POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO (A Component Unit of the City of Chicago)

Financial Statements and Supplementary Information For the Years Ended December 31, 2022 and 2021 (restated) With Independent Auditor's Report



(A Component Unit of the City of Chicago) Years Ended December 31, 2022 and 2021 (Restated)

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INDEPENDENT AUDITOR'S REPORT

Board of Trustees
Policemen's Annuity and Benefit Fund of Chicago

Report on the Financial Statements

We have audited the accompanying financial statements of the Policemen's Annuity and Benefit Fund of Chicago (the Fund), a component unit of the City of Chicago (City), as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Fund's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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



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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Fund as of December 31, 2022 and 2021, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Fund's basic financial statements. The schedule of administrative expenses, schedule of consulting costs and schedule of investment fees are presented for purposes of additional analysis and are not a required part of the basic financial statements.



The supplementary 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. Such 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 supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

June 28, 2023

Mitchell: Titas, LLP

The Management's Discussion and Analysis section of this report is intended to serve as an introduction to the financial statements of the Policemen's Annuity and Benefit Fund of Chicago (the Fund) and to supplement the information contained therein.

OVERVIEW OF FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

The basic financial statements are prepared in accordance with accounting principles generally accepted in the United States of America as established by the Governmental Accounting Standards Board (GASB) and are described below:

- Statements of Fiduciary Net Position report the Fund's assets, liabilities, deferred outflows and inflows of resources and the resultant net position where assets and deferred outflows minus liabilities and deferred inflows equal net position held in trust for pension benefits at the end of the year.
- Statements of Changes in Fiduciary Net Position show the sources and uses of funds during the calendar year, where additions minus deductions equal the net increase or decrease in net position held in trust for pension benefits for the year.
- Notes to the Financial Statements are an integral part of the financial statements and include important information and schedules to provide a more comprehensive understanding of the data provided in the financial statements. Information contained in the note disclosures includes the Fund's accounting policies, descriptions of pension and health benefits and related liabilities, detail of investments and related risks, fund reserves, and various other relevant topics.
- Required Supplementary Information presents detailed required historical information, and it is presented after the Notes to the Financial Statements. This required supplementary information includes data on the employer's net pension liability and changes thereof, employer's contribution and money-weighted rate of return for the pension plan; and information on total OPEB liability for the Staff Retiree Health Plan; along with the other information useful in evaluating the fiduciary net position of the Fund.
- Supplementary Information presents the details on administrative costs of maintaining a
 defined benefit pension plan.

FINANCIAL HIGHLIGHTS

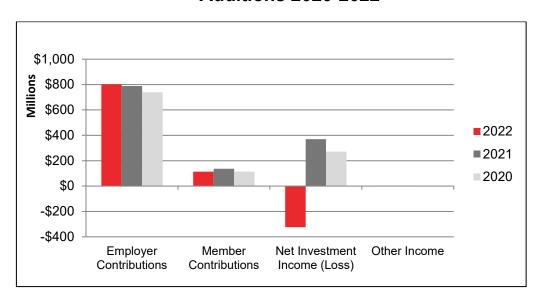
• The fiduciary net position of the Fund decreased by \$359.8 million, or 9.4%, to \$3,486.8 million at December 31, 2022. At December 31, 2021 (restated), the fiduciary net position of the Fund increased by \$404.8 million, or 11.8%, to \$3,846.6 million.

FINANCIAL HIGHLIGHTS (continued)

- Additions to the Fund are received from investment income and contributions from the employer and plan members. These are the primary funding sources for benefit payments. In 2022, these additions totaled \$592.2 million versus \$1,295.2 million in 2021, which is a 54.3% decrease. The Fund experienced a net loss on investment activity in calendar year 2022 of \$324.7.million, or (10.61%), which compares to the net gain on investment of \$369.6 million, or 13.80% in 2021. Stocks ended the fourth quarter in the black, but the gains were overshadowed by the broader losses of 2022 as persistent and elevated inflation, slowing economic growth, and a hawkish stance from central banks underscored concerns around an economic slowdown. In the U.S., the S&P 500 Index gained 7.6% in the fourth quarter: in the same period, international equities outperformed with the MSCI EAFE Index up 17.3% and the MSCI ACWI ex U.S. Index returning 14.3% driven by better-than-expected earnings and a selloff in the U.S. dollar. Meanwhile, private equity markets experienced lower valuations as the year pressed on. Fundraising totaled \$285.9 billion in the fourth quarter, according to data from Pregin, compared to \$386.3 billion a year earlier. For the year, fundraising totaled \$1.3 trillion, modestly down from 2021, despite a significant drop in the second half of the year amid heightening economic concerns and limited partners (LPs) exhausting 2022 commitments earlier on in the year. Doubling down on its commitment to rein in inflation even at the expense of economic growth, the Federal Reserve boosted the Fed Funds rate by 75 basis points in October and 50 basis points in December—its sixth and seventh rate hike in 2022—bringing the benchmark rate to 4.25% to 4.5%, the highest level in 15 years. In 2022, the longstanding negative correlation between high-quality fixed income and stocks reversed. Credit declined alongside stocks, with losses of 13% for the BBG Aggregate Index. The hardest hit fixed-income sectors were long duration, with U.S. long Treasury down 29.3% for the vear. In high-yield corporate debt, leveraged loans were the best relative performer, falling a modest 0.6% in total returns for the year as floating-rate coupons offset rising rates. In contrast, high-yield bonds fell 11.2%. However, credit spreads have stayed below 500 basis points, with limited defaults, underscoring relatively benign market expectations for credit.
- Employer contributions were a major factor in the additions to the Fund. Effective May 30, 2016, with the passing of Public Act 099-0506 (PA 99-0506), the contributions were adjusted in accordance with the Illinois Pension Statutes. For financial reporting purposes, 2022 employer contributions increased by \$12.9 million. In 2021, the employer contributions significantly increased by \$49.4 million.

FINANCIAL HIGHLIGHTS (continued)

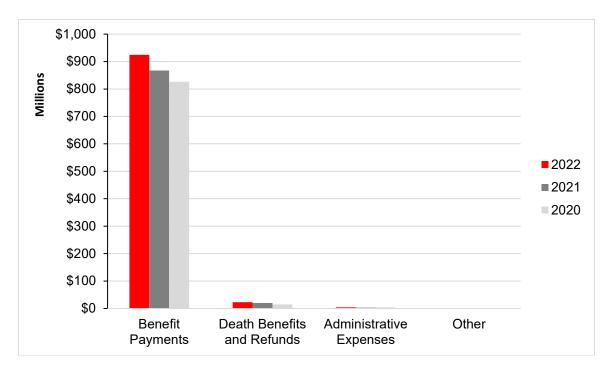
Additions 2020-2022



- Deductions to the Fund are incurred primarily for the purpose for which the Fund was created, to provide benefits to the police officers of the City and their surviving spouses and children. Deductions consist primarily of pension and disability benefits, death benefits, refunds of employee deductions, and administrative expenses. In 2022, these deductions totaled \$952.0 million and were \$890.4 million in 2021, which is a 6.9% increase. This increase is attributable primarily to the number of retirees and beneficiaries receiving higher benefit payments. The net number of benefit recipients increased in 2022 by 379 members to 14,639, the highest beneficiary count in Fund history.
- Also contributing to the increase in deductions and benefit payments is the enactment of Public Act 99-0905 (PA 99-0905) on November 29, 2016, which provided a statutory 3% automatic increase annually to members born between January 1, 1955, and January 1, 1966. The legislature also provided increased benefits to qualifying annuitants such that the minimum annuity paid cannot be less than 125% of the Federal poverty level.

FINANCIAL HIGHLIGHTS (continued)

Deductions 2020-2022



- Benefit payments, excluding death benefits and refunds, increased by approximately \$57.2 million in 2022 to \$924.4 million from \$867.2 million in 2021. Death benefits and refunds of employee deductions increased 16.73% from 2021 to 2022 by approximately \$3.4 million, from \$19.8 million to \$23.2 million, respectively.
- Administrative expenses increased by approximately \$1.0 million, or 29.4%, from \$3.4 million in 2021 to \$4.4 million in 2022.
- The primary objective of the Fund is to meet its long-term defined pension benefit obligations. The funding ratio of the Fund on a fair value basis, for purposes of statutory funding, was 21.76% at December 31, 2022 and 24.86% at December 31, 2021. The decrease reflects lower-than-expected investment return. Salary increases were higher than expected. Offsetting these items, the Fund experienced a favorable actuarial gain due to less-than-expected new disabled participants during 2022. For the year ended December 31, 2022, the Fund's (10.61%) investment return was significantly lower than the Fund's underlying investment return assumption of 6.75%.

FINANCIAL HIGHLIGHTS (continued)

- For accounting and financial reporting pursuant to GASB Nos. 67 and 68, which use a Single Discount Rate that reflects: (1) a long-term expected rate of return on pension plan investments (to the extent that the Fund's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met), the Fund's net pension liability increased by \$234,386,412 to \$12,727,850,004 at December 31, 2022 from \$12,493,463,592 as of December 31, 2021. Changes in the actuarial assumptions and methods led to the change in the Single Discount Rate to 6.64% from 6.26% (based on the long-term expected rate of return on investments of 6.75% used in both the December 31, 2022 and 2021, actuarial valuations and the long-term municipal bond rate of 4.05% as of December 31, 2022, and 1.84% as of December 31, 2021, respectively.
- In compliance with GASB No. 75, the Fund is required to recognize a liability for other postemployment benefits (OPEB), which represents health insurance coverage for retired Fund employees. Expenses of \$0.08 million and \$(0.9) million were recognized in 2022 and 2021, respectively, resulting in a total accrued liability of \$1.2 million and \$1.5 million as of December 31, 2022 and 2021, respectively.
- During fiscal year 2022, the Fund implemented GASB Statement No. 87, *Leases*. The Statement established criteria for accounting and financial reporting for leases. It creates a single model for lease accounting and requires recognitions of certain lease assets and liabilities for leases that were previously classified as operating leases. A lessee is required to recognize a lease liability and an intangible right-to-use asset. The provisions of this Statement are effective for fiscal years beginning after June 15, 2021, and should be applied retroactively by restating financial statements, if practicable, for all prior periods presented. All prior periods presented in the financial statements and accompanying notes to the financial statements that were impacted by this Statement have been restated. The Fund reported a \$(0.06) million decrease in fiduciary net position as of December 31, 2020, due to GASB 87. The impact to the earliest period presented in the Management's Discussion and Analysis is January 1, 2020. See Note 1, "Summary of Significant Accounting Policies," Note 11, "Lease Agreement," and Note 14, "Restatements Due to Implementation of New Accounting Standard" for additional information.

FIDUCIARY NET POSITION

A summary of fiduciary net position is presented below:

Fiduciary Net Position (In millions) As of December 31, 2022, 2021 and 2020

				2022–2	·2021	
				Chan	ge	
	2022	2021	2020	\$	%	
		(as re	estated)			
Receivables Brokers–unsettled trades	\$ 777.0 71.6	\$ 845.6 89.9	\$ 765.2 76.0	\$ (68.6) (18.3)	(8.1)% (20.4)	
Investments, at fair value Invested securities lending cash collateral	2,737.3 117.5	3,032.5 76.7	2,707.5 109.2	(295.2) 40.8	(9.7) 53.2	
Right-to-use lease asset, net of accumulated amortization of \$0.	-	70.7	109.2	40.0	55.2	
\$0.45 and \$0.22, respectively	2.1	2.3	2.6	(0.2)	(8.7)	
Total assets	3,705.5	4,047.0	3,660.5	(341.5)	(8.4)	
Deferred outflow of resources	0.3	0.4		(0.1)	(25.0)	
Total assets and deferred outflow of resources	3,705.8	4,047.4	3,660.5	(341.6)	(8.4)	
Brokers–unsettled trades Securities lending payable	92.0 117.5	113.7 76.7	97.8 109.2	(21.7) 40.8	(19.1) 53.2	
OPEB liability Refunds and accounts payable	1.2 4.8	1.5 5.4	2.3 5.9	(0.3) (0.6)	(20.0) (11.1)	
Long-term lease liability	2.9	3.2	3.4	(0.3)	<u>(9.4</u>)	
Total liabilities	218.4	200.5	218.6	17.9	8.9	
Deferred inflow of resources	0.6	0.3	0.1	0.3	100.0	
Total liabilities and deferred inflow of resources	219.0	200.8	218.7	18.2	<u>(9.1</u>)	
Net position	<u>\$ 3,486.8</u>	<u>\$ 3,846.6</u>	<u>\$ 3,441.8</u>	<u>\$ (359.8</u>)	<u>(9.4</u>)%	

Overall, the fiduciary net position decreased by \$359.8 million in 2022, primarily due to the negative investment performance of the Fund's portfolio. The Fund's investment portfolio earned an investment return of (10.61%) in 2022. The fiduciary net position increased by \$404.8 million in 2021 primarily due to the positive investment performance of the Fund's portfolio. The Fund's investment portfolio earned an investment return of 13.80% in 2021.

As of December 31, 2022 and 2021, the amount recorded as receivables includes the employer contributions receivable under the provisions of PA 99-0506. The funding provisions of PA 99-0506 are significantly different than Public Act-1495, which was in effect at December 31, 2015. Pursuant to PA 99-0506, the funding policy requires City contributions to be equal to \$786.8 million in payment year 2022. Required funding in the 2023 payment year is \$799.4 million. For the payment years 2023 through 2055, the employer is required to make percent of pay

FIDUCIARY NET POSITION (continued)

contributions that, along with member contributions and investment earnings, are expected to generate a projected funded ratio of 90% by plan year-end 2055.

CHANGES IN FIDUCIARY NET POSITION

The following table reflects a comparative summary of various changes in fiduciary net position:

Changes in Fiduciary Net Position (In millions)

Years Ended December 31, 2022, 2021 and 2020

								2022–2021		
								Chan	ige	
		2022		2021		2020		\$	<u>%</u>	
		(as restated)								
ADDITIONS										
Member contributions	\$	114.4	\$	136.2	\$	113.6	\$	(21.8)	(16.0)%	
Employer contributions	•	801.7		788.8		739.4	·	`12.9 [′]	` 1.6 [′]	
Net investment gain										
and investment income		(324.7)		369.6		271.5		(694.3)	187.9	
Securities lending income		0.4		0.5		0.4		(0.1)	(20.0)	
Miscellaneous income		0.4		0.1		0.5		0.3		
Total additions		592.2	_	1,295.2		<u>1,125.4</u>		(703.0)	<u>(54.3</u>)	
DEDUCTIONS										
Annuity, disability, and death										
benefits		926.5		869.2		828.9		57.3	6.6	
Refunds of contributions		21.1		17.8		12.7		3.3	18.5	
Administrative expenses		4.4		3.4		4.4		1.0	<u>29.4</u>	
Total deductions		952.0		890.4		846.0		61.6	6.9	
Net increase (decrease)		(359.8)		404.8		279.4	_	(764.6)	188.9	
Net position restricted for pension benefits										
Beginning of year		3,846.6	_	3,441.8		<u>3,162.4</u>	_	404.8	11.8	
Ending of year	\$	<u>3,486.8</u>	<u>\$</u>	<u>3,846.6</u>	<u>\$</u>	<u>3,441.8</u>	\$	(359.8)	<u>(9.4</u>)%	

The Fund experienced a decrease in fiduciary net position of \$359.8 million in 2022. The overall decrease in the net fiduciary position was accompanied by the continuing increase in benefit payments each year. The Fund experienced an increase in retirements of active members in 2022.

Contractual terms between the employer and the Fraternal Order of Police, Chicago Lodge No. 7, provided that police officers of at least 60 years of age, with over 20 years of service, receive free healthcare in the City-sponsored healthcare program until the age of Medicare eligibility. Police officers of at least 55 years of age, indicating their intent to retire prior to October 1, 2021,

CHANGES IN FIDUCIARY NET POSITION (continued)

with over 20 years of service, can participate in the City-sponsored healthcare program at a cost of 2% of their retirement annuity until their age of Medicare eligibility.

INVESTMENT ACTIVITIES

In April 2022, the Board approved increasing allocations to Private Equity +3%, U.S. Treasury Bonds +3%, Private Real Estate +3%, Opportunistic Credit +1%, Private Debt +1%, Private Real Assets +1%, and Non-U.S. Developed Equity +0.5%. The Board also approved decreasing the portfolio's allocations to U.S. Aggregated Bonds (8)%, Emerging Market Debt (3)%, Hedge Funds (1)%, and Emerging Market Equity (0.5)%. The Fund continues to prudently implement the strategic allocation approved by the Board of Trustees.

Investment Returns Years Ended December 31, 2022, 2021 and 2020

	2022	2021	2020
Total fund	(10.61%)	13.80%	12.29%
Equities	(17.92)	15.60	16.50
Fixed income	(11.19)	(1.30)	6.60
Real estate	6.69	28.60	(0.21)
Infrastructure	5.63	20.10	(7.28)
Private equity	19.04	85.30	16.69
Private debt	5.16	13.80	(1.82)
Opportunistic debt	(7.97)	14.70	15.30
Hedge fund	(2.71)	19.90	0.05
Global asset allocation	-	-	8.32
Cash and cash equivalents	2.29	1.00	1.67

PLAN MEMBERSHIP

The following table reflects the plan's membership as of December 31, 2022, 2021 and 2020.

Plan Membership As of December 31, 2022, 2021 and 2020

				2022-2021		
	2022	2021	2020	Change	%	
Retirees and beneficiaries						
receiving benefits	14,639	14,260	13,900	379	2.66 %	
Active employees	11,868	12,126	12,715	(258)	(2.13)	
Terminated (inactive members) employees entitled to benefits				, ,	, ,	
or refunds of contributions	1,151	940	801	211	22.45	
Total	<u>27,658</u>	27,326	<u>27,416</u>	332	<u>1.21</u> %	

FUNDING STATUS

The funding ratio of the Fund on a fair value basis, for purposes of market value funding, experienced a decrease to 21.76% at December 31, 2022 from 24.86% at December 31, 2021. During 2014, the Fund adopted GASB No. 67, which requires that projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average 'AA' credit rating. Using this methodology, the funding ratios of the Fund at December 31, 2022 and 2021, were 21.50% and 23.54%, respectively. Discount rates used in the GASB No. 67 valuation were 6.64% and 6.26% as of December 31, 2022 and 2021, respectively.

In 2016, certain assumptions were changed, which included the investment return assumption and the inflation rate assumption. Actuarial information presented as of December 31, 2022 and 2021 reflects these assumption changes.

Effective May 30, 2016, the Illinois Pension Statutes regarding employer contributions to the Fund were changed by PA 099-0506. In accordance with PA 099-0506, the funding policy requires that contributions from the City, as employer, be equal to \$420 million in payment year 2016, \$464 million in payment year 2017, \$500 million in payment year 2018, \$557 million in payment year 2019, and \$579 million in payment year 2020. For payment years after 2020, the City is required to make level percent of pay contributions for plan years 2021 through 2055 that, along with member contributions and investment earnings, are expected to generate a projected funded ratio of 90% by plan year-end 2055.

As currently provided in the applicable provisions of PA 099-0506, the funded ratio of the Fund is projected to increase slowly in future years, with required increases from the employer in years into the future in accordance with current legislation. The Fund continues to be heavily dependent upon employer contributions to fund benefit payments to members now and in future years.

CONTACT INFORMATION

This financial report is designed to provide the employer, plan participants, and others with a general overview of the Fund's finances and to show accountability for the monies received. Questions concerning any data provided in this report can be submitted to:

Mr. Kevin Reichart Executive Director Policemen's Annuity and Benefit Fund of Chicago 221 North LaSalle Street Suite 1626 Chicago, Illinois 60601

(A Component Unit of the City of Chicago) Statements of Fiduciary Net Position As of December 31, 2022 and 2021 (Restated)

	2022	Resta	
ASSETS			
Cash	\$ 2	50 \$	250
Receivables			
Employer - Tax levies, net of allowance for loss of			
\$0 in 2022, \$0 in 2021	761,713,4	43 811,2	248,459
Member contributions - December 31, 2022 payroll			
due in January 2023	9,084,5		342,251
Interest and dividends Accounts receivable - due from brokers	6,150,3		541,782
Accounts receivable - due from brokers	71,628,1		373,228
	848,576,4	86 935,5	505,720
Investments at fair value			
U.S. common stock and other equity	304,623,6	· ·	07,064
Collective investment funds, stock	539,785,4		61,458
Collective investment funds, international equities	10,603,3	,	88,457
Collective investment funds, fixed income Collective investment funds, international fixed income	213,253,9 40,337,2		514,113 549,006
International equity	419,351,5	•	93,853
U.S. bond and notes	275,945,6	•	242,564
International bonds and notes	9,169,4	•	47,738
Short-term instruments	199,024,7	•)44,870
Infrastructure	104,594,4	53 77,2	237,291
Forward contracts and swaps	68,4	44	76,065
Hedge fund-of-funds	220,294,5		521,237
Real estate	202,518,0	· ·	'80,088
Venture capital and private equity	197,729,7	<u>72</u> 176,6	94,191
	2,737,300,0		157,995
Invested securities lending cash collateral	117,469,7	84 76,6	91,671
Right-to-use lease asset, net of accumulated amortization of \$670,095 and			
\$446,730, respectively	2,121,9	68 2,3	345,333
Total assets	3,705,468,5	71 4,047,0	000,969
Deferred outflow of resources	326,4	81 3	376,339
Total assets and deferred outflow of resources	3,705,795,0	52 4.047.3	377,308
			,000
LIABILITIES	4 00 4 0	10 5.0	000 070
Refunds and accounts payable	4,804,0	,	889,876
Trade accounts payable - due to Brokers Security lending cash collateral	91,960,3	•	730,872
OPEB obligation	117,469,7 1,216,9		391,671 176,386
Long-term lease liability	2,977,5	•	88,270
Total liabilities	218,428,6		77,075
Deferred inflow of resources	586,5		354,948
Total liabilities and deferred inflow of resources	219,015,2		332,023
Net position held in trust for pension benefits	\$ 3,486,779,7	<u>\$ 3,846,5</u>	45,285

The accompanying notes are an integral part of these financial statements.

(A Component Unit of the City of Chicago) Statements of Changes in Fiduciary Net Position For the Years Ended December 31, 2022 and 2021 (Restated)

	2022	Restated 2021
ADDITIONS		
Contributions		
Employer Plan member salary deductions	\$ 801,706,005 114,403,212	\$ 788,769,979 136,225,041
Total contributions		
Total contributions	916,109,217	924,995,020
Investment income		
Net appreciation in fair value of investments Interest	(356,282,186)	343,315,879
Dividends	9,561,529 26,146,827	11,252,867 19,250,671
Real estate income	3,795,866	4,729,096
	(316,777,964)	378,548,513
In contract activity over a co		
Investment activity expenses Investment management fees	(7,211,140)	(8,208,317)
Custodial fees	(309,455)	(304,305)
Investment consulting fees	(438,996)	(426,295)
Total investment activity expenses	(7,959,591)	(8,938,917)
Net income from investing activities	(324,737,555)	369,609,596
From securities lending activities		
Securities lending income	1,930,663	499,256
Borrower rebates	(1,442,931)	108,319
Bank fees	(64,795)	(75,766)
Net income from securities lending activities	422,937	531,809
Total net investment income	(324,314,618)	370,141,405
Miscellaneous income	367,777	91,594
Total additions	592,162,376	1,295,228,019
DEDUCTIONS		
Pension and disability benefits	924,438,466	867,243,302
Death benefits	2,055,000	2,067,200
Refunds of employee deductions	21,096,110	17,766,049
	947,589,576	887,076,551
Administrative expenses	4,338,300	3,440,227
Total deductions	951,927,876	890,516,778
Net (decrease) increase in fiduciary net position	(359,765,500)	404,711,241
Net position held in trust for pension benefits		
Beginning of year	3,846,545,285	3,441,834,044
End of year	\$ 3,486,779,785	\$ 3,846,545,285

The accompanying notes are an integral part of these financial statements.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

Accounting principles generally accepted in the United States (U.S. GAAP), as established by the Governmental Accounting Standards Board (GASB), 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 the primary government to impose its will on the component unit, or a potential for the component unit to provide specific financial benefits to or impose specific financial burdens on the primary government. A primary government may also be financially accountable for its component units.

Based on the above criteria, the Policemen's Annuity and Benefit Fund of Chicago (the Fund, or PABF) is considered to be a component unit of the City of Chicago (the City). The Fund is part of the City's financial reporting entity and is included in the City's fiduciary statement of net position as a pension trust fund.

Basis of Accounting

The Fund's financial statements are prepared on the accrual basis of accounting. Employee and employer contributions are recognized as additions in the period in which employee services are performed. Benefits and refunds are recognized as deductions when payable. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

Use of Estimates

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

<u>Investments</u>

The Fund is authorized to invest in bonds, notes, and other direct obligations of the U.S. Government and U.S. Government agencies; corporate bonds, debentures, and notes; certain notes secured by mortgages, including pass-through securities; common and preferred stocks; certain pooled funds; limited partnerships; real estate; derivatives; currencies and other types of investment vehicles as set forth in the Fund's Statement of Investment Policy and in compliance with the Illinois Compiled Statutes.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Method Used to Value Investments

Investments are reported at fair value. Short-term investments are reported at fair value, which approximates costs. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Fixed-income securities are valued principally using quoted market prices provided by independent pricing services. For collective investments, net asset value (NAV) is determined and certified by the investment managers as of the reporting date. Real estate investments are valued at estimated fair value as determined by the general partner, based upon appraisals provided by the investment manager. Hedge funds, venture capital, private equity, infrastructure, and certain opportunistic investments are reported at estimated fair value as determined by the general partner of the investment vehicle.

Furniture and Office Equipment

Furniture and office equipment are not capitalized as they are immaterial and charged to expenses in the year of purchase.

Administrative Expenses

Administrative expenses are recorded as incurred and budgeted and approved by the Fund's Board of Trustees. Administrative expenses are funded by employer contributions.

Income Taxes

The Fund is a tax-exempt retirement plan as determined by the Internal Revenue Service. As such, income earned by the Fund is not subject to Federal income taxes.

Securities Lending Transactions

Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets in the statements of fiduciary net position at fair value. Securities received as collateral are reported as assets only if the Fund is able to pledge or sell them without a borrower default. Liabilities resulting from these transactions are reported in the statements of fiduciary net position.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Recent Accounting Pronouncements

The following standard was adopted by the Fund during 2022:

GASB Statement No. 87, *Leases*, was issued in June 2017. This Statement increases the usefulness of the government's financial statements by requiring recognition of certain lease assets and liabilities that were previously classified as operating leases. Implementing the Statement, a lessee is required to recognize a lease liability and an intangible right-to-use asset.

The implementation of this Statement has been reflected in RSI as of January 1, 2020. All prior periods of the financial statements and accompanying notes that were impacted by this Statement have been restated. As a result, the statement of net position now includes a liability for the present value of payments expected to be made and a right-to-use asset. Lease activity is further described in Note 11 – Lease Agreement. The financial statements for the year ended December 31, 2021, have been restated in order to adopt GASB Statement No. 87. The impact of this Statement includes a restated statement of fiduciary net position and statement of changes in fiduciary net position. The Fund reported a \$(0.06) million decrease to net position as of January 1, 2021 as a result of adoption.

NOTE 2 PENSION PLAN

Plan Description and Contribution Information

PABF is the administrator of a defined benefit, single-employer pension plan with a defined contribution minimum for the purpose of providing benefits to the police officers of the City and their widows and children. Any City employee employed under the provisions of the municipal personnel ordinance as police service is covered by the Fund. The defined benefits, as well as the employer and employee contribution levels, are mandated in Illinois Compiled Statutes (40 ILCS Act 5, Article 5) and may be amended only by the Illinois State Legislature. The Fund is governed by an eight-member Board of Trustees (four appointed by the City, three elected by the police officers, and one elected by the annuitants) whose duties are to administer the Fund under the Illinois Pension Code. The City's payrolls for employees covered by the Fund for the years ended December 31, 2022 and 2021 were \$1,274,049,642 and \$1,258,338,033, respectively. At December 31, 2022 and 2021, the Fund's membership consisted of the following:

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 2 PENSION PLAN (continued)

Plan Description and Contribution Information (continued)

	2022	2021
Active employees	11,868	12,126
Retirees and beneficiaries currently receiving benefits Terminated employees entitled to benefits or a refund of contributions,	14,639	14,260
but not yet receiving them	1,151	940
	27,658	27,326

The Fund provides retirement benefits as well as death, survivor, and disability benefits. Employees age 50 or older with at least 10 years of service are entitled to receive a money purchase annuity if they have completed less than 20 years of service. The mandatory retirement age for a participant is 63. Employees age 50 or older with at least 20 years of service are entitled to receive a minimum formula annuity of 2.5% per year for the first 20 years of service, plus 2.5% per year for each following year or fraction thereof times their final average salary (highest average annual salary for any four consecutive years within the last 10 years of service immediately preceding the date of retirement). The annuity will not exceed 75% of the highest average annual salary.

For members born before January 1, 1966 with at least 20 years of service, the monthly annuity increases by 3% of the original annuity at the first of the month following the later of the attainment of age 55 or the first anniversary of retirement, and by 3% of the original annuity on each January 1 thereafter.

Effective November 29, 2016, Public Act 99-0905 (PA 99-0905) became law. This Act extended the 3% annual automatic increase to participants born after December 31, 1954, but before January 1, 1966, first payable at the later of age 55 or one year from retirement date. In addition, under PA 99-0905, the minimum benefit for annuitants and widows cannot be less than 125% of the Federal poverty level.

If the recipient was born after January 1, 1966, the monthly annuity increases by 1.5% of the original annuity at the first of the month following the later of the attainment of age 60 or the first anniversary of retirement, and 1.5% on each January 1 thereafter, but will not exceed a total of 30%. Members first hired after January 1, 2011, are subject to different provisions within their defined benefit pension plan. The new provisions include a minimum retirement age of 55, a final average salary calculation based upon 96 consecutive months within the last 120 months of employment, an annual salary cap for purposes of calculating a pension benefit, and cost-of-living increases for a pension benefit that include considerations related to the Consumer Price Index for urban consumers.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 2 PENSION PLAN (continued)

Plan Description and Contribution Information (continued)

Covered employees are required to contribute 9.0% of their salary to the Fund. If an employee leaves, covered employment without qualifying for an annuity, accumulated contributions are refunded with interest.

Commencing with the City tax levy year beginning in 2016, legislation in place at December 31, 2016, provides for fixed dollar City contributions for payment years 2016 to 2020, and level percent of pay contributions for years 2021 to 2055. Beginning with payment year 2021, the funding policy requires that future employer contributions, employee contributions and other Fund income are sufficient to produce a funding goal of 90% by the fiscal year end 2055, based upon the actuarial value of Fund assets and application of certain required actuarial assumptions and methodologies.

The total pension liability at December 31, 2022 and 2021, was \$16,214,629,789 and \$16,340,008,877, respectively. The plan fiduciary net position at December 31, 2022 and 2021 was \$3,486,779,785 and \$3,846,545,285, respectively. The net pension liability at December 31, 2022 and 2021 was \$12,727,850,004 and \$12,493,463,592, respectively. The Single Discount Rate of 6.64% required by GASB Statement No. 67 as of December 31, 2022, was based on a long-term expected rate of return on pension plan investments of 6.75% and a long-term municipal bond rate of 4.05%. The Single Discount Rate of 6.26% required by GASB Statement No. 67 as of December 31, 2021, was based on a long-term expected rate of return on pension plan investments of 6.75% and a long-term municipal bond rate of 1.84%.

NOTE 3 HEALTH INSURANCE SUPPLEMENT

Plan Description and Contribution Information

The City offered group health benefits, as was provided, to annuitants and their eligible dependents, which expired on December 31, 2016.

Effective January 1, 2017 and thereafter, certain eligible annuitants in the Appellate Court expanded class, as defined in its June 29, 2017 order, and as further defined after remand in the Circuit Court's February 28, 2019 order, are entitled to continue to receive the 1983 statutory provided subsidies (related to the police and fire funds) of \$55 per month if non-Medicare eligible and \$21 per month if Medicare eligible. Therefore, this obligation is reflected as an actuarial accrued liability as of December 31, 2022 and 2021. There are currently no assets accumulated in a trust that meet the criteria of GASB codification P22.101 or P52.101 to pay related benefits for the health insurance supplement plan.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK

Cash

The bank balance and carrying amount of the Fund's deposits at December 31, 2022, were \$155,075 and \$48,640, respectively. The bank balance and carrying amount of the Fund's deposits at December 31, 2021 were \$9,644,679 and \$9,542,531, respectively. These balances excluded \$250 of petty cash. The bank balance at December 31, 2022 and 2021 is on deposit with the City Treasurer and insured or collateralized by securities held by the City Treasurer in the Fund's name.

Investment Policy

The Trustees assume the responsibility for establishing the Fund's investment policy. The Fund's overall investment policy is based on the following principles established by the Trustees:

- Maintain a long-term investment horizon for the Fund
- Diversify investments across several asset classes

The Trustees have indicated interest in developing a risk policy statement in parallel to the Fund's investment policy. The policy would highlight those risks managed at the Fund level and those managed by external managers. The risk policy would also state the types of risks that are monitored and how they are measured. Until such policy is developed by PABF staff and adopted by the Board, there is no formal policy relating to specific investment-related risks.

Money-Weighted Rate of Return

For the years ended December 31, 2022 and 2021, the annual money-weighted rate of return on the Fund's investments, net of investment expense, was (10.61)% and 13.80%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Summary

The following table presents a summary of the Fund's investments by type at December 31, 2022 and 2021:

	2022	2021
U.S. Government and agency fixed income Corporate fixed income U.S. common collective fixed-income funds Global common collective fixed-income funds U.S. equities U.S. common collective stock funds International equity common collective funds Foreign equities Pooled short-term investment funds Infrastructure Real estate Venture capital Forward contracts and swaps Hedge fund-of-funds	\$ 167,138,501 117,976,570 213,253,921 40,337,206 304,623,633 539,785,421 10,603,301 419,351,501 180,825,331 104,594,453 202,518,066 197,729,772 68,444 220,294,532	\$ 173,618,692 153,171,610 226,514,113 48,649,006 390,007,064 696,561,458 25,588,457 577,993,853 39,622,279 77,237,291 179,780,088 176,694,191 76,065 240,521,237
Cash and cash equivalents Total investments at fair value	18,199,431 \$ 2,737,300,083	<u>26,422,591</u> \$ 3,032,457,995
i otai ilivestilielits at Iali value	Ψ 2,131,300,003	Ψ 5,052,457,995

None of the Fund's individual investments as of December 31, 2022 represented 5% or more of net position held in trust for pension benefits The Fund's individual investment Northern Trust Collective Russell 1000 Index Fund – Non-Lending, which amounted to \$696,561,458 as of December 31, 2021, represented 5% or more of net position held in trust for pension benefits.

The Fund's investments were managed by approximately 33 external investment managers that managed 50 investment funds/products during 2021, with additional services provided by an external investment consultant. The Fund does not employ any internal investment managers; therefore, its investments are not managed internally. The Fund does not have a formal policy regarding the credit risk of its external managers or investment consultant.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Fair Value Measurements

The Fund categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure an asset's fair value. Fair value is the amount that would be received to sell the investment in an orderly transaction between market participants at the measurement date (*i.e.*, exit price). The fair value measurements are determined within a framework that utilizes a three-tier hierarchy, which maximizes the use of observable inputs and minimizes the use of unobservable inputs. Investments measured and reported at fair value are classified and disclosed in one of the following categories:

- <u>Level 1:</u> Unadjusted quoted prices in active markets for identical assets.
- <u>Level 2:</u> Inputs other than quoted prices that are observable for the asset, either directly or indirectly. These inputs include:
 - a. quoted prices for similar assets in active markets;
 - b. quoted prices for identical or similar assets in markets that are not active;
 - c. inputs other than quoted prices that are observable for the asset;
 - d. inputs that are derived principally from or corroborated by observable market data.
- <u>Level 3:</u> Inputs that are unobservable for the asset. The valuation of these investments requires significant judgment due to the absence of quoted market values, inherent lack of liquidity, and changes in market conditions.

The Fund's investments that are valued using the NAV per share (or its equivalent) are not classified in the fair value hierarchy. These investments do not have a readily determinable fair value.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Fair Value Measurements (continued)

The recurring fair value measurements for the year ended December 31, 2022, are as follows:

		Fair Value Measurements Using				
	Totals	Level 1	Level 2	Level 3		
Investments by fair value level Equities						
U.S. common stock and other equity Collective investment funds, stock International equity	\$ 304,623,633 539,785,421 419,257,002	\$ 304,581,910 539,785,421 419,247,125	\$ 28,601 - -	\$ 13,122 - 9,877		
Fixed income U.S. bonds and notes International bonds and notes Collective investment funds, fixed Cash equivalents and short-term instruments Forward contracts and swaps Venture capital and private equity Subtotal	274,945,628 9,169,438 3,144,399 199,024,762 68,444 41,504,088 1,791,522,815	7,663,915 - - - - \$ 1,271,278,371	274,945,628 9,169,438 - 191,360,847 68,444 - \$ 475,572,958	3,144,399 - - 41,504,088 \$ 44,671,486		
Investments measured at net asset value U.S. bonds and notes Collective investment funds, international equities Collective investment funds, fixed Collective investment funds, international fixed Infrastructure Hedge fund-of-funds Real estate Venture capital and private equity International equity	1,000,005 10,603,301 210,109,522 40,337,206 104,594,453 220,294,532 202,518,066 156,225,684 94,499					
Subtotal Total	945,777,268 \$ 2,737,300,083					

The recurring fair value measurements for the year ended December 31, 2021, are as follows:

Totals Level 1 Level 2 Level 3 Level 3 Level 3 Level 3 Level 3 Level 4 Level 5 Level			Fair Value Measurements Using					
Sequities Sequ		 Totals		Level 1		Level 2		Level 3
Ú.S. common stock and other equity \$ 390,007,064 \$ 389,967,874 \$ 26,068 \$ 13,122 Collective investment funds, stock 696,561,458 - 696,561,458 - 18,048 Fixed income U.S. bonds and notes 314,242,559 - 314,242,559 - 314,242,559 - Linternational bonds and notes 11,547,738 - 11,547,738 - - Cash equivalents and short-term instruments 66,044,870 26,419,693 39,625,177 - - Forward contracts and swaps 76,065 - 76,065 - - 13,540,292 Subtotal 2,070,008,580 \$994,358,053 \$1,062,079,065 \$13,571,462 Investments measured at net asset value U.S. bonds and notes 1,000,005 \$994,358,053 \$1,062,079,065 \$13,571,462 Investment funds, international equities Collective investment funds, fixed 226,514,113 Collective investment funds, international fixed 48,649,006 Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate								
International equity 577,988,534 577,970,486 - 18,048	U.S. common stock and other equity	\$ 	\$	389,967,874	\$.,	\$	13,122
U.S. bonds and notes 314,242,559 - 314,242,559 - 11,547,738	,	,		577,970,486		696,561,458 -		18,048
International bonds and notes	Fixed income							
Cash equivalents and short-term instruments Forward contracts and swaps Venture capital and private equity Subtotal 13,540,292 Subtotal 2,070,008,580 13,540,292 14,540,292 14,540,292 14,540,292 14,540,292 14,540,292 14,540,	U.S. bonds and notes	314,242,559		-		314,242,559		-
Forward contracts and swaps 76,065 - 76,065 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,540,292 - 13,571,462	International bonds and notes	11,547,738		-		11,547,738		-
Venture capital and private equity 13,540,292 - - 13,540,292 Subtotal 2,070,008,580 \$ 994,358,053 \$ 1,062,079,065 \$ 13,571,462 Investments measured at net asset value U.S. bonds and notes 1,000,005 25,588,457 Collective investment funds, international equities 25,588,457 25,588,457 Collective investment funds, international fixed 48,649,006 48,649,006 Infrastructure 77,237,291 77,237,291 Hedge fund-of-funds 240,521,237 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Cash equivalents and short-term instruments	66,044,870		26,419,693		39,625,177		-
Subtotal 2,070,008,580 \$ 994,358,053 \$ 1,062,079,065 \$ 13,571,462 Investments measured at net asset value U.S. bonds and notes 1,000,005 \$ 7,000,005	Forward contracts and swaps	76,065		-		76,065		-
Investments measured at net asset value U.S. bonds and notes 1,000,005 Collective investment funds, international equities 25,588,457 Collective investment funds, fixed 226,514,113 Collective investment funds, international fixed 48,649,006 Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Venture capital and private equity	 13,540,292		-		-		13,540,292
U.S. bonds and notes 1,000,005 Collective investment funds, international equities 25,588,457 Collective investment funds, fixed 226,514,113 Collective investment funds, international fixed 48,649,006 Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Subtotal	 2,070,008,580	\$	994,358,053	\$	1,062,079,065	\$	13,571,462
Collective investment funds, international equities 25,588,457 Collective investment funds, fixed 226,514,113 Collective investment funds, international fixed 48,649,006 Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Investments measured at net asset value							
Collective investment funds, fixed 226,514,113 Collective investment funds, international fixed 48,649,006 Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	U.S. bonds and notes	1,000,005						
Collective investment funds, international fixed Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Collective investment funds, international equities	25,588,457						
Infrastructure 77,237,291 Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Collective investment funds, fixed	226,514,113						
Hedge fund-of-funds 240,521,237 Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Collective investment funds, international fixed	48,649,006						
Real estate 179,780,088 Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Infrastructure	77,237,291						
Venture capital and private equity 163,153,899 International equity 5,319 Subtotal 962,449,415	Hedge fund-of-funds	240,521,237						
International equity 5,319 Subtotal 962,449,415	Real estate	179,780,088						
Subtotal 962,449,415	Venture capital and private equity	163,153,899						
	International equity	 5,319						
Total <u>\$ 3,032,457,995</u>	Subtotal	 962,449,415						
	Total	\$ 3,032,457,995						

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Fair Value Measurements (continued)

Equity investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors.

Equity, fixed-income securities, and investment derivative instruments classified in Level 2 of the fair market hierarchy are valued using either a bid evaluation or a matrix-pricing technique maintained by various pricing vendors. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Equity classified in Level 3 of the fair value hierarchy is securities whose stated market price is unobservable by the market place. Many of these securities are priced by the issuers of industry groups. These prices are obtained from various pricing sources by the Fund's custodian bank.

Investments measured at NAV for fair value are not subject to level classification. The following tables summarize the Fund's investments in certain entities that measure NAV per share as fair value measurement as of December 31, 2022 and 2021:

2022	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Collective investment funds, stock Collective investment funds, international equities Collective investment funds, fixed Collective investment funds, international fixed	\$ 1,000,005 10,603,301 210,109,522 40,337,206	\$ - - 22,623,716 10,765,092	Daily Daily Daily Daily	5 days 5 days 5 days 5 days
Infrastructure Hedge fund-of-funds Venture capital and private equity Real estate U.S. bonds and notes	104,594,453 220,294,532 156,225,684 202,518,066	13,789,577 2,410,226 78,474,328 42,875,392	Illiquid Quarterly Illiquid Illiquid Illiquid	N/A 90 days N/A N/A N/A
International equity	94,499 \$ 945,777,268	Unfunded	Illiquid Redemption Frequency (if Currently	N/A Redemption
Collective investment funds, stock Collective investment funds, international equities Collective investment funds, fixed Collective investment funds, international fixed Infrastructure Hedge fund-of-funds Venture capital and private equity Real estate U.S. bonds and notes International equity	\$ 1,000,005 25,588,457 226,514,113 48,649,006 77,237,291 240,521,237 163,153,899 179,780,088 - 5,319 \$ 962,449,415	\$ - 28,500,776 5,952,985 29,303,754 2,448,751 55,815,653 24,252,152	Daily Daily Daily Daily Daily Illiquid Quarterly Illiquid Illiquid Illiquid	5 days 5 days 5 days 5 days 5 days N/A 90 days N/A N/A N/A

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Fair Value Measurements (continued)

Collective investment funds, stock and international equities: There are four funds at December 31, 2022 and six funds at December 31, 2021, which invest in equities diversified across all geographies, sectors, and capitalization.

Collective investment funds, fixed and international fixed: There are three funds at December 31, 2021 and 2020, which invest in a variety of fixed-income markets through various investments.

Infrastructure: There are five funds at December 31, 2021 and 2020, which invest in a variety of infrastructure assets through various investments. These funds are not eligible for redemption.

Hedge fund-of-funds: There are four funds at December 31, 2021 and 2020, which invest in a select group of underlying managers that implement a number of different alternative investment strategies and invest in a variety of markets through limited partnerships, limited liability companies and other investment entities. None of the funds were available for redemption as of December 31, 2021, and two of these funds were available for redemption as of December 31, 2020.

Real estate, venture capital and private equity: The real estate investments consist of 10 and 25 real estate funds as of December 31, 2021 and 2020, respectively. As of December 31, 2021, the Fund held investments in one core fund, one core plus funds, three debt funds, two opportunistic funds, and three value-add funds. As of December 31, 2020, the Fund held investments in five core funds, two core plus funds, four debt funds, 10 opportunistic funds, and four value-add funds. The private equity partnerships consist of six and two limited partnership interests as of December 31, 2021 and 2020, respectively. The private debt partnerships consist of six limited partnership interests as of December 31, 2021, and eight limited partnership interests as of December 31, 2020. These funds invest in equity or debt securities of privately held companies. Private equity and debt closed-end funds are not eligible for redemption.

Investment Risks

The Fund's investments are subject to certain types of risks, including interest rate risk, credit risk, custodial credit risk and foreign currency risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term. The changes could materially affect the amounts reported in the statements of fiduciary net position.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Risks (continued)

Interest rate risk—Interest rate risk is the risk that the fair value of debt securities decreases due to increases in the prevailing market interest rate. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Fund does not have a formal policy regarding interest rate risk. The Fund attempts to mitigate its exposure to fair value loss arising from increasing interest rates by diversifying its fixed-income investment strategy and by allocation to several investment managers. Each investment manager is required to determine the maturities of all fixed-income securities in their portfolio. Additionally, guidelines are provided to the external investment managers, including a target duration range that is consistent with each investment manager's respective strategy.

The following tables show the segmented time distribution of the Fund's investments into time periods of maturities based on the investments' cash flows.

At December 31, 2022, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

		Investment Maturities			
	Fair	Less than	1 to 6	7 to 10	More than
Investment Type	Value	1 Year	Years	Years	10 Years
Asset-backed securities	\$ 15,312,801	\$ -	\$ 2,862,462	\$ 170,729	\$ 12,279,610
Bank loans	179,188	-	172,782	6,406	-
Commercial mortgage-backed					
securities	19,338,869	1,470,187	537,381	2,366,604	14,964,697
Corporate bonds	75,137,746	1,122,540	22,591,328	34,225,675	17,198,203
Corporate convertible bonds	434,124	-	302,478	-	131,646
Government agency securities	14,322,129	53,286	1,856,067	3,346,568	9,066,208
Government bonds	60,730,919	669,953	3,945,591	20,921,706	35,193,669
Government mortgage-backed					
securities	82,892,620	1,773,141	3,837,422	844,542	76,437,515
Index-linked bonds	3,565,849	-	1,098,110	2,370,695	97,044
Municipal/provincial bonds	7,199,221	133,486	1,113,489	156,386	5,795,860
Non-government-backed					
collateralized mortgage obligations	6,001,607		1,469,930		4,531,677
	\$ 285,115,073	\$ 5,222,593	\$ 39,787,040	\$ 64,409,311	\$ 175,696,129

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Risks (continued)

At December 31, 2021, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

			Investment Maturities				
	Fair	Less than	1 to 6	7 to 10	More than		
Investment Type	Value	1 Year	Years	Years	10 Years		
Asset-backed securities	\$ 18,546,477	· \$ -	\$ 2,486,580	\$ 1,377,655	\$ 14,682,242		
Bank loans	3,838,472	-	710,634	3,127,838	-		
Commercial mortgage-backed							
securities	23,709,744	-	1,791,856	2,940,645	18,977,243		
Corporate bonds	97,394,276	969,603	34,766,026	40,188,869	21,469,778		
Corporate convertible bonds	634,517	· <u>-</u>	286,123	-	348,394		
Government agency securities	17,973,166	731,532	2,435,486	3,066,739	11,739,409		
Government bonds	73,454,084	13,936,279	8,702,025	9,556,572	41,259,208		
Government mortgage-backed							
securities	73,974,731	-	5,478,729	2,142,921	66,353,081		
Index-linked bonds	875,114	-	-	29,850	845,264		
Municipal/provincial bonds	8,959,682	-	811,185	921,607	7,226,890		
Non-government-backed							
collateralized mortgage obligations	7,430,039	<u> </u>	1,545,562	589,083	5,295,394		
	\$ 326,790,302	2 \$ 15,637,414	\$ 59,014,206	\$ 63,941,779	\$ 188,196,903		

Credit risk—Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. One measure of credit risk is the quality ratings issued by national ratings agencies, such as Moody's Investors Services (Moody's) and Standard & Poor's Financial Services. The Fund does not have a formal policy in regard to aggregate credit quality of fixed-income holdings. The Fund utilizes external investment management firms to invest in fixed-income securities and credit quality is addressed within the guidelines of the mandate for each of the managers. If a holding falls below specific guideline requirements, the manager will either sell the security or will inform the Fund of the lower rating and why the manager believes that it is prudent to continue to hold the security as they believe that the security will return to minimum constraints.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Risks (continued)

The following table provides information on the credit ratings associated with the Fund's investments in debt securities. Ratings were obtained from Moody's:

	Fair Value			
	2022	2021		
Quality Rating				
Aaa	\$ 73,696,030	\$ 77,042,509		
Aa	5,666,666	7,424,424		
A	37,317,693	52,175,563		
Baa	22,615,891	29,429,260		
Ва	8,572,504	15,376,647		
В	1,660,621	3,088,074		
Not rated	29,097,582	35,528,933		
Caa through C	878,745	1,244,795		
Total credit risk of U.S.				
corporate fixed income	179,505,732	221,310,205		
U.S. Government fixed-income				
securities - explicitly guaranteed	104,058,677	102,977,278		
U.S. Government agency securities - not rated	1,550,664	2,502,819		
notrated				
	\$ 285,115,073	\$ 326,790,302		

Custodial credit risk—Custodial credit risk applies to investments, cash, and certificates of deposit. For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Fund will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. For cash and certificates of deposit, custodial credit risk is the risk that in the event of a bank failure, the Fund's deposits may not be returned. As of December 31, 2022 and 2021, cash deposits of \$974,980 and \$569,098, respectively, were exposed to custodial credit risk as uninsured and uncollateralized. The Fund does not have a formal policy regarding custodial credit risk.

Foreign currency risk—Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Risks (continued)

The Fund does not have a formal investment policy governing foreign currency risk, but manages its exposure to loss in the fair value of investments by requiring managers of foreign investments to maintain diversified portfolios. The Fund's equity and fixed-income portfolios include investments that are subject to foreign currency risk. Such investments include non-U.S. equities, non-U.S. Government bonds, corporate bonds, and derivative instruments. Additionally, some of the Fund's investment managers at least partially hedge foreign currency exchange risk. The Fund's exposure to foreign currency risk is as follows:

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Investment Risks (continued)

	Fair Value		
	2022		2021
Currency		_	
Australian Dollar	\$ 19,536,970	\$	
Brazilian Real	7,206,706		7,649,984
British Pound Sterling	33,268,727		42,902,334
Canadian Dollar	17,020,342		18,116,576
Chilean Peso	999,410		2,711,345
HK offshore Chinese Yuan Reminbi	217,020		233,312
Chinese Yuan Renminbi	503,202		3,201,989
Colombian Peso	2,382,429		3,385,017
Czech Koruna	1,899,253		3,131,635
Danish Krone	6,760,855		8,514,484
Egyptian Pound	36,374		76,333
Euro Currency Unit	69,085,820		122,526,949
Hong Kong Dollar	42,975,794		42,043,173
Hungarian Forint	1,460,422		750,089
Indian Rupee	9,425,766		11,723,245
Indonesian Rupiah	10,113,951		8,544,017
Japanese Yen	44,442,208		60,167,745
Kuwaiti Dinar	44,278		-
Malaysian Ringgit	1,614,867		1,576,041
Mexican Peso	4,599,068		5,540,832
New Israeli Shekel	1,602,045		944,609
New Taiwan Dollar	25,869,509		39,207,899
New Zealand Dollar	(115,182)		701,416
Norwegian Krone	6,349,746		5,378,359
Philippine Peso	1,717,714		1,703,061
Polish Zloty	267,801		2,143,063
Qatari Riyal	200,497		337,998
Russian Ruble	8,020		1,104,048
Singapore Dollar	3,752,260		879,031
South African Rand	7,317,262		12,073,552
South Korean Won	15,330,463		24,734,449
Swedish Krona	5,231,334		19,019,756
Swiss Franc	19,318,845		29,893,100
Thai Baht	5,126,663		3,732,649
Turkish Lira	68		388
United Arab Emirates Dirham	226,931		238,870
Total investments in foreign currency	\$ 365,797,438	_\$	496,566,591

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

Derivatives

The Fund's investment managers may enter into derivative transactions as permitted by their guidelines. A derivative financial instrument is an investment whose payoff depends on the value of an underlying instrument such as bond or stock prices, a market index, or commodity prices. Derivative financial instruments involve, to varying degrees, credit 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 terms. Market risk is the possibility that a change in the underlying element of the derivative will cause the value of a financial instrument to decrease or become more costly to settle. Most of the derivative transactions executed by the Fund's investment managers are related to currency through foreign exchange contracts, the vast majority of which is for hedging purposes, and interest rates through interest rate futures and forward contracts, the purpose of which is mostly duration management. In addition to derivative transactions executed directly by the Fund's investment managers, the Fund also holds interests in collective funds, hedge funds, and private equity funds, which may engage in derivative transactions. The Fund does not directly purchase derivatives with borrowed funds.

Futures contracts—The Fund's external investment managers enter into futures contracts in the normal course of investing activities to manage market risk associated with the Fund's fixed-income investments and to achieve overall investment portfolio objectives. These contracts involve elements of market risk in excess of amounts recognized in the statements of fiduciary net position. The credit risk associated with these contracts is minimal, as they are traded on organized exchanges and settled daily.

At December 31, 2022, the Fund had interest rate futures contracts to (sell) U.S. Treasury bonds and notes and German bonds with notional costs of \$(1,760,790), \$(12,498,043), and \$(4,133,072), respectively. At December 31, 2022, the Fund also had interest rate futures contracts to purchase U.S. Treasury bonds and notes and an Australian bond with notional amounts of \$4,447,312, \$1,438,366, and \$1,327,817, respectively. At December 31, 2021, the Fund had interest rate futures contracts to purchase U.S. Treasury bonds and notes with notional costs of \$5,415,334 and \$15,236,960, respectively. At December 31, 2021, the Fund also had interest rate futures contracts to (sell) U.S. Treasury bonds, an Italian bond, and German bonds with notional amounts of \$(15,851,596), \$2,009,223 and \$(1,950,654), respectively.

The fair value of futures contracts in the statements of fiduciary net position was zero at December 31, 2022 and 2021, as settlements are by cash daily.

The Fund had net investment earnings of \$2,161,480 and \$123,773 on futures contracts in 2022 and 2021, respectively. These earnings are accounted for as net appreciation in fair value of investments.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

<u>Derivatives</u> (continued)

Interest rate and credit default swaps—The Fund's external investment managers utilize interest rate and credit default swaps in the management of the Fund's fixed-income portfolio. Swap agreements are contractual agreements between two or more parties in which each party agrees to exchange sets of cash flows based on certain agreed-upon parameters. The holder is exposed to credit risk for nonperformance and market risk for changes in interest rates. Gains and losses on swaps are determined based on fair values and are recorded in the statements of changes in fiduciary net position. The notional value of credit default swaps was \$936,100 and \$(358,833) as of December 31, 2022 and 2021, respectively. The notional value of inflation and interest rate swaps was \$0 as of December 31, 2022 and 2021, respectively. The fair value of swaps outstanding at December 31, 2022 and 2021, was a net asset of \$44,201 and a net liability of \$(31,589), respectively. Investment gain (loss) from holdings and sales of interest rate and credit default swaps was \$(540,420) and \$(164,519) in 2022 and 2021, respectively. These gains and losses are included in net appreciation (depreciation) in the fair value of investments in the statements of changes in fiduciary net position.

Foreign exchange contracts—The Fund's external investment managers utilize foreign currency forward contracts, primarily for hedging purposes. Foreign currency forward contracts are contractual agreements to buy or sell a specific amount of a foreign currency at a certain date for an agreed price. As the fair value of the underlying foreign currency varies from the contractual agreed price, the Fund records an unrealized gain or loss. The holder is exposed to credit risk for nonperformance and to market risk for changes in exchange rates. The Fund had pending foreign currency purchases and sales that included positions with various currencies, primarily including Australian dollar, Brazilian real, British pound sterling, Canadian dollar, Chilean peso, Chinese yuan renminbi, Colombian peso, Danish krone, Euro currency unit, Hong Kong dollar, Indian rupee, Indonesian rupiah, Japanese yen, Malaysian ringgit, Mexican peso, New Israeli shekel, New Taiwan dollar, New Zealand dollar, Norwegian krone, Philippine peso, Polish zloty, Russian ruble, Singapore dollar, South African rand, South Korean won, Swedish krona, Swiss franc, Thai baht, and United States dollar at December 31, 2022 and 2021. Total pending foreign currency forward purchases and (sales) had notional values of \$70,141,120 and \$(70,143,156), respectively, at December 31, 2022, and \$72,839,399 and \$(72,974,949), respectively, at December 31, 2021.

The Fund had a net unrealized gain (loss) on pending foreign currency forward contracts of \$(2,036) and \$(135,551) at December 31, 2022 and 2021, respectively, which is reflected in the fair value of the investments on the statements of fiduciary net position. Investment gain (loss) from holdings and sales of foreign currency forward contracts was \$(373,631) and \$344,868 in 2022 and 2021, respectively.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 4 CASH AND INVESTMENT RISK (continued)

<u>Derivatives</u> (continued)

Forward interest rate contracts—The Fund's external investment managers entered into forward contracts to purchase or sell bond securities during 2022 and 2021. Forward contracts are contracts for delayed delivery of securities in which the seller agrees to make delivery at a specified future date of a specified instrument, at a specified price or yield. The holder is exposed to credit risk for nonperformance and to market risk for changes in interest rates.

These instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the statements of fiduciary net position. The Fund's external investment managers attempt to mitigate this credit risk through structured trading with reputable parties.

At December 31, 2022 and 2021, the Fund did not hold forward interest rate contracts.

Investment Management Fees

Investment management fees from equity and fixed-income managers, including one of the collective funds, one of the private equity managers, and the cash manager, are included in investment management fees on the statements of changes in fiduciary net position. Investment management fees from all other collective funds, short-term investments, infrastructure, hedge, real estate, venture capital and private equity are reflected in the net investment income from such investment products. Such investment management fees are not significant to the financial statements.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 5 SECURITIES LENDING PROGRAM

State statutes and the Fund's Statement of Investment Policy permit the Fund to lend certain of its liquid securities to broker/dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The Fund's securities lending agent, Deutsche Bank AG, New York Branch (Deutsche Bank), lends securities of the type on loan at year end for collateral in the form of U.S. dollars cash, securities issued by or guaranteed as to principal and interest by the U.S. Government, its agencies, instrumentalities and establishment, and non-U.S. sovereign debt securities representing obligations of an Organization for Economic Cooperation and Development country having a fair value equal to or exceeding 102% of the value of the loaned securities and 105% for non-U.S. securities. The contract with Deutsche Bank provides for indemnification for the Fund with respect to any shortfall between liquidation proceeds and the fair market value of: (1) in respect to lending transactions, the securities subject to such transaction, or (2) in the case of reverse transactions, the amount of cash deposited with a counterparty with respect to such transaction. The terms of liquidation proceeds, fair market value and reverse transactions are more specifically defined in the agency securities lending agreement.

Any of the loans of the Fund's securities can be terminated on demand by either the Fund or the borrower. The average terms of the Fund's loans were approximately 5.72 days and 5.70 days as of December 31, 2022 and 2021, respectively. At December 31, 2022 and 2021, cash collateral was reinvested in indemnified repurchase agreements, which had an interest sensitivity of one day. The Fund cannot pledge or sell collateral securities received unless the borrower defaults.

Loans outstanding as of December 31, 2022 and 2021, were as follows:

	2022	 2021
Fair value of securities loaned	\$ 114,860,939	\$ 74,906,707
Fair value reinvested of cash collateral from borrowers Fair value of non-cash collateral from borrowers	117,469,784	76,691,671
	4,768,292	11,367,909

As of December 31, 2022 and 2021, the Fund had limited credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts owed to the Fund.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 6 UNFUNDED INVESTMENT COMMITMENTS

The Fund had unfunded commitments of approximately \$171 million and \$146 million at December 31, 2022 and 2021, respectively, in connection with real estate, infrastructure, private equity and collective commingled fund investments.

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN

Plan Description

PABF, as an employer, administers a single-employer defined benefit postemployment healthcare plan (Staff Retiree Healthcare Plan). The Staff Retiree Healthcare Plan provides health and dental insurance to eligible retirees and their spouses through PABF's group health insurance plan, which covers both active and retired members. As of December 31, 2022 and 2021, 11 retirees were in the Staff Retiree Healthcare Plan and 19 active employees could be eligible at retirement. Benefit subsidy provisions have been established by PABF's Board of Trustees. The amount of the subsidy varies according to a retiree's years of service with PABF and the coverages elected. These benefit subsidy provisions can be modified or terminated at the sole discretion of the PABF Board. As of December 31, 2021, the Fund changed the plan provisions for medical benefits for retirees from a solely Preferred Provider Organization (PPO) model to a model that includes a PPO, a Supplemental Plan G, and a Prescription Drug Plan. The effect of this current period benefit change was to reduce total OPEB expense for 2022 by \$1,040,799.

Funding Policy

The required contribution is based on projected pay-as-you-go financing requirements. Accordingly, the plan does not accumulate assets in a trust for OPEB. For 2022 and 2021, PABF contributed approximately \$55,750 and \$110,269, respectively, to the Staff Retiree Healthcare Plan for current premiums, inclusive of an implicit subsidy of \$20,788 and \$23,548, for 2022 and 2021, respectively. For 2022 and 2021, members receiving benefits contributed approximately \$71,852 and \$87,726, respectively, to the Staff Retiree Healthcare Plan for current premiums.

GASB Statement No. 75 Valuation

As of December 31, 2022 and 2021, the Fund's total OPEB liability was \$1,216,942 and \$1,467,386, respectively. Total OPEB liability as of December 31, 2022 and 2021, was based on the requirements of GASB Statement No. 75, using census, plan provisions, methods and assumptions as of December 31, 2021.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN (continued)

GASB Statement No. 75 Valuation (continued)

The following methods and assumptions were used in the OPEB valuation for 2022:

Actuarial valuation date December 31, 2021

Measurement date December 31, 2022

Fiscal year end date December 31, 2022

Methods and actuarial assumptions used to measure total OPEB liability:

Actuarial cost method Entry-age normal

GASB Statement No. 75 discount

rate, beginning of year 1.84% per year

GASB Statement No.75 discount

rate, end of year 4.05% per year Wage inflation 3.00% per year

Retirement age Experience-based table of rates that are

specific to the type of eligibility condition

Post-retirement mortality The mortality rates are from the PUB-2010

Amount-weighted Below-median income Healthy Retiree Mortality Table with twodimensional, fully generational improvements using the MP-2020 Mortality Improvement

Scale

Healthcare trend rates Medical trend rates for plan years beginning

on and after January 1, 2023, based on 7.00% per year graded down in 0.25%

increments to an ultimate trend rate of 4.25% per year. Prescription drug plan trend rates for plan years beginning on and after January 1, 2023, based on 8.00% per year graded down in 0.25% increments to an ultimate trend rate of 4.25% per year. Dental and vision trend rate of 4.25% per year beginning

on January 1, 2023.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN (continued)

GASB Statement No. 75 Valuation (continued)

The following methods and assumptions were used in the OPEB valuation for 2021:

Actuarial valuation date December 31, 2021

Measurement date December 31, 2021

Fiscal year end date December 31, 2021

Methods and actuarial assumptions used to measure total OPEB liability:

Actuarial cost method Entry-age normal

GASB Statement No. 75 discount

rate, beginning of year 2.00% per year

GASB Statement No.75 discount

rate, end of year 1.84% per year Wage inflation 3.00% per year

Retirement age Experience-based table of rates that are

specific to the type of eligibility condition

Post-retirement mortality The mortality rates are from the PUB-2010

Amount-weighted Below-median income Healthy Retiree Mortality Table with twodimensional, fully generational improvements using the MP-2020 Mortality Improvement

Scale

Healthcare trend rates Medical trend rates for plan years beginning

on and after January 1, 2023, based on 7.00% per year graded down in 0.25%

increments to an ultimate trend rate of 4.25% per year. Prescription drug plan trend rates for plan years beginning on and after January 1, 2023, based on 8.00% per year graded down in 0.25% increments to an ultimate trend rate of 4.25% per year. Dental and vision trend rate of 4.25% per year beginning

on January 1, 2023.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN (continued)

<u>Total OPEB Liability and Sensitivity to Changes in the Discount and Healthcare</u> <u>Cost Trend Rates</u>

	2022	2021
 Total OPEB liability Service cost Interest on the total OPEB liability Changes in benefit terms Difference between expected and actual experience of the total OPEB liability Changes of assumptions Benefit payments 	\$ 77,143 27,412 (4,155) (309,594) (50,250)	\$ 95,032 45,221 (1,040,799) 169,830 45,990 (104,769)
 7. Net change in total OPEB liability 8. Total OPEB liability – beginning of year 9. Total OPEB liability – end of year 	(259,444) 1,476,386 \$ 1,216,942	(789,495) 2,265,881 \$ 1,476,386
Covered-employee payroll	\$ 1,562,786	\$ 1,690,071
Total OPEB liability as a percentage of Covered-employee payroll	77.87%	87.36%

Discount Rate

The following presents the Fund's total OPEB liability, calculated using a discount rate of 4.05% and 1.84% as of December 31, 2022 and 2021, respectively, as well as what the Fund's total OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher:

Net OPEB Liability for Year Ended	19	% Decrease	Α	Current ssumption	_ 1'	% Increase
December 31, 2022 December 31, 2021	\$	1,343,994 1,649,291	\$	1,216,942 1,476,386	\$	1,107,563 1,328,826

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN (continued)

Healthcare Cost Trend Rate

The following presents the Fund's OPEB liability, calculated using the assumed trend rates as well as what the Fund's total OPEB liability would be if it were calculated using a trend rate that is 1% lower or 1% higher:

Net OPEB Liability for Year Ended	1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
December 31, 2022 December 31, 2021	\$ 1,125,913 1,358,609	\$ 1,216,942 1,476,386	\$ 1,323,977 1,615,674
5	Statement of OPEB	Expense	
		2022	2021
Expense		¢ 77 1/12	¢ 05.033

	 2022		2021
Expense			
1. Service cost	\$ 77,143	\$	95,032
Interest on the total OPEB liability	27,412		45,221
Current-period benefit changes	-		(1,040,799)
OPEB plan administrative expense	5,500		5,500
5. Recognition of outflow (inflow) of resources due to non-investment experience6. Recognition of outflow (inflow) of resources	(14,678)		(14,216)
due to assumption changes	 (17,575)		16,886
7. Total OPEB expense	\$ 77,802	<u>\$</u>	(892,376)
Reconciliation of total OPEB liability			
 Net OPEB liability, beginning of year 	\$ 1,476,386	\$	2,265,881
2. OPEB expense	77,802		(892,376)
Employer contributions	(55,750)		(110,269)
 Change in deferred outflow/(inflow) due to non-investment experience 	10,523		184,046
Change in deferred outflow/(inflow) due to assumption changes	(292,019)	_	29,104
6. Net OPEB liability, end of year	\$ 1,216,942	<u>\$</u>	1,476,386

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 7 POSTEMPLOYMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTHCARE PLAN (continued)

The following table presents the components of total deferred outflows and inflows of resources related to OPEB at December 31:

<u>Deferred Outflows of Resources</u>	 2022	 2021
Differences between expected and actual non-investment experience Assumption changes	\$ 135,360 191,121	\$ 152,595 223,744
Total deferred outflows of resources	\$ 326,481	\$ 376,339
<u>Deferred Inflows of Resources</u>	 2022	 2021
Deferred Inflows of Resources Differences between expected and actual non-investment experience Assumption changes	\$ 2022 224,097 362,489	\$ 251,855 103,093

Amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense over 8.984 years as follows:

	Οι	Deferred Outflows of Resources		Deferred (Inflows) of Resources		Net Deferred Outflows (Inflows) of Resources	
						()	
2023	\$	49,858	\$	(82,111)	\$	(32,253)	
2024		49,858		(82,111)		(32,253)	
2025		49,858		(82,111)		(32,253)	
2026		49,858		(82,111)		(32,253)	
2027		49,858		(79,758)		(29,900)	
Thereafter		77,191		(178,384)		(101,193)	
	\$	326,481	\$	(586,586)	\$	(260,105)	

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 8 RESERVES

The Fund maintains several reserves, as required by the Illinois Pension Code and Board policy. The following are brief descriptions of the reserves:

City Contribution Reserve

		2022	2021		
Balance, at December 31	<u>\$</u>	1,922,588,658	<u>\$</u>	2,434,324,930	

The City contribution reserve is maintained for the payment of the City's portion of future retirement benefits for active and inactive participants. Interest at 3% is credited to this reserve annually. When the amount of annuity for a policeman or widow is fixed, the City contribution reserve is charged with the amount of the present value of retirement benefit and the annuity payment reserve is credited with such amount.

The City contribution reserve does not equal the present value of expected retirement benefits. The reserve is maintained on a cost basis, in accordance with the Illinois Pension Code.

Salary Deduction Reserve

	2022			2021
Balance, at December 31	\$	1,612,811,834	\$	1,645,058,291

The Illinois Pension Code requires the Fund to maintain separate accounts for each policeman for the amounts of salary deductions with interest at 3% per year. When a policeman retires, the amount of his annuity is charged to the salary deduction reserve and credited to the annuity payment reserve. If a policeman takes a separation refund, his or her salary deductions are refunded and charged to the salary deduction reserve. This reserve is fully funded.

Annuity Payment Reserve

	2022			2021
Balance, at December 31	<u>\$</u>	3,442,972,220	\$	3,175,809,910

When the amount of annuity has been fixed, the present value of expected benefit is transferred from the City contribution reserve and the salary deduction reserve to the annuity payment reserve for the payment of annuity. All age and service annuities, widow's annuities, and refunds are charged to this reserve.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 8 RESERVES (continued)

Annuity Payment Reserve (continued)

Annually, the actuary calculates the present value of all annuities. The investment and interest reserve will transfer amounts to the annuity payment reserve to ensure that the balance in the annuity payment reserve equals the present value of annuities. This reserve is fully funded.

Prior Service Annuity Reserve

	 2022	 2021
Balance, at December 31	\$ (603.149.151)	\$ (778.386.780)

The prior service annuity reserve is increased by the City's contributions for policemen and widows' prior service annuities and all prior service annuities payable to policemen and widows are charged to this reserve. This reserve included an unfunded liability of \$12,205,800,426 and \$11,761,260,336 as of December 31, 2022 and 2021, respectively.

Gift Reserve

	2022		2021	
Balance, at December 31	\$	14,041,369	\$	13,633,180

The gift reserve is maintained for gifts, grants, bequests, or other amounts received by the Fund. The Board of Trustees determines the use of these funds. Interest is credited to the gift reserve annually.

Investment and Interest Reserve

All gains and losses from investments and investment earnings are recorded in the investment and interest reserve. Interest due to the City contribution reserve, salary deduction reserve, prior service annuity reserve, gift reserve, and supplementary payment reserve is transferred from the investment and interest reserve to those reserves.

Ordinary Death Benefit Reserve

	 2022	2021		
Balance, at December 31	\$ (52,672,776)	\$	(52,068,449)	

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 8 RESERVES (continued)

Ordinary Death Benefit Reserve (continued)

Amounts contributed by policemen and the City for death benefits are credited to the ordinary death benefit reserve. Death benefit payments are charged to this reserve. At December 31, 2022 and 2021, the ordinary death benefit reserve had a deficit.

Automatic Increase Reserve

	 2022	2021
Balance, at December 31	\$ (2,846,259,770)	\$ (2,592,273,199)

The automatic increase reserve is credited with amounts deducted from the salaries of police officers and matching contributions by the City for automatic increase in annuity. Payments of increased annuities and salary deduction refunds, for increase in annuity, are charged to this reserve. At December 31, 2022 and 2021, the automatic increase reserve had a deficit.

Supplementary Payment Reserve

	2022		 2021
Balance, at December 31	\$	447,402	\$ 447,402

The supplementary payment reserve receives amounts transferred from the investment and interest reserve for supplemental increases in annuity for certain eligible retirees. This reserve is fully funded.

Additional Reserves

The following reserves - child's annuity reserve, duty disability reserve, ordinary disability reserve and expense reserve - have a \$0 balance at December 31, 2022 and 2021. City contributions are allocated to these reserve accounts in amounts equal to payments made on an annual basis.

Child's Annuity Reserve

Amounts contributed by the City for child's annuity are credited to the child's annuity reserve, and payments of child's annuity are charged to this reserve.

Duty Disability Reserve

The duty disability reserve is increased by the City's contributions for duty disability benefits, child's disability benefits, and compensation annuities and is decreased by the payments of these benefits.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 8 RESERVES (continued)

Ordinary Disability Reserve

Amounts contributed by the City for ordinary disability benefits are credited to the ordinary disability reserve. Payments of ordinary disability benefits are charged to this reserve.

Expense Reserve

Amounts contributed toward the cost of administration are credited to the expense reserve. Expenses of administration are also charged to this reserve.

NOTE 9 NET PENSION LIABILITY OF THE FUND

The components of the net pension liability at December 31, 2022 and 2021, were as follows:

	2022	2021
Total pension liability Less: Plan fiduciary net position	\$ 16,214,629,789 3,486,779,785	\$ 16,340,008,877 3,846,545,285
Fund net pension liability	<u>\$ 12,727,850,004</u>	<u>\$ 12,493,463,592</u>
Fund fiduciary net position as a percentage of total pension liability	21.50%	23.54%

Actuarial Assumptions

In 2020, the actuarial assumptions were changed from the prior actuarial valuation to reflect the results of an experience study performed for the period January 1, 2014 through December 31, 2019. The total pension liability was determined by an actuarial valuation as of December 31, 2022 and 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.25%
Salary increases	3.50% per year, plus additional percentage related to service
Investment rate of return	6.75%

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 9 NET PENSION LIABILITY OF THE FUND (continued)

Actuarial Assumptions (continued)

Cost-of-living adjustments For members hired before January 1, 2011:

3.0% (1.5% for retirees born on or after January 1, 1966, to a maximum of 30%)

For members hired on or after January 1, 2011: 1/2 of CPI-U, maximum 3.0%, to

begin no earlier than age 60.

Mortality rates were based on the Sex Distinct Pub-2010 amount weighted safety healthy retiree mortality tables weighted 119% for post-retirement males and 102% for females, respectively, and 100% for pre-retirement males and females, respectively, and 129% for disabled males and 112% for females, respectively.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate arithmetic expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These assumptions are converted into nominal assumptions by adding inflation, then combined by weighing them by the target asset allocation percentages. Finally, the arithmetic portfolio expected return is converted into a geometric expected return using assumed asset class standard deviations and correlations. The pension plan's target allocation as of December 31, 2022 and 2021, is summarized in the following tables:

December 31, 2022

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. equity	31.5%	5.70%
Non-U.S. equity	19.5	7.49
Fixed income	13.0	1.95
Private markets	22.0	8.45
Hedge funds	3.0	4.16
Real estate	<u>11.0</u>	5.49
Total	<u>100.0</u> %	

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 9 NET PENSION LIABILITY OF THE FUND (continued)

Actuarial Assumptions (continued)

December 31, 2021

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. equity	29.5%	7.85%
Non-U.S. equity	19.5	9.65
Fixed income	18.0	3.62
Private markets	15.0	11.20
Hedge funds	7.0	5.48
Real estate	<u>11.0</u>	5.99
Total	<u>100.0</u> %	

Single Discount Rate

A Single Discount Rate of 6.64% and 6.26% as of December 31, 2022 and 2021, respectively, was used to measure the total pension liability. These Single Discount Rates were based on an expected rate of return on pension plan investments of 6.75% for 2022 and 2021, and a municipal bond rate of 4.05% and 1.84%, respectively. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made under the statutory funding policy. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments only through the year 2079. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2079, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 6.64% and 6.26% as of December 31, 2022 and 2021, respectively, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is 1-percentage-point lower or 1-percentage-point higher:

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 9 NET PENSION LIABILITY OF THE FUND (continued)

Single Discount Rate (continued)

Sensitivity of net pension liability to the Single Discount Rate assumption as of December 31, 2022 is as follows:

1% Decrease 5.64%	Single Discount Rate Assumption 6.64%	1% Increase 7.64%
\$ 14,681,038,481	\$ 12,727,850,004	\$ 11,097,289,130

Sensitivity of net pension liability to the single discount rate assumption as of December 31, 2021 is as follows:

1% Decrease 5.26%	Rate Assumption 6.26%	1% Increase 7.26%
\$ 14,532,722,298	\$ 12,493,344,421	\$ 10,796,707,547

NOTE 10 DEFERRED COMPENSATION PLAN

The Fund offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all employees of the Fund, permits them to defer a portion of their salary until future years. Participation in the plan is optional. Accumulated balances within deferred compensation accounts are not available to employees until termination, retirement, death, or unforeseeable emergency. The plan is managed by a third-party administrator.

The assets of the plan are deposited in trust accounts with the plan administrator for the exclusive benefit of participants and their beneficiaries and are not considered assets of the Fund.

NOTE 11 LEASE AGREEMENT

The Fund leases its office facilities under a non-cancelable agreement. The current lease commenced on July 1, 2016, and was renewed for 16 years through 2032. The new lease agreement includes an abatement clause during the term of the new lease.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 11 LEASE AGREEMENT (continued)

GASB Statement No. 87, *Leases*, requires that the Fund, as a lessee, recognize a lease liability and an intangible right-to-use lease asset (lease asset). The lease liability is measured at the present value of payments expected to be made during the lease term. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured at the initial amount of the lease liability, adjusted for any lease incentives at or before commencement of the lease. Subsequently, the lease asset is amortized on a straight-line basis over the term of the lease.

GASB 87 was implemented in fiscal year 2022, with retroactive application for fiscal year 2021.

The amount of lease asset by major class of underlying assets at December 31, 2022 and 2021, respectively, is as follows:

			Current	Gross		
			Lease Term	Asset	Accumulated	Net
Lease Description	Role	Use	End Date	Balance	Amortization	Position
Office						
221 North LaSalle St.						
Suite 1626	Lessee	Office	6/30/2032	\$ 2,792,063	\$ 670,095	\$ 2,121,968
ı	Lease Asset and	Accumulated A	mortization as of D	ecember 31, 2021	(Restated)	
Lease Liability						
Principal and Interest						
•			Current	Gross		
Principal and Interest			Current Lease Term	Gross Asset	Accumulated	Net
Principal and Interest Requirements	Role	Use			Accumulated Amortization	Net Position
Principal and Interest Requirements to Maturity	Role	Use Office	Lease Term	Asset		

The scheduled fiscal year maturities of the lease liability and related interest expense at December 31, 2022 and restated for 2021 are as follows:

Lease Liability Principal and Interest Requirements to Maturity December 31, 2022

Requirements to maturity becomes or, 2022						
Fiscal		Interest			Liability	
Year Ending		Cash	Expense		Reduction	
2022	\$	362,197	\$	151,443	\$	210,754
2023		369,441		141,432		228,009
2024		376,830		130,602		246,228
2025		384,367		118,906		265,461
2026		392,054		106,296		285,758
2027		399,895		92,723		307,172
2028-2032		1,863,018		218,130		1,644,888

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 11 LEASE AGREEMENT (continued)

Lease Liability Principal and Interest Requirements to Maturity December 31, 2021

Fiscal Year Ending	 Cash		Interest Expense		Liability Reduction	
2021	\$ 355,095	\$	160,678	\$	194,418	
2022	362,197		151,443		210,754	
2023	369,441		141,432		265,347	
2024	376,830		130,602		246,228	
2025	384,367		118,906		265,461	
2026	392,054		106,296		285,758	
2027-2031	2,081,069		306,682		1,774,387	
2032-2036	181,844		4,171		177,673	

NOTE 12 RISK MANAGEMENT

The Fund is exposed to various risks of loss related to tort, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Fund carries commercial insurance to reduce its exposure to risk of loss. There is no significant change in insurance coverage from year to year. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

NOTE 13 CONTINGENCIES

In July 2013, a group of plaintiffs purporting to represent annuitants in four Chicago public pension funds filed a civil action, Underwood v. City of Chicago et. al. (13-CH-17450; 1-17-162356), seeking class certification and an order requiring the City and the defendant pension funds to continue subsidizing annuitant healthcare insurance premiums past the June 30, 2013, statutory expiration date. Following years of litigation, on June 29, 2017, the Illinois Appellate Court issued an order which, in part, affirmed the Circuit Court's dismissal order and held: (i) annuitants did not have a right to lifetime healthcare coverage; and (ii) the subsidies pursuant to the 1983 and 1985 amendments is the sole benefit protected under the pension protection clause of the Illinois Constitution. Accordingly, those eligible annuitants in the Appellate Court expanded class, and as further defined after remand in the Circuit Court's February 28, 2019 order, are entitled to continue to receive the 1983 provided subsidies (related to the police and fire funds) of \$55 per month if non-Medicare eligible and \$21 per month if Medicare eligible. While the plaintiffs continue to raise certain objections, the pension funds nevertheless, in accordance with the rulings made, have commenced payment of the subsidies to those defined eligible annuitants as of January 1, 2017 and thereafter.

(A Component Unit of the City of Chicago) Notes to Financial Statements Years Ended December 31, 2022 and 2021

NOTE 14 RESTATEMENTS DUE TO IMPLEMENTATION OF NEW ACCOUNTING STANDARD

During fiscal year 2022, the Fund implemented GASB Statement No. 87, *Leases*. The Statement established criteria for accounting and financial reporting for leases. It creates a single model for lease accounting and requires recognitions of certain lease assets and liabilities for leases that were previously classified as operating leases. A lessee is required to recognize a lease liability and an intangible right-to-use asset. The provisions of this Statement are effective for fiscal years beginning after June 15, 2021, and should be applied retroactively by restating financial statements, if practicable, for all prior periods presented. All prior periods presented in the financial statements and accompanying notes to the financial statements that were impacted by this Statement have been restated. The Fund reported a \$(0.06) million decrease in net position as of December 31, 2020 due to GASB 87. The impact to the earliest period presented in the Management's Discussion and Analysis is January 1, 2020, in which there was no impact to net position.

The impact of this new standard on the statement of fiduciary net position was as follows:

	_	ht-to-Use ase Asset	ong-Term se Liability	Net Position Held in Trust for Pension Benefits
December 31, 2020 (as previously reported) GASB 87 adoption	\$	- 2,568,698	\$ 3,382,688	\$3,441,897,879 (63,835)
December 31, 2020 (as restated)	\$	2,568,698	\$ 3,382,688	\$3,441,834,044
December 31, 2021 (as previously reported) GASB 87 adoption	\$	- 2,345,333	\$ - 3,188,270	\$3,846,664,456 (119,171)
December 31, 2021 (as restated)	\$	2,345,333	\$ 3,188,270	\$3,846,545,285

The effect of this new standard on the statement of changes in fiduciary net position were as follows:

	Administrativ Expense		
Fiscal year ended December 31, 2020 (as previously reported) GASB 87 adoption	\$	4,359,314 63,836	
Fiscal year ended December 31, 2020 (as restated)	\$	4,423,150	
Fiscal year ended December 31, 2021 (as previously reported) GASB 87 adoption	\$	3,384,892 55,335	
Fiscal year ended December 31, 2021 (as restated)	\$	3,440,227	



(A Component Unit of the City of Chicago)
Required Supplementary Information
Schedule of Changes in Net Pension Liability
As of December 31 - Last Nine Years
(Unaudited)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability									
Service cost, including pension plan									
administrative expense	\$ 294,469,959	\$ 284,707,281	\$ 286,536,580	\$ 240,383,419	\$ 242,998,341	\$ 237,333,255	\$ 220,569,553	\$ 213,584,647	\$ 199,435,084
Interest on the total pension liability	1,011,974,984	963,417,573	942,623,431	944,738,703	931,731,201	917,720,267	851,098,457	832,972,131	791,693,017
Benefit changes	40,209,941	-	-	24,216,420	-	-	606,249,791	-	-
Difference between expected and actual experience	179,968,529	450,528,053	61,913,883	(68,010,227)	(281,150,986)	(299,923,560)	1,801,353	(105,968,891)	-
Assumption changes	(700,064,974)	37,028,703	260,021,116	1,140,418,080	(259,051,713)	238,975,508	112,585,241	-	845,070,287
Benefit payments	(926,493,466)	(869,310,502)	(828,901,654)	(791,839,040)	(764,367,368)	(737,873,928)	(696,491,103)	(668,950,080)	(645,688,934)
Refunds	(21,096,110)	(17,766,049)	(12,696,058)	(8,828,904)	(6,737,073)	(10,017,655)	(10,704,842)	(7,826,847)	(8,991,636)
Pension plan administrative expense	(4,347,951)	(3,384,892)	(4,310,938)	(4,734,467)	(4,626,599)	(4,843,012)	(4,749,762)	(4,508,519)	(4,240,625)
Net change in total pension liability	(125,379,088)	845,220,167	705,186,360	1,476,343,984	(141,204,197)	341,370,875	1,080,358,688	259,302,441	1,177,277,193
Total pension liability – beginning	16,340,008,877	15,494,788,710	14,789,602,350	13,313,258,366	13,454,462,563	13,113,091,688	12,032,733,000	11,773,430,559	10,596,153,366
Total pension liability – ending (a)	16,214,629,789	16,340,008,877	15,494,788,710	14,789,602,350	13,313,258,366	13,454,462,563	13,113,091,688	12,032,733,000	11,773,430,559
Plan fiduciary net position									
Employer contributions	801,706,005	788,769,979	739,440,979	581,936,012	588,034,930	494,483,191	272,427,716	572,836,100	177,417,827
Employee contributions	114,403,212	136,225,041	113,621,747	110,791,663	107,186,492	103,011,250	101,475,864	107,626,311	95,675,538
Pension plan net investment (loss)									
income	(324,258,867)	370,141,406	271,890,867	369,982,655	(137,977,182)	412,190,404	142,699,124	(5,333,795)	181,901,293
Benefit payments	(926,493,466)	(869,310,502)	(828,901,654)	(791,839,040)	(764,367,368)	(737,873,928)	(696,491,103)	(668,950,080)	(645,688,934)
Refunds	(21,096,110)	(17,766,049)	(12,696,058)	(8,828,904)	(6,737,073)	(10,017,655)	(10,704,842)	(7,826,847)	(8,991,636)
Pension plan administrative expense	(4,394,051)	(3,384,892)	(4,310,938)	(4,734,467)	(4,626,599)	(4,843,012)	(4,749,762)	(4,508,519)	(4,240,625)
Other	367,777	91,594	472,449	32,359	1,600,348	97,239	1,412,770	3,091,545	740,305
Net change in plan fiduciary									
net position	(359,765,500)	404,766,577	279,517,392	257,340,278	(216,886,452)	257,047,489	(193,930,233)	(3,065,285)	(203, 186, 232)
Plan fiduciary net position -									
beginning	3,846,545,285	3,441,834,044	3,162,428,863	2,905,179,841	3,122,066,293	2,865,018,804	3,058,949,037	3,062,014,322	3,265,200,554
Adjustment as of January 1,		(55,336)	(112,211)	(91,256)					
Plan fiduciary net position –									
ending (b)	3,486,779,785	3,846,545,285	3,441,834,044	3,162,428,863	2,905,179,841	3,122,066,293	2,865,018,804	3,058,949,037	3,062,014,322
Net pension liability – ending (a)-(b)	\$ 12,727,850,004	\$ 12,493,463,592	\$ 12,052,954,666	\$ 11,627,173,487	\$ 10,408,078,525	\$ 10,332,396,270	\$ 10,248,072,884	\$ 8,973,783,963	\$ 8,711,416,237

The above information was required beginning in 2014. Information for the next year will be presented in future years.

(A Component Unit of the City of Chicago)
Required Supplementary Information
Notes to Schedule of Changes in Net Pension Liability
For the Years Ended December 31, 2022 and 2021
(Unaudited)

Beginning of year total pension liability for 2022 used a Single Discount Rate of 6.26% and the benefit provisions, actuarial assumptions and funding policy in effect as of the December 31, 2021 funding actuarial valuation. The Single Discount Rate of 6.26% was based on a long-term expected rate of return on pension plan investments of 6.75% used in the December 31, 2021, funding actuarial valuation for the years 2020 through 2077 and a long-term municipal bond rate as of December 31, 2021, of 1.84% for subsequent years.

End of year total pension liability for 2022 uses a Single Discount Rate of 6.64% and the benefit provisions, actuarial assumptions and funding policy in effect as of the December 31, 2022, funding actuarial valuation. The Single Discount Rate of 6.64% was based on a long-term expected rate of return on pension plan investments of 6.75% used in the December 31, 2022, funding actuarial valuation for the years 2020 through 2079 and a long-term municipal bond rate as of December 31, 2022, of 4.05% for subsequent years.

The decrease in the total pension liability for 2022 due to assumption changes and methods includes the impact of the change in the municipal bond rate from December 31, 2021, to December 31, 2022. Changes in actuarial assumptions and methods led to the change in the Single Discount Rate to 6.64% from 6.26% (based on the long-term expected rate of return on pension plan investments of 6.75% used in the December 31, 2022 and 2021 funding valuations and the long-term municipal bond rate of 4.05% as of December 31, 2022 and 1.84% as of December 31, 2021.) This change was measured at the end of the year using the benefit provisions in effect as of December 31, 2022.

The increase in the total pension liability for 2021 due to assumption changes and methods includes the impact of the change in the municipal bond rate from December 31, 2020, to December 31, 2021. Changes in actuarial assumptions and methods led to the change in the Single Discount Rate to 6.26% from 6.28% (based on the long-term expected rate of return on pension plan investments of 6.75% used in the December 31, 2021 and 2020 funding valuations and the long-term municipal bond rate of 1.84% as of December 31, 2021 and 2.00% as of December 31, 2020.) This change was measured at the end of the year using the benefit provisions in effect as of December 31, 2021.

(A Component Unit of the City of Chicago)
Required Supplementary Information
Schedule of Net Pension Liability
As of December 31 - Last Nine Years
(Unaudited)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability Plan fiduciary net position	\$ 16,214,629,789 3,486,779,785	\$ 16,340,008,877 3,846,664,456	\$ 15,494,788,710 3,441,946,255	\$ 14,789,602,350 3,162,428,863	\$ 13,313,258,366 2,905,179,841	\$ 13,454,462,563 3,122,066,293	\$ 13,113,091,688 2,865,018,804	\$ 12,032,733,000 3,058,949,037	\$ 11,773,430,559 3,062,014,322
Net pension liability	\$ 12,727,850,004	\$ 12,493,344,421	\$ 12,052,842,455	\$ 11,627,173,487	\$ 10,408,078,525	\$ 10,332,396,270	\$ 10,248,072,884	\$ 8,973,783,963	\$ 8,711,416,237
Plan fiduciary net position as a percentage of total pension liability	21.50%	23.54%	22.21%	21.38%	21.82%	23.20%	21.85%	25.42%	26.01%
Covered employee payroll	\$ 1,274,049,642	\$ 1,258,338,033	\$ 1,195,980,486	\$ 1,228,986,864	\$ 1,205,324,445	\$ 1,150,406,094	\$ 1,119,526,987	\$ 1,086,607,979	\$ 1,074,333,319
Net pension liability as a percentage of covered employee payroll	999.01%	992.84%	1007.78%	946.08%	863.51%	898.15%	915.39%	825.85%	810.87%

The above information is required beginning in 2014. Information for the next year will be presented in future years.

(A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Contributions—Pension Last 10 Years (Unaudited)

Year Ended	Actuarially Determined Contribution (a)*	Actual Contribution (b)	Contribution Deficiency (Excess) (c) = (b)-(a)	Covered Payroll (d)**	Actual Contribution as a % of Covered Payroll (e) = (b)/(d)	Statutory Contribution (f)	Statutory Contribution Deficiency/ (Excess) (g) = (f)-(b)*
12/31/13	474,177,604	179,521,259	294,656,345	1,015,426,128	17.68%	182,716,690	3,195,431
12/31/14	491,651,208	178,158,132	313,493,076	1,074,333,318	16.58%	178,773,877	615,745
12/31/15	785,500,836	575,927,645	209,573,191	1,086,607,979	53.00%	410,558,466	(165, 369, 179)
12/31/16	785,695,084	273,840,486	511,854,598	1,119,526,987	24.46%	454,844,486	181,004,000
12/31/17	910,938,497	494,580,430	416,358,067	1,150,406,094	42.99%	500,000,000	(5,419,570)
12/31/18	924,653,899	589,635,278	335,018,621	1,205,324,445	48.92%	557,000,000	(32,635,278)
12/31/19	933,769,914	581,968,371	351,801,543	1,228,986,864	47.35%	579,000,000	(2,968,371)
12/31/20	1,037,582,236	739,913,428	297,668,808	1,195,980,486	61.87%	737,527,285	(2,386,143)
12/31/21	1,047,839,052	788,861,573	258,977,479	1,258,338,033	62.89%	786,792,834	(2,068,739)
12/31/22	1,085,158,790	802,073,782	283,085,008	1,274,049,642	62.95%	799,446,710	(2,627,072)

^{*} The Fund's Statutory Funding does not conform to Actuarial Standards of Practice; therefore, for 2015 and after, the actuarially determined contribution is equal to the normal cost plus a 30-year level dollar amortization of the unfunded actuarial liability. Prior to 2015, the actuarially determined contribution was equal to the "ARC," which was equal to the normal cost plus a 30-year open level percent amortization of the unfunded actuarial liability.

^{**} Covered payroll shown is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during the fiscal year..

(A Component Unit of the City of Chicago) Required Supplementary Information Notes to Schedule of Contributions—Pension (Unaudited)

Valuation date: December 31, 2021

Methods and Assumptions Used for Actuarially Determined Contribution for Fiscal Year 2022:

Actuarial cost method: Entry-age normal

Amortization method: 30-year open period

Asset valuation method: Five-year smoothed market

Inflation: 2.25%

Salary increases: Salary increase rates based on wage inflation rate of 3.50% plus

service based increases consistent with bargaining contracts

Postretirement benefit

increases:

A retiree born before January 1, 1966, with at least 20 years of service or receiving a mandatory retirement minimum annuity, receives an increase of 3% of the original annuity, starting on the first of the month following the first anniversary of his retirement or the first of the month following attainment of age 55, whichever is later, and shall not be subject to a 30% maximum increase. For retirees born on or after January 1, 1966, automatic increases are 1.5% of the original annuity, commencing at age 60, or the first anniversary of retirement, if later, to a maximum of 30%. For participants that first became members on or after January 1, 2011, increases are equal to the

lesser of 3% and 50% of CPI-U of the original benefit,

commencing at age 60.

Investment rate of

return:

6.75%

(A Component Unit of the City of Chicago)
Required Supplementary Information
Notes to Schedule of Contributions—Pension (continued)
(Unaudited)

Methods and Assumptions Used for Actuarially Determined Contribution for Fiscal Year 2022 (continued):

Retirement age: Experience-based table of rates that are specific to the type of

eligibility condition. Last updated for the December 31, 2019, actuarial valuation pursuant to an experience study for the period

January 1, 2014 through December 31, 2018.

Mortality: Post-Retirement Healthy Mortality Rates: Sex Distinct Pub-2010

Amount-weighted Safety Employee Mortality Tables weighted 119% for males and 102% for females, set forward one year for

males.

Pre-Retirement Mortality Rates: Sex Distinct Pub-2010 Amount-Weighted Safety Healthy Retiree Mortality Tables

weighted 100% for males and 100% for females.

Disabled Mortality: Sex Distinct Pub-2010

Amount-Weighted Safety Healthy Retiree Mortality Tables

weighted 129% for males and 112% for females, set forward one

year for males.

Future mortality improvements are reflected by projecting the base

mortality tables forward using the MP-2018 projection scale.

Other: The actuarially determined contribution for fiscal year ending

December 31, 2022 was determined in the funding actuarial valuation as of December 31, 2021 and the statutory contribution (upon which the actual contribution was based) for fiscal year ending December 31, 2022 was determined in the funding actuarial valuation as of December 31, 2020, which were both

based on the assumptions summarized above.

Methods and Assumptions Used for Accounting Purposes as of the Valuation Date:

Actuarial cost method: Entry-age normal

Asset method: Market value

Discount rate: 6.64% as of the December 31, 2022 actuarial valuation

6.26% as of the December 31, 2021 actuarial valuation

(A Component Unit of the City of Chicago)
Required Supplementary Information
Schedule of Money-Weighted Rate of Return—Pension
(Unaudited)

Year Ended	Annual Money-Weighted Rate of Return, Net of Investment Expense
12/31/14	6.24 %
12/31/15	(0.41)
12/31/16	6.6
12/31/17	16.7
12/31/18	(5.7)
12/31/19	16.31
12/31/20	12.29
12/31/21	13.80
12/31/22	(10.61)

The above information is required beginning in 2014. Information for the next year will be presented in future years.

(A Component Unit of the City of Chicago)
Required Supplementary Information
Schedule of Changes in Total OPEB Liability – Staff Retiree Healthcare Plan
As of December 31 – Last Five Years
(Unaudited)

	2022		2021		2020		2019		2018	
Total OPEB liability										
Service cost	\$	77,143	\$	95,032	\$	101,259	\$	83,294	\$	93,951
Interest on the total pension liability		27,412		45,221		70,229		82,713		75,485
Changes of benefit terms		-		(1,040,799)		-		-		-
Difference between expected and actual										
experience of the total OPEB liability		(4,155)		169,830		(304,583)		(11,367)		-
Changes of assumption		(309,594)		45,990		(53,712)		266,289		(101,657)
Benefits payments		(50,250)		(104,769)		(100,933)		(109,992)		(117,063)
Net change in total OPEB liability	\$	(259,444)	\$	(789,495)	\$	(287,740)	\$	310,937	\$	(49,284)
Total plan assets	\$	_	\$		\$		\$		\$	_
Total OPEB liability - beginning	\$	1,476,386	\$	2,265,881	\$	2,553,621	\$	2,242,684	\$	2,291,968
Total OPEB liability - ending	\$	1,216,942	\$	1,476,386	\$	2,265,881	\$	2,553,621	\$	2,242,684
Covered-employee payroll	\$	1,562,786	\$	1,690,071	\$	1,639,092	\$	1,492,077	\$	1,630,338
Total OPEB liability as a percentage of covered-employee payroll		77.87%		87.36%		138.24%		171.15%		137.56%

The above information is required beginning in 2018. Information for the next five years will be presented in future years.



(A Component Unit of the City of Chicago)
Schedule of Administrative Expenses
For the Years Ended December 31, 2022 and 2021 (Restated)

	2022	2021	2021	
Administrative expenses				
Actuary services	\$ 71,000	\$ 75,500)	
Benefits disbursement	306,557	294,277	,	
Equipment service and rent	60,508	54,708	}	
External auditors	45,675	57,803	}	
Fiduciary insurance	217,123	208,770)	
Legal services	295,566	212,885	;	
Medical consultants	400,088	342,389)	
Miscellaneous	145,500	127,184	ļ	
Penson administration	145,000	138,240)	
Occupancy and utilities	436,201	433,927	,	
Personnel salaries and benefits	2,206,633	1,441,319)	
Postage	-	10,000)	
Supplies	8,449	8,438	3	
Trustee election		34,787	_	
Total administrative expenses	\$ 4,338,300	\$ 3,440,227	•	

(A Component Unit of the City of Chicago)
Schedule of Consulting Costs
For the Years Ended December 31, 2022 and 2021

	 2022	2021		
Payments to consultants				
External auditors	\$ 45,675	\$	57,803	
Medical consultants	400,088		342,389	
Legal services	295,566		212,885	
Actuary service	71,000		75,500	
Investment management fees	7,211,140		8,208,316	
Custodial fees	309,455		304,305	
Investment consulting and other fees	 438,996		426,295	
Total consulting costs	\$ 8,771,920	\$	9,627,493	

(A Component Unit of the City of Chicago) Schedule of Investment Fees For the Years Ended December 31, 2022 and 2021

Investment managers		 2022	2021		
Acadian Asset Manager \$ 682,923 \$ 898,827 Ariel Capital Management 386,389 352,540 Artisan Partners 672,932 499,784 Blackrock 100,053 67,342 Blueprint Capital - - BMO Asset Management 403,047 555,921 Chicago Equity Partners - - Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 225,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Invest		 _			
Ariel Capital Management 386,389 352,540 Artisan Partners 672,932 499,784 Blackrock 100,053 67,342 Blueprint Capital - - BMO Asset Management 403,047 555,921 Chicago Equity Partners - - Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure	<u> </u>				
Artisan Partners 672,932 499,784 Blackrock 100,053 67,342 Blueprint Capital - - BMO Asset Management 403,047 555,921 Chicago Equity Partners - - Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trus	<u> </u>	\$ •	\$	· ·	
Blackrock 100,053 67,342 Blueprint Capital - - BMO Asset Management 403,047 555,921 Chicago Equity Partners - - Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Manage	•	•		•	
Blueprint Capital		672,932			
BMO Asset Management 403,047 555,921 Chicago Equity Partners - - Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792		100,053		67,342	
Chicago Equity Partners -	Blueprint Capital	-		-	
Earnest Partners 741,112 840,297 Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 <t< td=""><td>-</td><td>403,047</td><td></td><td>555,921</td></t<>	-	403,047		555,921	
Garcia Hamilton 159,099 178,383 Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 4	Chicago Equity Partners	-		-	
Great Lakes Advisors 312,562 322,780 HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Total investment Trust Company <td>Earnest Partners</td> <td>741,112</td> <td></td> <td>840,297</td>	Earnest Partners	741,112		840,297	
HGK Asset Management - 48,856 ING Clarion - - Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 7he Northern Trust Company 309,455 304,305	Garcia Hamilton	159,099		178,383	
NG Clarion	Great Lakes Advisors	312,562		322,780	
Lazard Asset Management 365,749 468,962 MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	HGK Asset Management	-		48,856	
MacKay Shields LLC - 2,110 Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	ING Clarion	-		-	
Manulife Asset Management 83,458 93,047 National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 1 309,455 304,305	Lazard Asset Management	365,749		468,962	
National Investment Services 463,943 504,564 Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Master custodian 438,996 426,295 Master custodian 309,455 304,305	· ·	-		· ·	
Northern Trust Global Investments - Index Funds 93,055 106,907 Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 7 309,455 304,305	Manulife Asset Management	83,458		•	
Pluscios Management, LLC 255,067 279,841 UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 7 438,996 426,295 Master custodian 309,455 304,305	National Investment Services	· · · · · · · · · · · · · · · · · · ·			
UBS Global Asset Management 374,430 569,516 UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	Northern Trust Global Investments - Index Funds	93,055		106,907	
UBS Realty Investors 104,637 112,297 Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	Pluscios Management, LLC	255,067		279,841	
Ullico Infrastructure Fund 788,287 754,337 Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	UBS Global Asset Management	374,430		569,516	
Voya Collective Trust 50,234 49,797 Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305		104,637		112,297	
Wellington Management 228,126 322,416 William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	Ullico Infrastructure Fund	788,287		754,337	
William Blair & Co. 946,037 1,179,792 Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305	Voya Collective Trust	50,234		49,797	
Total investment manager fees 7,211,140 8,208,316 Investment consultants and other 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian 309,455 304,305		228,126		322,416	
Investment consultants and other NEPC LLC Total investment consultants and other Master custodian The Northern Trust Company A38,996 426,295 438,996 426,295 304,305	William Blair & Co.	 946,037		1,179,792	
NEPC LLC 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian The Northern Trust Company 309,455 304,305	Total investment manager fees	 7,211,140		8,208,316	
NEPC LLC 438,996 426,295 Total investment consultants and other 438,996 426,295 Master custodian The Northern Trust Company 309,455 304,305	Investment consultants and other				
Master custodian The Northern Trust Company 309,455 304,305		 438,996		426,295	
The Northern Trust Company 309,455 304,305	Total investment consultants and other	438,996		426,295	
The Northern Trust Company 309,455 304,305	Master custodian				
Total investment fees \$ 7,959,591 \$ 8,938,916		 309,455		304,305	
	Total investment fees	\$ 7,959,591	\$	8,938,916	

