# COUNTY EMPLOYEES' AND OFFICERS' ANNUITY AND BENEFIT FUND OF COOK COUNTY (A FIDUCIARY FUND OF COOK COUNTY, ILLINOIS)

FINANCIAL STATEMENTS

DECEMBER 31, 2022 AND 2021

### FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

### DECEMBER 31, 2022 AND 2021

#### **CONTENTS**

	PAGE
Independent Auditor's Report	1
Management's Discussion and Analysis (Unaudited)	4
Basic Financial Statements	
Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position	10
Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position	11
Notes to Financial Statements	13
Required Supplementary Information - Pension	
Schedule of Changes in the Employer's Net Pension Liability and Related Ratios	43
Schedule of Employer Contributions and Related Notes	44
Schedule of Investment Returns	45
Required Supplementary Information - Postemployment Healthcare	
Schedule of Changes in the Employer's Net Postemployment Healthcare Liability and Related Ratios	46
Schedule of Employer Contributions and Related Notes	47

#### FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

### DECEMBER 31, 2022 AND 2021

#### **CONTENTS**

	PAGE
Supplementary Information	
Schedules of Net Administrative Expenses and Professional and Consulting Fees	48
Schedules of Investment Expenses	49
Schedule of Additions by Source	51
Schedule of Deductions by Type	51
Schedule of Employer Contributions Receivable	52



RSM US LLP

#### **Independent Auditor's Report**

To the Board of Trustees of the County Employees' and Officers' Annuity and Benefit Fund of Cook County

#### **Opinion**

We have audited the accompanying Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position of the County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Fund), a fiduciary component unit of Cook County, Illinois, as of December 31, 2022 and 2021, the related Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position for the years then ended and the related notes to the financial statements, which collectively comprise the Fund's basic financial statements as listed in the table of contents.

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

#### **Basis for Opinion**

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

#### Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Fund's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

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

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

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to
  fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
  include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
  statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures
  that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
  effectiveness of the Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that
  raise substantial doubt about the Fund's ability to continue as a going concern for a reasonable period
  of time.

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

#### **Required Supplementary Information**

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

#### Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Fund's basic financial statements. The Schedules of Net Administrative Expenses and Professional and Consulting Fees, Schedules of Investment Expenses, Additions by Source, Deductions by Type, and the Schedule of Employer Contributions Receivable are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules of Administrative Expenses and Professional and Consulting Fees, Schedules of Investment Expenses, Additions by Source, Deductions by Type, and the Schedule of Employer Contributions Receivable is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

RSM US LLP

Chicago, Illinois May 31, 2023

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

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

#### **Overview of the Basic Financial Statements**

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

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

Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position shows the revenues (additions) and expenses (deductions) during the year, where additions less deductions equal net increase (decrease) in net position. The net increase (decrease) in net position reports the change in net position during the year.

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

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

**Supplementary Information** includes schedules of net administrative expenses, professional and consulting fees, investment expenses, additions by source, and deductions by type and employer contributions receivable.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) (CONTINUED)

#### **Financial Highlights**

**Net position** decreased by \$2,262,797,734 or 15.8% from \$14,281,527,562 at December 31, 2021 to \$12,018,729,828 at December 31, 2022. Comparatively, net position increased by \$1,631,917,124 or 12.9% from \$12,649,610,438 at December 31, 2020 to \$14,281,527,562 at December 31, 2021. The decrease in net position for 2022 was primarily due to the decrease in the fair value of investments. The increase in net position for 2021 was primarily due to the increase in fair value of investments.

**Rate of return** of the Fund's investment portfolio was a loss of 12.90% (benchmark loss of 12.53%), a gain of 17.15% (benchmark gain of 14.67%) for 2021, and a gain of 12.74% (benchmark gain of 13.27%) for 2020.

**Funded ratio** for the Fund, based on the actuarial value of assets, was 66.46% in 2022, 67.16% in 2021, and 63.87 % in 2020.

#### **Net Position**

The condensed Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position reflects the resources available to pay benefits to members. A summary of the Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Plan Net Position is as follows:

#### Plan Net Position As of December 31,

				Current Year	•
				Increase (Decreas	<u>e) in</u>
	2022	2021	2020	Dollars	Percent
Total assets	\$ 13,233,597,770	\$ 15,382,692,833	\$ 13,436,785,089	\$ (2,149,095,063)	-14.0%
Total liabilities	1,214,867,942	1,101,165,271	787,174,651	113,702,671	10.3%
Net position	\$ 12,018,729,828	\$ 14,281,527,562	\$ 12,649,610,438	\$ (2,262,797,734)	-15.8%

Total receivables increased to \$462,713,628 in 2022 from \$400,434,172 in 2021 and were \$367,208,528 in 2020. The increase in 2022 was the result of outstanding amount from employer tax levy contribution, increased earned investment income not yet paid, increased investment securities sold but not settled, and federal tax withholding refund due at year-end. The amounts owed were received in the subsequent year. The increase in 2021 was the result of increased earned investment income not yet paid, increased investment securities sold but not settled, and a great amount of healthcare rebate payments due from vendors at year-end.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) (CONTINUED)

Total investments decreased to \$11,789,033,349 in 2022 from \$14,188,869,915 in 2021 and were \$12,475,167 in 2020. The decrease in 2022 was due to fair value decreases in equities, fixed income (corporate and foreign government obligations and commingled fixed income) securities, private equities, and short-term investments. In addition, the Fund reallocated its exposure to private global fixed fund investment vehicle to short term fixed income to rebalance the portfolio. The increase in 2021 was due to fair value increases in equities, fixed income (U.S. government and government agency obligations, and corporate and foreign government obligations) securities, exchange traded funds, private equities, hedge funds, real estate funds, and short-term investments.

Total liabilities increased to \$1,214,867,942 in 2022 from \$1,101,165,271 in 2021 and were \$787,174,651 in 2020. The increase in 2022 was due to increased securities lending collateral. The increase in 2021 was the result of increased unsettled investment securities purchased, an increase in investment manager fees and administrative expense payable, and increased healthcare expenses due at year-end.

#### **Changes in Net Position**

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

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

				Current Ye	
	2022	2021	2020	Increase/(Decre Dollars	Percent
Additions:	•				
	\$ 525,233,835	\$ 541,300,175	\$ 509,209,160	\$ (16,066,340)	-3.0%
Employer contributions	+,,	4	+,,	4 (-0,000,000)	2.2%
Employee contributions	136,293,311	133,368,302	134,157,866	2,925,009	2.2%
Net investment income/(loss)					
(includes security	(1.065.050.050)	1 0 6 0 0 1 0 6 1 1	1 465 455 045	(2.020.254.520)	105.00/
lending activities)	(1,867,355,079)		1,465,457,845	(3,828,274,720)	-195.2%
Other	42,907,044	39,562,675	36,669,560	3,344,369	8.5%
Total additions	(1,162,920,889)	2,675,150,793	2,145,494,431	(3,838,071,682)	-143.5%
<b>5</b> . 1:					
Deductions:					
Benefits	1,061,568,488	1,001,104,106	950,137,294	60,464,382	6.0%
Refunds and death benefit	33,588,190	36,979,751	30,990,651	(3,391,561)	-9.2%
Employee transfers to (from)					
the Forest Preserve Fund	7	42,007	714,659	(42,007)	-100.0%
Administrative expenses	4,720,167	5,107,805	5,000,609	(387,638)	-7.6%
Total deductions	1,099,876,845	1,043,233,669	986,843,213	56,643,176	5.4%
Net increase (decrease)	(2,262,797,734)	1,631,917,124	1,158,651,218	(3,894,714,858)	-238.7%
Net position					
Beginning of year	14,281,527,562	12,649,610,438	11,490,959,220	1,631,917,124	12.9%
End of year	\$ 12,018,729,828	\$ 14,281,527,562	\$ 12,649,610,438	\$ (2,262,797,734)	-15.8%
-					

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) (CONTINUED)

#### **Additions to Net Position**

Total additions were (\$1,162,920,889) in 2022, \$2,675,150,793 in 2021, and \$2,145,494,431 in 2020.

Employer contributions decreased to \$525,233,835 in 2022 from \$541,300,175 in 2021. Comparatively, employer contributions increased to \$541,300,175 in 2021 from \$509,209,160 in 2020. Employer contributions are statutorily set at 1.54 times employee contributions collected two years prior. The County made supplemental contributions of \$322,199,712 in 2022, \$339,961,760 in 2021, and \$309,214,508 in 2020.

Employee contributions, including permissive service credit purchases, increased to \$136,293,311 in 2022 from \$133,368,302 in 2021. Comparatively, employer contribution decreased to \$133,368,302 in 2021 from \$134,157,866 in 2020. Employees are required to contribute 8.5% (9% for sheriffs) of their pensionable salary to the Fund.

Net investment income/(loss) totaled (\$1,867,355,079) for 2022 compared to net investment income of \$1,960,919,641 in 2021 and \$1,465,457,845 in 2020. Investment earnings fluctuate primarily from the overall performance of the financial markets from year to year.

#### **Deductions to Net Position**

Total deductions were \$1,099,876,845 in 2022, \$1,043,233,669 in 2021, and \$986,843,213 in 2020.

Benefits increased to \$1,061,568,488 in 2022, from \$1,001,104,106 in 2021 and from \$950,137,294 in 2020 due primarily to the 3% annual cost of living increases for annuitants and an increase in the number of retirees.

Refunds decreased to \$33,588,190 in 2022 from \$36,979,751 in 2021 and from \$30,990,651 in 2020. These changes are due to fluctuations in refund applications.

Employee transfers to (from) the Cook County Fund resulted from Forest Preserve District employees transferring employment to or (from) Cook County. The accumulated contributions and the accrued pension benefit obligation are transferred between the Forest Preserve Fund and the Cook County Fund.

The cost to administer the Fund decreased to \$4,720,167 from \$5,107,805 in 2021. Comparatively, the cost to administer the Fund increased to \$5,107,805 in 2020 from \$5,000,609 in 2020.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) (CONTINUED)

#### **Actuarial Information**

#### Pension Benefits

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

#### Funding for Pension Benefits For the Years Ended December 31,

	2022	2021		2020
Total pension liability Plan fiduciary net position Employer's net pension liability	\$ 24,850,806,602 12,018,729,828 12,832,076,774	\$ 25,118,79 14,281,52 \$ 10,837,26	7,562	\$ 27,634,518,984 12,649,610,438 \$ 14,984,908,546
Plan fiduciary net position as a percentage of the total pension liability	48.36%	56.86%	)	45.77%

#### Postemployment Healthcare Benefits

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

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

	2022	2021	2020
Total other postemployment benefits liability	\$ 1,661,200,170	\$ 1,978,062,391	\$ 2,105,154,520
Plan fiduciary net position	-	-	-
Employer's net other postemployment benefits liability	\$ 1,661,200,170	\$ 1,978,062,391	\$ 2,105,154,520

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

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) (CONTINUED)

#### **Actuarial Information (continued)**

#### Combined

The Fund actuary has performed a combined valuation of the pension and postemployment healthcare benefits provided by the Fund to measure the overall funded status and contribution requirements of the Fund. Such a valuation is required under Chapter 40, Article 5/9-199 of the Illinois Pension Code which provides that the Fund shall submit a report each year containing a detailed statement of the affairs of the Fund, its income and expenditures, and assets and liabilities. The combined valuation reflects the actuarial assumptions adopted by the Board based on the results of an actuarial experience study. These assumptions conform to the actuarial standards recommended by the Fund's actuary and were used by the Fund's actuary to present the combined funding status in accordance with Section 9-199. The Fund's funding under the combined actuarial valuation is as follows:

### Funding for Combined Pension and Postemployment Healthcare Benefits For the Years Ended December 31,

	2022	 2021	2020
Unfunded actuarial accrued liability	\$ 6,650,235,845	\$ 6,268,859,053	\$ 6,655,454,351
Funded ratio	66.46%	67.16%	63.87%

#### **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 show accountability for money it receives. Questions concerning any data provided in the report or requests for additional information should be addressed to:

County Employees' and Officers' Annuity and Benefit Fund of Cook County Attention: Executive Director 70 West Madison Street, Suite 1925 Chicago, Illinois 60602

# County Employees' and Officers' Annuity and Benefit Fund of Cook County

### Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position

December 31, 2022 and 2021

	2022			2021			
	Total	Pension	Postemployment Healthcare	Total	Pension	Postemployme Healthcare	
Assets		Chiston	Treatment	10111	1 chsion	Treatment	
Receivables							
Employer contributions less allowance of \$7,703,181 in 2022 and \$7,231,365 in 2021	\$ 223,937,034	\$ 223,937,034	\$ -	\$ 195,286,088	\$ 195,286,088	\$ -	
Employee contributions	902,675	902,675	-	5,623,324	5,623,324	-	
Accrued investment income	42,949,437	42,949,437	_	38,777,422	38,777,422	_	
Receivable for securities sold	181,279,930	181,279,930	_	129,946,647	129,946,647	_	
EGWP/Medicare Part D subsidy & other	12,121,755	1,358,575	10,763,180	28,234,791	9,820,317	18,414,47	
Prescription rebates	54,580	-,,	54,580	1,103,276	-	1,103,27	
Imprest balance receivable	1,441,000	-	1,441,000	1,441,000	_	1,441,00	
Other	27,217	27,217	-	21,624	21,624	-	
Total receivables	462,713,628	450,454,868	12,258,760	400,434,172	379,475,422	20,958,75	
Investments						•	
U.S. and international equities	6,034,643,952	6,034,643,952	_	7,635,101,620	7,635,101,620	_	
U.S. Government and government agency obligations	1,469,836,010	1,469,836,010	_	1,473,893,826	1,473,893,826	_	
Corporate and foreign government obligations	1,124,132,728	1,124,132,728	_	1,451,709,977	1,451,709,977	_	
Collective international equity fund	83,714,867	83,714,867	_	98,052,511	98,052,511	_	
Commingled fixed income fund	31,396,051	31,396,051	_	36,954,580	36,954,580	_	
Private global fixed fund limited partnership	-	-	_	234,288,180	234,288,180	_	
Exchange traded funds	13,203,898	13,203,898	_	9,662,015	9,662,015	_	
Private equities	873,806,502	873,806,502	_	1,107,947,617	1,107,947,617	_	
Hedge funds	803,501,480	803,501,480	_	814,964,951	814,964,951	_	
Real estate funds	1,120,026,750	1,120,026,750	_	968,510,214	968,510,214	_	
Short-term investment	234,771,111	234,771,111	_	357,784,424	357,784,424	_	
Total investments	11,789,033,349	11,789,033,349		14,188,869,915	14,188,869,915		
Collateral held for securities on loan	981,850,793	981,850,793	-	793,388,746	793,388,746	-	
Total assets	13,233,597,770	13,221,339,010	12,258,760	15,382,692,833	15,361,734,083	20,958,750	
Liabilities							
Accounts payable	7,352,658	7,352,658	-	8,120,850	8,120,850	-	
Healthcare and other benefits payable	11,704,639	-	11,704,639	20,958,750	-	20,958,75	
Due to Forest Preserve District Employees' Annuity							
and Benefit Fund of Cook County	554,121	-	554,121	998,679	998,679	-	
Payable for securities purchased	213,405,731	213,405,731	-	277,698,246	277,698,246	-	
Securities lending collateral	981,850,793	981,850,793	-	793,388,746	793,388,746	-	
Total liabilities	1,214,867,942	1,202,609,182	12,258,760	1,101,165,271	1,080,206,521	20,958,75	
Net position							
Net position restricted for pensions	12,018,729,828	12,018,729,828	-	14,281,527,562	14,281,527,562	-	
Net position held in trust for postemployment healthcare benefits	-	-	-	-	-	-	
Total	\$ 12,018,729,828	\$ 12,018,729,828	\$ -	\$ 14,281,527,562	\$ 14,281,527,562	\$ -	
companying notes to financial statements.		10					

# County Employees' and Officers' Annuity and Benefit Fund of Cook County

### Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position

Years Ended December 31, 2022 and 2021

Parish   P			2022		2021				
Propertication		Postemployment				Postemployment			
Statutory   Stat		Total	Pension	Healthcare	Total	Pension	Healthcare		
Stutiony         \$ 203,034,123         \$ 203,034,123         \$ 2.0,338,415         \$ 1.0,339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 34,230,005         \$ 34,230,005         \$ 34,230,005         \$ 34,230,005         \$ 339,61,760         \$ 339,61,760         \$ 339,61,760         \$ 339,61,700         \$ 34,230,005         \$ 30,203,005         \$ 30,203,005         \$ 34,230,0									
Supplemental Allocation to postemployment healthcare   322,199,712   322,199,712   44,292,643   339,961,760   33,9961,760   34,230,005   34,230,00	1 7								
Allocation to postemployment healtheare	•			\$ -		, ,	\$ -		
Total employer contributions	11	322,199,712		-	339,961,760	, ,	-		
Salary deductions	Allocation to postemployment healthcare	-	(44,292,643)	44,292,643		(34,230,005)	34,230,005		
Salary deductions         131,007,071         131,007,071         131,007,071         127,259,463         127,259,463         1.28,259,148         1.27,259,463         1.28,27,248         2.22,279,48         2.22,279,48         2.22,279,48         2.22,279,48         2.22,279,48         2.22,279,48         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,948         2.23,27,18         2.23,27,18         2.23,	Total employer contributions	525,233,835	480,941,192	44,292,643	541,300,175	507,070,170	34,230,005		
Refund repayments         2,295,608         2,295,608         -         3,055,193         3,075,193         -           Former and miscellaneous service payments         637,291         637,291         -         677,061         677,061         -           Optional payments and deductions         70,054         -         48,637         48,637         -           Deductions in lieu of disability         2,283,287         2,283,287         -         2,327,948         2,327,948         -           Total employee contributions         136,293,311         136,293,311         133,368,302         133,368,302         -           Investment income         (2,054,246,372)         (2,054,246,372)         1,779,077,843	Employee contributions								
Former and miscellaneous service payments   637,291   637,291   637,291   648,637   48,637   677,061   677,061   677,061   607,061   6	Salary deductions	131,007,071	131,007,071	-	127,259,463	127,259,463	-		
Optional payments and deductions         70,054         70,054         70,054         -         48,637         48,637         -           Deductions in lieu of disability         2,283,287         2,283,287         -         2,327,948         2,327,948         -           Total employee contributions         136,293,311         136,293,311         -         133,368,302         133,368,302         -           Investment income         8         -         1,779,077,843	Refund repayments	2,295,608	2,295,608	-	3,055,193	3,055,193	-		
Deductions in lieu of disability	Former and miscellaneous service payments	637,291	637,291	-	677,061	677,061	-		
Total employee contributions   136,293,311   136,293,311   - 133,368,302   133,368,302   - 1			,	-	,	48,637	-		
Investment income   Capta	Deductions in lieu of disability	2,283,287	2,283,287	-	2,327,948	2,327,948	-		
Net appreciation/(depreciation) in fair value of investments Dividends         (2,054,246,372)         (2,054,246,372)         1,779,077,843         1,779,078,43         1,779,078,43         1,779,078,43         1,779,078,43         1,779,078,43         1,799,898,4637         1,798,984,637         1,798,984,637         1,798,984,637         1,798,984,637         1,798,984,637         1,798,984,637         1,988,846,37         1,798,984,637         1,798,984,637         1,988,846,37         1,798,984,637         1,988,846,37         1,798,984,637         1,988,846,37         1,988,846,37         1,798,984,637         1,988,846,37	Total employee contributions	136,293,311	136,293,311	-	133,368,302	133,368,302	-		
Dividends   134,247,618   134,247,618   137,638,306   140,000   14	Investment income								
Interest   91,068,296   91,068,296   - 82,268,488   82,268,488   - 1,998,984,637	Net appreciation/(depreciation) in fair value of investments	(2,054,246,372)	(2,054,246,372)		1,779,077,843	1,779,077,843			
Less investment expenses         (1,828,930,458)         (1,828,930,458)         - 1,998,984,637         1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,998,984,637         - 1,958,264,465         - 1	Dividends	134,247,618	134,247,618		137,638,306	137,638,306			
Less investment expenses         (40,766,793)         (40,766,793)         (40,720,172)         (40,720,172)         -           Net investment income         (1,869,697,251)         (1,869,697,251)         -         1,958,264,465         1,958,264,465         -           Securities lending         1         1,958,264,465         1,958,264,465         -         -           Income         2,869,802         2,869,802         -         3,225,119         3,225,119         -           Expenses         (527,630)         (527,630)         -         (569,943)         (569,943)         -           Net securities lending income         2,342,172         2,342,172         -         2,655,176         2,655,176         -           Other         -         -         -         2,655,176         2,655,176         -         -           Employer federal subsidized programs         4,720,315         4,720,315         4,321,425         4,321,425         -         -         30,522,721         -         30,522,721         -         30,522,721         -         30,522,721         -         30,522,721         -         30,522,721         -         4,530,153         -         -         -         -         -         -         -	Interest	91,068,296	91,068,296	-	82,268,488	82,268,488	-		
Net investment income         (1,869,697,251)         (1,869,697,251)         -         1,958,264,465         1,958,264,465         -           Securities lending Income         2,869,802         2,869,802         -         3,225,119         3,225,119         -           Expenses         (527,630)         (527,630)         -         (569,943)         (569,943)         -           Net securities lending income         2,342,172         2,342,172         -         2,655,176         2,655,176         -           Other         -         -         -         2,655,176         2,655,176         -         -           Employer federal subsidized programs         4,720,315         4,720,315         4,321,425         4,321,425         4,321,425         4,321,425         4,530,153         -         30,522,721         -         30,522,721         -         30,522,721         -         30,522,721         -         30,522,721         -         4,530,153         -         4,530,153         -         4,530,153         -         -         4,530,153         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -		(1,828,930,458)	(1,828,930,458)	-	1,998,984,637	1,998,984,637	-		
Securities lending	Less investment expenses	(40,766,793)	(40,766,793)		(40,720,172)	(40,720,172)	-		
Income         2,869,802         2,869,802         -         3,225,119         3,225,119         -           Expenses         (527,630)         (527,630)         -         (569,943)         (569,943)         -           Net securities lending income         2,342,172         2,342,172         -         2,655,176         2,655,176         -           Other         -         -         -         2,655,176         2,655,176         -           Employer federal subsidized programs         4,720,315         4,720,315         4,321,425         4,321,425           EGWP/Medicare Part D subsidy         33,094,734         -         33,094,734         30,522,721         -         30,522,721           Prescription plan rebates         4,865,829         -         4,865,829         4,530,153         -         -         4,530,153           Employees' Annuity and Benefit Fund of Cook County         8,533         8,533         -         -         -         -         -           Miscellaneous         217,633         217,633         217,633         37,960,563         39,562,675         4,509,801         35,052,874	Net investment income	(1,869,697,251)	(1,869,697,251)	-	1,958,264,465	1,958,264,465	-		
Expenses         (527,630)         (527,630)         -         (569,943)         (569,943)         -           Net securities lending income         2,342,172         2,342,172         -         2,655,176         2,655,176         -           Other         -         -         2,655,176         -	Securities lending								
Net securities lending income         2,342,172         2,342,172         -         2,655,176         2,655,176         -           Other         Employer federal subsidized programs         4,720,315         4,720,315         4,321,425         4,321,425           EGWP/Medicare Part D subsidy         33,094,734         -         33,094,734         30,522,721         -         30,522,721           Prescription plan rebates         4,865,829         -         4,865,829         4,530,153         -         4,530,153           Employee transfer from Forest Preserve District         Employees' Annuity and Benefit Fund of Cook County         8,533         8,533         -         -         -         -         -         -           Miscellaneous         217,633         217,633         -         188,376         188,376         -         -           Total other additions         42,907,044         4,946,481         37,960,563         39,562,675         4,509,801         35,052,874	Income	2,869,802	2,869,802	-	3,225,119	3,225,119	-		
Other       Employer federal subsidized programs       4,720,315       4,720,315       4,720,315       4,321,425       4,321,425         EGWP/Medicare Part D subsidy       33,094,734       -       33,094,734       30,522,721       -       30,522,721         Prescription plan rebates       4,865,829       -       4,865,829       4,530,153       -       4,530,153         Employee transfer from Forest Preserve District       -       -       -       -       -       -         Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874	Expenses	(527,630)	(527,630)	-	(569,943)	(569,943)	-		
Employer federal subsidized programs       4,720,315       4,720,315       4,720,315       4,321,425       4,321,425         EGWP/Medicare Part D subsidy       33,094,734       -       33,094,734       30,522,721       -       30,522,721         Prescription plan rebates       4,865,829       -       4,865,829       4,530,153       -       4,530,153         Employee transfer from Forest Preserve District       -       -       -       -       -       -         Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874	Net securities lending income	2,342,172	2,342,172	-	2,655,176	2,655,176	-		
EGWP/Medicare Part D subsidy       33,094,734       -       33,094,734       30,522,721       -       30,522,721         Prescription plan rebates       4,865,829       -       4,865,829       4,530,153       -       4,530,153         Employee transfer from Forest Preserve District       Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874	Other								
EGWP/Medicare Part D subsidy       33,094,734       -       33,094,734       30,522,721       -       30,522,721         Prescription plan rebates       4,865,829       -       4,865,829       4,530,153       -       4,530,153         Employee transfer from Forest Preserve District       Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874	Employer federal subsidized programs	4,720,315	4,720,315		4,321,425	4,321,425			
Employee transfer from Forest Preserve District       8,533       8,533       -       -       -       -       -         Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874			-	33,094,734		-	30,522,721		
Employees' Annuity and Benefit Fund of Cook County       8,533       8,533       -       -       -       -       -         Miscellaneous       217,633       217,633       -       188,376       188,376       -         Total other additions       42,907,044       4,946,481       37,960,563       39,562,675       4,509,801       35,052,874	Prescription plan rebates	4,865,829	-	4,865,829	4,530,153	-	4,530,153		
Miscellaneous         217,633         217,633         -         188,376         188,376         -           Total other additions         42,907,044         4,946,481         37,960,563         39,562,675         4,509,801         35,052,874	Employee transfer from Forest Preserve District								
Total other additions 42,907,044 4,946,481 37,960,563 39,562,675 4,509,801 35,052,874	Employees' Annuity and Benefit Fund of Cook County	8,533	8,533	-	-	-	-		
	Miscellaneous	217,633	217,633	-	188,376	188,376	-		
Total additions $(1,162,920,889)$ $(1,245,174,095)$ $82,253,206$ $2,675,150,793$ $2,605,867,914$ $69,282,879$	Total other additions	42,907,044	4,946,481	37,960,563	39,562,675	4,509,801	35,052,874		
	Total additions	(1,162,920,889)	(1,245,174,095)	82,253,206	2,675,150,793	2,605,867,914	69,282,879		

# County Employees' and Officers' Annuity and Benefit Fund of Cook County

### Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position

Years Ended December 31, 2022 and 2021

	2022				2021						
		Total		Pension	Pos	stemployment Healthcare	Total		Pension	Po	stemployment Healthcare
Deductions											
Benefits											
Annuity											
Employee	\$	892,501,083	\$	892,501,083	\$	-	\$ 849,658,684	\$	849,658,684	\$	-
Spouse and children		74,497,309		74,497,309		-	69,428,345		69,428,345		-
Disability											
Ordinary		11,637,363		11,637,363		-	11,989,211		11,989,211		-
Duty		679,527		679,527		-	744,987		744,987		-
Healthcare less annuitant contributions of											
\$51,740,499 in 2022 and \$57,240,134 in 2021		82,253,206		-		82,253,206	69,282,879		-		69,282,879
Total benefits		1,061,568,488		979,315,282		82,253,206	1,001,104,106		931,821,227		69,282,879
Refunds and death benefit		33,588,190		33,588,190			36,979,751		36,979,751		
Employee transfer to Forest Preserve District											
Employees' Annuity and Benefit Fund of Cook County		-		-		-	42,007		42,007		-
Net administrative expenses		4,720,167		4,720,167		-	5,107,805		5,107,805		-
Total deductions		1,099,876,845		1,017,623,639		82,253,206	1,043,233,669		973,950,790		69,282,879
Net increase/(decrease)		(2,262,797,734)		(2,262,797,734)		-	1,631,917,124		1,631,917,124		-
Net position											
Beginning of year		14,281,527,562		14,281,527,562		-	12,649,610,438	1	2,649,610,438		-
End of year	\$	12,018,729,828	\$	12,018,729,828	\$	-	\$14,281,527,562	\$1	4,281,527,562	\$	-

#### NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2022 AND 2021

#### NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Fund or Plan) is administered in accordance with Chapter 40, Article 5/9 of the Illinois Compiled Statutes (the Statutes).

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

Based on the above criteria, the Fund is considered to be a fiduciary component unit of Cook County, Illinois (the County) and is included in the County's financial statements.

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

**Investments** - Investments are reported at fair value, which generally represents reported fair value as of the last business day of the year. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) in fair value of investments includes gains and losses on investments bought and sold, as well as held during the year.

**Allocated Expenses** - Administrative expenses are initially paid by the Fund. These expenses are allocated between the Fund and the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (the Forest Fund) on a pro rata basis, as applicable.

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

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

**Subsequent Events** - Subsequent events have been evaluated through the auditor's report date, which is the date the financial statements were available to be issued.

#### NOTE 2. PLAN DESCRIPTION

The Fund was established on January 1, 1926, and is governed by legislation contained in the Illinois Compiled Statutes (the Statutes), particularly Chapter 40, Articles 5/1; 5/9 and 5/20. Effective with the signing of Public Act 96-0889 into law on April 14, 2010, participants that first became contributors on or after January 1, 2011 are Tier 2 participants. All other participants that were contributing prior to January 1, 2011 are Tier 1 participants. The pension plan provisions can be amended only by the Illinois Legislature. The pension plan is a single employer defined benefit pension plan with a defined contribution minimum. The pension plan was established for the purpose of providing retirement, death and disability benefits for full-time employees of the County and the eligible dependents of such employees.

The Statutes authorize a Board of Trustees (the Board) of nine members to carry out the provisions of the Article. According to the Article, two members of the Board are ex officio, four are elected by the employee members of the Fund and three are elected by the annuitants of the Fund. The two ex officio members are the Comptroller of Cook County, or someone chosen by the Comptroller, and the Treasurer of Cook County, or someone chosen by the Treasurer. All members of the Board are fiduciaries with respect to the Fund and are statutorily mandated to discharge their duties, as such, solely in the interest of the Fund's participants and beneficiaries.

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

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 2. PLAN DESCRIPTION (CONTINUED)

Covered employees are required to contribute 8.5% (9% for sheriffs) of their salary to the Fund, subject to the salary limitations for Tier 2 participants in Article 5/1-160. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest (3% or 4% depending on when the employee became a participant). The County's total contribution is the amount of contributions made by the employees to the Fund in the calendar year two years prior to the year for which annual applicable tax is levied, multiplied by 1.54. The source of funds for the County's contributions has been designated by State Statute as the County's annual property tax levy.

The Fund provides retirement as well as death and disability benefits. Tier 1 employees age 50 or older and Tier 2 employees age 62 or older are entitled to receive a minimum formula annuity of 2.4% for each year of credited service if they have at least 10 years of service. The maximum benefit is 80% of the final average monthly salary. For Tier 1 employees under age 60 and Tier 2 employees under age 67, the monthly retirement benefit is reduced by ½% for each month the participant is below that age. The reduction is waived for Tier 1 participants having 30 or more years of credited service.

Participants should refer to the applicable Articles for more complete information.

At December 31, 2022 and 2021, participants consisted of the following:

	2022	2021
Active members	18,107	18,320
Retired members	17,163	16,945
Beneficiaries	2,975	2,911
Inactive members	_18,019_	17,313
Total	56,264	55,489

#### NOTE 3. EMPLOYER'S PENSION LIABILITY

#### **Net Pension Liability**

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

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

#### **Net Pension Liability (continued)**

	2022	2021
Total pension liability	\$ 24,850,806,602	\$ 25,118,790,453
Plan fiduciary net position	12,018,729,828	14,281,527,562
Employer's net pension liability	\$ 12,832,076,774	\$ 10,837,262,891
Plan fiduciary net position as a percentage of the total pension liability	48.36%	56.86%

Refer to the schedule of changes in the employer's net pension liability and related ratios in the required supplementary information for additional information related to the funded status of the Fund.

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

December 31, 2022 and 2021
Entry Age Normal
2.50% per year, compounded annually
3.00% to 5.00%, based on service
7.00% per year, compounded annually
Rates of retirement for each age from 50 to 80 based on recent experience of the Plan where all employees are assumed to retire by age 80
Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021
Tier 1 participants - 3.0% compounded annually
Tier 2 participants - the lesser of 3.0% or one half of the
increase in the Consumer Price Index

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

#### **Net Pension Liability (continued)**

The actuarial assumptions used in the December 31, 2021 valuations were based on the results of an actuarial experience study conducted by Cavanaugh Macdonald Consulting dated March 2022 covering a four-year period ended December 31, 2020.

#### **Discount Rate**

The discount rate used to measure the total pension liability at December 31, 2022 and 2021 was 4.63% and 4.38%, respectively. The projection of cash flows used to determine the discount rate assumed that contributions will continue to follow the current funding policy. Based on this assumption, the Fund's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current plan members. A municipal bond rate of 3.65% at December 31, 2022 (2.05% for 2021) and long-term investment rate of 7.00% for 2022 and 2021 were used in the development of the blended discount rate after that point. The municipal bond rates are based on the S&P Municipal Bond 20 Year High Grade Rate Index. As a result, for December 31, 2022 and 2021, the long-term rate of return of 7.00% was applied to projected benefit payments through 2042 and 2052, respectively. Based on the long-term rate of return of 7.00% and municipal bond rate of 3.65% at December 31, 2022 and 2.05% at December 31, 2021, the blended discount rate would be 4.63% at December 31, 2022 and 4.38% at December 31, 2021.

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

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

		Current	
		Discount	
	1% Decrease	Rate	1% Increase
	3.63%	4.63%	5.63%
Net Pension Liability - December 31, 2022	\$ 16,529,465,255	\$ 12,832,076,774	\$ 9,818,360,298
		Current	
		Discount	
	1% Decrease	Rate	1% Increase
	3.38%	4.38%	5.38%
Net Pension Liability - December 31, 2021	\$ 14,697,112,448	\$ 10,837,262,891	\$ 7,701,865,180

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 4. SUMMARY OF EMPLOYER FUNDING POLICIES

#### **Statutory Funding**

Employer contributions are funded primarily through a tax levied by Cook County, Illinois. The employer contributions to be remitted to the Fund are equal to the total contributions made by the employees to the Fund in the calendar year two years prior, multiplied by 1.54.

#### **Supplemental Funding**

Per the 2022 IGA (Intergovernmental Agreement), the County is required to make supplemental payments totaling \$324,199,712 by November 30, 2022, to promote the long-term fiscal sustainability of the Fund. During the year ended December 31, 2022, the County made supplemental contributions to the Fund totaling \$322,199,712, which includes \$24,000,000 paid on December 31, 2022, pertaining to the 2023 IGA. Per the 2021 IGA (Intergovernmental Agreement), the County is required to make supplemental payments totaling \$341,961,760 by November 30, 2021, to promote the long-term fiscal sustainability of the Fund. During the year ended December 31, 2021, the County made supplemental contributions to the Fund totaling \$339,961,760, which includes \$26,000,000 paid on December 31, 2021, pertaining to the 2022 IGA.

#### NOTE 5. INVESTMENTS

#### **Investment Policy**

The Board of Trustees is responsible for establishing reasonable and consistent investment objectives, policies, and guidelines governing the investment of Fund assets in accordance with the Illinois Compiled Statutes. The Fund is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the "prudent person" provisions of the state statutes. All of the Fund's financial instruments are consistent with the permissible investments outlined in the state statutes and any index-linked financial instruments are limited to those indices that replicate the permissible investments outlined in the State Statutes. The investment policy was updated to conform with new legislation (PA 1001-473), also known as Sustainable Investing Principles Act.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 5. INVESTMENTS (CONTINUED)

The Fund's investment policy in accordance with the Statutes establishes the following target allocation across asset classes for the years ended December 31, 2022 and 2021:

	2022		2	2021
		Long-term		Long-term
	Target	Expected Real	Target	Expected Real
Asset Class A	Allocation %	Rate of Return	Allocation %	Rate of Return
Domestic equities	33.00%	5.40%	33.00%	5.33%
International equities	21.00%	5.65%	21.00%	5.63%
Fixed income	26.00%	3.55%	26.00%	1.18%
Real estate funds	9.00%	4.00%	9.00%	4.27%
Private equity	4.00%	6.65%	4.00%	6.65%
Hedge funds	6.00%	3.15%	6.00%	2.70%
Short-term investment	1.00%	35.00%	1.00%	0.00%
Total investments	100.00%		100.00%	

#### **Long-Term Expected Real Rate of Return**

The long-term expected real rates of return are the nominal expected returns for various asset classes net of the long-term inflation assumption of 2.50% (2.25% for 2021). The nominal expected return is expressed as the annualized growth rate over 30 years (i.e., geometric or compounded return). A building block methodology is employed to develop long-term return expectations. Building block includes a long-term estimate of the short-term real rate, inflation, term premium, credit premium, and equity risk premium among others. Current economic conditions (inflation, yields, valuation) serve as a starting point for development; however, over a 30-year horizon, risk premiums are largely influenced by long-term history. The 30-year geometric long-term expected real rate of return for each major asset class included with the Fund's target asset allocation as of December 31, 2022 and 2021 are listed in the table above.

#### **Annual Money-Weighted Rate of Return**

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was (13.01%) and 17.13% for the years ended December 31, 2022 and 2021, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 5. INVESTMENTS (CONTINUED)

#### **Custodial Credit Risk – Deposits**

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to cover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The fund does not have uncollateralized cash balances as of December 31, 2022.

#### **Custodial Credit Risk – Investments**

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. None of the Fund's investments are exposed to custodial credit risk as they are held by the custodian in the name of the Fund as of December 31, 2022.

#### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The Fund did not have any issuer investment that exceeded 5% of the total investments of the fund as of December 31, 2022.

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund's investment policy is an average credit quality for each manager's total fixed income portfolio (Corporate and U.S. Government holdings) of not less than A- by two out of three credit agencies (Moody's Investor Service, Standard & Poor's and/or Fitch). The following table presents a summarization of the Fund's credit quality ratings of investments at December 31, 2021 and 2020 valued by Moody's Investors Service, Standard & Poor's and/or Fitch:

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

NOTE 5. INVESTMENTS (CONTINUED)

Type of Investment	Rating	2022	2021
U.S. Government and government agency obligations	Aaa Aa A Baa Not Rated	\$ 1,425,384,223 5,111,614 1,391,238 287,922 37,661,013 \$ 1,469,836,010	\$ 1,314,968,485 7,233,724 1,804,256 472,447 149,414,914 \$ 1,473,893,826
Corporate and foreign government obligations	Aaa Aa A Baa Ba B Caa Ca Not Rated	\$ 118,570,471 32,733,557 253,755,586 404,651,813 57,699,989 31,958,547 2,815,732 604,350 221,342,683 \$ 1,124,132,728	\$ 124,316,082 40,172,373 295,611,897 551,439,307 87,298,814 38,049,146 1,873,000 - 312,949,358 \$ 1,451,709,977
Commingled fixed income fund	Not Rated	\$ 31,396,051	\$ 36,954,580
Short-term investment	Not Rated	\$ 234,771,111	\$ 357,784,424

#### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments with longer maturities are subject to increased risk of adverse interest rate changes. In an effort to mitigate this risk, the Fund's investment policy states that the duration for each manager's total fixed income portfolio shall not exceed 30% of the duration of its respective fixed income performance benchmark (*Bloomberg Barclays US Aggregate Fixed Income Index, Bloomberg Barclays US 1-3 Year Government/Credit Index,* which was 6.17 years at December 31, 2022 and 6.78 years at December 31, 2021). The following table presents a summarization of the Fund's debt investments at December 31, 2022 and 2021, using the segmented time distribution method:

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 5. INVESTMENTS (CONTINUED)

Type of Investment	Maturity	2022	2021
U.S. Government and government agency			
obligations	Less than 1 year 1 - 5 years 5 - 10 years Over 10 years	\$ 4,729,058 424,703,461 224,591,677 815,811,814 \$ 1,469,836,010	\$ 15,968,060 444,475,797 236,712,933 776,737,036 \$ 1,473,893,826
Corporate and foreign government obligations	Less than 1 year	\$ 7,227,931	\$ 24,262,286
	1 - 5 years 5 - 10 years Over 10 years	304,843,100 330,024,433 482,037,264	303,148,360 446,568,544 677,730,787
		\$ 1,124,132,728	\$ 1,451,709,977
Commingled fixed income fund	1 - 5 years	\$ 31,396,051	\$ 36,954,580
Short-term investment	Less than 1 year	\$ 234,771,111	\$ 357,784,424

### **Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Fund's investment policy addresses the fact that the portfolio is susceptible to the risk and the Fund accepts currency risks consistent with geographic exposures. The Fund's exposure to foreign currency risk at December 31, 2022 and 2021 is as follows:

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 5. INVESTMENTS (CONTINUED)

### **Foreign Currency Risk (continued)**

Type of Investment	Fair Value (USD)		(USD) (U		Fair Value (USD) 2021
U.S. and international equities				2021	
Australian dollar	\$	65,117,568	\$	75,746,515	
Brazil real	Ψ	37,249,892	4	36,227,422	
British pound sterling		231,144,283		270,808,291	
Canadian dollar		139,161,910		147,867,286	
Chilean peso		2,738,694		3,086,381	
Colombian peso		2,750,051		79,231	
Danish krone		48,383,481		55,321,315	
European euro		532,700,996		647,363,300	
Hong Kong dollar		166,570,756		204,015,807	
Hungarian forint		909,405		1,243,636	
Indian rupee		28,915,161		28,497,256	
Indonesian rupiah		10,724,462		15,288,877	
Israeli shekel		16,141,808		16,039,686	
Japanese yen		287,351,142		356,631,089	
Malaysian ringgit		5,726,134		5,806,620	
Mexican peso		13,654,439		14,347,603	
New Taiwan dollar		69,559,175		102,529,377	
New Zealand dollar		2,174,387		420,295	
Norwegian krone		14,390,009		13,280,228	
Philippines peso		7,956,815		7,961,719	
Polish zloty		2,298,328		2,509,521	
Russian ruble		- -		382,805	
Singapore dollar		29,724,202		27,035,493	
South African rand		15,688,301		15,169,951	
South Korean won		65,224,774		75,562,516	
Swedish krona		49,745,916		73,702,234	
Swiss franc		119,221,768		147,040,503	
Thailand baht		14,352,615		14,975,166	
Turkish lira		2,036,344		578,041	
United Arab Emirates dirham		5,277,204		4,280,904	
U.S. dollar		4,050,503,983		5,271,302,552	
Total U.S. and international equities	\$	6,034,643,952	\$	7,635,101,620	

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 5. INVESTMENTS (CONTINUED)

#### Foreign Currency Risk (continued)

Fair Value (USD) Type of Investment 2022			Fair Value (USD) 2021	
Comparete and foreign government alligations				
Corporate and foreign government obligations Brazil real	\$		\$	(074 219)
	Ф	- - 707 751	Ф	(974,318)
British pound sterling		5,797,751		5,778,004
Chilean eso		-		(491,054)
Canadian dollar		479,322		553,968
Colombian peso		-		(281,737)
European euro	18,980,917			24,465,958
Hungarian forint		-		(310,131)
Mexican peso		1,177,212		746,237
New Zealand dollar		-		(291,010)
Norwegian krone		-		726,982
Polish zloty		2,792		(386,621)
South African rand		366,436		748,859
U.S. dollar		1,097,328,298		1,421,424,840
Total corporate and foreign government obligations	\$	1,124,132,728	\$	1,451,709,977
Drivota aquitias				
Private equities	¢.	71 (79 272	¢	05 560 774
European euro	\$	71,678,272	\$	85,569,774
U.S. dollar		802,128,230	_	1,256,666,023
Total private equities	\$	873,806,502	\$	1,342,235,797

Corporate and foreign government obligations include Fixed Income Swap derivative instruments.

#### **Investment Activity**

The calculation of realized gains and losses is independent of the calculation of net appreciation in the fair value of plan investments. Investments purchased in the previous year and sold in the current year result in their realized gains and losses being reported in the current year and their net appreciation in Fund assets being reported in both the current year and the previous years.

#### NOTE 6. DERIVATIVES

Derivative transactions involve, to varying degrees, credit risk, interest rate risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to the previously agreed upon terms. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 6. DERIVATIVES (CONTINUED)

decrease or become more costly to settle. The following table summarizes the derivatives held within the Fund's investment portfolio as of December 31, 2022 and 2021.

	Notional	Amounts	Fair <b>'</b>	Value
	2022	2021	2022	2021
Hedging derivative instruments				
Foreign currency contracts purchased	\$ -	\$ -	\$ (121,375,378)	\$ (105,256,931)
Foreign currency contracts sold	-	-	119,236,074	105,854,694
Futures				
Equity	-	-	-	-
Fixed Income	85,913,226	(78,645,182)	81,320	492,454
Options				
Purchased	-	-	49,260	64,395
Written	-	-	(47,958)	(16,541)
Swaps				
Inflation swaps	-	-	-	(548,009)
Credit default swaps	_	-	-	15,897
Interest rate swaps	-	-	351,899	(2,405,070)
Return swaps	_	-	(579,624)	=
Zero coupon swaps	-	-	277,248	(473,896)

#### **Forward Currency Forward Contracts**

Forward currency contracts are used to hedge against fluctuations in foreign currency-denominated assets used primarily in portfolio trade settlements. These contracts are a cash contract in which a seller agrees to deliver a specific cash commodity to a buyer sometime in the future. Forward agreements are subject to the creditworthiness of the counterparties, which are principally large financial institutions. Forward currency contracts are reported at fair value within the combining statement of pension plan fiduciary net position and postemployment healthcare plan net position included in investments. The gain or loss on forward currency contracts is recognized and recorded on the combining statement of changes in pension plan fiduciary net position and postemployment healthcare plan net position as part of investment income. The foreign currency contracts are short-term in nature.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 6. DERIVATIVES (CONTINUED)

### **Forward Currency Forward Contracts (continued)**

The Fund's exposure to foreign currency risk at December 31, 2022 and 2021 is as follows:

Foreign currency exchange sales	<u> </u>	
Currency		
Australian dollar	\$ 5,760,275	\$ 5,420,436
Brazil real	582,931	1,715,368
British pound sterling	1,671,898	2,573,137
Canadian dollar	7,336,832	7,516,759
Chilean peso	659,955	378,080
Chinese yuan renminbi	4,088,237	2,701,623
Colombian peso	1,835,264	160,222
Czech koruna	4,454,841	1,257,443
European euro	6,298,500	1,253,828
Hong Kong dollar	-	60,454
Hungarian forint	4,604,386	1,781,162
Indian rupee	-	2,491,045
Indonesian rupiah	1,031,615	1,288,335
Israeli shekel	395,700	430,450
Japanese yen	5,401,664	3,380,602
Mexican peso	710,447	1,108,815
Taiwan Dollar	421,992	
New Zealand dollar	68,603	195,014.00
Norwegian krone	375,338	963,673
Philippines peso	1,252,657	278,996
Polish zloty	2,783,858	2,397,912
Russian ruble	-	1,037,841
Singapore dollar	1,124,319	476,959
South Korean won	1,457,910	-
South African rand	2,431,333	979,030
Swedish krona	1,656,258	1,708,492
Swiss franc	507,745	546,052
Thailand baht	2,212,144	988,296
Turkish lira		- -
U.S. dollar	60,111,372	62,764,670
Total	\$ 119,236,074	\$ 105,854,694

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

NOTE 6. DERIVATIVES (CONTINUED)

### **Forward Currency Forward Contracts (continued)**

	2022	2021
Foreign currency exchange purchases		
Currency		
Australian dollar	(387,910)	\$ (665,810)
Brazil real	(289,406)	(158,258)
British pound sterling	(8,176,415)	(7,004,975)
Canadian dollar	(479,787)	-
Chilean peso	(1,405,324)	-
Chinese yuan renminbi	(4,640,005)	(2,112,148)
Colombian peso	(305,042)	(346,867)
Czech koruna	(5,223,242)	(1,268,552)
European euro	(45,264,047)	(45,129,349)
Hong Kong dollar	(102,898)	-
Hungarian forint	(1,901,273)	(1,598,421)
Indian rupee	(708,828)	(1,190,739)
Israeli shekel	(107,398)	(684,605)
Japanese yen	(1,351,998)	(35,524)
Mexican peso	(914,037)	(486,448)
New Taiwan dollar	(3,153,841)	(3,030,738)
Norwegian krone	-	(566,726)
Russian ruble	-	(515,180)
Philippines peso	(3,337,699)	(1,713,342)
Polish zloty	(2,913,814)	(363,714)
Singapore dollar	-	(3,402,757)
South African rand	(293,108)	(2,759,351)
South Korean won	(1,011,448)	(1,400,959)
Swiss franc	(2,195,494)	(2,299,682)
Thailand baht	(3,259,051)	(2,418,549)
U.S. dollar	(33,953,313)	(26,104,237)
	\$ (121,375,378)	\$ (105,256,931)

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 6. DERIVATIVES (CONTINUED)

#### Futures, Swaps, and Options

Futures are agreements to purchase or sell a specific amount of an asset at a specified maturity for an agreed-upon price. Swaps are arrangements to exchange currency or assets. Options are contracts that give its holder the right but not the obligation to buy or sell a financial instrument or commodity at a certain price for a period of time.

Futures contracts, swaps, and options are reported at fair value in the fixed income investments on the combining statement of pension plan fiduciary net position and postemployment healthcare plan net position. The gain or loss on futures contracts, swaps, and options are reported as part of investment income on the combining statement of changes in pension plan fiduciary net position and postemployment healthcare plan net position. These instruments are not rated by the credit rating agencies.

The following table presents a summarization of the Fund's Futures and Swaps investments' interest rate risk exposure at December 31, 2022 and 2021, using the segmented time distribution method:

Derivative Type	Maturity	2022		 2021
Futures	Less than 1 Year	\$	81,320	\$ 492,454
Options	Less than 1 Year	\$	1,302	\$ 47,854
Swaps	Less than 1 Year	\$	(577,043)	\$ -
	1 - 5 years		402,975	(724,096)
	5 - 10 years		169,079	(1,277,827)
	Over 10 years		54,512	 (1,409,155)
		\$	49,523	\$ (3,411,078)

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 7. WHEN-ISSUED TRANSACTIONS

The Fund may purchase securities on a when-issued basis, that is, obligate itself to purchase securities with delivery and payment to occur at a later date. At the time the Fund enters into a commitment to purchase the security, the transaction is recorded at the purchase price which equals fair value. The value at delivery may be more or less than the purchase price. No interest accrues to the Fund until delivery and payment takes place. As of December 31, 2022 and 2021, the Fund contracted to acquire securities on a when-issued basis with a total principal amount of approximately \$33,224,524 and \$140,813,796, respectively.

#### NOTE 8. FAIR VALUE MEASUREMENTS

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

#### Basis of Fair Value Measurement

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

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

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 8. FAIR VALUE MEASUREMENTS

			Fair Value Measurements at 12/31/2022 Using						
			Quoted Prices in Active Significant						
			č			gnificant			
							bservable		
		Total		Assets (Level 1)	Inputs (Level 2)		Inputs (Level 3)		
-		10tai (Level 1) (Level 2				(Level 2)	(1	Level 3)	
Investments by fair value level									
U.S. and international equities	\$	6,034,643,952	\$	6,034,643,952	\$	-	\$	-	
U.S. Government and government		4 450 00 5 040		-0.5.400.055		50 <b>2 -2-</b> 044			
agency obligations		1,469,836,010		786,108,966		683,727,044		-	
Corporate and foreign government obligations Exchange traded funds		1,124,132,728 13,203,898		13,203,898		1,124,132,728		-	
Total investments by fair value level		8,641,816,588	\$	6,833,956,816	\$	1,807,859,772	\$		
Total investments by fair value level		=	Ψ	0,022,720,010	Ψ	1,007,037,772			
Investments measured at net asset value		3,147,216,761							
Total investments at fair value	\$	11,789,033,349							
			Fair Value Measurements at 12/31/2021 Using						
			Quoted Prices in						
			Active Significant  Markets for Other Significant  Identical Observable Unobservab  Assets Inputs Inputs						
						-			
						Inputs			
		Total		(Level 1)		(Level 2)	(Level 3)		
Investments by fair value level									
U.S. and international equities	\$	7,635,101,620	\$	7,635,101,620	\$	-	\$	-	
U.S. Government and government agency obligations		1,473,893,826		841,154,708		632,739,118			
Corporate and foreign government obligations		1,473,893,820		-		1,451,709,977		-	
Exchange traded funds		9,662,015		9,662,015		-		-	
Total investments by fair value level		10,570,367,438	\$	8,485,918,343	\$	2,084,449,095	\$		
Investments measured at net asset value	_	3,618,502,477	_						
Total investments at fair value	\$	14,188,869,915	=						

### Level 1 Measurements

U.S. Government obligations, U.S. and international equities and exchange traded funds are traded in active markets on national and international securities exchanges and are valued at closing prices on the measurement date.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 8. FAIR VALUE MEASUREMENTS (CONTINUED)

#### Level 2 Measurements

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

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

	Fair Value				Unfunded	Redemption Frequency	Redemption Notice
	12/31/2022		12/31/2021		Commitments	(If Eligible)	Period
		12/31/2022	12/31/2021		Communicitis	(II Eligible)	1 CHOU
Investments measured at net asset value:							
Collective international equity fund (1)							
Lazard/Wilmington Emerging							
Markets Sudan Free Portfolio	\$	83,714,867	\$	98,052,511	\$ -	Daily	N/A
Commingled fixed income fund (2)							
MacKay Shields Defensive Bond							
Arbitrage Fund Ltd.		31,396,051		36,954,580	-	Daily	5 days
Private global fixed fund limited partnership (3)							
Franklin Templeton Global Multisector							
Plus Fund, L.P.		-		234,288,180	-	Monthly	15 days
Private equities (4)		873,806,502	1	,107,947,617	145,261,213	Closed Ended	N/A
Hedge funds (5)							
Burnham Harbor Fund Ltd.		592,616,232		592,454,271	-	Monthly	95 days
RC Kenwood Fund Ltd.		210,885,248		222,510,680	-	Quarterly	90 days
Real estate funds (6)							
JPMCB Strategic Property Fund		317,671,194		313,259,400	-	Quarterly	45 days
PRISA Separate Account		339,539,226		330,709,230	-	Quarterly	90 days
Artemis Real Estate Partners		30,690,770		21,373,339	43,249,348	Closed Ended	N/A
Others		432,125,560		303,168,245	61,417,926	Quarterly	90 days
Short-term investment (7)							
BNY Mellon EB Temporary							
Investment Fund		234,771,111		357,784,424	-	Daily	N/A
Total investments measured at net asset value	\$ 3	3,147,216,761	\$ 3	,618,502,477			

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 8. FAIR VALUE MEASUREMENTS (CONTINUED)

- (1) <u>Collective international equity fund</u> The fund's investment objective is the achieve long-term capital appreciation by investing primarily in equity and equity-related securities of issuers that are located, or do significant business, in emerging market countries. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (2) <u>Commingled fixed income fund</u> The fund's investment objective is to track the performance of the Barclays U.S. Aggregate Index. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (3) <u>Private global fixed income fund limited partnership</u> The partnership's investment objective is to maximize total investment return by investing in a portfolio of fixed and floating rate debt securities and debt obligations of governments, government-related or corporate issuers in the partnership fund has been determined using the NAV per share (or its equivalent) of the investment.
- (4) Private equities This investment consists of 83 limited partnership investments in 2021 and 77 in 2020, with an investment objective to achieve long-term capital appreciation and capital preservation through investments in limited partnerships, privately issued securities, private equity funds, and other pooled investments. Closed-end limited partnership interests are generally illiquid and cannot be redeemed. It is expected that liquidation of the limited partnership interests will generally coincide with the terms of the various underlying partnership agreements. These underlying private equity partnerships generally have a fund life per the Limited Partnership Agreements of approximately 10 to 12 years plus 2 to 3 one-year extensions. However, the underlying general partners may extend their funds indefinitely to facilitate an orderly liquidation of the underlying assets. The fair value of the investments in this type has been determined using the NAV per share (or its equivalent) of the investments.
- (5) <u>Hedge funds</u> The investment objective of the hedge funds is to invest in non-traditional portfolio managers, diversified portfolios of hedge funds having a low correlation with major investment markets, and diversified groups of alternative investment funds that invest or trade in a wide variety of financial instruments and strategies. The fair value of the investment in the hedge funds has been determined using the NAV per share (or its equivalent) of the investment.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 8. FAIR VALUE MEASUREMENTS (CONTINUED)

- (6) Real estate funds These investments include a commingled pension trust fund, an insurance company separate account, and other real estate funds that are designed as funding vehicles for tax-qualified pension plans. Their investments are comprised primarily of real estate investments either directly owned or through partnership interests and mortgage and other loans on income producing real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. Due to the nature of the investments and available cash on hand, significant redemptions in this type of investment may at times be subject to additional restrictions.
- (7) <u>Short-term investment</u> This investment's objective is to invest in short-term investments of high quality and low risk to protect capital while achieving investment returns. The fair value of the investment in the fund has been determined using the NAV per share of the investment.

#### NOTE 9. SECURITIES LENDING

State Statutes and the investment policy permit the Fund to lend its securities to broker-dealers and other entities with a simultaneous agreement to return collateral for the same securities in the future. The Fund's custodian, acting as the lending agent, lends securities for collateral in the form of cash, U.S. Government obligations and irrevocable letters of credit equal to 102% of the fair value of domestic securities plus accrued interest and 105% of the fair value of foreign securities plus accrued interest.

The Fund does not have the right to sell or pledge securities received as collateral unless the borrower defaults. The average term of securities loaned was 87 days for 2022 and 116 days for 2021; however, any loan may be terminated on demand by either the Fund or the borrower. Cash collateral was invested in a separately managed portfolio, which had an average weighted maturity at December 31, 2022 and 2021 of 79 and 68 days, respectively.

As of December 31, 2022 and 2021, the fair value (carrying amount) of loaned securities was \$1,065,335,185 and \$1,009,457,404, respectively. As of December 31, 2022 and 2021, the fair value (carrying amount) of cash collateral received by the Fund was \$981,850,793 and \$793,388,746, respectively. The cash collateral is included as an asset and a corresponding liability on the combining statements of pension plan fiduciary net position and postemployment healthcare plan net position. As of December 31, 2022 and 2021, the fair value (carrying amount) of non-cash collateral received by the Fund was \$111,630,895 and \$241,667,352, respectively.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 9. SECURITIES LENDING (CONTINUED)

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

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower. The contract with the lending agent requires indemnification to the Fund if borrowers fail to return the securities or fail to pay the Fund for income distributions by the issuers of securities while the securities are on loan.

A summary of securities loaned at fair value as of December 31, 2022 and 2021 is as follows:

	2022	2021			
Securities loaned - backed by cash collateral					
U.S. and international equities	\$ 702,721,752	\$	435,948,180		
U.S. Government and government	139,061,495				
agency obligations			175,275,397		
Exchange traded funds	6,730,391		-		
Corporate and foreign government obligations	110,033,596		163,292,881		
Total securities loaned -			_		
backed by cash collateral	958,547,234		774,516,458		
Securities loaned - backed by non-cash collateral			_		
U.S. and international equities	60,820,841		165,364,054		
U.S. Government and government	, ,		, ,		
agency obligations	42,932,857		66,618,139		
Exchange traded funds	-		-		
Corporate and foreign government obligations	3,034,253		2,958,753		
Total securities loaned -					
backed by non-cash collateral	106,787,951		234,940,946		
Total	\$ 1,065,335,185	\$	1,009,457,404		

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 10. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY

#### **Plan Description**

The Fund administers a Postemployment Group Healthcare Benefit Plan (PGHBP), a single-employer defined benefit postemployment healthcare plan. The PGHBP is administered in accordance with Chapter 40, Article 5/10 of the Illinois Compiled Statutes, which assigns the authority to establish and amend benefit provisions to the Fund's Board of Trustees. PGHBP provides a healthcare benefit to annuitants of Cook County, Illinois (the employer) who elect to participate in the PGHBP.

At December 31, 2022 and 2021, participants consisted of the following:

	2022	2021
Active members	18,107	18,320
Retired plan members or beneficiaries currently receiving benefit payments	11,573	11,792
Inactive plan members entitled to but not yet receiving benefit payments	1,657	1,657
Total	31,337	31,769

**Benefits provided** - The PGHBP provides healthcare and vision benefits for annuitants and their dependents.

**Contributions** - The PGHBP is funded on a "pay-as-you-go" basis. For the valuation of the obligation as of December 31, 2022 and 2021 the employee and spouse annuitants are expected to pay 56% of the annual costs. The remaining costs are funded by an allocation from the Fund.

**Method of Accounting** - The PGHBP's financial statements have been combined with the Fund's financial statements and are presented using the accrual basis of accounting. Healthcare expenses are recognized when incurred and estimable.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 10. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

### **Plan Description (continued)**

#### **Employer's Net Postemployment Healthcare Liability**

The components of the employer's net postemployment healthcare liability at December 31, 2022 and 2021 were as follows:

	2022	2021
Total postemployment healthcare liability	\$ 1,661,200,170	\$ 1,978,062,391
Plan fiduciary net position		
Employer's net postemployment healthcare liability	\$ 1,661,200,170	\$ 1,978,062,391
Plan fiduciary net position as a percentage of the total postemployment healthcare liability	0.00%	0.00%

Contributions for postemployment healthcare benefits are made on a "pay-as-you-go" basis. There are no dedicated assets for healthcare benefits resulting in a 0.00% funded ratio.

Refer to the schedule of changes in the employer's net postemployment healthcare liability and related ratios in the required supplementary information for additional information related to the funded status of the PGHBP.

The net postemployment healthcare liability was determined by actuarial valuations performed as of December 31, 2022 and 2021 using the following actuarial methods and assumptions:

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

## NOTE 10. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

## **Employer's Net Postemployment Healthcare Liability (Continued)**

Actuarial valuation date	December 31, 2022	December 31, 2021
Actuarial cost method	Entry Age Normal	Entry Age Normal
Actuarial assumptions:		
Inflation	2.50% per year	2.50% per year
Salary increases	3.00% to 5.00%, based on service	3.00% to 5.00%, based on service
Health care cost trend rates	7.000% in the first year, decreasing by	7.000% in the first year, decreasing by
	.250% per year until an ultimate rate of	.25% per year until an ultimate rate of
	4.500% is reached for pre-Medicare.	4.500% is reached for pre-Medicare.
	5.750% in the first year, decreasing by	5.500% in the first year, decreasing by
	.125% per year until an ultimate rate of	.25% in the second year, decreasing by
	4.500% is reached for post-Medicare.	.125 % in the third and fourth year, and
		decreasing by .25% in the fifth year until an
		ultimate rate of 4.500% is reached for post-
		Medicare.
Mortality	Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021	Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021
	•	-

The actuarial assumptions used in the December 31, 2022 and 2021 valuations were based on the results of the actuarial experience study conducted by Cavanaugh Macdonald Consulting over the period 2017 through 2020.

#### **Discount Rate**

The blended discount rate used to measure the total postemployment healthcare liability at December 31, 2022 and 2021 was 3.65% and 2.05%, respectively. The projection of cash flows used to determine the discount rate assumed that the employer's contributions will continue to follow the current funding policy. Based on this assumption, the Fund's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current plan members. Municipal bond rates of 3.65% and 2.05% at December 31, 2022 and 2021, respectively, and the long-term investment rate of return of 0% were used in the development of the blended discount rates. The municipal bond rates for 2022 and 2021 are based on the S&P Municipal Bond 20 Year High Grade Rate Index and Municipal Bond 20-Year Index Rate, respectively.

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 10. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

## Sensitivity of the Net Postemployment Healthcare Liability to Changes in the Discount Rate

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

	1% Decrease 2.65%	Current Discount Rate 3.65%	1% Increase 4.65%
Net postemployment healthcare liability as of December 31, 2022	\$ 1,942,546,793	\$ 1,661,200,170	\$ 1,434,883,159
	1% Decrease 1.05%	Current Discount Rate 2.05%	1% Increase 3.05%
Net postemployment healthcare liability as of December 31, 2021	\$ 2,363,453,441	\$ 1,978,062,391	\$ 1,673,001,519

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 10. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

## Sensitivity of the Net Postemployment Healthcare Liability to Changes in the Health Care Cost Trend Rate

The following is an analysis of the net postemployment healthcare liability's sensitivity to changes in the health care cost trend rate at December 31, 2022 and 2021. The following table presents the net postemployment healthcare liability of the employer using the health care cost trend rate as well as the employer's net postemployment healthcare liability calculated using a health care cost trend rate 1% lower and 1% higher than the current health care cost trend rate:

		Health Care	
		Cost Trend	
	1% Decrease	Rate	1% Increase
Net postemployment healthcare liability as of December 31, 2022	\$1,411,630,103	\$1,661,200,170	\$1,981,252,720
	1% Decrease	Health Care Cost Trend Rate	1% Increase
Net postemployment healthcare liability as of December 31, 2021	\$1,637,326,692	\$1,978,062,391	\$2,426,877,442

#### NOTE 11. RELATED PARTY TRANSACTIONS

The Fund has common Trustees and shares office space with the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (Forest Fund) who reimburses the Fund for shared administrative services provided by the Fund. During the years ended December 31, 2022 and 2021, the Fund allocated administrative expenditures of \$93,426 and \$101,428, respectively, to the Forest Fund.

As of December 31, 2022 and 2021, the Fund owed \$554,121 and \$998,679, respectively, to the Forest Fund. These amounts include plan transfers from Fund members transferring from one Fund to the other.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 12. PRONOUNCEMENTS ISSUED EFFECTIVE FISCAL YEAR ENDED DECEMBER 31, 2022

In June 2017, GASB issued Statement No. 87, *Leases*. Statement No. 87 was issued to improve accounting and financial reporting for leases by governments. This Statement increases the usefulness of governmental financial statements by requiring recognition of certain lease assets and liabilities for leases that were previously classified as leases. Statement No. 87 establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Statement No. 87 is effective for the Fund's fiscal year ending December 31, 2022. Fund staff evaluated Statement No. 87 and have concluded that the requirements of the statement do not materially impact the Fund's financial statements and related disclosures.

In May 2019, GASB issued Statement No. 91, Conduit Debt Obligations. Statement No. 91 was issued to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with commitments extended by issuers, arrangements associated with conduit debt obligations, and related note disclosures. Statement No. 91 is effective for the Fund's fiscal year ending December 31, 2022. Fund staff evaluated Statement No. 91 and have concluded that the requirements of the statement do not materially impact the financial operations of the Fund. Therefore, the Fund will pass on implementation of the Statement.

In January 2020, GASB issued Statement No. 92, *Omnibus 2020*. Statement No. 92 was issued to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. Statement No. 92 is effective for the Fund's fiscal year ending December 31, 2022 and has been implemented as applicable.

In March 2020, GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. Statement No. 93 was issued to address the result of global reference rate reform, when London Interbank Offered Rate (LIBOR) is expected to cease to exist in its current form at the end of 2021, and other accounting and financial reporting implications that result from the replacement of an interbank offered rate (IBOR). Statement No. 93 is effective for the Fund's fiscal year ending December 31, 2022. Statement No. 93 has no material impact on the Fund's financial operation.

In April 2022, GASB issued Statement No. 99, *Omnibus 2022*. Statement No. 99 was issued to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The requirements related to leases, PPPs, and SBITAs are effective for fiscal years beginning after June 15, 2022. Fund staff evaluated these requirements and determined that they do not materially impact the financial operations of the Fund. Therefore, the Fund will pass on implementation of the Statement.

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

#### NOTE 13. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE

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

In May 2020, GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. Statement No. 95 primary objective is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic and extends the effective dates of certain accounting and financial reporting periods beginning after June 15, 2018. The Fund's effective dates have been updated for each applicable pronouncement according to Statement No. 95.

In May 2020, GASB issued Statement No. 96, Subscription-Based Information Technology Arrangements (SBITAs). Statement No. 96 requires a government to disclose descriptive information about its SBITAs other than short-term SBITAs, such as the amount of the subscription asset, accumulated amortization, other payments not included in the measurement of a subscription liability, principal and interest requirements for the subscription liability, and other essential information. Statement No. 96 is effective for the Fund's fiscal year ending December 31, 2023.

In June 2020, GASB issued Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32. Statement No. 97's primary objectives are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform;

(2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. The requirements of this Statement No. 97 that are related to the accounting and financial reporting for Section 457 plans are effective for fiscal years beginning after June 15, 2021.

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 2022 AND 2021

### NOTE 13. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE (CONTINUED)

In April 2022, GASB issued Statement No.99, *Omnibus 2022*. Statement No. 99 was issued to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 are effective for fiscal years beginning after June 15, 2023, and all reporting periods thereafter.

In June 2022, GASB issued Statement No. 100, Accounting Changes and Error Corrections and amendment of GASB Statement No.62. Statement No. 100 was issued to enhance accounting and reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decision or assessing accountability. The statement requires disclosure in notes to financial statements of descriptive information about accounting changes and error correctios, such as their nature. In addition, information about the quantitative effects on beginning balances of each accounting change and error correction should be disclosed by reporting unit in a tabular format to reconcile beginning balances as previously reported to beginning balances as restated. The requirements of Statement No. 100 are effective for accounting changes and error corrections made in fiscal year beginning after June 15, 2023.

In June 2022, GASB issued Statement No. 101, Compensated Absences. Statement No. 101 was issued to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absence. The statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. The requirements of Statement No. 101 are effective for fiscal years beginning after December 15, 2023.

The Fund is currently evaluating the impact of adopting the aforementioned GASB Statements.

#### **NOTE 14. SUBSEQUENT EVENTS**

The Fund has evaluated events subsequent to December 31, 2022 through the date of issuance of the financial statement and determined that no additional disclosure was necessary in the financial statements.



## Required Supplementary Information - Pension

## Schedule of Changes in the Employer's Net Pension Liability and Related Ratios

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability						_			_
Service cost	\$ 380,927,496	\$ 522,496,743	\$ 469,652,001	\$ 367,986,188	\$ 440,682,868	\$ 478,904,097	\$ 559,176,234	\$ 496,161,454	\$ 491,887,347
Interest	1,094,942,781	1,018,513,289	1,038,868,271	1,078,970,836	1,027,348,255	1,082,982,064	1,002,950,495	994,674,970	958,433,835
Difference between expected and actual experience	122,597,765	(54,518,860)	192,731,447	1,775,621	(278,982,116)	(152,859,373)	318,014,746	(126,330,351)	-
Changes of assumptions	(853,548,421)	(3,033,418,725)	1,766,822,859	2,760,713,592	(1,601,212,188)	(950,493,320)	(1,893,474,930)	1,329,087,966	-
Expected benefit payments, including refunds of employee contributions	(1,012,903,472)	(968,800,978)	(905,497,405)	(860,741,164)	(805,394,705)	(757,930,854)	(709,560,225)	(676,470,215)	(622,003,259)
Net change in total pension liability	(267,983,851)	(2,515,728,531)	2,562,577,173	3,348,705,073	(1,217,557,886)	(299,397,386)	(722,893,680)	2,017,123,824	828,317,923
Total pension liability									
Beginning of year	25,118,790,453	27,634,518,984	25,071,941,811	21,723,236,738	22,940,794,624	23,240,192,010	23,963,085,690	21,945,961,866	21,117,643,943
End of year	\$ 24,850,806,602	\$ 25,118,790,453	\$ 27,634,518,984	\$ 25,071,941,811	\$ 21,723,236,738	\$ 22,940,794,624	\$ 23,240,192,010	\$ 23,963,085,690	\$ 21,945,961,866
Plan fiduciary net position									
Contributions - employer	\$ 480,941,192	\$ 507,070,170	\$ 465,778,715	\$ 488,003,692	\$ 549,437,252	\$ 511,750,985	\$ 414,703,155	\$ 136,075,504	\$ 146,075,414
Contributions - employee	136,293,311	133,368,302	134,157,866	134,837,512	134,159,171	138,826,184	139,355,592	137,707,719	129,325,318
Net investment income	(1,867,355,079)	1,960,919,641	1,465,457,845	1,865,645,039	(424,787,945)	1,399,625,874	629,442,470	(21,896,696)	488,890,897
Expected benefit payments, including refunds of employee contributions	(1,012,903,472)	(968,800,978)	(905,497,405)	(860,741,164)	(805,394,705)	(757,930,854)	(709,560,225)	(676,470,215)	(622,003,259)
Administrative expenses	(4,720,167)	(5,107,805)	(5,000,609)	(5,085,445)	(5,134,047)	(5,406,034)	(5,373,555)	(5,151,110)	(5,010,206)
Other	4,946,481	4,467,794	3,754,806	6,275,804	5,860,613	5,359,418	4,046,158	4,380,293	3,753,960
Net change in plan fiduciary net position	(2,262,797,734)	1,631,917,124	1,158,651,218	1,628,935,438	(545,859,661)	1,292,225,573	472,613,595	(425,354,505)	141,032,124
Plan fiduciary net position									
Beginning of year	14,281,527,562	12,649,610,438	11,490,959,220	9,862,023,782	10,407,883,443	9,115,657,870	8,643,044,275	9,068,398,780	8,927,366,656
End of year	\$ 12,018,729,828	\$ 14,281,527,562	\$ 12,649,610,438	\$ 11,490,959,220	\$ 9,862,023,782	\$ 10,407,883,443	\$ 9,115,657,870	\$ 8,643,044,275	\$ 9,068,398,780
Employer's net pension liability	\$ 12,832,076,774	\$ 10,837,262,891	\$ 14,984,908,546	\$ 13,580,982,591	\$ 11,861,212,956	\$ 12,532,911,181	\$ 14,124,534,140	\$ 15,320,041,415	\$ 12,877,563,086
Plan fiduciary net position as a percentage of the total pension liability	48.36%	56.86%	45.77%	45.83%	45.40%	45.37%	39.22%	36.07%	41.32%
Covered payroll	\$ 1,577,093,973	\$ 1,520,619,855	\$ 1,532,744,306	\$ 1,553,498,503	\$ 1,533,721,507	\$ 1,567,480,401	\$ 1,580,251,254	\$ 1,572,417,298	\$ 1,514,550,023
Employer's net pension liability as a percentage of covered payroll	813.65%	712.69%	977.65%	874.22%	773.36%	799.56%	893.82%	974.30%	850.26%

Note:

Changes in Benefit:

None noted in 2022.

Changes of Assumptions:

The blended discount rate used changed to 4.63% in 2022 from 4.38% in 2021.

The mortality table used Pub-2010 General Amount Weighted Median Tables, same as in 2021.

Mortality projections projected from 2010 using generational improvement with Scale MP-2021, same as in 2021.

Investment rate of return was 7.00%, same as in 2021.

Projected salary increase was 3.00%-5.00% based on services, same as in 2021.

Inflation rate was 2.50%, same as in 2021.

Rates of retirement remained the same as in 2021, employees are assumed to retire by age 80.

Post retirement annuity increase remained the same as in 2021.

Tier 1 participants 3.0% compounded annually;

Tier 2 participants lesser of 3.0% or one half of the increase in the CPI.

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

Changes in Benefit:

None noted in 2021 versus 2020

Changes of Assumptions: CY 2021 and 2020

The blended discount rate used changed from 3.68% in 2020 to 4.38% in 2021.

The mortality table used changed from RP-2014 Blue Collar in 2020 to Pub-2010 amount-weighed in 2021.

Mortality projections in 2021 are projected from 2010 using generational improvement with Scale MP-2021, and were projected from 2006 base year using Buck Modified MP-2017 scale in 2020.

The investment rate of return changed from 7.25% in 2020 to 7.00% in 2021.

Projected salary increases changed from 3.50%-8.00% based on age in 2020 to 3.00%-5.00% in 2021 based on service.

Inflation rate changed from 2.75% in 2020 to 2.50% in 2021.

Rates of retirement remained the same as in 2020, employees are assumed to retire by age 80.

Post retirement annuity increase remained the same,

Tier 1 participants 3.0% compounded annually;

Tier 2 participants lesser of 3.0% or one half of the increase in the CPI.

## Required Supplementary Information - Pension

## Schedule of Employer Contributions and Related Notes

## Last Ten Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined contribution	\$ 522,467,203	\$ 650,512,479	\$ 536,955,558	\$ 523,625,965	\$ 562,815,816	\$ 514,888,487	\$ 519,642,931	\$ 595,370,046	\$ 540,218,287	\$ 493,724,370
Contributions in relation to the actuaria determined contribution	(480,941,192)	(507,070,170)	(465,778,715)	(488,003,692)	(549,437,252)	(511,750,985)	(414,703,155)	(136,075,504)	(146,075,414)	(147,720,014)
Contribution deficiency	\$ 41,526,011	\$ 143,442,309	\$ 71,176,843	\$ 35,622,273	\$ 13,378,564	\$ 3,137,502	\$ 104,939,776	\$ 459,294,542	\$ 394,142,873	\$ 346,004,356
Covered payroll	\$1,577,093,973	\$ 1,520,619,855	\$ 1,532,744,306	\$ 1,553,498,503	\$ 1,533,721,507	\$ 1,567,480,401	\$ 1,580,251,254	\$ 1,572,417,298	\$ 1,514,550,023	\$1,484,269,715
Contributions as a percentage of covered payroll	30.50%	33.35%	30.39%	31.41%	35.82%	32.65%	26.24%	8.65%	9.64%	9.95%

## **Notes to Schedule**

Actuarially determined contribution rates are calculated as of December 31, one year prior to the fiscal year in which contributions are reported.

Valuation Date December 31, 2021

Methods and assumptions used to determine contribution rates:

Actuarial cost method Entry Age Normal Amortization method Level Dollar - Open

Remaining amortization period 30 years

Asset valuation method Five Year Smoothed Average Market Inflation 2.50% per year, compounded annually Salary increases 3.00% to 5.00%, based on service Investment rate of return 7.00% per year, compounded annually

Retirement age Based on actual past experience, assume all employees retire by age 80 (Tier 1 participants) and 75 (Tier 2 participants)

Mortality Pub-2010 amount-weighted tables projected from 2010 using generational improvement with Scale MP-2021

Postretirement annuity increases Tier 1 participants - 3.0% compounded annually

Tier 2 participants - the lesser of 3.0% or one half of the increase in the Consumer Price Index

## Required Supplementary Information - Pension

## Schedule of Investment Returns

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	-13.01%	17.13%	12.50%	19.07%	-3.79%	15.35%	7.67%	-0.10%	5.90%

## Note:

This schedule is intended to show information for ten years.

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

REOUIRED SUPPLEME	NTARY INFORMATION	- Postemployment H	<b>I</b> EALTHCARE

## Required Supplementary Information - Postemployment Healthcare

# Schedule of Changes in the Employer's Net Postemployment Healthcare Liability and Related Ratios

	2022	2021	2020	2019	2018	2017
Total postemployment healthcare liability						
Service cost	\$ 72,409,061	\$ 79,427,382	\$ 66,338,671	\$ 46,682,354	\$ 40,557,095	\$ 82,344,830
Interest	41,582,968	45,952,201	53,508,403	64,502,784	68,565,681	84,911,522
Changes in benefit terms	-	166,241,145	(65,649,811)	(81,634,771)	(292,725,744)	(79,293,990)
Difference between expected and actual experience	15,151,444	(275,500,153)	(15,827,767)	(9,467,033)	(92,253,919)	(55,814,160)
Changes of assumptions	(401,713,051)	(108,982,699)	209,226,099	385,089,639	(300,028,016)	(66,330,809)
Benefit payments	(44,292,643)	(34,230,005)	(43,430,445)	(38,237,172)	(38,310,969)	(47,454,621)
Net change in total postemployment healthcare liability	(316,862,221)	(127,092,129)	204,165,150	366,935,801	(614,195,872)	(81,637,228)
Total postemployment healthcare liability						
Beginning of year	1,978,062,391	2,105,154,520	1,900,989,370	1,534,053,569	2,148,249,441	2,229,886,669
End of year	\$ 1,661,200,170	\$ 1,978,062,391	\$ 2,105,154,520	\$1,900,989,370	\$ 1,534,053,569	\$ 2,148,249,441
Plan fiduciary net position						
Contributions - employer	\$ 44,292,643	\$ 34,230,005	\$ 43,430,445	\$ 38,237,172	\$ 38,310,969	\$ 47,454,641
Benefit payments - net	(44,292,643)	(34,230,005)	(43,430,445)	(38,237,172)	(38,310,969)	(47,454,641)
Net change in plan fiduciary net position	-	-	-	-	-	-
Plan fiduciary net position						
Beginning of year	-	-	-	-	-	-
End of year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Employer's net postemployment healthcare liability	\$ 1,661,200,170	\$ 1,978,062,391	\$ 2,105,154,520	\$1,900,989,370	\$ 1,534,053,569	\$ 2,148,249,441
Plan fiduciary net position as a percentage of the total postemployment healthcare liability	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Covered-employee payroll	\$ 1,632,797,650	\$ 1,572,958,479	\$ 1,583,198,305	\$ 1,603,347,918	\$ 1,576,658,158	\$ 1,602,986,483
Employer's net postemployment healthcare liability as a percentage of covered-employee payroll	101.74%	125.75%	132.97%	118.56%	97.30%	134.02%

## Note to the schedule:

There are no assets accumulated in a Trust that meets the criteria of GASB Codification P52.101 to pay related benefits for the OPEB plan.

Changes in Benefit Terms:

Subsidy percentages for member health benefits remained the same as in 2021;

Choice and Choice Plus Plans:

Annuitants with and without Medicare 44%.

Survivors with and without Medicare 44%.

Changes of Assumptions:

The discount rate used changed from 2.05% in 2021 to 3.65% in 2022.

The mortality table used Pub-2010 General Amount Weighted Median Tables, same as in 2021.

Mortality projections projected from 2010 using generational improvement with Scale MP-202, same as in 2021.

Healthcare cost trend rates remained the same for pre-Medicare, 7.000% in the first year, decreasing by .25% per year until an ultimate rate of 4.500% is reached. Healthcare cost trend rates changed for post-Medicare from, from 5.500% in the first year, decreasing by .25% in the second year, decreasing by .125 % in the third and fourth year, and decreasing by .25% in the fifth year until an ultimate rate of 4.500% is reached to 5.750% decreasing by 0.125% per year until an ultimate rate of 4.500% is reached.

Projected salary increases remained the same as in 2021; 3.00%-5.00% based on service.

Inflation rate was 2.50%, same as in 2022.

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

## Required Supplementary Information - Postemployment Healthcare

## **Schedule of Employer Contributions and Related Notes**

## **Last Ten Fiscal Years**

		2022	 2021	2020		2019		2018		2017		2016		2015		2014		2013
Actuarially determined contribution	\$	137,658,885	\$ 159,551,340	\$ 172,996,709	\$	157,705,345	\$	133,228,086	\$	187,348,423	\$	206,678,514	\$	190,871,452	\$	189,907,202	\$	178,698,965
Contributions in relation to the actuarially determined contribution  Contribution deficiency		(44,292,643) 93,366,242	 (34,230,005) 125,321,335	 (43,430,445) 129,566,264		(38,237,172) 119,468,173		(38,310,969)		(47,454,621) 139,893,802		(49,565,249) 157,113,265		(50,756,817) 140,114,635	<u> </u>	(43,957,458) 145,949,744	<u> </u>	(40,097,630) 138,601,335
Covered-employee payroll	\$ 1,	.632,797,650	\$ 1,572,958,479	\$ 1,583,198,305	\$	1,603,347,918	\$	1,576,658,158	\$	1,602,986,483	\$	1,609,559,234	\$	1,597,597,077	\$ 1	1,514,550,023	\$ 1	1,484,269,715
Contributions as a percentage of covered-employee payroll		2.71%	2.18%	2.74%		2.38%		2.43%		2.96%		3.08%		3.18%		2.90%		2.70%

## **Notes to Schedule**

Valuation Date: December 31, 2022

Methods and assumptions used to determine contribution rates:

Actuarial cost method Entry Age Normal
Amortization method Level Dollar - Open

Remaining amortization period 30 years
Inflation 2.50% per year

Salary increases 3.00% to 5.00%, based on service

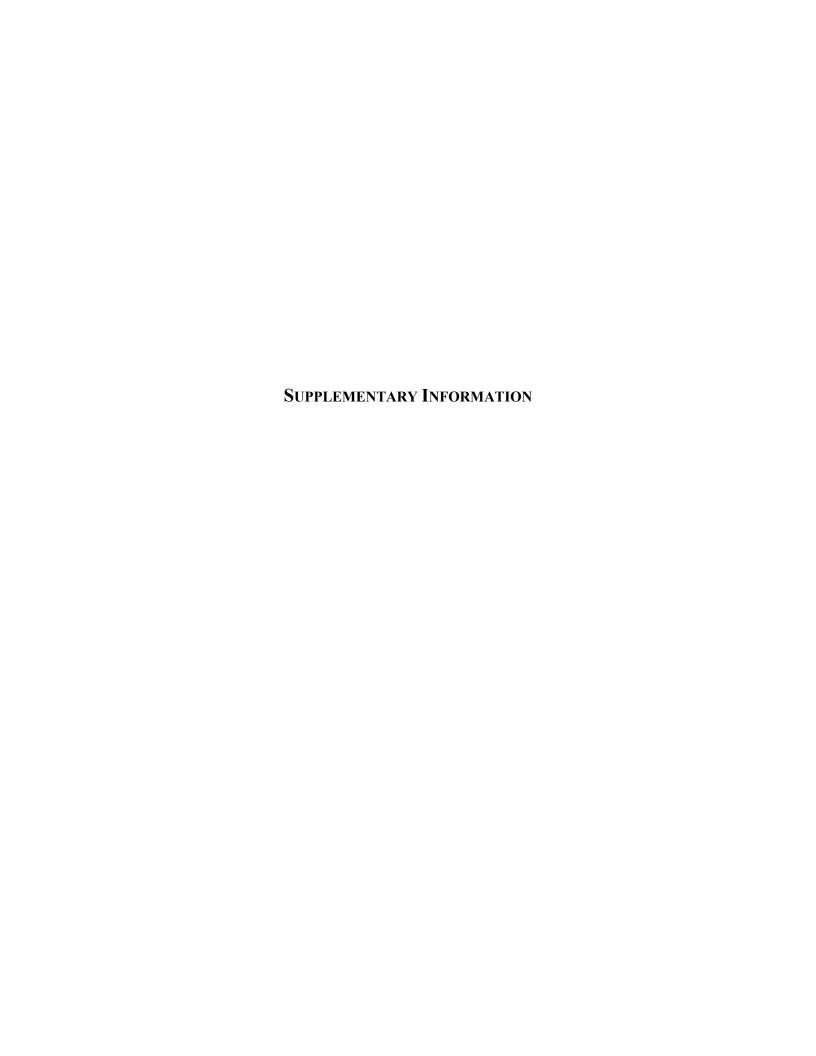
Health care cost trend rate 7.000% in the first year, decreasing by .25% per year until an ultimate rate of 4.500% is reached for pre-Medicare

5.750% decreasing by 0.125% per year until an ultimate rate of 4.500% is reached for post-Medicare

Retirement age

Based on actual past experience, assume all employees retire by age 80 (Tier 1 participants) and 75 (Tier 2 participants)

Mortality Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021



# **Schedules of Net Administrative Expenses** and **Professional and Consulting Fees**

Years Ended December 31, 2022 and 2021

		2022		2021
Administrative expenses				
Bank charges	\$	34,333	\$	35,995
Election expense	4	63,046	_	77,187
Employee benefits		436,867		574,865
Insurance - fidelity, fiduciary and liability		184,466		172,337
Maintenance of equipment, systems, software and support		339,456		305,623
Membership, conferences and training		22,164		16,323
Office expense		43,387		37,412
Postage		109,430		115,370
Printing and stationery		63,947		57,375
Professional and consulting fees		510,032		656,421
Recovery site expense		37,140		4,092
Regulatory filing fees		8,000		8,000
Rent		593,288		517,657
Salaries		2,368,037		2,630,576
Total		4,813,593		5,209,233
Less administrative expenses allocated to Forest Preserve				
District Employees' Annuity and Benefit Fund				
of Cook County		(93,426)		(101,428)
Net administrative expenses	\$	4,720,167	\$	5,107,805
Professional and consulting fees				
Actuarial services	\$	67,046	\$	110,368
Audit	Ψ	71,135	Ψ	69,225
Consulting		165,825		227,692
Legal		174,432		217,562
Lobbyist		31,594		31,574
Total	\$	510,032	\$	656,421

## **Schedules of Investment Expenses**

Years Ended December 31, 2022 and 2021

	2022	2021
Investment manager expense		
Adelante Capital Management	\$ 656,968	\$ 658,383
Allspring Global Investments	1,451,336	1,909,451
Angelo Gordon	185,892	249,758
Ariel Investments	752,121	778,479
Artemis Real Estate Partners	761,901	507,353
Basis Investment Group	591,781	-
Blackstone Alternative Asset Management	6,503,985	6,329,051
Boston Common Asset Management	730,684	662,139
CastleArk Management	832,420	1,048,953
CBRE Global Investors	265,554	295,354
Channing Capital Management	1,450,363	1,555,757
Clarion Partners	2,131,843	1,199,489
Franklin Templeton Investments	2,216,697	3,008,035
Frontier Capital Management	1,489,723	1,632,803
Garcia Hamilton	145,638	118,263
Great Lakes Advisors, Inc.	591,334	580,109
J.P. Morgan Asset Management	2,567,664	2,425,778
LaSalle Investment Management	405,610	434,739
Lazard Asset Management, LLC	750,656	804,747
LM Capital Group, LLC	471,337	(262,300) *
MacKay Shields	1,003,846	1,092,581
Mellon Capital	163,070	166,550
Mesirow Financial	4,124,397	4,617,972

<sup>\*</sup> Includes \$867,116 fee reimbursement and interest. Total fee for 2021 was \$604,816.

## **Schedules of Investment Expenses (Continued)**

Years Ended December 31, 2022 and 2021

	2022	2021	
Investment manager expense (continued)			
Mondrian Investment Partners, Ltd.	\$ 1,139,627	\$ 1,397,146	
Muller and Monroe Asset Management	213,306	251,028	
New Century Investment Management	284,568	302,123	
PGIM Investments	873,037	926,744	
Progress Investment Management	,	-	
Prudential Real Estate Investors	2,687,543	2,076,806	
RhumbLine Advisers	255,277	280,678	
Russell Investments	176,185	209,318	
SPC Capital Management	7,195	15,840	
Strategic Global Advisors	719,897	792,362	
State Street Global Advisors	425,679	483,987	
The Rock Creek Group	1,568,822	1,609,653	
William Blair & Company	952,992	1,143,560	
Xponance	436,587	461,308	
Investment management expenses	39,985,535	39,763,997	
Callan LLC	396,963	516,479	
Investment custodian fees			
BNY Mellon	384,295	439,696	
Total investment expenses	\$ 40,766,793	\$ 40,720,172	

#### Schedule of Additions by Source

Net Investment and Net Securities

Year Ended Employer Employee December 31, Contributions Contributions		Lending Income (1)		Other (2)	Total Additions	
2017	\$ 559,205,626	\$ 138,826,184	\$	1,399,625,874	\$ 23,321,813	\$ 2,120,979,497
2018	587,748,221	134,159,171		(424,787,945)	27,479,205	324,598,652
2019	526,240,864	134,837,512		1,865,645,039	35,158,714	2,561,882,129
2020	509,209,160	134,157,866		1,465,457,845	36,669,560	2,145,494,431
2021	541,300,175	133,368,302		1,960,919,641	39,562,675	2,675,150,793
2022	525,233,835	136,293,311		(1,867,355,079)	42,907,044	(1,162,920,889)

#### **Schedule of Deductions by Type**

			Employee	Net		
Year Ended			Transfers to	Administrative	Total	
December 31,	Benefits	Refunds	Forest Preserve Fund	Expenses	Deductions	
2017	\$ 790,352,526	\$ 32,995,364	\$ - (3	5,406,034	\$ 828,753,924	
2018	831,661,745	33,662,521	- (3	5,134,047	870,458,313	
2019	890,115,295	37,745,951	- (3	5,085,445	932,946,691	
2020	950,137,294	30,990,651	714,659	5,000,609	986,843,213	
2021	1,001,104,106	36,979,751	42,007	5,107,805	1,043,233,669	
2022	1,061,568,488	33,588,190	-	4,720,167	1,099,876,845	

<sup>1 -</sup> Includes realized and unrealized net gain or loss on investments and net securities lending income.

<sup>2 -</sup> Includes employer federal subsidized programs, EGWP/Medicare Part D, prescription/repayment plan rebates, employee transfers, and miscellaneous income.

<sup>3 -</sup> Employee transfers were added under "Other" in Schedule of Additions By Source above.

## **Schedule of Employer Contributions Receivable**

December 31, 2022

Contribution	C	Contributions	Uncollected			(	Net Contributions
Year		Receivable			Reserved		Receivable
2021 2022	\$	201,879,823 202,168,959	\$ 29,471,256 202,168,959	\$	1,336,981 6,366,200	\$	28,134,275 195,802,759
			\$ 231,640,215	\$	7,703,181	\$	223,937,034

## Note:

Employer contributions are funded primarily through property taxes levied by Cook County, Illinois.