparency. Securities that trade infrequently and therefore have little or no price transparency are valued using the investment manager's best estimates.

The valuation methods for investments measured at net asset value (NAV) are presented on the following table:

				Redemption	Redemption
	Fair	Value	Unfunded	Frequency	Notice
	12/31/2022	12/31/2021	Commitments	(If Eligible)	Period
Investments measured at net asset	value:				
Short-term investment fund (1)	\$ 12,600,762	\$ 24,681,632	\$ -	Daily	N/A
Pooled funds (2)					
Equity	26,165,910	62,452,249	-	Daily, Monthly	N/A, 10 Days
Fixed income	16,083,566	18,522,904	-	Daily	N/A
Real estate	13,119,177	12,612,685	-	Pro Rata Basis	N/A
Limited partnerships (3)	69,397,114	60,239,714	42,100,238	Closed-end / Quarterly	N/A
Total	\$ 137,366,529	<u>\$178,509,184</u>			

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- (1) <u>Short-term investment fund</u> This investment's objective is to invest in short-term investments of high quality and low risk to protect capital while achieving investment returns. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (2) <u>Pooled funds</u> This investment is made up of two equity funds, three fixed income funds, and a commingled real estate account all with an investment objective to maximize the total return. The fair value of the investments in this type has been determined using the NAV per share of the investments.

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

(3) <u>Limited partnerships</u> - This investment consists of fourteen limited partnership investments with an investment objective to achieve long-term capital appreciation, preserve capital, and achieve a consistent pattern of returns through investments in limited partnerships, privately issued securities, private equity funds, other pooled investments, and real estate funds. Thirteen of the fourteen limited partnership investments are closed-end where the partnership interests are generally illiquid and cannot be redeemed. It is expected that the liquidation of the limited partnership interests will generally coincide with the terms of the various partnership agreements. The limited partnership termination dates range from October 22, 2017 to December 26, 2034 but may be terminated earlier or extended later as set forth in the terms of the applicable partnership agreement. One of the fourteen partnerships is open-ended with an infinite life, unless the general partner determines otherwise. The fair value of the investments in this type has been determined using the NAV per share (or its equivalent) of the investments.

NOTE 8. SECURITIES LENDING

The Statutes and the Board of Trustees permit the Plan to lend its securities to broker-dealers and other entities with a simultaneous agreement to return collateral for the same securities in the future. The Plan's custodian, acting as the lending agent, lends securities for collateral in the form of cash, U.S. Government obligations and irrevocable letters of credit equal to 102% of the fair value of domestic securities plus accrued interest and 105% of the fair value of foreign securities plus accrued interest. The Plan is not restricted as to the type or amount of securities it may loan. The Plan does not have the right to sell or pledge securities received as collateral unless the borrower defaults.

The average term of securities loaned was 50 days in 2022 and 49 days in 2021; however, any loan may be terminated on demand by either the Plan or the borrower. Cash collateral may be invested in a short-term investment pool, which had an average weighted maturity at December 31, 2022 and 2021 of 15 and 28 days, respectively. Cash collateral may also be invested in term loans in which the investments (term loans) match the term of the securities loaned.

As of December 31, 2022 and 2021, the fair value (carrying amount) of loaned securities was \$87,460,892 and \$105,742,645 respectively. As of December 31, 2022 and 2021, the fair value (carrying amount) of cash collateral received by the Plan was \$89,882,515 and \$108,665,402 respectively. The cash collateral is included as an asset and a corresponding liability on the statements of plan net position.

Although the Plan's securities lending activities are collateralized as described above, they involve both market and credit risk. In this context, market risk refers to the possibility that the borrower of securities will be unable to collateralize the loan upon a sudden material change in the fair value of the loaned securities. Credit risk refers to the possibility that counterparties involved in the securities lending program may fail to perform in accordance with the terms of their contracts.

NOTE 8. SECURITIES LENDING (CONTINUED)

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower. The contract with the lending agent requires it to indemnify the Plan if borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the Plan for income distributions by the issuers of securities while the securities are on loan.

There were no losses due to default of a borrower or the lending agent during the years ended December 31, 2022 and 2021.

A summary of securities loaned at fair value as of December 31:

	<u>2022</u>	<u>2021</u>
Corporate bonds	\$ 21,414,908	\$ 25,025,588
Equities	63,692,519	76,187,989
U.S. and Foreign Government obligations	 2,353,465	 4,529,068
Total	\$ 87,460,892	\$ 105,742,645

NOTE 9. DERIVATIVES

The Plan invests in derivative financial instruments as provided by the Plan's statement of investment policy. The Plan uses derivative financial instruments to gain exposure to an asset class or manage portfolio risk. A derivative security is a financial contract whose value is based on, or "derived" from, a traditional security, an asset, or a market index. Derivative instruments include options, forward contracts, swaps, and futures as part of the Plan's portfolio. Derivative transactions involve, to varying degrees, credit risk, interest rate risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to the previously agreed upon terms. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to decrease or become more costly to settle.

NOTE 9. DERIVATIVES (CONTINUED)

The Plan's portfolio includes the following derivative instruments at December 31, 2022 and 2021:

	 2022				2021			
	Notional		Fair		Notional		Fair	
Derivative	Value		Value		Value		Value	
Options	\$ (3,076,391)	\$	7,050	\$	(323,872)	\$	2,946	
Futures purchase commitments	46,802,563		-		83,771,873		-	
Futures sales commitments	(46,802,563)		-		(83,771,873)		-	
Swap assets	1,558,318		1,024,261		18,509,631		473,806	
Swap liabilities	 (434,148)		(105,721)		(10,948,113)		(151,896)	
Total	\$ (1,952,221)	\$	925,590	\$	7,237,646	\$	324,856	

The Plan uses options to reduce the risk of holding an asset. An option is a contract that conveys the right, but not the obligation, to buy (call) or sell (put) an item at an agreed upon price during a certain period of time or on a specific date. For the year ended December 31, 2022, the options expire approximately one to two months after year end. For the year ended December 31, 2021, the options expire approximately one to four months after year end.

Futures contracts are used to provide exposure to an asset class using uninvested cash. These contracts are a legally binding agreement, made on the trading floor of a futures exchange, to buy or sell a commodity or financial instrument sometime in the future. Futures contracts have little credit risk, as organized exchanges are the guarantors. For the year ended December 31, 2022, the futures contracts mature from three months to three years after year end. For the year ended December 31, 2021, the futures contracts mature from three months to two years after year end.

Swaps are used by the Plan to hedge certain risks such as interest rate risk, or to speculate on changes in the underlying price of an asset. Traditionally, a swap is the exchange of one security for another to change the maturity, quality, structure of an issue, or because investment objectives have changed. For the year ended December 31, 2022, the swaps have maturity dates ranging from September 2024 through April 2052. For the year ended December 31, 2021, the swaps have maturity dates ranging from June 2022 through July 2051.

The Plan's derivative instruments are reported at fair value in equity investments on the statements of pension plan fiduciary net position. The gain or loss on derivative instruments is reported as part of investment income on the statements of changes in pension plan fiduciary net position.

NOTE 10. HEALTH INSURANCE SUPPLEMENT PLAN

Plan Description

Public Act 98-0043, effective June 28, 2013, initially terminated the health insurance supplement to be paid by the Plan after December 31, 2016. During the year ended December 31, 2019, the Circuit Court ordered that all eligible City of Chicago employee annuitants of the Plan are entitled to receive a health insurance premium subsidy for each month after December 31, 2016 in which they meet the eligibility requirements.

Eligible City of Chicago employee annuitants (both current and future employee annuitants, but not spousal or child annuitants) of the Plan are entitled to receive a health insurance premium subsidy of \$55 per month from the Plan if the annuitant is not qualified to receive Medicare benefits or \$21 per month from the Plan if the annuitant is qualified to receive Medicare benefits, representing a partial reimbursement for healthcare costs. The remaining costs for healthcare are borne by the City and the annuitant.

To be eligible for the health insurance premium subsidy, the annuitant must have retired on or after August 23, 1989; the annuitant must have been hired prior to July 1, 2003; and the annuitant must have either, (a) participated in a group healthcare plan for which the Plan offers to deduct health insurance premiums from monthly annuities in accordance with the 1983 and 1985 amendments to the Illinois Pension Code Statutes (currently either the Blue Cross/Blue Shield plans sponsored by the City of Chicago or the Aetna plans sponsored by Local 2), or (b) for the period between January 1, 2017 and December 31, 2019, participated in any health insurance plan and paid their healthcare insurance coverage themselves, either through an account on which the annuitant is named or an account established for the benefit of the annuitant.

At December 31, 2022 and 2021, participants potentially eligible for the health insurance supplement consisted of the following:

	<u>2022</u>	<u>2021</u>
Active members	1,421	1,573
Inactive plan members or beneficiaries currently receiving benefits		1,628
Inactive plan members entitled to but not yet receiving benefit payments		18
Total participants	3,204	<u>3,219</u>

Benefits Provided - The Plan pays a health insurance premium subsidy of \$55 per month if the annuitant is not qualified to receive Medicare benefits or \$21 per month if the annuitant is qualified to receive Medicare benefits.

Contributions - The Plan pays the health insurance premium subsidies on a "pay-as-you-go" basis through an allocation of Employer contributions from the City of Chicago.

NOTE 10. HEALTH INSURANCE SUPPLEMENT PLAN (CONTINUED)

Method of Accounting - The health insurance supplement plan's financial statements have been combined with the Plan's financial statements and are presented using the accrual basis of accounting.

Net Health Insurance Supplement Liability

The components of the city's net health insurance supplement liability for the year ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Total health insurance supplement liability	\$ 8,336,979	\$ 9,155,590
Plan fiduciary net position		
City's net health insurance supplement liability	<u>\$ 8,336,979</u>	<u>\$ 9,155,590</u>
Plan fiduciary net position as a percentage of the		
total health insurance supplement liability	0.00%	<u>0.00</u> %

Contributions for health insurance premium subsidies are made on a "pay-as-you-go" basis. There are no dedicated assets for health insurance premiums subsidies resulting in a 0.00% funded ratio.

See the schedule of changes in the city's net health insurance supplement liability and related ratios in the required supplementary information for additional information related to the funded status of the health insurance supplement plan.

NOTE 10. HEALTH INSURANCE SUPPLEMENT PLAN (CONTINUED)

The net health insurance supplement liability was determined by an actuarial valuation performed as of December 31, 2022 and 2021 using the following actuarial methods and assumptions:

Discount rate	2022 - 3.72%
	2021 - 2.06%
Election percentage	20% of pre-Medicare eligible retirees and 60% of post-Medicare eligible retirees are assumed to receive the supplement.
Mortality	2022 - Post-retirement mortality rates for non-disabled pensioners were based on the PubS-2010 Retiree Amount-weighted Mortality tables, using 119% of rates for males and 100% of rates for females and projected generationally using scale MP-2021. Post- retirement mortality rates for disabled pensioners were based on the PubS-2010 Disabled Annuitant Amount-weighted Mortality Table and projected generationally using scale MP-2021. Pre- retirement mortality rates were based on the PubS-2010 Employee Amount-weighted Mortality Table and projected generationally using scale MP-2021.
	2021 - Post-retirement mortality rates for non-disabled pensioners were based on the RP-2014 Blue Collar Healthy Annuitant Mortality Tables, scaled by 106% for males and 98% for females, and projected generationally using scale MP-2017. Post-retirement mortality rates for disabled pensioners were based on the RP-2014 Blue Collar Healthy Annuitant Mortality Tables, scaled by 107% for males and 99% for females, and projected generationally using scale MP-2017. Pre-retirement mortality rates were based on the RP-2014 Blue Collar Employee Mortality Tables, scaled by 92% for males and 100% for females, and projected generationally using scale MP-2017.

The actuarial assumptions used in the December 31, 2022 valuation were based on the results of an actuarial experience study conducted for the period of January 1, 2017 through December 31, 2021, and were adopted and became effective December 31, 2022.

The actuarial assumptions used in the December 31, 2021 valuation were based on the results of an actuarial experience study conducted for the period of January 1, 2012 through December 31, 2016, and were adopted and became effective December 31, 2018.

NOTE 10. HEALTH INSURANCE SUPPLEMENT PLAN (CONTINUED)

Discount Rate

As there are no assets dedicated to the health insurance supplement plan, the discount rates used to measure the total health insurance supplement liability were 3.72% as of December 31, 2022 and 2.06% as of December 31, 2021 based on the Bond Buyer 20-Bond Index of general obligation municipal bonds.

Sensitivity of the Net Health Insurance Supplement Liability to Changes in the Discount Rate

The following is an analysis of the net health insurance supplement liability's sensitivity to changes in the discount rate at December 31, 2022 and 2021. The following table presents the net health insurance supplement liability of the employer using the current discount rate as well as the employer's net health insurance supplement liability calculated using a discount rate 1 percent lower and 1 percent higher than the current discount rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
	2.72%	3.72%	4.72%
City's Net Health Insurance Supplement			
Liability - December 31, 2022	\$ 9,151,080	\$ 8,336,979	\$ 7,643,125
		Current	
	1% Decrease	Discount Rate	1% Increase
	1.06%	2.06%	3.06%
City's Net Health Insurance Supplement			
Liability - December 31, 2021	<u>\$ 10,189,657</u>	<u>\$ 9,155,590</u>	<u>\$ 8,289,634</u>

NOTE 11. EMPLOYER CONTRIBUTIONS RECEIVABLE - NET

Employer contributions due and not paid prior to year-end are recorded as contributions receivable and are reserved for uncertain collections. The allowance for uncollectible accounts is based on the likelihood of future collections. Employer contributions receivable at December 31, 2022 and 2021 consist of the following:

	<u>2022</u>	<u>2021</u>
Employer contributions receivable	\$ 404,376,390	\$ 379,447,327
Less allowance for uncollectible accounts		-
Total	\$ 404,376,390	\$ 379,447,327

NOTE 12. DEFERRED COMPENSATION PLAN

The Plan offers its employees a deferred compensation plan established in accordance with Internal Revenue Code Section 457. The deferred compensation plan, which is funded through employee contributions, is available to all Plan employees and permits them to defer a portion of their salary until future years. Participation in the deferred compensation plan is optional. The deferred compensation is managed by a third party administrator. The assets of the deferred compensation plan are placed in trust with the third party for the exclusive benefit of the participants and their beneficiaries and are not considered assets of the Plan.

NOTE 13. RELATED PARTY TRANSACTIONS

The Plan has allowed the Ende, Menzer, Walsh & Quinn Retirees', Widows' and Children's Assistance Fund (the Corporation) to utilize its facilities and equipment to accommodate the once a year distribution to widows and orphans in December at no additional expense to the Plan. This distribution by the Corporation, to the widows and orphans, had been handled by the Plan.

Three of the Plan's Trustees are also directors of the Corporation.

During both of the years ended December 31, 2022 and 2021, the Plan contributed to the Corporation from the balances in the gift reserve account as allowed under the discretionary authority granted by 40ILCS Act 5, Article 6-202 to render financial assistance to qualified widows and children annuitants of the participants of the Plan.

NOTE 14. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. Statement No. 94 was issued to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements. Statement No. 94 is effective for the Plan's fiscal year ending December 31, 2023.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements.* The objective of this Statement is to address contracts that convey control of the right to use another party's information technology software and provides capitalization criteria for outlays other than subscription payments. Statement No. 96 is effective for the Plan's fiscal year ending December 31, 2023.

In April 2022, GASB issued Statement No. 99, *Omnibus 2022*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements and accounting and financial reporting for financial guarantees. Certain provisions of Statement No. 99 are effective for the Plan's fiscal years ending December 31, 2023 and 2024.

NOTE 14. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE (CONTINUED)

In June 2022, GASB issued Statement No. 100, *Accounting Changes and Error Corrections - An Amendment of GASB Statement No. 62*. The primary objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections. Statement No. 100 is effective for the Plan's fiscal year ending December 31, 2024.

In June 2022, GASB issued Statement No. 101, *Compensated Absences*. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. Statement No. 101 is effective for the Plan's fiscal year ending December 31, 2024.

The Plan's management has not yet determined the effect, if any; these Statements will have on the Plan's financial statements.

NOTE 15. SUBSEQUENT EVENT

In January 2023, the City of Chicago, as a part of its Pension Management Policy, made a supplemental contribution of \$38,720,000. The supplemental contribution is not included as a receivable on the Statement of Plan Net Position as of December 31, 2022.

On May 12, 2023, an executive order was signed authorizing the City to assign \$641,500,000 of projected fund balance to a Pension Advance Fund to cover advance pension payments to the City's four pension funds for the years ended December 31, 2024, 2025 and 2026. The City has estimated the total advance contribution for the year ended December 31, 2024 to be \$275,000,000 to the City's four pension funds. The final calculation and allocation of the advance contribution for the year ended December 31, 2024 will not occur until the 2022 actuarial results are delivered during the summer of 2023. The advance contributions for the years ended December 2025 and 2026 has not yet been projected.

Required Supplementary Information - Pension

Required Supplementary Information - Health Insurance Supplement

Required Supplementary Information - Pension

SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY AND RELATED RATIOS

	2022	2021	<u>2020</u>	2019	<u>2018</u>	2017	2016	2015	<u>2014</u>
Total pension liability									
Service cost including pension plan administrative expense	\$ 115,307,255	\$ 115,812,400	\$ 112,478,105	\$ 105,367,286	\$ 97,143,246	\$ 93,366,729	\$ 94,115,473	\$ 87,203,153	\$ 83,095,601
Interest on the total pension liability	466,819,133	429,630,005	410,128,090	408,586,099	410,821,674	371,622,080	342,084,603	338,986,636	329,965,941
Benefit changes	11,737,121	196,531,562	-	-	-	-	227,212,695	-	-
Difference between expected and actual experience	(30,666,655)	93,928,230	174,717,534	(65,213,748)	(56,417,879)	26,954,338	24,110,158	(7,980,712)	-
Assumption changes	53,664,613	(340,370,762)	30,468,135	190,954,465	382,610,753	414,218,762	(74,372,930)	176,281,502	88,448,895
Benefit payments	(398,049,793)	(385,067,130)	(362,831,685)	(342,884,926)	(320,595,085)	(302,518,486)	(283,085,767)	(274,459,754)	(261,571,672)
Refunds	(3,917,789)	(3,607,546)	(3,328,719)	(3,452,913)	(4,067,219)	(3,579,629)	(3,673,250)	(3,557,317)	(2,321,666)
Pension plan administrative expense	(3,390,041)	(3,082,062)	(2,991,289)	(3,225,938)	(3,285,110)	(3,171,986)	(3,216,823)	(3,149,549)	(3,069,192)
Net change in total pension liability	211,503,844	103,774,697	358,640,171	290,130,325	506,210,380	596,891,808	323,174,159	313,323,959	234,547,907
Total pension liability									
Beginning of year	7,004,905,578	6,901,130,881	6,542,490,710	6,252,360,385	5,746,150,005	5,149,258,197	4,826,084,038	4,512,760,079	4,278,212,172
End of year	\$7,216,409,422	\$7,004,905,578	\$ 6,901,130,881	\$ 6,542,490,710	\$ 6,252,360,385	\$ 5,746,150,005	\$ 5,149,258,197	\$ 4,826,084,038	\$4,512,760,079
Plan fiduciary net position									
Contributions - employer	\$ 399,209,599	\$ 367,481,614	\$ 368,422,961	\$ 255,382,266	\$ 249,684,038	\$ 228,452,611	\$ 154,101,396	\$ 236,104,362	\$ 107,334,399
Contributions - employee	53,030,821	52,268,136	54,414,653	46,622,658	45,894,781	47,364,276	48,959,929	46,552,247	48,056,393
Net investment income	(155,590,040)	129,513,641	105,366,987	161,082,443	(58,000,233)	140,569,856	60,881,106	7,595,562	30,867,889
Benefit payments	(398,049,793)	(385,067,130)	(362,831,685)	(342,884,926)	(320,595,085)	(302,518,486)	(283,085,767)	(274,459,754)	(261,571,672)
Refunds	(3,917,789)	(3,607,546)	(3,328,719)	(3,452,913)	(4,067,219)	(3,579,629)	(3,673,250)	(3,557,317)	(2,321,666)
Pension plan administrative expense	(3,390,041)	(3,082,062)	(2,991,289)	(3,225,938)	(3,285,110)	(3,171,986)	(3,216,823)	(3,149,549)	(3,069,192)
Other	5,150	4,788	12,757	506,886	5,853	22,879	(53,891)	7,141	7,393
Net change in plan fiduciary net position	(108,702,093)	157,511,441	159,065,665	114,030,476	(90,362,975)	107,139,521	(26,087,300)	9,092,692	(80,696,456)
Plan fiduciary net position									
Beginning of year	1,466,397,921	1,308,886,480	1,149,820,815	1,035,790,339	1,126,153,314	1,019,013,793	1,045,101,093	1,036,008,401	1,116,704,857
End of year	\$1,357,695,828	\$1,466,397,921	\$ 1,308,886,480	\$ 1,149,820,815	\$ 1,035,790,339	\$ 1,126,153,314	\$ 1,019,013,793	\$ 1,045,101,093	\$1,036,008,401
City's net pension liability	\$5,858,713,594	\$5,538,507,657	\$ 5,592,244,401	\$ 5,392,669,895	\$ 5,216,570,046	\$ 4,619,996,691	\$ 4,130,244,404	\$ 3,780,982,945	\$3,476,751,678
Plan fiduciary net position as a percentage of the total pension liability	<u>18.81</u> %	<u>20.93</u> %	<u>18.97</u> %	<u>17.57</u> %	<u>16.57</u> %	<u>19.60</u> %	<u>19.79</u> %	<u>21.66</u> %	<u>22.96</u> %
Covered-employee payroll	\$ 525,479,549	\$ 520,047,197	\$ 500,367,870	\$ 457,082,316	\$ 456,969,301	\$ 469,407,281	\$ 478,470,944	\$ 465,231,594	\$ 460,189,982
Employer's net pension liability as a percentage of covered-employee payroll	<u>1114.93</u> %	<u>1065.00</u> %	<u>1117.63</u> %	<u>1179.80</u> %	<u>1141.56</u> %	<u>984.22</u> %	863.22%	<u>812.71</u> %	<u>755.50</u> %

Note: This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

Required Supplementary Information - Pension

SCHEDULE OF CITY CONTRIBUTIONS AND RELATED NOTES

LAST TEN FISCAL YEARS

	2022	2021	<u>2020</u>	2019	2018	2017	2016	2015	2014	<u>2013</u>
Actuarially determined contribution	\$ 509,936,459	\$ 476,497,828	\$ 466,556,303	\$ 442,044,761	\$ 412,220,284	\$ 372,845,121	\$ 333,952,291	\$ 323,544,987	\$ 304,265,411	\$ 294,877,895
Contributions in relation to the actuaria determined contribution Contribution deficiency	(399,209,599) (399,209,599) (\$ 110,726,860	(367,481,614) \$ 109,016,214	(368,422,961) \$ 98,133,342	(255,382,266) \$ 186,662,495	(249,684,038) \$ 162,536,246	(228,452,611) \$ 144,392,510	(154,101,396) \$ 179,850,895	(236,104,362) \$ 87,440,625	(107,334,399) \$ 196,931,012	(103,669,015) \$ 191,208,880
Covered employee payroll	\$ 525,479,549	\$ 520,047,197	\$ 500,367,870	\$ 457,082,316	\$ 456,969,301	\$ 469,407,281	\$ 478,470,944	\$ 465,231,594	\$ 460,189,982	\$ 416,491,784
Contributions as a percentage of covered employee payroll	<u>75.97</u> %	<u>70.66</u> %	<u>73.63</u> %	<u>55.87</u> %	<u>54.64</u> %	<u>48.67</u> %	<u>32.21</u> %	<u>50.75</u> %	<u>23.32</u> %	<u>24.89</u> %

Notes to Schedule

Valuation Date:

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

Methods and assumptions used to establish "actuarially determined contribution" rates:

Actuarial cost method Amortization method	Entry Age Actuarial cost method 30-year open, level dollar amortization
Asset valuation method	5-year smoothed fair value
Actuarial assumptions:	
Investment rate of return	6.75%, net of investment expense
Projected salary increases	3.50% to 25.00%, varying by years of service
Mortality	Post-retirement mortality - RP-2014 Blue Collar Healthy Annuitant Mortality Tables, scaled by 106% for males and 98% for females, projected generationally using scale MP-2017. Disabled mortality - RP-2014 Blue Collar Healthy Annuitant Mortality Tables, scaled by 107% for males and 99% for females, projected generationally using scale MP-2017. Pre-retirement mortality - RP-2014 Blue Collar Employee Mortality, scaled by 92% for males and 100% for females, projected generationally using scale MP-2017.
Cost of living adjustments	Tier 1: 3% simple Tier 2: The lesser of 3% or one-half of the change in the Consumer Price Index.

Other assumptions:

Same as those used in the December 31, 2021 actuarial funding valuations.

Required Supplementary Information - Pension

Schedule of Investment Returns

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	- <u>14.7</u> %	<u>14.2</u> %	<u>11.7</u> %	<u>20.4</u> %	- <u>6.6</u> %	<u>17.9</u> %	<u>7.5</u> %	- <u>0.1</u> %	<u>3.4</u> %

Note: This schedule is intended to show information for ten years.

The additional years' information will be displayed as it becomes available.

SUPPLEMENTARY INFORMATION

REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT

Schedule of Changes in the City's Net Health Insurance Supplement Liability and Related Ratios

		<u>2022</u>		<u>2021</u>		<u>2020</u>		<u>2019</u>
Total health insurance supplement liability								
Service cost	\$	168,461	\$	187,889	\$	161,182	\$	129,709
Interest		185,376		185,051		266,380		350,846
Difference between expected and actual experience		761,207		909,364		(1,403,312)		89,281
Assumption changes		(1,283,254)		(233,476)		906,200		1,362,123
Benefit payments		(650,401)		(868,386)		(1,032,062)		(565,425)
Net change in total health insurance supplement liability		(818,611)		180,442		(1,101,612)		1,366,534
Total health insurance supplement liability								
Beginning of year		9,155,590		8,975,148		10,076,760		8,710,226
End of year	\$	8,336,979	\$	9,155,590	\$	8,975,148	\$	10,076,760
Plan fiduciary net position								
Contributions - employer	\$	650,401	\$	868,386	\$	1,032,062	\$	565,425
Benefit payments		(650,401)		(868,386)		(1,032,062)		(565,425)
Net change in plan fiduciary net position		-		-	_	-		-
Plan fiduciary net position								
Beginning of year		-		-		-		-
End of year	\$	-	\$	-	\$	-	\$	-
City's net health insurance supplement liability	\$	8,336,979	<u>\$</u>	9,155,590	\$	8,975,148	\$	10,076,760
Plan fiduciary net position as a percentage of the total health insurance supplement liability		0.00%		0.00%		0.00%		0.00%
······								
Covered-employee payroll	\$1	92,319,657	<u>\$2</u>	08,128,910	\$2	219,890,380	<u>\$22</u>	20,401,135
Employer's net health insurance supplement liability as a percentage of covered-employee payroll		<u>4.33</u> %		<u>4.40</u> %		<u>4.08</u> %		<u>4.57</u> %

Note: This schedule is intended to show information for ten years.

The additional years' information will be displayed as it becomes available. There are currently no assets accumulated in a trust that meets the criteria of GASB codifications P22.101 or P52.101 to pay related benefits for the health insurance supplement plan.

REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT

SCHEDULE OF CITY CONTRIBUTIONS AND RELATED NOTES

LAST TEN FISCAL YEARS

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Actuarially determined contribution Contributions in relation to the actuarially determined Contribution deficiency	\$ 650,401 (650,401) <u>\$ -</u>	\$ 868,386 (868,386) <u>\$ -</u>	\$ 1,032,062 (1,032,062) <u>\$ -</u>	\$ 565,425 (565,425) <u>\$ -</u>
Covered employee payroll	\$192,319,657	\$ 208,128,910	\$219,890,380	\$ 220,401,135
Contributions as a percentage of covered employee payroll	0.34%	0.42%	0.47%	<u>0.26</u> %

Notes to Schedule

Valuation Date: December 31, 2022	
Actuarial cost method	Entry Age Normal Cost
Amortization method Actuarial assumptions:	30-year open, level dollar amortization
Discount rate	3.72%
Election percentage	20% of pre-Medicare eligible retirees and 60% of post-Medicare eligible retirees are assumed to receive the subsidy.
Mortality	Post-retirement mortality rates for non-disabled pensioners were based on the PubS-2010 Retiree Amount-weighted Mortality Tables, using 119% of rates for males and 100% of rates for females and projected generationally using scale MP-2021. Post-retirement mortality rates for disabled pensioners were based on the PubS-2010 Disabled Annuitant Amount-weighted Mortality Table and projected generationally using scale MP-2021. Pre-retirement mortality rates were based on the PubS-2010 Employee Amount-weighted Mortality Table and projected generationally using scale MP-2021.

Note: This schedule is intended to show information for ten years.

The additional years' information will be displayed as it becomes available.

SUPPLEMENTARY INFORMATION

Schedules of Administrative Expenses

YEARS ENDED DECEMBER 31, 2022 AND 2021

	<u>2022</u>	<u>2021</u>
Administrative expenses		
Employee benefits	\$ 395,416	\$ 374,589
Equipment and maintenance	120,994	91,302
General and administrative	202,113	109,470
Insurance and surety bond	180,166	172,501
Office salaries	1,534,882	1,416,392
Printing and postage	37,040	56,207
Professional and consulting fees		
Actuarial	76,120	69,944
Audit	50,000	66,000
Consulting	39,419	94,670
Legal	329,135	262,218
Medical	170,976	173,154
Payroll administration	2,204	3,658
Rent	251,576	191,957
Total administrative expenses	\$ 3,390,041	\$ 3,082,062

SUPPLEMENTARY INFORMATION

Schedules of Investment Expenses

YEARS ENDED DECEMBER 31, 2022 AND 2021

		<u>2022</u>		<u>2021</u>
Investment manager fees				
Adams Street Partners	\$	305,538	\$	254,046
Allspring Global Investments		-		25,769
Apollo Global Real Estate Management, LP		1,194		7,771
Brandes Investment Partners, L.P.		334,808		358,965
Brown Advisory		227,661		268,085
Brown Capital Management		269,820		356,818
CBRE Investment Management		362,528		262,685
Earnest Partners, LLC		162,027		153,005
Garcia Hamilton & Associates, L.P.		15,618		6,738
GlobeFlex Capital, L.P.		194,141		202,675
Highclere International Investors LLP		249,191		314,130
Jackson Square Partners		187,917		315,814
JP Morgan Asset Management		42,553		25,513
Keeley Teton Advisors LLC		164,953		180,122
Kennedy Capital Management		200,693		192,713
Logan Capital Management, Inc.		185,511		218,593
Loomis, Sayles & Company, L.P.		231,923		246,961
LSV Asset Management		481,914		534,922
Neuberger Berman, LLC		313,769		349,338
Newton Investment Management		196,595		181,059
Pacific Investment Management Company, LLC		150,102		117,464
Pomona Capital		179,799		235,124
Principal Global Investors		314,123		308,018
RhumbLine Advisers, Corp.		22,207		21,728
Western Asset Management Company		163,273		187,553
William Blair & Company, LLC		417,137		633,597
1 57		5,374,995		5,959,206
				- <u>,, - , , - , - , - , - , - , - , - , </u>
Other trading expenses and investment fees		2,462,481		1,689,384
Investment consulting fees				
Callan LLC		268,975		272,571
	-	200,775		212,211
Investment custodian fees				
Northern Trust		80,500		77,051
Total investment expenses	\$	8,186,951	\$´	7,998,212

SUPPLEMENTARY INFORMATION

Additions by Source

			Net Investment					
		and Net						
			Securities					
Year Ended	Employer	Plan Member	Lending				Total	
December 31,	Contributions	Contributions	Income (Loss)		<u>Other</u>	Additions		
2014	\$ 109,805,454	\$ 48,056,393	\$ 30,863,888	\$	11,394	\$	188,737,129	
2015	\$ 238,485,820	\$ 46,552,247	\$ (346,886)	\$	7,949,589	\$	292,640,770	
2016	\$ 156,158,391	\$ 48,959,929	\$ 55,362,185	\$	5,525,415	\$	266,005,920	
2017	\$ 228,452,611	\$ 47,364,276	\$ 140,507,402	\$	85,333	\$	416,409,622	
2018	\$ 249,684,038	\$ 45,894,781	\$ (58,048,526)	\$	54,146	\$	237,584,439	
2019	\$ 255,947,691	\$ 46,622,658	\$ 161,032,664	\$	556,665	\$	464,159,678	
2020	\$ 369,455,023	\$ 54,414,653	\$ 105,329,745	\$	49,999	\$	529,249,420	
2021	\$ 368,350,000	\$ 52,268,136	\$ 129,510,718	\$	7,711	\$	550,136,565	
2022	\$ 399,860,000	\$ 53,030,821	\$ (155,590,513)	\$	5,623	\$	297,305,931	

DEDUCTIONS BY TYPE

Year Ended December 31,	<u>Benefits</u>	ministrative <u>Expenses</u>	1	Annuitant Health <u>Care</u>	<u>Other</u>	Total <u>Deductions</u>
2014	\$ 261,571,672	\$ 3,066,946	\$	2,471,055	\$ 2,323,912	\$ 269,433,585
2015	\$ 274,459,754	\$ 3,149,549	\$	2,381,458	\$ 3,557,317	\$ 283,548,078
2016	\$ 283,085,767	\$ 3,216,823	\$	2,056,995	\$ 3,733,635	\$ 292,093,220
2017	\$ 302,518,486	\$ 3,171,986	\$	-	\$ 3,579,629	\$ 309,270,101
2018	\$ 320,595,085	\$ 3,285,110	\$	-	\$ 4,067,219	\$ 327,947,414
2019	\$ 342,884,926	\$ 3,225,938	\$	565,425	\$ 3,452,913	\$ 350,129,202
2020	\$ 362,831,685	\$ 2,892,186	\$	1,032,062	\$ 3,427,822	\$ 370,183,755
2021	\$ 385,067,130	\$ 3,082,062	\$	868,386	\$ 3,607,546	\$ 392,625,124
2022	\$ 398,049,793	\$ 3,390,041	\$	650,401	\$ 3,917,789	\$ 406,008,024