Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

A FIDUCIARY FUND OF FOREST PRESERVE DISTRICT
OF COOK COUNTY, ILLINOIS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Years Ended December 31, 2021 and 2020

Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

A Component Unit of the Forest Preserve District
of Cook County, Illinois

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Years Ended December 31, 2021 and 2020

Prepared by the staff of the
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

TABLE OF CONTENTS

INTRODUCTORY Section

This section provides information regarding the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County's Certificate of Achievement, Board of Trustees, consultants, and organizational structure, as well as a letter of transmittal.

Government Finance Officers Association

Certificate of Achievement

for Excellence in

Financial Reporting

Presented to

Forest Preserve District
Employees' Annuity and Benefit Fund
of Cook County, Illinois

For its Annual Comprehensive Financial Report

For the Fiscal Year Ended

December 31, 2020

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Executive Director/CEO

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Elected Cook County Annuitant

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Elected Forest Preserve District Employee

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Elected Cook County Employee

Tracy Reed
Elected Cook County Employee

James M. O'Rourke
Elected Cook County Annuitant

PROFESSIONAL CONSULTANTS

Legal Counsel
Burke Burns & Pinelli, Ltd.

Auditor
RSM US LLP

Investment Consultant
Callan Associates, Inc.

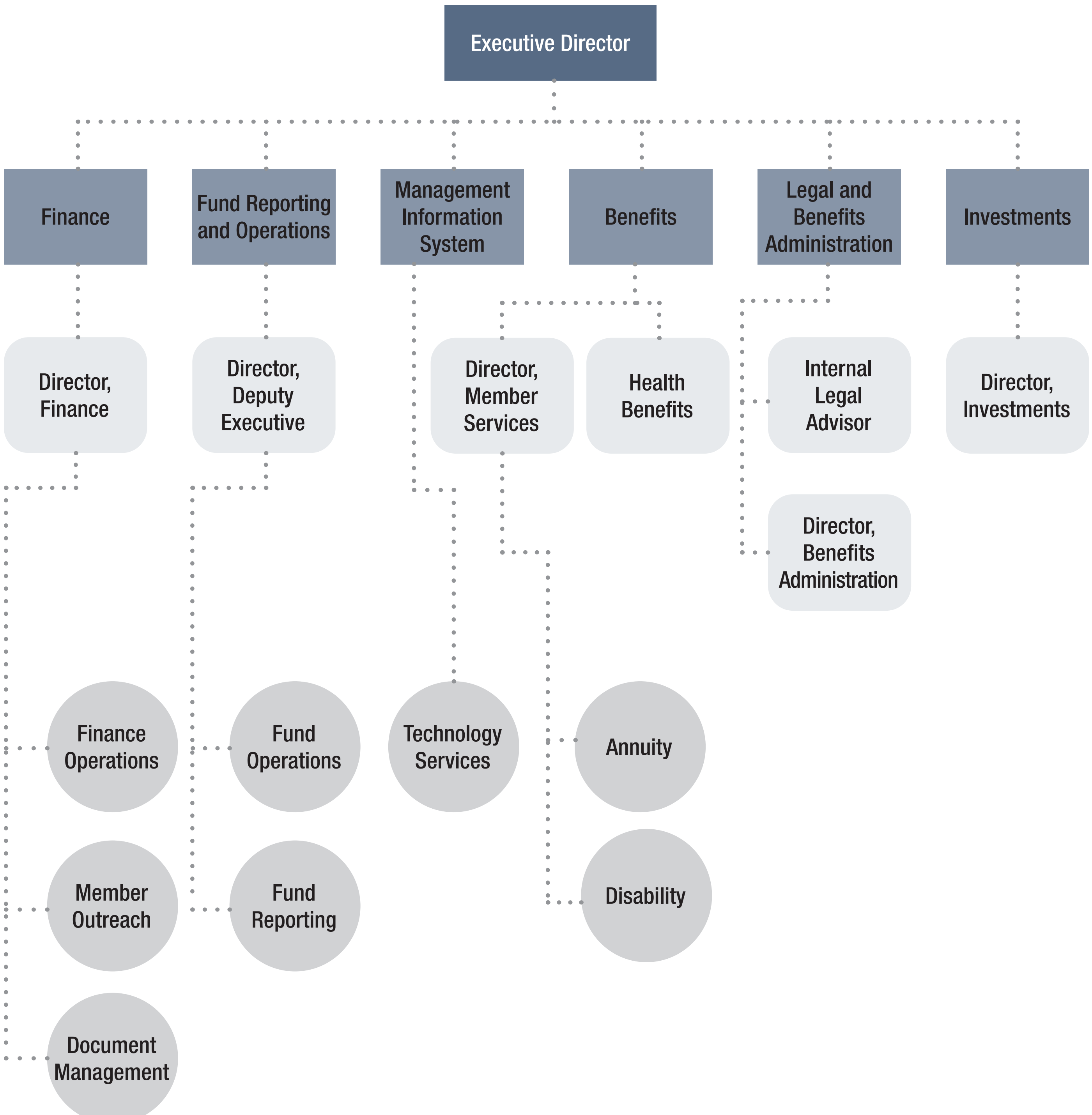
Consulting Actuary
Cavanaugh Macdonald Consulting, LLC

Master Custodian
BNY Mellon

Custodian
Cook County Treasurer

Investment Managers are listed on page 69.
Brokers used by Investment Managers are listed on page 70.

As of December 31, 2021



June 1, 2022

Retirement Board
County Employees' and Officers' Annuity and Benefit Fund of Cook County
and *ex officio* for the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
70 W Madison St, Suite 1925
Chicago, IL 60602

To the Retirement Board and Our Members:

We are pleased to submit to you the Annual Comprehensive Financial Report ("ACFR") of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("the Fund") for the calendar year ended December 31, 2021. The financial statements and their content are the responsibility of the Fund's management.

To the best of our knowledge and belief, the information contained in this report is complete and accurate in all material respects. This report is provided to allow the reader to gain an understanding of the Fund's financial position and operational activities as of December 31, 2021. Readers should review this report in conjunction with the Management's Discussion and Analysis (MD&A) found in the Financial Section of this report.

Fund Profile

Established in 1931 by an act of the Illinois General Assembly, the Fund is a defined benefit public pension fund that is governed by the Illinois Pension Code 40 ILCS 5/1-101 et seq. The Fund administers annuity, disability, death, and health benefits to employees and their beneficiaries of the Forest Preserve District of Cook County, Illinois (the Forest Preserve District). It is considered a component unit of the Forest Preserve District and is included in the Forest Preserve District's financial statements as a pension trust fund. As of December 31, 2021, the Fund consisted of 516 active employees, 382 retiree annuitants, 154 survivor annuitants, and 1,521 inactive members.

The Fund is governed by a nine-member Retirement Board ("Board"). The Retirement Board of the County Employees' and Officers' Annuity and Benefit Fund of Cook County (CEABF) is ex officio the Retirement Board for the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County. The nine Trustees are elected or appointed as follows: three are elected by the employees of Cook County; one is elected by employees of the Forest Preserve District, two are elected by the annuitants of Cook County; one is elected by the annuitants of the Forest Preserve District, and two are ex officio seats appointed by the Comptroller and Treasurer of Cook County. Elected Trustees serve staggered three-year terms resulting in no more than three positions being subject to election each year. The Fund has common trustees to administer the annuity and benefits of Cook County and Forest Preserve District employees in accordance with Illinois Compiled Statutes (ILCS) Chapter 40, Articles 1, 9, 10, and 20.

Summary of Financial Experience

Summary of Financial Experience

The following table illustrates the changes in the Fund's net position between December 31, 2021 and December 31, 2020 (numbers in millions):

A more detailed analysis of the Fund's financial experience can be found in the Financial Section of this report.

Change in Net Position	2020		2019		$ Change		% Change
Total additions	$	35.2	$	30.8	$	4.4	14.4%
Total deductions	$	21.5	$	21.1	$	0.4	2.1%
Change in net position from prior year	$	13.8	$	9.8	$	4.0	41.0%

A more detailed analysis of the Fund's financial information can be found in the Financial Section of this report.

Funding

The Fund engages an independent actuary, Cavanaugh Macdonald Consulting, LLC, to perform an actuarial valuation on an annual basis pursuant to the provisions of the Illinois Pension Code.

As of December 31, 2021, the Fund's combined actuarial accrued liability for pension and retiree benefits was

$367.9 million and the actuarial value of assets was $218.4 million, resulting in an unfunded actuarial accrued liability of $149.5 million. The funded ratio (ratio of assets to liabilities) for pension benefits and retiree health benefits combined was 59.37%, a slight increase from prior year's funded ratio of 59.05%.

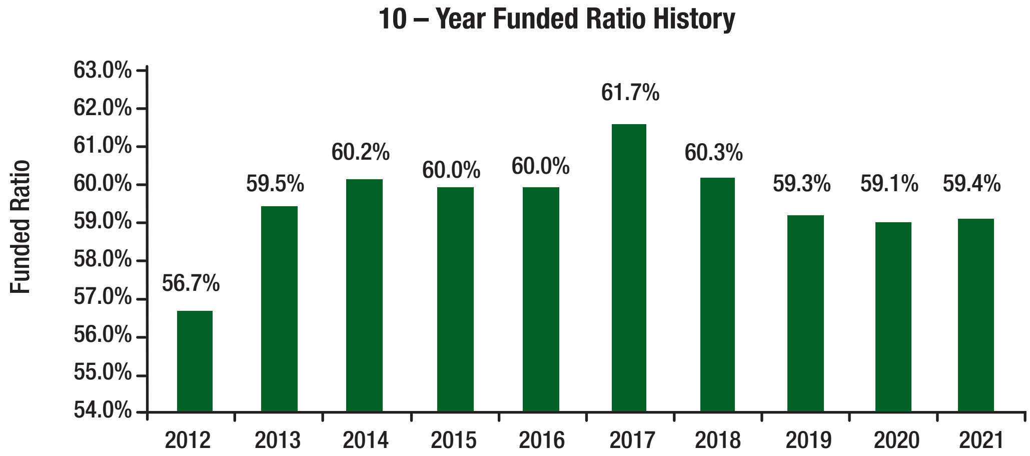
The Fund's actuarial accrued liability for pension benefits only was $344.4 million and the actuarial value of assets was $218.4 million, resulting in an unfunded liability of $126.0 million and a funded ratio of 63.42%. The Fund's actuarial accrued liability for retiree health benefits was $23.5 million. As there are no dedicated assets for retiree health benefits, the actuarial value of assets was $0 for retiree health benefits, resulting in an unfunded liability for retiree health benefits of $23.5 million.

Employees contribute 8.5% of pensionable earnings to the Fund. Contributions from the employer, as required by the Illinois Pension Code, are determined by a multiplier of active employee contributions. Specifically, the Forest Preserve levies a tax annually equal to the total amount of contributions made by employees in the calendar year 2 years prior to the year of the levy, multiplied by 1.30.

This multiplier, in the opinion of the Fund's actuary, is an inadequate funding mechanism to address the long-term financial requirements of the Fund. Since 1973, the statutory tax multiple used to determine the employer contribution has remained static at 1.30. According to the Fund's 2021 actuarial valuation, an actuarially-determined tax multiplier of 4.44 would be needed to generate the actuarially required 2021 employer contribution. Thus, the current fixed multiplier is an inadequate mechanism to provide long-term sustainability. The Fund's most recent actuarial valuation projects that the Fund's assets will be depleted by 2044. On a projected basis, the Fund faces a critical funding shortfall without legislative action to establish an actuarially-based funding policy.

The Fund has been submitting legislation to the General Assembly on an annual basis since 2010 which proposes an actuarially-based funding policy in lieu of a fixed multiplier. The Fund continues to work with its actuary, legislation liaison, fiduciary counsel and the employer to address the funding shortfall and identify permanent long-term solutions that can be enacted as statutory requirements within the Illinois Pension Code.

The following chart depicts historical funding ratios for the Fund.



A detailed discussion of funding is provided in the Actuarial Section of this report.

Investments

The Board's authority to invest the Fund's assets is governed by 40 ILCS 5/1-101 et seq. and 40 ILCS 5/9-101 et seq. The Fund's Investment Policy, which provides additional strategies and safeguards for the Fund's investment objectives, can be found at CookCountyPension.com.

At year-end, the total invested assets of the Fund were valued at $230.0 million compared with $224.6 million at the end of 2020, an increase of approximately $5.4 million. With the gradual opening of the economy due to Covid vaccine prevalence, investors hoped for a return to normalcy in 2021 and the Fund experienced another strong year of investment returns with a realized 12.9% net return on investment for the year ended December 31, 2021. Widespread distribution of vaccines and the easing of lockdowns were followed by an economic rebound, but the emergence of new variants would deal a setback for a full opening and recovery as well as looming concerns about long-term inflation. Throughout the year, the U.S. and global market continued a relatively steady rise, with U.S. large cap stocks ending 2021 at record highs. As a result, the Fund continued to generate positive returns on a 3, 5 and 10-year basis with all three time periods well above the actuarial assumed rate of return of 7.25%.

The Fund outperformed its benchmark for the year ended December 31, 2021. Active management was a positive contributor in all asset classes, with domestic equity and private real estate posting the largest contributions to earnings. As was experienced in 2020, the Fund once again reached record asset levels at the end of 2021.

The Board continues to work to maintain a diversified asset allocation within acceptable risk parameters. In 2021, the Fund approved a commitment of $2 million to Clarion Lion Industrial Trust, a private real estate manager in order to diversify the Fund's real estate exposure.

Additional information regarding performance and investment professionals who provide services to the Fund can be found in the Investment Section of this report.

Benefits and Communication

Fund staff continues to process member needs through various service support platforms, including in-person counseling appointments, email communications and phone call requests. During 2021, over 33,000 incoming phone calls and 5,400 emails were received and prompt responses were provided. Member applications for benefits continue at a steady pace.

The following summarizes the benefits processed in 2021 for both the Cook County and Forest Preserve Funds:

- Processed over 247,000 annuity and disability payments to members
- Processed over 2,700 refunds to terminated members or their survivors
- Calculated approximately 1,250 new annuitant and survivor benefits

In addition to processing of member benefits, the Fund initiated a member outreach to update contact information, including obtaining notarized signatures, for all annuitants. These efforts were conducted in a series of mailings that began in May of 2021. Through these efforts Fund staff has been able to verify or obtain new contact information for its annuitants, including email addresses, as available. The Fund has updated its records and will utilize the information to mitigate fraud risks to the Fund and its members, and improve future means of communication.

Trustee Election

In 2021 three member trustee positions were subject to election, which was held on October 27, 2021.

As decided by a majority of Cook County annuitants, Mr. Patrick J. McFadden was re-elected Cook County Annuitant Trustee and his three year term is December 1, 2021, through November 30, 2024.

As decided by a majority of Cook County employees, Ms. Tracy Reed was elected Cook County Employee Trustee and her three year term is December 1, 2021, through November 30, 2024.

Mr. Stephen Hughes was the sole candidate for the Forest Preserve District Employee Trustee, and was declared the winner by acclamation, in accordance with the Board's rules. His three year term is December 1, 2021, through November 30, 2024.

Ms. Diahann Goode decided not to seek election for another Trustee Term and completed her responsibilities as Cook County Employee Trustee on November 30, 2021. Ms. Goode's dedication to the membership and commitment to the Fund is greatly appreciated and acknowledged.

Investment

In 2021, the Fund's investment consultant continued to focus on generating return and income to satisfy liquidity and guarantee benefit payments. As previously mentioned, the Board approved a new commitment of $2 million to Clarion Lion Industrial Trust, a private real estate manager in order to diversify the Fund's real estate exposure.

The Board engaged Callan LLC in 2021 to prepare an asset liability study for the Fund. Results of the study and proposed changes to the target asset allocation will be evaluated in 2022.

Administration

Fund staff continues to seek ways to evaluate cost-efficient solutions to enhance member service. In 2020, a request for proposal (RFP) was issued for global custody and ancillary services, which included services for a benefit payment agent. In 2021, the Board awarded these services to Bank of New York Mellon (BNY Mellon). In addition to significant cost savings on global custody services for five years beginning in 2022, BNY Mellon's response included an initiative to outsource the payment of benefits to a service line within the custodial bank. Currently these functions are performed by Fund staff. Outsourcing these functions will enhance member service in many ways and provide opportunities to evaluate and improve Fund staff current procedures and processes.

Legislation

The following Public Acts were enacted in calendar year 2021:

Public Act 102-0210 Provisions

- amends 5/10-107 to allow the Forest Preserve District to use other lawfully available funds in lieu of all or part of the tax levy.
- amends 5/9-158 to allow the Board to use an acceptable physician and allow the Board discretion to approve periods longer than 1 year of disability.
- amends 5/14-110(h) to allow state employees to transfer prior Cook County service to SERS if they were in certain County positions (corrections officer, court services officer).

Accounting System and Internal Control

This report and the financial statements included within were prepared to conform to the principles of governmental accounting and reporting pronounced by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants.

The financial statements were prepared using the accrual basis of accounting. Under the accrual basis, revenues are recognized in the accounting period in which they are earned, without regard to the date of collection, and expenses are recognized when the corresponding liabilities are incurred, regardless of when payment is made.

The Fund maintains a system of internal controls to adequately safeguard its assets and assure the reliability of its financial records. The controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that first, the cost of the control should not exceed the benefits likely to be derived, and second that the valuation of the cost and benefits requires estimates and judgments by management. Management and the independent auditor continually review the controls for adequacy.

The financial statements included in this report were audited by RSM US LLP who has issued an unmodified opinion for calendar year ended December 31, 2021. A copy of their report is contained in the Financial Section of this report.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fund for its ACFR for the fiscal year ended December 31, 2020. This was the twelfth year that the Fund has earned this prestigious award. In order to be awarded a Certificate of Achievement, the Fund must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that this current ACFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

Thank you to the Fund's accounting and finance staff that worked diligently under the direction of the Board to prepare the 2021 financial statements and the compilation and production of this report. The favorable financial results included herein reflect many years of prudent dedication by the Board to a strategic investment plan and careful evaluation of many financial considerations. These results also reflect the efforts of Fund staff to execute all Board directives, policies and procedures, with efficient utilization of Fund resources and professional consultants.

A special thank you to the Board and Fund staff who faced many challenges presented by the Covid-19 pandemic, and professionally and effectively re-engineered job functions, presented creative service solutions and adapted to meet member needs and provide quality public service.

In addition, thank you to the members of the Fund for their hard work and dedication to providing vital support to the operations of the Forest Preserve District of Cook County. We appreciate the members' interest and involvement in the Fund and are always striving for cost effective ways to better serve the Fund's members. We welcome your comments or suggestions.

Respectfully submitted,

Regina Tuczak, Executive Director

FINANCIAL Section

This section contains the report of the independent auditors, financial statements, analysis, and supplemental financial information.

RSM US LLP

Independent Auditor's Report

To the Board of Trustees of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

Opinions
We have audited the accompanying Combining Statements of Pension Plan Fiduciary Net Position and

Postemployment Healthcare Plan Net Position of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (the Fund), a fiduciary component unit of the Forest Preserve District of Cook County, Illinois, as of December 31, 2021 and 2020, 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 respective financial position of the Fund, as of December 31, 2021 and 2020, and the respective changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions
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 opinions.

Responsibilities of Management for the Financial Statements
Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, 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 opinions on the financial statements that collectively comprise the Fund's basic financial statements. The Schedules of Administrative Expenses and Professional and Consulting Fees, Schedules of Investment Expenses, Schedules of Additions by Source, Schedules of Deductions by Source, and the Schedules 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, Schedules of Additions by Source, Schedules of Deductions by Source, and the Schedules of Employer Contributions Receivable are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

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

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

RSM US LLP

Chicago, Illinois
June 1, 2022, except for our report on the "Other Information", for which the date is August 30, 2022

Management's Discussion and Analysis (Unaudited)

This section presents Management's Discussion and Analysis of the financial position and performance of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (the Fund or the Plan) for the years ended December 31, 2021 and 2020. 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 basic 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, employer contributions and investment returns.

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

Financial Highlights

Net position increased by $13,751,042 or 6.2% from $221,439,748 at December 31, 2020 to $235,190,790 at December 31, 2021. Comparatively, net position increased by $9,752,394 or 4.6% from $211,687,354 at December 31, 2019 to $221,439,748 at December 31, 2020. The increase in net position for both years was primarily due to the fluctuation in the fair value of the investments.

Rate of return of the Fund's investment portfolio was 12.85% (benchmark 12.01%) for 2021, 11.38% (benchmark 12.27%) for 2020, and 18.60% (benchmark 18.47%) for 2019.

Funded ratio for the Fund, based on the actuarial value of assets, was 59.37% in 2021, 59.05% in 2020, and 59.25 % in 2019.

Net Position

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

Net Position as of December 31,

				Current Year Increase (Decrease) in	
	2021	2020	2019	Dollars	Percent
Total assets	$ 237,192,379	$ 232,336,785	$ 214,126,736	$ 4,855,594	2.1%
Total liabilities	2,001,589	10,897,037	2,439,382	(8,895,448)	-81.6%
Net position	$ 235,190,790	$ 221,439,748	$ 211,687,354	$ 13,751,042	6.2%

Total receivables decreased to $6,698,282 in 2021from $7,520,060 in 2020, and were $5,431,912 in 2019. The decrease in 2021 was the result of decreased investment securities sold but not settled at year-end, and a slightly lower amount of employer contributions from the tax levy. The increase in 2020 was due to employee contribution outstanding and unsettled transaction from securities sold at year-end.

Total investments increased to $237,192,379 in 2021 from $232,336,785 in 2020, and were $214,126,736 in 2019. The increase in 2021 was due to market value increases in equities, fixed income (U.S. government and government agency obligations and commingled funds) securities, hedge funds, and real estate funds investments. The increase in 2020 was due to market value increases in equities, corporate bonds, and short-term investments.

Total liabilities decreased to $2,001,589 in 2021 from $10,897,037 in 2020, and were $2,439,382 in 2019. The decrease in 2021 was the result of reduced investment securities purchased, and decreases in investment manager fees and administrative expense payable at year-end. The increase in 2020 was due to increased unsettled transactions from securities purchased and outstanding 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 reflect 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 Net Position for the Years Ended December 31,

				Current Year Increase/(Decrease) in	
	2021	2020	2019	Dollars	Percent
Additions:					
Employer contributions	$ 3,930,617	$ 3,952,140	$ 4,299,140	$ (21,523)	-0.5%
Employee contributions	3,124,691	3,192,954	3,020,322	(68,263)	-2.1%
Net investment income (includes security lending activities)	27,021,748	21,851,955	33,653,650	5,169,793	23.7%
Employee transfers to (from) the Cook County Fund	42,007	714,659	(252,406)	(672,652)	-94.1%
Other	1,123,337	1,093,578	814,335	29,759	2.7%
Total additions	35,242,400	30,805,286	41,535,041	4,437,114	14.4%
Deductions:					
Benefits	20,878,490	19,975,300	19,251,286	903,190	4.5%
Refunds and death benefits	455,017	898,786	840,125	(443,769)	-49.4%
Miscellaneous - benefit expenses	—	20,439	—	(20,439)	
Administrative expenses	157,851	158,367	154,352	(516)	-0.3%
Total deductions	21,491,358	21,052,892	20,245,763	438,466	2.1%
Net increase	13,751,042	9,752,394	21,289,278	3,998,648	41.0%
Net position:					
Beginning of year	221,439,748	211,687,354	190,398,076	9,752,394	4.6%
End of year	$ 235,190,790	$ 221,439,748	$ 211,687,354	$ 13,751,042	6.2%

Additions to Net Position

Total additions were $35,242,400 in 2021, $30,805,286 in 2020, and $41,535,041 in 2019.

Employer contributions decreased to $3,930,617 in 2021, from $3,952,140 in 2020 and were $4,299,140 in 2019. Employer contributions are statutorily set at 1.30 times employee contributions collected two years prior.

Employee contributions, including permissive service credit purchases, decreased to $3,124,691 in 2021 from $3,192,954 in 2020, and were $3,020,322 in 2019. Employees contribute 8.5% of covered wages.

Net investment income totaled $27,021,748 for 2021 when compared to net investment income of $21,851,955 for 2020. Comparatively, net investment income was $33,653,650 in 2019. Investment earnings fluctuate primarily from overall performance of the financial markets from year to year.

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.

Deductions to Net Position

Total deductions were $21,491,358 in 2021, $21,052,892 in 2020, and $20,245,763 in 2019.

Benefits increased to $20,878,490 in 2021 from $19,975,300 in 2020 and $19,251,286 in 2019, primarily due to the 3% annual cost of living increases for annuitants.

Refunds decreased to $445,017 from $898,786 in 2020, and decreased from $840,125 in 2019. These changes are due to fluctuations in refund applications.

The cost to administer the Fund slightly decreased to $157,851 from $158,367 in 2020. Comparatively, the cost to administer the Fund increased to $158,367 in 2020 from $154,352 in 2019.

Actual 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,

	2021	2020	2019
Total pension liability	$ 569,301,801	$ 546,436,340	$ 496,379,240
Plan fiduciary net position	(235,190,790)	(221,439,748)	(211,687,354)
Employer's net pension liability	$ 334,111,011	$ 324,996,592	$ 284,691,886
Plan fiduciary net position as a percentage of the total pension liability	41.31%	40.52%	42.65%

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

	2021	2020	2019
Total OPEB liability	$ 48,532,749	$ 49,201,023	$ 43,728,394
Plan fiduciary net position	—	—	—
Employer's net OPEB liability	$ 48,532,749	$ 49,201,023	$ 43,728,394

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

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

	2021	2020	2019
Unfunded actuarial accrued liability	$ 149,474,346	$ 145,422,750	$ 139,936,050
Funded ratio	59.37%	59.05%	59.25%

Contact Information

This financial report is designed to provide the employer, Fund 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:

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

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

December 31, 2021

	Total	Pension	Postemployment Healthcare
ASSETS			
RECEIVABLES			
Employer contributions less allowance of $202,249 in 2021	$ 3,870,847	$ 3,870,847	$ —
Employee contributions	119,451	119,451	—
Due from County Employees' and Officers' Annuity and Benefit Fund of Cook County	998,679	998,679	—
Accrued investment income	302,216	302,216	—
Receivable for securities sold	—	—	—
EGWP/Medicare Part D subsidy & other	1,318,877	582,121	736,756
Prescription rebates	26,212	—	26,212
Imprest balance receivable	62,000	—	62,000
Total receivables	6,698,282	5,873,314	824,968
INVESTMENTS			
U.S. and international equities	104,002,706	104,002,706	—
U.S. Government and government agency obligations	12,313,410	12,313,410	—
Corporate bonds	2,569,740	2,569,740	—
Collective international equity fund	29,244,255	29,244,255	—
Commingled fixed income fund	31,201,244	31,201,244	—
Hedge fund	23,877,689	23,877,689	—
Real estate funds	21,716,538	21,716,538	—
Short–term investment	5,097,175	5,097,175	—
Total investments	230,022,757	230,022,757	—
Collateral held for securities on loan	471,340	471,340	—
Total assets	237,192,379	236,367,411	824,968
LIABILITIES			
Accounts payable	60,506	60,506	—
Healthcare and other benefits payable	824,968	—	824,968
Payable for securities purchased	644,775	644,775	—
Securities lending collateral	471,340	471,340	—
Total liabilities	2,001,589	1,176,621	824,968
Net position			
Net position restricted for pensions	235,190,790	235,190,790	—
Net position restricted for postemployment healthcare benefits	—	—	—
Total	$ 235,190,790	$ 235,190,790	$ —

See accompanying notes to financial statements.

Combining Statements of Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position (continued)

December 31, 2020

	Total	Pension	Postemployment Healthcare
ASSETS			
RECEIVABLES			
Employer contributions less allowance of $121,991 in 2020	$ 3,967,644	$ 3,967,644	$ —
Employee contributions	118,146	118,146	—
Due from County Employees' and Officers' Annuity and Benefit Fund of Cook County	686,022	686,022	—
Accrued investment income	283,312	283,312	—
Receivable for securities sold	1,684,000	1,684,000	—
EGWP/Medicare Part D subsidy & other	698,290	266,155	432,135
Prescription rebates	20,646	—	20,646
Impress balance receivable	62,000	—	62,000
Total receivables	7,520,060	7,005,279	514,781
INVESTMENTS			
U.S. and international equities	103,570,202	103,570,202	—
U.S. Government and government agency obligations	3,330,914	3,330,914	—
Corporate bonds	7,992,903	7,992,903	—
Collective international equity fund	29,581,703	29,581,703	—
Commingled fixed income fund	29,543,197	29,543,197	—
Hedge fund	22,543,485	22,543,485	—
Real estate funds	14,057,489	14,057,489	—
Short–term investment	14,013,569	14,013,569	—
Total investments	224,633,462	224,633,462	—
Collateral held for securities on loan	183,263	183,263	—
Total assets	232,336,785	231,822,004	514,781
LIABILITIES			
Accounts payable	77,062	77,062	—
Healthcare and other benefits payable	514,781	—	514,781
Payable for securities purchased	10,121,931	10,121,931	—
Securities lending collateral	183,263	183,263	—
Total liabilities	10,897,037	10,382,256	514,781
Net position			
Net position restricted for pensions	221,439,748	221,439,748	—
Net position restricted for postemployment healthcare benefits	—	—	—
Total	$ 221,439,748	$ 221,439,748	$ —

See accompanying notes to financial statements.

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

Year Ended December 31, 2021

	Total	Pension	Postemployment Healthcare
ADDITIONS			
Employer contributions	$ 3,930,617	$ 3,930,617	$ —
Allocation to postemployment healthcare	—	(802,133)	802,133
Total employer contributions	3,930,617	3,128,484	802,133
Employee contributions			
Salary deductions	2,982,139	2,982,139	—
Refund repayments	75,795	75,795	—
Former and miscellaneous service payments	24,581	24,581	—
Deductions in lieu of disability	42,176	42,176	—
Total employee contributions	3,124,691	3,124,691	—
Investment income			
Net appreciation in fair value of investments	25,086,046	25,086,046	—
Dividends	2,378,975	2,378,975	—
Interest	108,509	108,509	—
	27,573,530	27,573,530	—
Less investment expenses	(595,421)	(595,421)	—
Net investment income	26,978,109	26,978,109	—
Securities lending			
Income	54,240	54,240	—
Expenses	(10,601)	(10,601)	—
Net securities lending income	43,639	43,639	—
Other			
EGWP/Medicare Part D subsidy	1,012,644	—	1,012,644
Prescription plan rebates	110,693	—	110,693
Employee transfers to (from) County Employees' and Officers' Annuity and Benefit Fund of Cook County	42,007	42,007	—
Total other additions	1,165,344	42,007	1,123,337
Total additions	35,242,400	33,316,930	1,925,470
DEDUCTIONS			
Benefits			
Annuity			
Employee	15,648,029	15,648,029	—
Spouse and children	3,109,832	3,109,832	—
Disability			
Ordinary	166,129	166,129	—
Duty	29,030	29,030	—
Healthcare less annuitant contributions of $1,555,085 in 2021	1,925,470	—	1,925,470
Total benefits	20,878,490	18,953,020	1,925,470
Refunds	455,017	455,017	—
Miscellaneous – benefit expense	—	—	—
Administrative expenses	157,851	157,851	—
Total deductions	21,491,358	19,565,888	1,925,470
Net increase (decrease)	13,751,042	13,751,042	—
Net position			
Beginning of year	221,439,748	221,439,748	—
End of year	$ 235,190,790	$ 235,190,790	$ —

See accompanying notes to financial statements.

Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position (continued)

Year Ended December 31, 2020

	Total	Pension	Postemployment Healthcare
ADDITIONS			
Employer contributions	$ 3,952,140	$ 3,952,140	$ —
Allocation to postemployment healthcare	—	(660,611)	660,611
Total employer contributions	3,952,140	3,291,529	660,611
Employee contributions			
Salary deductions	3,076,210	3,076,210	—
Refund repayments	81,350	81,350	—
Former and miscellaneous service payments	368	368	—
Deductions in lieu of disability	35,026	35,026	—
Total employee contributions	3,192,954	3,192,954	—
Investment income			
Net appreciation in fair value of investments	20,664,547	20,664,547	—
Dividends	1,620,427	1,620,427	—
Interest	134,214	134,214	—
	22,419,188	22,419,188	—
Less investment expenses	(578,452)	(578,452)	—
Net investment income	21,840,736	21,840,736	—
Securities lending			
Income	14,013	14,013	—
Expenses	(2,794)	(2,794)	—
Net securities lending income	11,219	11,219	—
Other			
EGWP/Medicare Part D subsidy	1,005,789	—	1,005,789
Prescription plan rebates	87,789	—	87,789
Employee transfers to (from) County Employees' and Officers Annuity and Benefit Fund of Cook County	714,659	714,659	—
Total other additions	1,808,237	714,659	1,093,578
Total additions	30,805,286	29,051,097	1,754,189
DEDUCTIONS			
Benefits			
Annuity			—
Employee	15,117,909	15,117,909	—
Spouse and children	2,928,375	2,928,375	—
Disability			—
Ordinary	160,302	160,302	—
Duty	14,525	14,525	—
Healthcare less annuitant contributions of $1,445,022 in 2020	1,754,189	—	1,754,189
Total benefits	19,975,300	18,221,111	1,754,189
Refunds	898,786	898,786	—
Miscellaneous – benefit expense	20,439	20,439	—
Administrative expenses	158,367	158,367	—
Total deductions	21,052,892	19,298,703	1,754,189
Net increase (decrease)	9,752,394	9,752,394	—
Net position			
Beginning of year	211,687,354	211,687,354	—
End of year	$ 221,439,748	$ 221,439,748	$ —

See accompanying notes to financial statements.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (the Fund or Plan) is administered in accordance with Chapter 40, Article 5/10 of the Illinois Compiled 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 Forest Preserve District of Cook County, Illinois (the Forest Preserve District) and is included in the Forest Preserve District'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 market value as of the last business day of the year. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss. 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 County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Cook County Fund). These expenses are allocated between the Cook County Fund and the 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, 2021 and 2020, the Fund does not have any capital assets.

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

Reclassifications — Certain prior year amounts have been reclassified to conform to the current year presentation.

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 July 1, 1931, and is governed by legislation contained in the Illinois Compiled Statutes (the Statutes), particularly Chapter 40, Articles 5/1; 5/10 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 Fund can be amended only by the Illinois Legislature. The Fund is a single employer defined benefit pension plan with a defined contribution minimum. The Fund was established for the purpose of providing retirement, death and disability benefits for full-time employees of the Forest Preserve District 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 Forest Preserve District 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.

Covered employees are required to contribute 8.5% 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 Forest Preserve District'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 1.30. The source of funds for the Forest Preserve District's contributions has been designated by State Statute as the Forest Preserve District'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.

NOTE 2. PLAN DESCRIPTION (CONTINUED)

At December 31, 2021 and 2020, participants consisted of the following:

	2021	2020
Active members	516	521
Retired members	382	391
Beneficiaries	154	147
Inactive members	1,521	1,468
Total	2,573	2,527

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, 2021 and 2020 are as follows:

	2021	2020
Total pension liability	$ 569,301,801	$ 546,436,340
Plan fiduciary net position	235,190,790	221,439,748
Employer's net pension liability	$ 334,111,011	$ 324,996,592
Plan fiduciary net position as a percentage of the total pension liability	41.31%	40.52%

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

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, 2021 and 2020 using the following actuarial methods and assumptions:

Actuarial valuation dates	December 31, 2021	December 31, 2020
Actuarial cost method	Entry Age Normal	Entry Age Normal
Actuarial assumptions: Inflation	2.50% per year, compounded annually	2.75% per year, compounded annually
Salary increases	3.00% to 5.00%, based on service	3.50% to 8.00%, based on age
Investment rate of return	7.00% per year, compounded annually	7.25% per year, compounded annually
Retirement age	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	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
Mortality	Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021	RP-2014 Blue Collar Mortality Table, base year 2006. Buck Modified MP-2017 projection scale.
Postretirement annuity increase	Tier 1 participants — 3.0% compounded annually	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	Tier 2 participants — the lesser of 3.0% or one half of the increase in the Consumer Price Index

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 ending December 31, 2020. In addition to the assumptions listed above, the assumptions changes include decrease of wage growth assumptions from 0.75% to 0.50%, and general wage inflation assumption lowered from 3.50% to 3.00%. The marriage assumption was changed from assuming spouses of active female members are four years older than female members to assume that spouses of active female members are two years older than female members. The marital status assumption for female members was lowered from 70% assumed to be married to 40% assumed to be married. The assumed retirement age for Tier 1 deferred vested members was increased from 55 to 62. The assumed annual increase in administrative expense was lowered form 5.00% to 2.50%.

The December 31, 2020 valuations were based on the results of an actuarial experience study conducted by Buck (Formerly Conduent, Inc.) covering the four-year period ending in December 31, 2016. The Fund engaged Cavanaugh Macdonald Consulting to prepare the December 31, 2021 and 2020 valuations.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Discount Rate

The discount rate used to measure the total pension liability at December 31, 2021 and 2020 was 3.17% and 3.22%, 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 2.05% at December 31, 2021 (2.12% for 2020) and long-term investment rate of 7.00% (7.25% for 2020) 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, 2021 and 2020, the long-term rate of return of 7.00% and 7.25%, respectively, were applied to projected benefit payments through 2043 and 2041, respectively. Based on the long-term rate of return of 7.00% for 2021 and 7.25% for 2020 and municipal bond rate of 2.05% at December 31, 2021 and 2.12% at December 31, 2020, the blended discount rate would be 3.17% at December 31, 2021 and 3.22% at December 31, 2020.

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, 2021 and 2020. 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:

	1% Decrease 2.17%	Current Discount Rate 3.17%	1% Increase 4.17%
Net Pension Liability — December 31, 2021	$ 429,131,129	$ 334,111,011	$ 258,184,371

	1% Decrease 2.22%	Current Discount Rate 3.22%	1% Increase 4.22%
Net Pension Liability — December 31, 2020	$ 415,577,011	$ 324,996,592	$ 252,686,640

NOTE 4. SUMMARY OF EMPLOYER FUNDING POLICIES

Employer contributions are funded primarily through a tax levied by the Forest Preserve District of 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 1.30.

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.

The Fund's investment policy in accordance with the Statutes establishes the following target allocation across asset classes for the years ended December 31, 2021 and 2020:

	2021		2020	
Asset Class	Target Allocation %	Long–Term Expected Real Rate of Return	Target Allocation %	Long–Term Expected Real Rate of Return
Domestic equities	32.00%	5.33%	32.00%	5.58%
International equities	27.00%	5.63%	27.00%	5.88%
Fixed income	21.00%	1.18%	21.00%	1.43%
Real estate funds	9.00%	4.27%	9.00%	4.52%
Hedge funds	10.00%	2.70%	10.00%	2.91%
Cash equivalents	1.00%	0.00%	1.00%	0.03%
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 2.25%. 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, 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, 2021 are listed in the previous table.

Annual Money-Weighted Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.87% and 10.82% for the years ended December 31, 2021 and 2020, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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 12/31/2021.

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, 2021.

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, 2021.

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 as valued by Moody's Investors Service, Standard & Poor's and/or Fitch:

Type of Investment	Rating	2021	2020
U.S. Government and government agency obligations	Aaa	$ 12,313,410	$ 3,330,914
Corporate bonds	A	$ 2,569,740	$ 7,992,903
Commingled fixed income fund	Not Rated	$ 31,201,244	$ 29,543,197
Short–Term investment	Not Rated	$ 5,097,175	$ 14,013,569

NOTE 5. INVESTMENTS (CONTINUED)

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 6.78 years at December 31, 2021 and 6.22 years at December 31, 2020). The following table presents a summarization of the Fund's debt investments at December 31, 2021 and 2020 using the segmented time distribution method:

Type of Investment	Maturity	2021	2020
U.S. Government and government agency obligations	1 – 5 years	$ 11,741,372	$ 3,330,914
	> 5 years	572,038	—
		$ 12,313,410	$ 3,330,914
Corporate bonds	<1 year	$ 1,088,314	$ —
	1 – 5 years	1,481,426	6,668,405
	5 – 10 years	—	1,324,498
		$ 2,569,740	$ 7,992,903
Commingled fixed income fund	5 – 10 years	$ 31,201,244	$ 29,543,197
Short–Term investment	<1 year	$ 5,097,175	$ 14,013,569

NOTE 5. INVESTMENTS (CONTINUED)

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 exposure to foreign currency risk at December 31, 2021 and 2020 is as follows:

Type of Investment	Fair Value (USD) 2021	Fair Value (USD) 2020
U.S. and international equities		
British pound sterling	$ 3,868,705	$ 5,208,931
Canadian dollar	3,922,038	3,356,246
Danish krone	1,735,980	1,735,240
European euro	11,167,775	11,289,881
Hong Kong Dollar	1,030,579	1,789,021
Israeli shekel	817,194	492,468
Japanese yen	2,038,257	3,051,793
Swedish krona	427,546	692,330
Swiss franc	1,635,572	1,354,773
U.S. dollar	77,359,060	74,599,519
Total U.S. and international equities	$ 104,002,706	$ 103,570,202

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 a previous year and sold in the current year result in their realized gains and losses being reported in the current year and their net appreciation in plan assets being reported in both the current year and the previous years.

Derivatives

A derivative instrument is an instrument or contract whose value is derived from that of other financial instruments such as stocks, bonds, and commodities, interest rates or a market index. The Fund's investments in derivative instruments are immaterial to the financial statements. The Fund also holds interests in collective funds, and hedge funds, which may engage in derivative transactions.

NOTE 6. 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:

<u>Basis of Fair Value Measurement</u>

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, 2021 and 2020:

		Fair Value Measurements at 12/31/2021 Using		
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
U.S. and international equities	$ 104,002,706	$ 104,002,706	$ —	$ —
U.S. Government Obligations	12,313,410	11,741,372	572,038	—
Corporate bonds	2,569,740	—	2,569,740	—
Total investments by fair value level	118,885,856	$ 115,744,078	$ 3,141,778	$ —
Investments measured at net asset value	111,136,901			
Total investments at fair value	$ 230,022,757			

NOTE 6. FAIR VALUE MEASUREMENTS (CONTINUED)

		Fair Value Measurements at 12/31/2020 Using		
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
U.S. and international equities	$ 103,570,202	$ 103,570,202	$ —	$ —
U.S. Government and government agency obligations	3,330,914	3,330,914	—	—
Corporate bonds	7,992,903	—	7,992,903	—
Total investments by fair value level	114,894,019	$ 106,901,116	$ 7,992,903	$ —
Investments measured at net asset value	109,739,443			
Total investments at fair value	$ 224,633,462			

Level 1 Measurements

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

Level 2 Measurements

Corporate bonds 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.

NOTE 6. FAIR VALUE MEASUREMENTS (CONTINUED)

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

	Fair Value		Unfunded Commitments	Redemption Frequency (If Eligible)	Redemption Notice Period
	12/31/2021	12/31/2020			
Investments measured at net asset value:					
Collective international equity funds (1)					
Lazard/Wilmington Emerging Markets Sudan Free Portfolio	$ 8,844,107	$ 8,682,250	—	Daily	N/A
State Street Global Advisory MCSI ACWI EX	20,400,148	20,899,453	—	Daily	N/A
Commingled fixed income fund (2)					
EB DV Non–SL Aggregate Bond Index Fund	31,201,244	29,543,197	—	Daily	N/A
Hedge fund (3)					
Burnham Harbor Fund Ltd.	23,877,689	22,543,485	—	Monthly	95 days
Real estate funds (4)					
JPMCB Strategic Property Fund	8,477,254	7,251,365	—	Quarterly	45 days
PRISA Separate Account	10,992,436	6,806,124	—	Quarterly	90 days
Clarion Lion Industrial Trust	2,246,848	—	—	Quarterly	90 days
Short–Term investment (5)					
BNY Mellon EB Temporary Investment Fund	5,097,175	14,013,569	—	Daily	N/A
Total investments measured at net asset value	$ 111,136,901	$ 109,739,443			

(1) Collective international equity funds — The funds' investment objectives are to achieve long-term capital appreciation by investing primarily in equity and equity-related securities of issuers that are located, or do significant business, in international and emerging market countries. The fair values of the investments in the funds have been determined using the NAV per share of the investment.

(2) Commingled fixed income fund — 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) Hedge fund — 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.

(4) Real estate funds — These investments include a commingled pension trust fund and an insurance company separate account that are both 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.

NOTE 6. FAIR VALUE MEASUREMENTS (CONTINUED)

(5) Short–Term Investment — 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 7. 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 270 days for 2021 and 212 days for 2020; however, any loan may be terminated on demand by either the Fund or the borrower. Cash collateral is invested in a separately managed portfolio, which had an average weighted maturity at December 31, 2021 and 2020 of 3 and 4 days, respectively.

As of December 31, 2021 and 2020, the fair value (carrying amount) of loaned securities was $2,533,739 and $2,860,595, respectively. As of December 31, 2021 and 2020, the fair value (carrying amount) of cash collateral received by the Fund was $471,340 and $183,263, 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, 2021 and 2020, the fair value (carrying amount) of noncash collateral received by the Fund was $2,133,884 and $2,736,387, respectively.

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.

NOTE 7. SECURITIES LENDING (CONTINUED)

A summary of securities loaned at fair value as of December 31, 2021 and 2020 is as follows:

	2021	2020
Securities loaned — backed by cash collateral		
International Equities	$ 448,806	$ 179,556
Total securities loaned — backed by cash collateral	448,806	179,556
Securities loaned — backed by non–cash collateral		
U.S. Government Debt	2,084,933	2,681,039
Total securities loaned — backed by non–cash collateral	2,084,933	2,681,039
Total	$ 2,533,739	$ 2,860,595

NOTE 8. 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. The PGHBP provides a healthcare benefit to annuitants of the Forest Preserve District of Cook County, Illinois (the employer) who elect to participate in the PGHBP.

At December 31, 2021 and 2020, participants consisted of the following:

	2021	2020
Active members	516	521
Retired plan members or beneficiaries currently receiving benefit payments	339	352
Inactive plan members entitled to but not yet receiving benefit payments	47	43
Total	902	916

NOTE 8. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

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, 2021, the employee and spouse annuitants are expected to pay 56% of the annual costs. For the valuation of the obligation as of December 31, 2020, the employee and spouse annuitants are expected to pay between 55% - 67% and 48% - 62% of the annual costs, respectively, depending upon Medicare enrollment and coverage selection. 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.

Employer's Net Postemployment Healthcare Liability

The components of the employer's net postemployment healthcare liability at December 31, 2021 and 2020 were as follows:

	2021	2020
Total postemployment healthcare liability	$ 48,532,749	$ 49,201,023
Plan fiduciary net position	—	—
Employer's net postemployment healthcare liability	$ 48,532,749	$ 49,201,023
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.

NOTE 8. EMPLOYER'S POSTEMPLOYMENT HEALTHCARE LIABILITY (CONTINUED)

The net postemployment healthcare liability was determined by actuarial valuations performed as of December 31, 2021 and 2020 using the following actuarial methods and assumptions:

Actuarial valuation date	December 31, 2021	December 31, 2020
Actuarial cost method	Entry Age Normal	Entry Age Normal
Actuarial assumptions:		
Inflation	2.50% per year	2.75% per year
Salary increases	3.00% to 5.00%, based on age	3.50% to 8.00%, based on age
Health care cost trend rates	7.000% in the first year, decreasing by .25% per year until an ultimate rate of 4.500% is reached for pre-Medicare. 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 for post-Medicare.	7.00% in the first year, decreasing by .25% per year until an ultimate rate of 4.75% is reached for pre-Medicare. 5.50% in the first year, decreasing by .25% until an ultimate rate of 4.75% is reached for post-Medicare
Mortality	Pub-2010 amount-weighed tables projected from 2010 using generational improvement with Scale MP-2021	RP-2014 Blue Collar Mortality Table, base year 2006, Buck (Formerly Conduent) Modified MP-2017 projection scale

The actuarial assumptions used in the December 31, 2021 valuations were based on the results of the actuarial experience study conducted by Cavanaugh Macdonald Consulting over the period 2017 through 2020. The December 31, 2020 valuations were based on the results of an actuarial experience study conducted by Buck (Formerly Conduent, Inc.) over the period 2013 through 2016.

Discount Rate

The blended discount rate used to measure the total postemployment healthcare liability at December 31, 2021 and 2020 was 2.05% and 2.12%, 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 2.05% and 2.12% at December 31, 2021 and 2020, 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 2021 and 2020 are based on the S&P Municipal Bond 20 Year High Grade Rate Index and Municipal Bond 20-Year Index Rate, respectively.

NOTE 8. 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, 2021 and 2020. 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 1.05%	Current Discount Rate 2.05%	1% Increase 3.05%
Net postemployment healthcare liability as of December 31, 2021	$ 58,193,857	$ 48,532,749	$ 40,981,603

	1% Decrease 1.12%	Current Discount Rate 2.12%	1% Increase 3.12%
Net postemployment healthcare liability as of December 31, 2020	$ 58,647,639	$ 49,201,023	$ 41,797,795

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, 2021 and 2020. 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 percent lower and 1 percent higher than the current health care cost trend rate

	1% Decrease	Health Care Cost Trend Rate	1% Increase
Net postemployment healthcare liability as of December 31, 2021	$ 40,161,817	$ 48,532,749	$ 59,721,782

	1% Decrease	Health Care Cost Trend Rate	1% Increase
Net postemployment healthcare liability as of December 31, 2020	$ 40,900,068	$ 49,201,023	$ 60,272,801

NOTE 9. RELATED PARTY TRANSACTIONS

The Fund has common Trustees and shares office space with the Cook County Fund. The Fund reimburses the Cook County Fund for shared administrative services provided by the Cook County Fund. During the years ended December 31, 2021 and 2020, the Cook County Fund allocated administrative expenditures of $101,428 and $102,610, respectively.

As of December 31, 2021 and 2020, the Fund was owed $998,679 and $686,022, respectively, from the Cook County Fund. These amounts include plan transfers from Fund members transferring from one Fund to the other.

NOTE 10. PRONOUNCEMENTS ISSUED EFFECTIVE FOR FISCAL YEAR ENDING DECEMBER 31, 2021

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. Statement No. 89 was issued to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and simplify accounting for interest cost incurred before the end of a construction period. Statement No. 89 is effective for the Fund's fiscal year ending December 31, 2021. We evaluated Statement No.89 and have concluded that the operations of the Fund do not fall within the scope of Statement No.89. Therefore, there is no impact on the Fund's financial statements.

In October 2021, GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*. Statement No. 98 establishes the term annual comprehensive financial report and its acronym ACFR. The acronym replaces instances of annual comprehensive financial report and its acronym in generally accepted accounting principles for state and local governments. Statement No. 98 is effective for the Fund's fiscal year ending December 31, 2021 and has been implemented.

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 of this Statement are effective as follows:

- The requirements related to extension of the use of LIBOR, accounting for SNAP distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63 are effective upon issuance. We evaluated these requirements and concluded that the statement does not materially impact the financial operations of the Fund. Therefore, the Fund will pass on implementation of the Statement.

NOTE 11. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE

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 operating 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.

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.

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.

In March 2020, GASB issued Statement No. 93, R*eplacement 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.

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, 2022.

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 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

NOTE 11. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE (CONTINUED)

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.

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 of this Statement are effective as follows:

- The requirements related to leases, PPPs, and SBITAs are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter.
- 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.

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

NOTE 12. SUBSEQUENT EVENTS

The Cook County Fund has been named as a defendant in a class action litigation, entitled *Lori G. Levin, et. al., v. The Retirement Board of the County Employees' and Officers' Annuity and Benefit Fund of Cook County*, in which the plaintiff seeks, on behalf of herself and similarly situated annuitants, the ability to purchase health insurance administered by the Cook County Fund, despite her ineligibility under the Board's policy. On June 7, 2019, the Appellate Court reversed the order of the Circuit Court of Cook County affirming the Board's decision denying Ms. Levin's participation in the health insurance program administered by the Cook County Fund. The Cook County Fund successfully filed a petition for leave to appeal the decision to the Illinois Supreme Court. On May 21, 2020, the Illinois Supreme Court entered a Per Curiam Opinion stating that one Justice had recused himself and that it was not able to obtain the constitutionally required concurrence of at least four justices necessary to enter a decision. Accordingly, the appeal was dismissed and the Clerk of the Supreme Court issued a mandate to Appellate and Circuit Courts. Based upon the Appellate Court's decision entered on June 7, 2019, the matter was then remanded to the Retirement Board with specific instructions. The Retirement Board allowed the Plaintiff to participate in the health insurance program as was consistent with the directions from the Appellate Court. Because the Circuit Court was not revested with jurisdiction, Plaintiff's motions to certify the class, issue notice and award damages and attorneys' fees were dismissed for want of jurisdiction and that order was entered as a final order. On April 23, 2021, the Plaintiff filed an appeal from the order entered by the Circuit Court. The matter was fully briefed before the Appellate Court by the parties and on May 20, 2022, the Appellate Court affirmed the Circuit Court's order that it lacked jurisdiction and had properly dismissed Plaintiff's motions to certify the class, issue notice and award damages and attorneys' fees. Plaintiff has 35 days to file a petition for leave to appeal the Appellate Court's May 20, 2022 order to the Illinois Supreme Court.

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

	2021	2020	2019	2018
Total pension liability				
Service cost	$ 12,842,866	$ 11,099,720	$ 7,981,035	$ 9,426,212
Interest	17,698,797	18,774,499	20,343,569	19,182,488
Difference between expected and actual experience	6,666,390	(2,400,863)	(420,786)	608,525
Changes of assumptions	5,065,445	41,724,080	71,398,627	(26,452,372)
Expected benefit payments, including refunds of employee contributions	(19,408,037)	(19,140,336)	(18,323,398)	(17,817,279)
Net change in total pension liability	22,865,461	50,057,100	80,979,047	(15,052,426)
Total pension liability				
Beginning of year	546,436,340	496,379,240	415,400,193	430,452,619
End of year	$ 569,301,801	$ 546,436,340	$ 496,379,240	$ 415,400,193
Plan fiduciary net position				
Contributions - employer	$ 3,128,484	$ 3,291,529	$ 3,345,462	$ 3,481,281
Contributions - employee	3,124,691	3,192,954	3,020,322	3,127,980
Net investment income (loss)	27,021,748	21,851,955	33,653,650	(8,422,851)
Expected benefit payments, including refunds of employee contributions	(19,408,037)	(19,140,336)	(18,323,398)	(17,817,279)
Administrative expenses	(157,851)	(158,367)	(154,352)	(159,489)
Other	42,007	714,659	(252,406)	(182,512)
Net change in plan fiduciary net position	13,751,042	9,752,394	21,289,278	(19,972,870)
Plan fiduciary net position				
Beginning of year	221,439,748	211,687,354	190,398,076	210,370,946
End of year	$ 235,190,790	$ 221,439,748	$ 211,687,354	$ 190,398,076
Employer's net pension liability	$ 334,111,011	$ 324,996,592	$ 284,691,886	$ 225,002,117
Plan fiduciary net position as a percentage of the total pension liability	41.31%	40.52%	42.65%	45.83%
Covered payroll	$ 35,059,352	$ 35,159,979	$ 35,056,459	$34,071,319
Employer's net pension liability as a percentage of covered payroll	952.99%	924.34%	812.10%	660.39%

Note:
Changes in Benefit: None noted in 2021.
Changes of Assumptions:
The blended discount rate used changed from 3.22% in 2020 to 3.17% 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.

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios (continued)

	2017	2016	2015	2014
Total pension liability				
Service cost	$ 10,698,297	$ 11,224,976	$ 9,656,955	$ 9,575,195
Interest	20,384,471	19,482,189	19,471,424	18,880,782
Difference between expected and actual experience	(1,344,952)	(6,776,942)	(270,033)	—
Changes of assumptions	(21,473,767)	(26,186,535)	28,495,220	—
Expected benefit payments, including refunds of employee contributions	(16,670,896)	(16,462,185)	(15,920,776)	(15,805,217)
Net change in total pension liability	(8,406,847)	(18,718,497)	41,432,790	12,650,760
Total pension liability				
Beginning of year	438,859,466	457,577,963	416,145,173	403,494,413
End of year	$430,452,619	$438,859,466	$457,577,963	$416,145,173
Plan fiduciary net position				
Contributions - employer	$ 2,242,489	$ 1,971,946	$ 1,763,345	$ 1,520,316
Contributions - employee	3,300,222	3,184,051	2,771,533	2,645,164
Net investment income (loss)	30,500,015	10,477,792	2,549,975	13,525,606
Expected benefit payments, including refunds of employee contributions	(16,670,896)	(16,462,185)	(15,920,776)	(15,805,217)
Administrative expenses	(163,275)	(157,577)	(143,953)	(142,067)
Other	(40,007)	(133,999)	(6,928)	(175,370)
Net change in plan fiduciary net position	19,168,548	(1,119,972)	(8,986,804)	1,568,432
Plan fiduciary net position				
Beginning of year	191,202,398	192,322,370	201,309,174	199,740,742
End of year	$210,370,946	$191,202,398	$192,322,370	$201,309,174
Employer's net pension liability	$220,081,673	$247,657,068	$265,255,593	$214,835,999
Plan fiduciary net position as a percentage of the total pension liability	48.87%	43.57%	42.03%	48.37%
Covered payroll	$ 35,078,173	$ 34,509,011	$ 32,007,657	$ 29,811,912
Employer's net pension liability as a percentage of covered payroll	627.40%	717.66%	828.73%	720.64%

Notes (continued):

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.

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

Schedule of Employer Contributions and Related Notes Last Ten Fiscal Years

	2021	2020	2019	2018	2017
Actuarially determined contribution	$ 13,554,738	$ 13,027,669	$ 10,195,691	$ 10,678,782	$ 10,230,872
Contributions in relation to the actuarially determined contribution	(3,128,484)	(3,291,529)	(3,345,462)	(3,481,281)	(2,242,489)
Contribution deficiency	$ 10,426,254	$ 9,736,140	$ 6,850,229	$ 7,197,501	$ 7,988,383
Covered payroll	$ 35,059,352	$ 35,159,979	$ 35,056,459	$ 34,071,319	$ 35,078,173
Contributions as a percentage of covered payroll	8.92%	9.36%	9.54%	10.22%	6.39%

Notes to Schedule of Employer Contributions

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, 2020
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	2.75% per year
Salary increases	3.50% to 8.00%, based on age
Investment rate of return	7.25% per year, compounded annually
	5.50% in the first year, decreasing by .25% until an ultimate rate of 4.75% 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	RP–2014 Blue Collar Mortality Table, base year 2006, Buck Modified MP–2017 projection scale
Post retirement 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 CPI.

See Report of Independent Auditors.

Schedule of Employer Contributions and Related Notes Last Ten Fiscal Years (continued)

	2016	2015	2014	2013	2012
Actuarially determined contribution	$ 10,166,661	$ 10,921,946	$ 9,608,247	$ 8,590,721	$ 7,626,778
Contributions in relation to the actuarially determined contribution	(1,971,946)	(1,763,345)	(1,520,316)	(1,403,628)	(2,117,976)
Contribution deficiency	$8,194,715	$9,158,601	$8,087,931	$7,187,093	$5,508,802
Covered payroll	$ 34,509,011	$ 32,007,657	$ 29,811,912	$ 29,485,857	$ 26,252,071
Contributions as a percentage of covered payroll	5.71%	5.51%	5.10%	4.76%	8.07%

Schedule of Investment Returns

	2021	2020	2019	2018	2017	2016	2015	2014
Annual money–weighted rate of return, net of investment expense	12.87%	10.82%	18.60%	-4.31%	16.58%	5.67%	1.50%	7.10%

Notes

This schedule is intended to show information for ten years.

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

See Report of Independent Auditors.

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

	2021	2020	2019
Total postemployment healthcare liability			
Service cost	$ 2,222,582	$ 1,903,291	$ 1,331,088
Interest	1,081,722	1,245,850	1,516,095
Changes in benefit terms	4,049,971	(1,816,766)	(2,350,490)
Difference between expected and actual experience	(5,759,153)	(66,097)	(320,932)
Changes of assumptions	(1,461,263)	4,866,962	8,656,072
Benefit payments	(802,133)	(660,611)	(953,678)
Net change in total postemployment healthcare liability	(668,274)	5,472,629	7,878,155
Total postemployment healthcare liability			
Beginning of year	49,201,023	43,728,394	35,850,239
End of year	$ 48,532,749	$ 49,201,023	$ 43,728,394
Plan fiduciary net position			
Contributions - employer	$ 802,133	$ 660,611	$ 953,678
Benefit payments - net	(802,133)	(660,611)	(953,678)
Net change in plan fiduciary net position	—	—	—
Plan fiduciary net position			
Beginning of year	—	—	—
End of year	$ —	$ —	$ —
Employer's net postemployment healthcare liability	$ 48,532,749	$ 49,201,023	$ 43,728,394
Plan fiduciary net position as a percentage of the total postemployment healthcare liability	0.00%	0.00%	0.00%
Covered payroll	$ 35,059,352	$ 35,164,564	$ 35,164,564
Employer's net postemployment healthcare liability as a percentage of covered payroll	138.43%	139.92%	124.73%

Notes:

Changes in Benefit Terms: Subsidy percentages for member health benefits changed from 2020 to 2021, respectively, as follows:

Choice Plan:

- Annuitants without Medicare changed from 45% to 44%; Annuitants with Medicare changed from 38% to 44%. Survivors without Medicare changed from 52% to 44%; Survivors with Medicare changed from 38% to 44%."

Choice Plus Plan:

- Annuitants without Medicare changed from 42% to 44%; Annuitants with Medicare changed from 33% to 44%. Survivors without Medicare changed from 48% to 44%; Survivors with Medicare changed from 38% to 44%."

Changes of Assumptions:
The discount rate used changed from 2.12% in 2020 to 2.05% 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-2021and were projected from 2006 base year using Buck Modified MP-2017 scale in 2020.

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 for pre-Medicare.

See Report of Independent Auditors.

Schedule of Changes in the Employer's Net Postemployment Healthcare Liability and Related Ratios (continued)

	2018	2017
Total postemployment healthcare liability		
Service cost	$ 2,197,459	$ 2,349,531
Interest	1,613,714	1,937,384
Changes in benefit terms	(7,184,763)	(1,738,947)
Difference between expected and actual experience	(2,029,921)	(611,268)
Changes of assumptions	(7,310,288)	(1,979,137)
Benefit payments	(606,110)	(1,305,075)
Net change in total postemployment healthcare liability	(13,319,909)	(1,347,512)
Total postemployment healthcare liability		
Beginning of year	49,170,148	50,517,660
End of year	$ 35,850,239	$ 49,170,148
Plan fiduciary net position		
Contributions - employer	$ 606,110	$ 1,305,075
Benefit payments - net	(606,110)	(1,305,075)
Net change in plan fiduciary net position	—	—
Plan fiduciary net position		
Beginning of year	—	—
End of year	$ —	$ —
Employer's net postemployment healthcare liability	$ 35,850,239	$ 49,170,148
Plan fiduciary net position as a percentage of the total postemployment healthcare liability	0.00%	0.00%
Covered payroll	$ 34,071,319	$ 35,078,173
Employer's net postemployment healthcare liability as a percentage of covered payroll	105.22%	140.17%

Notes (continued):

Healthcare cost trend rates changed for post-Medicare from, 5.50% in the first year, decreasing by .25% until an ultimate rate of 4.75% is reached to 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.

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.

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

See Report of Independent Auditors.

Schedule of Employer Contributions and Related Notes Last Ten Fiscal Years

	2021	2020	2019	2018	2017
Actuarially determined contribution	$ 4,275,965	$ 4,409,455	$ 4,004,996	$ 3,353,628	$ 4,681,598
Contributions in relation to the actuarially determined contribution	(802,133)	(660,611)	(953,678)	(606,110)	(1,305,075)
Contribution deficiency	$ 3,473,832	$ 3,748,844	$ 3,051,318	$ 2,747,518	$ 3,376,523
Covered payroll	$ 35,059,352	$ 35,164,564	$ 35,058,531	$ 34,071,319	$ 35,078,173
Contributions as a percentage of covered payroll	2.29%	1.88%	2.72%	1.78%	3.72%

Notes to Schedule of Employer Contributions

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
Inflation	2.50% per year
Salary increases	3.00% to 5.00%, based on service
Investment rate of return	7.000% in the first year, decreasing by .25% per year until an ultimate rate of 4.500% is reached for pre–Medicare 5.500% in the first year, decreasing by .25% in the second year, decreasing by 1.25 in the third and fouth year, and decreasing by .25% in the fifth year until an ultimate rate of 4.500% is reached for post–Medicare
Retirement Rates	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

See Report of Independent Auditors.

Schedule of Employer Contributions and Related Notes Last Ten Fiscal Years (continued)

	2016	2015	2014	2013	2012
Actuarially determined contribution	$ 5,099,567	$ 4,637,519	$ 4,641,151	$ 4,234,545	$ 3,541,064
Contributions in relation to the actuarially determined contribution	(1,419,435)	(1,698,692)	(1,616,436)	(1,459,517)	(991,000)
Contribution deficiency	$ 3,680,132	$ 2,938,827	$ 3,024,715	$ 2,775,028	$ 2,550,064
Covered payroll	$ 34,512,652	$ 32,007,657	$ 29,811,912	$ 29,485,857	$ 26,252,071
Contributions as a percentage of covered payroll	4.11%	5.31%	5.42%	4.95%	3.77%

See Report of Independent Auditors.

Schedules of Administrative Expenses and Professional and Consulting Fees

Years Ended December 31, 2021 and 2020

	2021	2020
Administrative expenses		
Administrative expenses allocated from County		
Employees' and Officers' Annuity and Benefit Fund of Cook County	$ 101,428	$ 102,610
Affordable care insurance fee	952	913
Bank charges	10,726	11,058
Membership	670	1,610
Professional and consulting fees	36,075	34,176
Regulatory filing fees	8,000	8,000
Total	$ 157,851	$ 158,367
Professional and consulting fees		
Actuarial service	$ 2,586	$ 1,598
Audit	23,075	22,850
Consulting	4,361	4,722
Legal	5,014	4,049
Lobbyist	1,039	957
Total	$ 36,075	$ 34,176

Schedules of Investment Expenses

Years Ended December 31, 2021 and 2020		
	2021	2020
Investment manager expense		
Blackstone Alternative Asset Management	$ 235,688	$ 231,975
Channing Capital Management	45,039	37,180
Clarion Partners	6,097	—
Garcia Hamilton & Associates, L.P.	6,648	5,813
J.P. Morgan Asset Management	61,098	60,595
Lazard Asset Management, LLC	81,402	82,125
Mellon Capital	7,275	8,211
Prudential Real Estate Investors	57,682	54,592
RhumbLine Advisers	6,150	4,236
State Street Global Advisors	10,884	9,274
William Blair & Company	58,154	66,134
Total investment manager expenses	$ 576,117	$ 560,135
Investment consulting fees		
Callan LLC	10,304	9,317
Investment custodian fees		
BNY Mellon	9,000	9,000
Total investment expenses	$ 595,421	$ 578,452

Schedules of Additions by Source

Year Ended December 31,	Employer Contributions	Employee Contributions	Net Investment and Net Securities Lending Income (1)	Other (2)	Total Additions
2016	$ 3,391,381	$ 3,184,051	$ 10,477,792	$ 317,217	$ 17,370,441
2017	3,544,707	3,300,222	30,500,015	598,522	37,943,466
2018	4,087,391	3,127,980	(8,422,851)	946,166	(261,314)
2019	4,299,140	3,020,322	33,653,650	814,335	41,787,447
2020	3,952,140	3,192,954	21,851,955	1,093,578	30,090,627
2021	3,930,617	3,124,691	27,021,748	1,165,344	35,242,400

Schedules of Deductions by Source

Year Ended December 31,	Benefits	Refunds	Employee Transfers to (from) Cook County Fund	Administrative Expenses	Total Deductions
2016	$ 17,458,251	$ 740,586	$ 133,999	$ 157,577	$ 18,490,413
2017	18,002,969	554,417	54,257	163,275	18,774,918
2018	18,286,045	1,083,510	182,512	159,489	19,711,556
2019	19,251,286	840,125	252,406	154,352	20,498,169
2020	19,995,739	898,786	— [3]	158,367	21,052,889
2021	20,878,490	455,017	— [3]	157,851	21,491,355

[1] Includes realized and unrealized net gain or loss on investments and net securities lending income.

[2] Includes EQWP/Medicare Part D, prescription/repayment plan rebates and miscellaneous income.

[3] Employee transfers are added under "Other" in Schedule of Additions By Source above.

Schedules of Employer Contributions Receivable December 31, 2021

Contribution Year	Contributions Receivable	Uncollected Balance	Reserved	Net Contributions Receivable
2020	$ 4,066,374	$ 146,677	$ 84,456	$ 62,221
2021	3,926,419	3,926,419	117,793	3,808,626
		$ 4,073,096	$ 202,249	$ 3,870,847

Notes

Employer contributions are funded primarily through property taxes levied by the Forest Preserve District of Cook County, Illinois

INVESTMENT
Section

This section includes an Investment Report, Investment Consultant's Commentary, the Master Custodian's Certification, Summary of Investment Policy, asset allocation and historical investment returns, and summary tables of investment data.

June 1, 2022

To the Retirement Board and Fund Members:

As an institutional investor, the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("the Fund") employs a prudent investment strategy to meet its long-term actuarial objective of growing Fund assets to support member benefits. Together with Fund staff and the investment consultant, Callan LLC, the Retirement Board oversees the investment strategy through ongoing study of the portfolio structure, return assumptions, and projected funding needs to support member benefits.

In 2021, the Fund returned a very solid +12.85 % net return of investment fees continuing momentum from 2020, with investment income reaching almost $27 million. Invested assets increased from $224.6 million at the end of 2020 to $230.0 million at December 31, 2021. The two largest contributors to this performance came from the domestic equity asset class with a 25.8% return, followed by a real estate return of 20.4%.

The Fund's 2021 portfolio returns exceeded its policy benchmark and have generated positive returns on a 3, 5 and 10-year basis.

In the absence of a sustainable funding solution to ensure the Fund's viability, approximately $13.8 million of investments or investment earnings were liquidated in 2021 to help fund $20.4 million in benefit payments and administrative expenses for that period.

The Consultant's Commentary; Master Custodian's certification letter; Summary of the Fund's Investment Policy; and selected investment schedules follow for your review.

Sincerely,

Regina Tuczak

Regina Tuczak
Executive Director

Data provided to the Fund by its investment consultant form the basis of the information that is presented throughout the Investment Section. All portfolio rates of return are presented using time and asset-weighted returns. Returns are calculated net of investment manager fees, unless otherwise noted.

Callan

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June 1, 2022

Board of Trustees
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
70 W. Madison Street, Suite 1925
Chicago, IL 60602

Dear Trustees:

Callan LLC is pleased to present the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("Fund") investment results for fiscal year ended December 31, 2021. As of year-end, the Fund reported a fair value of approximately $230.0 million, an increase of approximately $5.4 million from December 31, 2020. This increase in value included approximately $13.8 million in net withdrawals.

The fourth quarter of 2021 closed out another remarkable year following the wild ride through the pandemic and the recovery, a cycle that began in earnest in February 2020. U.S. GDP notched an incredibly strong 6.9% quarterly gain (4Q over 4Q), which translates to annual growth of 5.7% over 2020. We have not seen such growth since the Ronald Reagan administration, following the consecutive recessions of 1980 and 1982 induced in part to wring double-digit inflation out of the economy. The U.S. economy added just shy of 6.5 million jobs over the year, which is the most on record, but we are still short of where we were pre-pandemic. The outlook is further clouded by uncertainty regarding the pace and degree of tighter fiscal and monetary policy, the path of inflation, lofty valuations across markets, and, of course, COVID. Annual CPI jumped to 7.0% in December — its eighth consecutive reading above 5% and the largest 12-month increase since the period ending June 1982.

The U.S. equity market continued to rise as the S&P 500 posted 70 record highs in 2021, and its nearly 29% jump marked the third consecutive year of double-digit gains (and the fifth in the past six years). Stock prices were bolstered by strong earnings as well as record-breaking share repurchases ($1 trillion). While revenues for companies in the S&P 500 grew roughly 17% in 2021, margins improved by 55% and the number of shares outstanding declined modestly. However, not all stocks enjoyed the same ride. Within the S&P 500 Index, the market capitalization weight of the top 10 stocks in the index reached a record 30.5%, and the P/E ratio of those stocks was 33.2 versus 21.2 for the broad index. Larger capitalization securities outperformed their smaller capitalization brethren for the year. Regarding style characteristics, the results were mixed as growth stocks outperformed value stocks in the large cap space, but for smaller capitalization issues, growth underperformed value securities.

Non-U.S. developed markets trailed the U.S. markets, but remained positive overall as measured by the MSCI ACWI ex-USA IMI Index which returned 8.5%. Developed markets were positive and outperformed emerging markets which were weighed down by China's lackluster performance thus resulting in a negative annual return for the MSCI Emerging Index (-2.5%). Rising inflation remained a focal point, intensified by tangled supply chains and demand vastly outpacing supply. The U.S. dollar rose against other major currencies as tapering accelerated alongside the expectation for 2022 rate hikes, which notably detracted from global ex-U.S. results.

Fixed Income experienced a challenging year in 2021 as the broad fixed income Bloomberg Aggregate Index posted an unusual negative result for the calendar year (-1.5%), for only the fourth time since the inception of the Index in 1976. In the fourth quarter, Fed Chairman Jerome Powell acknowledged that it might be time to retire the word "transitory" in describing inflationary pressures. The Fed later announced it would double the pace of its tapering plans and stop new purchases by March 2022. Lastly, the Fed expressed the view that it would begin raising interest rates earlier in 2022.

Following a year of havoc and disruption caused by the pandemic, commercial real estate returns (NCREIF ODCE Value-weighted Net) shot to a calendar year record of approximately 21% in 2021, well surpassing even the most optimistic expectations. The Industrial sector continued to be the strongest performer. Record performance was fueled by rebounding economic growth, marked improvement in real estate fundamentals of almost all property types, and the weight of capital propelling real estate valuations.

Hedge fund returns were mixed given changes in market dynamics throughout the year. Positions in growth vs. momentum and value vs. cyclical stocks fluctuated as rate hike forecasts and reopening expectations were constantly changing. The meme stock craze at the beginning of the year, driven by motivated retail investors, caused losses in some hedge fund mangers' short positions. Overall, hedge funds delivered as expected: trailing public equities in strong markets and outperforming fixed income.

The Fund's hedge fund investment outperformed its absolute return benchmark, yet did not keep pace with public equity markets throughout the year. Event driven and equity hedge strategies were the top performers while credit strategies, albeit positive, trailed.

Total Fund Fiscal Year End Performance (net of fees)

The Fund generated a total return of 12.85% net of manager fees for the year ended December 31, 2021 outperforming the 12.01% return of the Fund's Total Fund Benchmark (Policy Benchmark). In addition, the Fund ranked in the 41st percentile of its peer universe of funds. For the trailing three years, the Fund generated a 14.23% annualized return which was in line with the 14.21% Policy Benchmark return. The Fund posted a 10.70% annualized return versus the 10.54% return of the Policy Benchmark for the last five years. The Fund ranked above the median of a comparable gross of fee peer group for the last five years.

Asset Class Fiscal Year End Performance (net of fees)

The Domestic Equity composite portfolio posted a return of 25.77% for the year ended December 31, 2021, outperforming the Domestic Equity Benchmark, the Russell 3000 Index, return of 25.66%. For the three-year period, the domestic portfolio generated an annualized 24.95% return, yet trailed the 25.79% return of the benchmark. For the last five years, domestic equities added 17.30% per annum, yet trailed the strong benchmark return of 17.97%.

The International Equity composite portfolio posted a return of 7.68% for the one year period ending December 31, 2021, trailing the benchmark ACWI ex US Index return of 7.82%. The actively managed portion of the portfolio earned 7.55% in 2021, trailing the benchmark by 0.27%.

The fixed income composite portfolio posted a return of -1.25% for the one year period ending December 31, 2021. Albeit negative, the fixed income investments exceeded the -1.43% return of the custom fixed income benchmark. The real estate composite portfolio posted a 20.42% return versus the 21.02% return of the NFI-ODCE Index.

Lower risk-positioning led to approximate benchmark performance. Hedge Fund investments generated a 5.92% return versus the 4.16% of the Libor +4% target. The credit oriented approach generated a positive return in all four quarters of 2021.

Investment Manager Changes

The Clarion Lion Industrial Trust was added in 2021. All performance returns for the Fund presented in this report have been calculated by Callan LLC using a time-weighted rate of return calculation for accounts with daily pricing and a modified BAI calculation for accounts without daily pricing.

Sincerely,

John P. Jackson, CFA
Senior Vice President, Callan LLC

BNY MELLON

Declan Denehan
Managing Director
Government Banking

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June 1, 2022

To the Board of Trustees and the Executive Director of the Forest Preserve District Employees Annuity and Benefit Fund: BNY Mellon as custodian of the Forest Preserve District Employees Annuity And Benefit Fund (the "client") has established an "Account" that holds the clients property in safekeeping facilities of the Custodian (or other custodian banks or clearing operations), provided the recordkeeping of certain property of the client and completed the annual accounting certification for the year January 1, 2021 through December 31, 2021.

In addition, in accordance with the terms of the Custody Agreement dated, October 1, 2007, BNY Mellon also provides the following services as Custodian:

- Market settlement of purchases and sales and engage in other transactions, Including free receipts and deliveries, exchanges and other voluntary corporate actions, with respect to securities or property received by the Custodian.
- Take actions necessary to settle transactions in futures and/or options contracts, short selling programs, foreign exchange or foreign exchange contracts, swaps and other derivative investments with third parties.
- Lend the assets of the Account in accordance with a separate Securities Lending Agreement.
- Invest available cash in any collective fund, including a collective investment fund maintained by the Custodian or and affiliate of the Custodian for collective investment of employee benefit trusts or deposit in an interest bearing account of banking department of Custodian.
- Appoint subcustodians, including affiliates of the custodian, as to part or all of the Account.
- Hold property in nominee name, in bearer form or in book entry form, In a clearinghouse corporation or in a depository.
- Take all action necessary to pay for, and settle authorized transactions.
- Collect income payable to and distributions due to the Account.
- Collect all proceeds from securities, certificates of deposit or other investments which may mature or be called.
- Forward to the authorized party as designated by the client, proxies or ballots that are to be a voted by the authorized party.
- Attend to corporate actions that have no discretionary decision requirement.
- Report the value of the Account as agreed upon by the client and custodian.
- Credit the account with income and maturity proceeds on securities contractual payment date.

Sincerely,

Declan Denehan
Managing Director

Investment Authority

The Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("Fund") is a statutorily created public defined benefit plan. The Fund was established on July 31, 1931 and is governed by the Illinois Pension Code [40 ILCS 5] ("Code"). The Fund was designed to provide retirement, death and disability benefits for Forest Preserve District employees and their surviving spouses, children and certain other dependents.

Overview

Under the guidance and direction of the Board and governed by the "prudent man rule," it is the mission of the Fund and the Investment Staff to optimize the total return of the Fund's investment portfolio through a policy of diversified investments using parameters of prudent risk management as measured on the total portfolio, acting at all times in the exclusive interest of the participants and beneficiaries of the Fund. Investments made by the Fund shall satisfy the conditions of the Illinois Pension Code and applicable Illinois law and, in particular, the "prudent man" fiduciary standard set forth in section1-109 of the Code [40 ILCS 5/1-109].

Subject to these fiduciary standards, the Board of Trustees ("Board") and Investment Staff shall endeavor at all times to execute their responsibilities in a manner consistent with the stated mission of the Fund, while ensuring transparency and compliance with all applicable laws and regulations.

- Establish a clear understanding of all involved parties of the investment goals and objectives of the Fund
- Define and assign the responsibilities of all involved parties
- Establish the relevant investment horizon for which the Fund assets will be managed
- Establish risk parameters governing assets of the Fund
- Establish target asset allocation and re-balancing procedures
- Establish a methodology and criteria for selecting, retaining and terminating Investment Service Providers
- Offer specific guidance to and define limitations for all Investment Managers regarding the investment of Fund assets

In summary, the purpose of the Statement of Investment Policy is to formalize the Board's investment objectives, policies and procedures and to define the duties and responsibilities of the various entities involved in the investment process. The Statement of Investment Policy is intended to serve as a guide, reference tool and a communications link between the Board, Investment Staff and Investment Professionals.

Roles and Responsibilities

The Board is a fiduciary and has original and exclusive jurisdiction over all matters relating to the Fund, including benefits administration and the investment of the assets. As a fiduciary, the Board will discharge its duties in the sole interest of the participants and beneficiaries of the Fund.

Investment Committee

The Board has established an Investment Committee ("IC"), which is a committee of the whole. The IC reviews and makes recommendations of investment related policies to the Board for approval. The IC works with Investment Staff and Investment Consultant(s) to implement all Board approved investment policies, evaluate investment performance and comply with the IPS.

Investment Staff

The Executive Director ("ED") along with other staff are responsible for the implementation of investment strategy approved by the Board, making recommendations to the Board and Investment Committee as appropriate and for the coordination of all investment activities on behalf of the Fund.

Investment Consultant

The Board may hire Investment Consultant(s) to assist the Board, its Committees and Staff in developing and implementing a prudent process for establishing, monitoring and evaluating the Fund's investment policy.

Investment Managers

Manage assets in accordance with the guidelines and objectives and consistent with each investment manager's stated investment philosophy and style.

Objectives

The Fund's assets will be invested for the sole interests of the participants and beneficiaries of the Fund and in accordance with the following objectives:

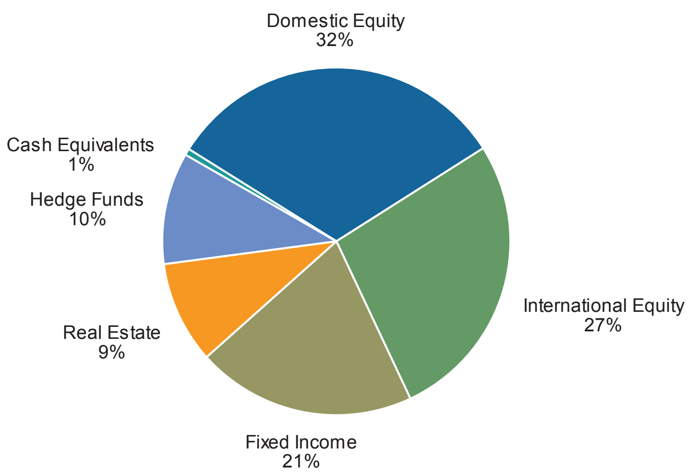
- Ensure that the current and future obligations of the Fund are met when due
- Ensure the assets of the Fund are invested with the care, skill, and diligence that a prudent person acting in a like capacity would undertake
- Ensure the assets of the Fund are invested in a manner that manages and controls the costs incurred in administering and managing the assets
- Diversify the investment of the assets to minimize the risk of large losses
- Attain the actuarial assumed annual rate of return over a long-term time horizon
- Exceed an asset policy weighted composite benchmark (Policy Target) over a market cycle (typically, 5 to 10 years)

In establishing the asset allocation policy, the Board takes into consideration the actuarial rate of return, the nature of the Fund's liabilities, the cash flow needs, the return and risk expectations for the capital markets, as well as any applicable legislation and statutes governing the Fund. The asset policy reflects the Board's return objectives at a prudent level of risk.

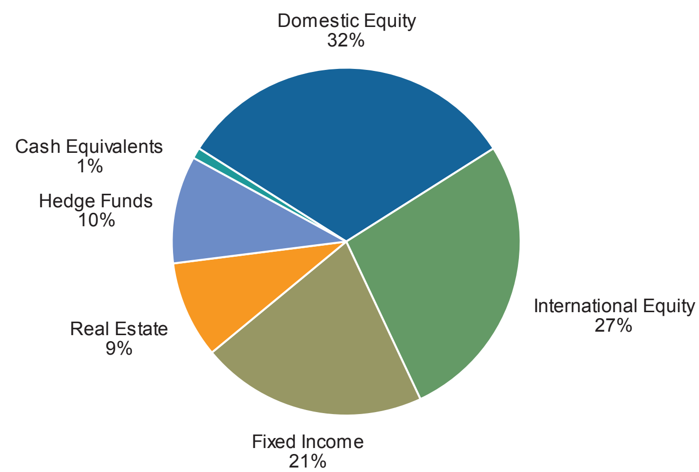
2021 Asset Allocation

As of December 31, 2021, compared to the target allocation, the Fund was allocated within its target ranges. The Fund's asset allocation at the end of 2021 is shown below.

Actual Asset Allocation



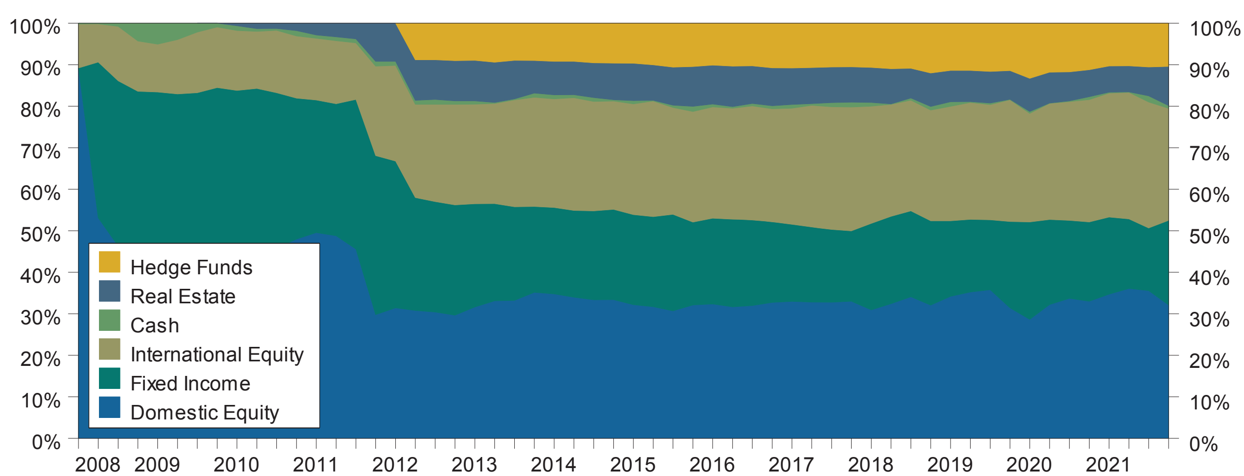
Target Asset Allocation



Historical Allocation by Asset Class

The chart below illustrates the historical asset allocation of the Fund.

Actual Historical Asset Allocation



Investment Results

Annual and Trailing Investment Returns (net of fees) – December 31, 2021. Below is a detailed analysis of the Fund's net of fee performance on a trailing and calendar year basis. Calculations are prepared utilizing a time weighted rate of return.

Historical Calendar Year Investment Returns (Net of Fees)

Asset Class	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Net of Fee Returns										
Domestic Equity	25.77%	19.05%	30.28%	-5.93%	21.04%	11.82%	1.76%	11.45%	34.92%	16.46%
Domestic Equity Benchmark (2)	25.66%	20.89%	31.02%	-5.24%	21.13%	13.03%	0.13%	11.73%	33.72%	16.38%
International Equity	7.68%	10.23%	22.38%	-11.50%	28.14%	1.16%	-0.57%	-0.10%	23.66%	23.76%
International Equity Benchmark (4)	7.82%	10.65%	21.51%	-14.20%	27.19%	4.50%	-5.66%	-3.87%	15.29%	16.83%
Fixed Income	-1.25%	6.44%	8.00%	-0.11%	3.38%	2.43%	0.75%	5.87%	-2.11%	4.42%
Fixed Income Benchmark (3)	-1.43%	7.09%	8.72%	0.01%	3.54%	2.65%	0.55%	5.97%	-2.02%	4.13%
Real Estate	20.42%	1.13%	6.89%	6.28%	5.92%	8.66%	3.64%	15.30%	6.53%	14.96%
NFI–ODCE Value Weight Net	21.02%	0.34%	4.39%	7.36%	6.66%	7.79%	3.95%	11.46%	12.90%	9.79%
Hedge Funds	5.92%	2.17%	5.90%	3.00%	7.14%	2.49%	3.51%	7.95%	10.44%	—
LIBOR + 4%	4.16%	4.64%	6.35%	6.35%	5.26%	4.75%	4.30%	4.23%	4.28%	4.47%
HFRI Fund of Funds Index	9.65%	8.68%	4.90%	-1.52%	7.74%	-0.79%	0.52%	4.34%	8.83%	2.98%
Cash Equivalents	0.05%	0.62%	2.74%	2.96%	1.26%	0.50%	0.03%	-0.18%	0.13%	0.16%
3-Month Treasury Bill	0.05%	0.67%	2.28%	1.87%	0.86%	0.33%	0.05%	0.03%	0.07%	0.11%
Total Fund	12.85%	11.38%	18.60%	-4.31%	16.58%	5.67%	1.37%	6.99%	17.40%	13.77%
Total Fund Benchmark (1)	12.01%	12.27%	18.47%	-4.17%	15.63%	7.65%	0.68%	5.74%	13.94%	11.64%

Investment results are calculated and presented using standard performance evaluation methods in a manner consistent with the investment industry in general and public pension funds in particular. Rates of return were determined using a modified time-weighted return calculation.

1. Total Fund Benchmark is as follows:

   2020 - 2021: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex-US Index, 18.9% Bloomberg Barclays Aggregate Index, 2.1% Blmbg Gov/Cred 1-3 Yr; 9.0% NFI-ODCE Value Weight Net, 10.0% (3 Month Libor+ 4.0%), and 1.0% 3-Month Treasury Bill

   2016 - 2019: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex-US Index, 21.0% Bloomberg Barclays Aggregate Index, 9.0% NFI-ODCE Value Weight Net, 10.0% (3 Month Libor+ 4.0%), and 1.0% 3-Month Treasury Bill.

   2013 - 2015: 21.0% S&P 500 Index, 9.0% Russell 2500 Index, 23.0% MSCI ACWI ex-US Index, 29.0% Bloomberg Barclays Aggregate Index, 9.0% NFI-ODCE Value Weight Net, 9.0% (3 Month Libor+ 4.0%).

   2012: 25.0% S&P 500 Index, 7.5% Russell 1000 Growth Index, 7.5% Russell 1000 Value Index, 5.0% Russell 2000 Value Index, 15.0% MSCI ACWI ex-US Index, 30.0% Bloomberg Barclays Aggregate Index, 10.0% Bloomberg Barclays Intermediate Gov/Cred Index.

2. Domestic Equity Benchmark:

   2016 - 2021: Russell 3000.

   2013-2015: 70% S&P 500, 30% Russell 2500.

   2012: 55.5% S&P 500, 11.1% Russell 2000 Value, 16.7% Russell 1000 Growth, and 16.7% Russell 1000 Value.

3. Fixed Income Benchmark:

   2020 - 2021: 90.0% Bloomberg Barclays Aggregate Index, 10.0% Blmbg Gov/Cred 1-3 Yr;

   2013 - 2019: Bloomberg Barclays Aggregate.

   2012: 75% Bloomberg Barclays Aggregate Index, 25% Bloomberg Barclays Gov/Credit Intermediate Index.

4. International Equity Benchmark:

   2012 - 2021: MSCI ACWI ex US Index.

Current Year and Annualized Returns

Asset Class	For the Year Ended December 31, 2021	Annualized Returns 3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Net of Fee Returns				
Domestic Equity	**25.77%**	**24.95%**	**17.30%**	**16.04%**
Domestic Equity Benchmark (2)	25.66%	25.79%	17.97%	16.22%
International Equity	**7.68%**	**13.25%**	**10.50%**	**9.74%**
International Equity Benchmark (4)	7.82%	13.18%	9.61%	7.28%
Fixed Income	**-1.25%**	**4.32%**	**3.23%**	**2.73%**
Fixed Income Benchmark (3)	-1.43%	4.69%	3.51%	2.86%
Real Estate	**20.42%**	**9.19%**	**7.94%**	**8.83%**
NFI–ODCE Value Weight Net	21.02%	8.23%	7.74%	9.43%
Hedge Funds	**5.92%**	**4.65%**	**4.81%**	**—**
LIBOR + 4%	4.16%	5.05%	5.35%	4.88%
HFRI Fund of Funds	9.65%	7.71%	5.81%	4.46%
Cash Equivalents	0.05%	1.13%	1.52%	0.82%
3–Month Treasury Bill	0.05%	0.99%	1.14%	0.63%
Total Fund	**12.85%**	**14.23%**	**10.70%**	**9.79%**
Total Fund Benchmark (1)	12.01%	14.21%	10.54%	9.18%

Investment results are calculated and presented using standard performance evaluation methods in a manner consistent with the investment industry in general and public pension funds in particular. Rates of return were determined using a modified time-weighted return calculation.

1. Total Fund Benchmark is as follows:

   2020 – 2021: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex-US Index, 18.9% Bloomberg Barclays Aggregate Index, 2.1% Blmbg Gov/Cred 1-3 Yr; 9.0% NFI-ODCE Value Weight Net, 10.0% (3 Month Libor+ 4.0%), and 1.0% 3-Month Treasury Bill

   2016 – 2019: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex-US Index, 21.0% Bloomberg Barclays Aggregate Index, 9.0% NFI-ODCE Value Weight Net, 10.0% (3 Month Libor+ 4.0%), and 1.0% 3-Month Treasury Bill.

   2013 – 2015: 21.0% S&P 500 Index, 9.0% Russell 2500 Index, 23.0% MSCI ACWI ex-US Index, 29.0% Bloomberg Barclays Aggregate Index, 9.0% NFI-ODCE Value Weight Net, 9.0% (3 Month Libor+ 4.0%).

   2012: 25.0% S&P 500 Index, 7.5% Russell 1000 Growth Index, 7.5% Russell 1000 Value Index, 5.0% Russell 2000 Value Index, 15.0% MSCI ACWI ex-US Index, 30.0% Bloomberg Barclays Aggregate Index, 10.0% Bloomberg Barclays Intermediate Gov/Cred Index.

2. Domestic Equity Benchmark:

   2016 – 2021: Russell 3000.

   2013 – 2015: 70% S&P 500, 30% Russell 2500.

   2012: 55.5% S&P 500, 11.1% Russell 2000 Value, 16.7% Russell 1000 Growth, and 16.7% Russell 1000 Value.

3. Fixed Income Benchmark:

   2020 – 2021: 90.0% Bloomberg Barclays Aggregate Index, 10.0% Blmbg Gov/Cred 1-3 Yr;

   2013 – 2019: Bloomberg Barclays Aggregate.

   2012: 75% Bloomberg Barclays Aggregate Index, 25% Bloomberg Barclays Gov/Credit Intermediate Index.

4. International Equity Benchmark

   2012 – 2021: MSCI ACWI ex US Index.

Schedule of Investment Summary and Asset Allocation

	For Year Ended December 31, 2021			For Year Ended December 31, 2020		
Asset Class	Fair Value	Percent of Total	Target	Fair Value	Percent of Total	Target
Domestic Equity	$ 77,359,060	34%	32%	$ 74,599,519	33%	32%
International Equity	55,887,901	24%	27%	58,552,386	26%	27%
Fixed Income	46,084,394	20%	21%	40,867,014	18%	21%
Real Estate	21,716,538	9%	9%	14,057,489	6%	9%
Hedge Funds of Funds	23,877,689	10%	10%	22,543,485	10%	10%
Short-term investments	5,097,175	3%	1%	14,013,569	7%	1%
Total Investments	$ 230,022,757	100%	100%	$ 224,633,462	100%	100%

Schedule of Top Ten Largest Holdings (Excludes Commingled Funds)

For year ended December 31, 2021

Top 10 Domestic Equity Holdings	Sector	Shares	Fair Value	% of Total
Apple Inc.	Technology	22,688	$ 4,028,708	5.2%
Microsoft Corp.	Technology	10,971	3,689,767	4.8%
Alphabet Inc.	Communication	876	2,536,348	3.3%
Amazon.com Inc.	Consumer Discretionary	639	2,130,643	2.8%
Accenture PLC	Technology	3,930	1,629,182	2.1%
Aon PLC	Financial Services	5,230	1,571,929	2.0%
Tesla Inc.	Automotive	1,183	1,250,171	1.6%
Meta Platforms Inc	Communication	3,604	1,212,205	1.6%
Nvidia Corp.	Semiconductors	3,638	1,069,972	1.4%
Medtronic PLC	Pharmaceuticals	9,992	1,033,672	1.3%
Total Top 10 Domestic Equity Holdings		62,751	$ 20,152,597	26.1%
Total Domestic Equity			$ 77,359,060	100.0%

Top 10 International Equity Holdings	Sector	Shares	Fair Value	% of Total
Relx PLC (United Kingdom)	Publishing	42,808	$ 1,392,711	2.5%
National Bank of Canada (Canada)	Healthcare	14,403	1,099,652	2.0%
Sanofi (France)	Pharmaceuticals	10,637	1,071,499	1.9%
CAE Inc.(Canada)	Aircraft	40,352	1,019,382	1.8%
ABB LTD. (Switzerland)	Electronics	25,586	980,027	1.8%
Toromont Industries LTD. (Canada)	Machinery	10,814	979,052	1.8%
Continental AG (Germany)	Automotive	8,857	937,821	1.7%
CRH PLC (Ireland)	Building Materials	16,917	894,952	1.6%
Coca-Cola European Partners PLC (United Kingdom)	Beverage	15,209	848,872	1.5%
Israel Discount Bank LTD (Israel)	Banks	121,463	817,194	1.5%
Total Top 10 International Equity Holdings		307,046	$ 10,041,162	18.0%
Total International Equity			$ 55,887,901	100.0%

Top 10 Fixed Income Holdings	Sector	Par	Fair Value	% of Total
U.S Treasury Note 1.750% 06/30/2024	US Government	3,705,000	$3,786,473	8.2%
U.S Treasury Note Var Rt 07/31/2023	US Government	2,390,000	2,390,359	5.2%
U.S Treasury Note Var Rt 10/31/2023	US Government	2,380,000	2,380,452	5.2%
U.S Treasury Note Var Rt 04/30/2023	US Government	2,330,000	2,330,093	5.1%
U.S Treasury Note 1.875% 07/31/2026	US Government	830,000	853,995	1.9%
Citi Group Inc Var Rt 10/27/2022	Banking and Finance	545,000	547,229	1.2%
Morgan Stanley Var Rt 01/20/2023	Banking and Finance	545,000	545,087	1.2%
Manufacturers & Trades Trust Var Rt 05/18/2022	Banking and Finance	540,000	541,085	1.2%
Comercia Inc. Var Rt 3.7000% 07/31/2023	Banking and Finance	440,000	457,921	1.0%
Bank of New York Mellon Var/ Rt 10/30/2023	Banking and Finance	375,000	377,768	0.8%
Total Top 10 Fixed Income Holdings		14,080,000	$14,210,462	30.8%
Total Fixed Income			$46,084,394	100.0%

A complete list of the portfolio holdings is available for review upon request

Schedule of Investment Manager Fees and Assets Under Management

For year ended December 31, 2021

Asset Category	Investment Manager Fees	Assets Under Management
U.S. and International Equity		
Channing Capital Management	$ 45,039	$ 7,407,522
Lazard Asset Management, LLC	81,402	41,380,838
RhumbLine Advisers	6,150	58,733,667
State Street Global Advisors	10,884	20,400,148
William Blair & Company	58,154	7,610,927
Total U.S and International Equity	$ 201,629	$ 135,533,102
Fixed Income		
Garcia Hamilton & Associates, L.P.	$ 6,648	$ 16,223,460
Mellon Capital (Commingled)	7,275	31,201,244
Total Fixed Income	$ 13,923	$ 47,424,704
Real Estate		
Clarion Partners	$ 6,097	2,246,848
J.P. Morgan Asset Management	61,098	8,477,254
Prudential Real Estate Investors	57,682	10,992,436
Total Real Estate	$ 124,877	$ 21,716,538
Hedge Funds of Funds		
Blackstone Alternative Asset Management	$ 235,688	$ 23,877,689
Total Hedge Funds	$ 235,688	$ 23,877,689
Short-Term Investments		
BNY Mellon *	$ —	$ 1,470,724
Total	$ 576,117	$ 230,022,757

* Investments are held in commingled funds and/or publicly traded funds, and related investment returns are net of fees.

Schedule of Brokerage Commissions

For Year Ended December 31, 2021

Broker Name	Number of Shares	Commissions	Cost per Share
Domestic Equity Commissions			
Siebert Williams Shank *	134,003	$ 2,052	$ 0.015
Loop Capital Markets, LLC*	40,561	821	0.020
J.P. Morgan Securities	15,713	554	0.035
Instinet Clearing Service, Inc.	31,848	485	0.015
Penserra Securities*	44,503	462	0.010
Cabrera Capital Markets*	16,705	383	0.023
Baird, Robert W & Co.	14,182	361	0.025
William O'Neil Y Co Inc.	8,493	255	0.030
National Financial Services Corp.	7,104	213	0.030
Raymond James & Associates, Inc.	7,858	195	0.025
Piper Jaffray & Co.	6,631	185	0.028
Jefferies, LLC	7,141	177	0.025
CJS Securities Inc.	5,397	162	0.030
Liquident, Inc.	15,071	160	0.011
Stiffel Nicolaus	5,992	150	0.025
Goldman Sachs & Co.	5,596	149	0.027
Cornerstone Macro LLC	8,145	129	0.016
Seaport Group Securities, LLC	4,250	128	0.030
Wells Fargo Securities, LLC	4,498	112	0.025
Keefe Bruyette & Woods, Inc.	4,501	112	0.025
Luminex Trading and Analytics	7,351	104	0.014
Brokers with < $100 of Commission	38,959	849	0.022
Total Domestic Equity Commissions	434,502	$ 8,198	$ 0.019

*Women/minority-owned brokerage firm. The Retirement Board's brokerage policy encourages investment manager, as they search for best possible trade execution, to utilize women/minority-owned enterprises, specifically firms headquartered in the State of Illinois.

Schedule of Brokerage Commissions (continued)

Broker Name	Number of Shares	Commissions	Cost per Share
International Equity Commissions			
Loop Capital Markets, LLC*	91,875	$ 1,578	$ 0.017
Credit Suisse	45,587	1,354	0.030
Morgan Stanley & Co.	68,877	1,077	0.016
UBS Warburg	181,099	641	0.004
Barclays Capital	61,057	637	0.010
Citigroup Global Markets, Inc.	129,463	629	0.005
Merrill Lynch Securities	118,675	428	0.004
BNY Convergex Execution	11,186	413	0.037
Liquidnet Europe Limited	40,163	370	0.009
Exane	20,389	330	0.016
Daiwa Securities Inc.	7,800	320	0.041
Credit Lyonnas Securities	144,400	312	0.002
Investment Technology Group LTD	19,754	288	0.015
Instinet Europe Limited	11,837	233	0.020
Goldman Sachs & Co.	25,026	224	0.009
Merrill Lynch Securities	4,000	203	0.051
Brokers with < $200 of Commission	143,191	2,097	0.015
Total International Equity Commissions	1,124,379	$ 11,134	$ 0.010

*Women/minority-owned brokerage firm. The Retirement Board's brokerage policy encourages investment manager, as they search for best possible trade execution, to utilize women/minority-owned enterprises, specifically firms headquartered in the State of Illinois.

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ACTUARIAL
Section

This section includes the actuarial reports and summarizes actuarial liability and unfunded actuarial liability. Schedules of data summarizing information about members and beneficiaries, actuarial assumptions, principal provisions, and a glossary of terms are also included.

June 2, 2022

Board of Trustees
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
Chicago, Illinois

RE: December 31, 2021 Actuarial Valuation

Ladies and Gentlemen:

In accordance with your request, we have completed an actuarial valuation of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("FPEABF" or "the Fund") as of December 31, 2021. The major findings of the valuation are contained in this report.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the FPEABF's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information provided in prior years. The valuation results depend on the integrity of this information. The benefits considered are those delineated in the Fund. The FPEABF was established on July 1, 1931 and is governed by legislation contained in the Illinois Compiled statutes, particularly Chapter 40, as amended and restated effective December 31, 2021. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

Cavanaugh Macdonald performs the actuarial valuation annually. All exhibits, except Exhibit 2.1 and 2.2 were prepared by the actuary.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the FPEABF's funded status); and changes in fund provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We note that as we are preparing this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions prior to the next experience study.

The FPEABF is funded by Employer and Member Contributions. The Forest Preserve levies a tax annually equal to the total amount of contributions made by the members in the calendar year 2 years prior to the year of the levy, multiplied by 1.30. This funding mechanism is insufficient to meet the needs of the FPEABF. We project that the FPEABF will become insolvent in 2043.

We recommend that a funding policy be legislated that is sufficient to pay the Normal Costs of active Fund members, Fund expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percent of payroll (or salary) over a period no longer than 30 years.

The economic and demographic assumptions used in the valuation were adopted by the Board and first reflected in the December 31, 2021 valuation. The Board's recent practice is to review the experience of the FPEABF every four years to determine if any changes to the valuation assumptions are warranted. The assumptions used in the valuation meet the parameters set by the Actuarial Standards of Practice and are based on recommendations made and approved by the Board as part of an Experience Study covering plan years from January 1, 2017 through December 31, 2020. We recommend performing an Experience Study covering plan years from January 1, 2021 through December 31, 2024 to compare economic and demographic experience against the actuarial assumptions used in the valuation. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown beginning on page 102.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the Fund based on the Board's funding policy report and all supporting schedules to meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statement No. 67 and No. 68. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Fund's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

We have prepared required accounting information for GASB Statement Nos. 67 and 68 for the measurement year ending December 31, 2021, based on valuation dates of December 31, 2020 and December 31, 2021.

The actuary prepared, or assisted in preparing, the following supporting information for the actuarial valuation:

- Comparative Summary of Principal Actuarial Valuation Results
- Actuarial Liabilities and Normal Cost
- Actuarial Contributions
- Calculation of Actuarial (Gain)/Loss
- Analysis of Experience
- Actuarial Balance Sheet
- History of UAAL and Funded Ratio
- Solvency Test
- Reconciliation of Change in Unfunded Actuarial Liability
- Determination of Actuarial Value of Assets
- GASB 67 Schedule of Changes in Net Pension Liability
- GASB 67 Net Pension Liability (Asset)
- GASB 67 Sensitivity of Net Pension Liability
- GASB 67 and 68 Actuarial Assumptions and Methods
- Membership Data
- Summary of Benefit Provisions
- Description of Actuarial Methods and Valuation Procedures
  - Actuarial Cost Method
  - Asset Valuation Method
  - Valuation Procedures
- Summary of Actuarial Assumptions

The actuaries who worked on this assignment are pension actuaries. CMC's advice is not intended to be a substitute for qualified legal or accounting counsel.

This is to certify that Larry Langer and Wendy Ludbrook are members of the American Academy of Actuaries, have experience in performing valuations for public retirement funds, and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board and the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement fund and on actuarial assumptions that are internally consistent and reasonable based on the actual experience of the Fund and future expectations. However, the Board of Trustees has the final decision regarding the selection of the assumptions and adopted them as indicated beginning on page 103.

Respectfully submitted,

Wendy Ludbrook

Larry Langer, ASA, EA, FCA, MAAA
Principal and Consulting Actuary

Wendy T. Ludbrook, FSA, EA, FCA, MAAA
Consulting Actuary

Ryan Gundersen

Ryan Gundersen, Senior Consultant

Overview

The Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("FPEABF" or "the Fund") provides pension and ancillary benefit payments to the active, retired and separated employees of the Forest Preserve District. A Retirement Board comprised of retiree, employee, and appointed representatives is responsible for administering the Fund and providing oversight of the investment policy. This report presents the results of the actuarial valuation of the Fund benefits as of the valuation date of December 31, 2021.

Purpose

An actuarial valuation is performed on the Fund annually as of the end of the fiscal year. The primary purposes of performing the valuation are:

- to estimate the liabilities for the future benefits expected to be provided by the Fund;
- to determine the actuarial contribution rate, based on the Fund's funding policy;
- to measure and disclose various asset and liability measures;
- to monitor any deviation between actual Fund experience and experience predicted by the actuarial assumptions so that recommendations for assumption changes can be made when appropriate;
- to analyze and report on any significant trends in contributions, assets and liabilities over the past several years.

Membership

Actives: As of December 31, 2021, there were 516 employees in active service (including 3 on disability) covered under the provisions of the Fund. The significant age, service, salary and accumulated contribution information for these employees is summarized below, along with comparative figures from the last actuarial valuation one year earlier.

	December 31, 2021	December 31, 2020
Number of active employees	516	521
Average age	46.0	46.3
Average years of service	9.6	9.6
Total annual payroll for year ended	$ 35,059,352	$ 35,159,979
Average annual salary	67,944	67,486
Total accumulated contributions	$ 31,192,109	$ 30,603,829
Average accumulated contributions	60,450	58,741

The number of active members decreased by 1.0% from the previous valuation date. The average age of the active members decreased by 0.3 years, and the average service remained the same. The total annual salary decreased by 0.3%. The average salary increased by 0.7% from the previous valuation.

Disabilities: There were 3 disabled members (included in the active data). There were 2 disabilities in the prior year.

Retirees and Beneficiaries: In addition to the active members, there were 382 retired members and 154 beneficiaries who are receiving monthly benefit payments on the valuation date. The significant age and annual benefit information for these members are summarzed below with comparative figures from the last actuarial valuation performed one year earlier.

	December 31, 2021	December 31, 2020
Number of members receiving payments		
Retirees	382	391
Beneficiaries	154	147
Total	536	538
Average age	73.0	72.7
Annual benefit amounts		
Retirees	$ 15,791,382	$ 15,525,311
Beneficiaries	3,300,431	3,028,489
Total	$ 19,091,813	$ 18,553,800
Average annual benefit payments	$ 35,619	$ 34,487

The number of retired members and beneficiaries decreased by 0.4% from the previous valuation date. The average age of the retired members increased by 0.3 years. The total annual benefit payments for these members increased by 2.9% from the previous valuation date.

Inactives: In addition to the active and retired members, there were 1,521 inactive members who did not elect to receive their accumulated contributions when they left covered employment. The age information for these inactive members is summarized below with comparative figures from the last actuarial valuation one year earlier.

	December 31, 2021	December 31, 2020
Number of inactive members	1,521	1,468
Average age	44.7	44.2

The number of inactive members increased by 3.6% from the previous valuation. The average age of the inactive members increased by 0.5 years.

In our opinion, the membership data collected and prepared for use in this actuarial valuation meets the data quality standards required under Actuarial Standards of Practice No. 23.

Fund Assets

The Fund's assets are held in trust and invested for the exclusive benefit of Fund members. The trust is funded by member and employer contributions, and pays benefits directly to eligible members in accordance with Fund provisions. The assets are audited annually and are reported at fair value. On a fair value basis, the Fund has a Net Position Available for Benefits of $235.2 million as of December 31, 2021. This includes an increase of $13.8 million from the Net Position Available for Benefits of $221.4 million as of December 31, 2020. During the prior year, the fair value of assets experienced an investment rate of return of 12.9% (net of investment expenses), as reported by the investment consultant.

In order to reduce the volatility investment gains and losses can have on the Fund's actuarially required contribution and funded status, the Board has adopted a five-year smoothing method to determine the actuarial value of assets used for funding purposes. This method recognizes gains and losses, i.e. the difference between actual investment return during the year and the expected return based on the valuation interest rate, on a level basis over a five year period. In our opinion, this method complies with Actuarial Standards of Practice No. 44.

As of December 31, 2021, the assets available for benefits on an actuarial value basis were $218.4 million. This includes an increase of $8.7 million over the actuarial value of assets of $209.7 million as of December 31, 2020. During 2021, the actuarial value of assets experienced an actuarial rate of return of 10.8% which is based on a five-year averaging of investment returns.

A summary of the assets held for investment, a summary of changes in assets, and the development of the actuarial value of assets is shown on page 90.

Actuarial Experience

Differences between the expected experience based on the actuarial assumptions and the actual experience create changes in the actuarial accrued liability, actuarial value of assets, and the unfunded actuarial accrued liability from one year to the next. These changes create an actuarial gain if the experience is favorable and an actuarial loss if the experience is unfavorable. The Fund experienced a total net actuarial gain of $10.6 million during the prior year. This net gain is about 3.2% of the Fund's prior year actuarial accrued liability. The net gain is a combination of two principal factors, a gain due to favorable demographic experience and a gain due to favorable investment performance under actuarial smoothing. Below is a more detailed discussion.

The demographic experience tracks actual changes in the Fund's population compared to the assumptions for decrements such as mortality, turnover, and retirement, as well as pay increases. The Fund experienced a demographic gain of $3.3 million during the year ending December 31, 2021. This gain decreased the unfunded actuarial accrued liability by $3.3 million and increased the funded ratio by 0.6%.

There were 439 active members who were also reported active in the December 31, 2020 actuarial valuation. The total pensionable salary for this group increased by 2.2%, which was lower than the 4.2% increase that was expected.

Actuarial Experience (continued)

Continued tracking of the demographic experience is warranted in order to confirm the appropriateness of the actuarial assumptions. Details of the demographic, economic, and other assumptions used to value the Fund liabilities and normal cost can be found on page 85. In our opinion, the economic assumptions comply with Actuarial Standards of Practice No. 27 and the demographic assumptions comply with Actuarial Standards of Practice No. 35.

On the asset side, the rate of return on the fair value of assets for the year ending December 31, 2021 was reported to be 12.9%, which was higher than the assumed rate of 7.25%.

The Fund experienced a gain on an actuarial value of assets basis. The rate of return on the actuarial value of Fund assets for the year ending December 31, 2021 was approximately 10.8% compared to the assumption of 7.25%, resulting in an asset gain of $7.2 million. This gain decreased the unfunded actuarial accrued liability by $7.2 million and increased the funded ratio by 2.1%.

The rate of return on the fair value of assets for the year ending December 31, 2021 was higher than the assumed rate of 7.25%. The actuarial value of the assets recognizes only 20% of the 2021 unexpected change in fair value, delaying the recognition of the remaining 80% over the next four years. Moreover, the actuarial value of assets also recognizes deferred portions of prior years' gains and losses on fair value. The investment gain recognized this year is primarily due to the investment gains in 2021, 2020 and 2019. It should be noted that the Fund's assumed asset return of 7.25% during 2021 is a long-term rate and short-term performance is not necessarily indicative of expected long-term future returns.

A summary of the actuarial gains and losses experienced during the prior year is shown on page 87.

Actuarial Contributions

The current contribution mechanism is not sufficient to fund the FPEABF in an actuarially sound manner. The Forest Preserve levies a tax annually equal to the total amount of contributions made by the members in the calendar year 2 years prior to the year of the levy, multiplied by 1.30. This funding policy is insufficient to meet the needs of the FPEABF. We project that the FPEABF will become insolvent in 2043. We recommend that a funding policy be legislated that is sufficient to pay the Normal Costs of active Fund members, Fund expenses, and amortize the unfunded actuarial accrued liability as a level percent of payroll (or salary) over a period no longer than 30 years. We summarize those costs based on 30 years in the next paragraph.

The normal cost represents the cost of the benefits that accrue during the year for active members under the Entry Age Actuarial Cost Method. It is determined as a level percentage of pay which, if paid from entry age to the assumed retirement age, assuming all the actuarial assumptions are exactly met by experience, would accumulate to a fund sufficient to pay all benefits provided by the Fund. The expected member contributions are subtracted from this amount to determine the employer normal cost. The employer normal cost for 2022 has been determined to be $1.6 million, or 4.28% of pay. This represents a decrease in the employer normal cost rate of 0.51% of pay from last year's employer normal cost rate of 4.79%.

Actuarial Contributions (continued)

The cost method also determines the actuarial accrued liability which represents the value of all accumulated past normal cost payments. This amount is compared to the actuarial value of assets to determine if the Fund is ahead or behind in funding as of the valuation date. The difference between the total actuarial accrued liability and the actuarial value of assets equals the amount of unfunded actuarial accrued liability or surplus (if negative) on the valuation date. This amount is amortized and added to the employer normal cost plus Fund expenses to determine the annual actuarially required employer contribution for the year.

The unfunded actuarial accrued liability as of December 31, 2021 is $126.0 million. This represents an increase of $4.6 million in the unfunded actuarial accrued liability from last year's amount of $121.4 million. The annual payment required to amortize the unfunded actuarial accrued liability of $126.0 million, over a period of 30 years, as of December 31, 2021 is $9.8 million, or 27.0% of pay.

The annual actuarially required employer contribution for fiscal year ending December 31, 2023 is $11.37 million, or 31.3% of pay. This represents a decrease of $0.03 million in the employer contribution amount of $11.40 million for fiscal year ending December 31, 2022, or an decrease of 0.7% of pay from last year's employer contribution rate of 32.0%.

The actuarial liabilities and development of the annual actuarial employer contribution is shown beginning on page 85.

In our opinion, the measurement of the benefit obligations and determination of the actuarial cost of the Fund is performed in compliance with Actuarial Standards of Practice No. 4.

Funded Status

The funded status is a measure of the progress that has been made in funding the Fund as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a Fund that is ahead in funding, and a ratio of less than 100% represents a Fund that is behind in funding on the valuation date.

As of December 31, 2021 the funded ratio of the Fund is 63.42%. This represents an increase of 0.09% from last year's funded ratio of 63.33% as of December 31, 2020.

Where presented, references to "funded ratio" and "unfunded accrued liability" are typically measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded ratios and unfunded accrued liabilities. Moreover, the funded ratio presented is appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the Fund if the plan were to settle (i.e. purchase annuities) for a portion or all of its liabilities.

A history of the unfunded actuarial accrued liability and the funded ratio is shown on page 88.

Accounting Information

The Governmental Accounting Standards Board (GASB) issues statements which establish financial reporting standards for defined benefit pension Funds and accounting for the pension expenditures and expenses for governmental employers. The required financial reporting information for the Fund and the Employer under GASB No. 67 and 68 can be found beginning on page 94.

Changes in Fund Provisions

There were no changes in benefits or other Fund provisions considered in this actuarial valuation since the last valuation performed as of December 31, 2020.

Changes in Actuarial Assumptions, Methods, or Procedures

The assumptions used in this valuation were developed as part of an Experience Study covering plan years from January 1, 2017 through December 31, 2020 and first used in the December 31, 2021 actuarial valuation. A description of these assumptions can be found beginning on page 103.
The changes include:

- The investment return assumption was lowered from 7.25% to 7.00%
- The inflation assumption was lowered from 2.75% to 2.50%
- The real wage growth assumption was decreased from 0.75% to 0.50%
- The general wage inflation assumption was lowered from 3.50% to 3.00%
- The withdrawal rates, retirement rates, mortality and annual rate of salary increase assumptions were changed
- The marriage assumption was changed from assuming spouses of female employees were four years older than female employees to assume that spouses of female employees are two years older than female employees.
- The marital status assumption for female members was lowered from 70% assumed to be married to 40% assumed to be married.
- The assumed retirement age for Tier 1 deferred vested members was increased from 55 to 62.
- The assumed annual increase in administrative expense was lowered from 5.00% to 2.50%.

The impact of these assumption changes was to increase the Actuarial Accrued Liabilty by $7.7 million.

All results presented in this report for years prior to December 31, 2018 were performed by the prior actuary(s).

Comparative Summary of Key Actuarial Valuation Results

Actuarial Valuation as of	December 31, 2021	December 31, 2020
Summary of Member Data		
Number of Members Included in the Valuation:		
Active Members	516	521
Retirees and Beneficiaries	536	538
Inactive Members	1,521	1,468
Total	2,573	2,527
Annual Payroll		
Average	$ 67,944	$ 67,486
Annual Benefit Payments		
Retirees and Beneficiaries (Average) [1]	$ 35,619	$ 34,487
Investment Returns		
Fair Value Rate of Return (net of investment expenses)[2]	12.85%	11.38%
Actuarial Value Rate of Return	10.82%	9.28%
Summary of Assets and Liabilities		
Total Actuarial Accrued Liability	$ 344,389,208	$ 331,146,777
Actuarial Value of Assets	218,414,061	209,707,146
Unfunded Actuarial Accrued Liability	$ 125,975,147	$ 121,439,631
Funded Ratio	63.42%	63.33%

Fiscal Year Ending	December 31, 2023	December 31, 2022
Employer Actuarial Required Contribution		
Employer Normal Cost	$ 1,553,221	$ 1,706,826
Amortization of Unfunded Actuarial Accrued Liability (Surplus)	9,814,197	9,688,242
Employer Actuarial Required Contribution	$ 11,367,418	$ 11,395,068

1 The average annual benefit payments for retirees only is $41,339 as of December 31, 2021 and $39,707 as of December 31, 2020.

2 Rate of return provided by the CCPF.

Actuarial Liabilities and Normal Cost

Actuarial Liabilities	Tier 1	Tier 2	Total	December 31, 2020 Total
1. Present Value of Projected Benefits				
a. Retirement Benefits	$ 104,040,928	$ 15,439,315	$119,480,243	$ 122,577,163
b. Withdrawal Benefits	3,409,217	7,124,793	10,534,010	9,129,082
c. Death Benefits	1,083,315	376,758	1,460,073	2,103,447
Total	**$ 108,533,460**	**$ 22,940,866**	**$ 131,474,326**	**$ 133,809,692**
2. Retired Members and Beneficiaries Receiving Benefits	225,330,728	—	225,330,728	209,018,919
3. Inactive Members with Deferred Benefits	19,070,865	1,044,438	20,115,303	23,123,641
4. Total Present Value of Projected Benefits (1. + 2. + 3.)	**$ 352,935,053**	**$ 23,985,304**	**$ 376,920,357**	**$ 365,952,252**
5. Present Value of Future Normal Costs	20,743,645	11,787,504	32,531,149	34,805,475
6. Total Actuarial Accrued Liability	**$ 332,191,408**	**$ 12,197,800**	**$ 344,389,208**	**$ 331,146,777**
a. Active Members	87,789,815	11,153,362	98,943,177	99,004,217
b. Retired Members and Beneficiaries Receiving Benefits	225,330,728	—	225,330,728	209,018,919
c. Inactive Members with Deferred Benefits	19,070,865	1,044,438	20,115,303	23,123,641

Normal Cost as of December 31, 2021	Tier 1		Tier 2		Total		December 31, 2020 Total	
Projected Capped Payroll for Fiscal Year 2022	**$ 19,027,699**		**$ 17,290,904**		**$ 36,318,603**		**$ 35,619,556**	
1.Total Normal Cost	**Amount**	**% of Pay**	**Amount**	**% of Pay**	**Amount**	**% of Pay**	**Amount**	**% of Pay**
a. Retirement Benefits	$ 2,614,089	13.74%	$ 1,074,003	6.21%	$ 3,688,092	10.15%	$ 3,900,740	10.95%
b. Withdrawal Benefits	241,787	1.27%	411,332	2.38%	653,119	1.80%	487,375	1.37%
c. Duty Disability Benefits	—	0.00%	—	0.00%	—	0.00%	—	0.00%
d. Ordinary Disability Benefits	68,848	0.36%	—	0.00%	68,848	0.19%	79,804	0.22%
e. Death Benefits	42,354	0.22%	26,092	0.15%	68,446	0.19%	100,284	0.28%
f. Administrative Expenses	84,767	0.45%	77,030	0.45%	161,797	0.45%	166,285	0.47%
Total	**$ 3,051,845**	**16.04%**	**$ 1,588,457**	**9.19%**	**$ 4,640,302**	**12.78%**	**$ 4,734,488**	**13.29%**
2. Expected Member Contributions	**$ 1,617,354**	**8.50%**	**$ 1,469,727**	**8.50%**	**$ 3,087,081**	**8.50%**	**$ 3,027,662**	**8.50%**
3. Employer Normal Cost (1. – 2.)	**$ 1,434,491**	**7.54%**	**$ 118,730**	**0.69%**	**$ 1,553,221**	**4.28%**	**$ 1,706,826**	**4.79%**

Actuarial Contributions*

Valuation Date	December 31, 2021	December 31, 2020
1. Projected Payroll for Year Beginning	$ 36,318,603	$ 35,619,556
2. Total Actuarial Accrued Liability		
a. Active Members		
i. Retirement Benefits	$ 92,784,967	$ 92,916,835
ii. Withdrawal Benefits	5,195,956	4,731,299
iii. Death Benefits	962,254	1,356,083
iv. Total	$ 98,943,177	$ 99,004,217
b. Retired Members and Beneficiaries Receiving Benefits	$ 225,330,728	$ 209,018,919
c. Inactive Members with Deferred Benefits	20,115,303	23,123,641
d. Total (2a. + 2b. + 2c.)	$ 344,389,208	$ 331,146,777
3. Actuarial Value of Assets	218,414,061	209,707,146
4. Unfunded Actuarial Accrued Liability (UAAL) (2d. – 3.)	$ 125,975,147	$ 121,439,631
5. Funded Ratio (3. / 2d.)	63.42%	63.33%
6. UAAL as a Percent of Annual Payroll (4. / 1.)	346.86%	340.94%

Development of Employer Contribution*	Fiscal Year Ending December 31, 2023	Fiscal Year Ending December 31, 2022
7. Amortization Payment for UAAL (30 year amortization)		
a. Amount	$ 9,814,197	$ 9,688,242
b. As a % of pay (7a. / 1.)	27.01%	27.21%
8. Employer Normal Cost		
a. Amount	$ 1,553,221	$ 1,706,826
b. As a % of pay (8a. / 1.)	4.28%	4.79%
9. Employer Actuarial Required Contribution		
a. Amount (8a + 7a)	$ 11,367,418	$ 11,395,068
b. As a % of pay (9a. / 1.)	31.29%	32.00%

* Amount needed to fund the FPEABF in an actuarially responsible manner. These amounts have not been adjusted to account for the difference in Valuation Date and Fiscal Year End.

Calculation of Actuarial (Gain)/Loss

Development of Actuarial (Gain) / Loss		Amount
1. Expected Actuarial Accrued Liability		
a. Actuarial Accrued Liability at December 31, 2020	$	331,146,777
b. Normal Cost at December 31, 2020		4,568,203
c. Interest on a. + b. to End of Year		24,339,336
d. Benefit Payments and Refunds, with Interest to End of Year		20,055,766
e. Expected Actuarial Accrued Liability Before Changes (a. + b. + c. – d.)	$	339,998,550
f. Change in Actuarial Accrued Liability at December 31, 2021 due to:		7,735,307
i. Change in Actuarial Assumptions		
ii. Change in Actuarial Methods		—
g. Expected Actuarial Accrued Liability at December 31, 2021 (e. + f.i. + f.ii.)	$	347,733,857
2. Actuarial Accrued Liability at December 31, 2021		344,389,208
3. Liability (Gain) / Loss (2. – 1.g.)	**$**	**(3,344,649)**
4. Expected Actuarial Value of Assets		
a. Actuarial Value of Assets at December 31, 2020	$	209,707,146
b. Interest on a. to End of Year		15,203,768
c. Contributions Paid During 2021		6,295,182
d. Interest on c. to End of Year		224,208
e. Benefit Payments, Refunds and Administrative Expenses, with Interest to End of Year		20,262,741
f. Change in Actuarial Value of Assets at December 31, 2021 due to:		
i. Change in Asset Method		—
g. Expected Actuarial Value of Assets at December 31, 2021 (a. + b. + c. + d. – e. – f.i.)	$	211,167,563
5. Actuarial Value of Assets as of December 31, 2021		218,414,061
6. Actuarial Asset (Gain) / Loss (4.g. – 5.)	**$**	**(7,246,498)**
7. Actuarial (Gain) / Loss (3. + 6.)	**$**	**(10,591,147)**

Analysis of Experience

Type of (Gain) or Loss		Year Ending December 31, 2021	As a % of Last Year's AAL
1. (Gain) or Loss During the Year from Experience:			
a. Salary	$	(2,065,574)	-0.62%
b. Investment		(7,246,498)	-2.19%
c. Retiree Mortality		(222,764)	-0.07%
d. Other (turnover, retirement ages, service purchase, etc.)		(1,056,311)	-0.32%
e. Total Experience (Gain) or Loss (a. + b. + c. + d.)	$	(10,591,147)	-3.20%
2. Assumption and Method Changes		7,735,307	2.34%
3. Total (Gain) or Loss During Year (1.e. + 2.)	$	(2,855,840)	-0.86%

Actuarial Balance Sheet

Financial Resources		December 31, 2021
1. Actuarial Value of Assets	$	218,414,061
2. Present Value of Future Contributions		
a. Expected Member Contributions		21,642,189
b. Employer Normal Cost		10,888,960
c. Total	$	32,531,149
3. Unfunded Actuarial Accrued Liability/(Reserve)	$	125,975,147
4. Total Assets [1. + 2.c. + 3.]	$	376,920,357

Benefit Obligations		December 31, 2021
1. Present Value of Future Benefits		
a. Active Members	$	131,474,326
b. Retirees and Beneficiaries		225,330,728
c. Inactive Members		20,115,303
d. Total	$	376,920,357

History of UAAL and Funded Ratio

Valuation Date	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Funded Ratio (AVA as a % of AAL)	Unfunded Actuarial Accrued Liability (UAAL)
December 31, 2012	$ 273,136,730	$ 172,566,956	63.18%	$ 100,569,774
December 31, 2013	277,560,212	182,554,587	65.77%	95,005,625
December 31, 2014	285,960,963	189,917,999	66.41%	96,042,964
December 31, 2015	291,739,068	193,729,042	66.40%	98,010,026
December 31, 2016	300,259,728	198,244,885	66.02%	102,014,843
December 31, 2017	302,213,539	204,273,172	67.59%	97,940,367
December 31, 2018	313,013,137	202,894,946	64.82%	110,118,191
December 31, 2019	319,710,584	203,486,292	63.65%	116,224,292
December 31, 2020	331,146,777	209,707,146	63.33%	121,439,631
December 31, 2021	344,389,208	218,414,061	63.42%	125,975,147

Reconciliation of Change In Unfunded Actuarial Liability

Development of Unfunded Actuarial Liability		Amount
1. Unfunded Actuarial Accrued Liability as of December 31, 2020	$	121,439,631
2. Total Normal Cost Paid During 2021		4,888,754
3. Interest on 1. and 2.		8,978,490
4. Employer Contribution Requirement of Normal Cost Plus Interest on Unfunded Liability for Period January 1, 2020 to December 31, 2021	$	13,867,244
5. Total Contribution for the Year (Includes Misc. Contribution)		6,253,175
6. Interest on 5.		222,714
7. Increase/(Decrease) in Unfunded Liability Due to Employer Contribution Plus Interest Being Greater Than Normal Cost Plus Interest on Unfunded Liability (4. – (5.+6.))	$	7,391,355
8. Increase/(Decrease) in Unfunded Liability Due to:		
a. Investment Return Lower/(Higher) Than Assumed		(7,246,498)
b. Salary Increases Higher/(Lower) Than Assumed		(2,065,574)
c. Assumption changes		7,735,307
d. Other Sources		(1,279,074)
9. Net Increase/(Decrease) in Unfunded Liability for the Year (7. + 8a. + 8b. + 8c. + 8d.)		4,535,516
10. Unfunded Actuarial Accrued Liability as of December 31, 2021(1. + 9.)	$	125,975,147

Summary of Fair Value of Assets

	Fair Value as of December 31, 2021			Fair Value as of December 31, 2020		
Asset Category		Amount	%		Amount	%
1. Short–Term Investments	$	5,097,175	2.21%	$	14,013,569	6.23%
2. Investments at Fair Value						
a. U.S. and International Equities	$	104,002,706	45.12%	$	103,570,202	46.07%
b. U.S. Government and Government Agency Obligations		12,313,410	5.34%		3,330,914	1.48%
c. Corporate Bonds		2,569,740	1.11%		7,992,903	3.56%
d. Collective International Equity Fund		29,244,255	12.69%		29,581,703	13.16%
e. Commingled Fixed Income Fund		31,201,244	13.54%		29,543,197	13.14%
f. Hedge Funds		23,877,689	10.36%		22,543,485	10.03%
g. Real Estate		21,716,538	9.42%		14,057,489	6.25%
h. Total	$	224,925,582	97.58%	$	210,619,893	93.69%
3. Collateral Held for Securities Lending	$	471,340	0.20%	$	$ 183,263	0.08%
4. Total Assets (1. + 2.h + 3.)	$	230,494,097	100.00%	$	224,816,725	100.00%
5. Receivables						
a. Interest and Dividends	$	302,216		$	283,312	
b. Investments Sold		—			1,684,000	
c. Other Receivables		5,571,098			5,037,967	
d. Total	$	5,873,314		$	7,005,279	
6. Payables						
a. Investments Purchased	$	644,775		$	10,121,931	
b. Securities Lending Collateral		471,340			183,263	
c. Other Payables		60,506			77,062	
d. Total	$	1,176,621		$	10,382,256	
7. Net Position for Pension Benefits [4. + 5.d – 6.d.]	**$**	**235,190,790**		**$**	**221,439,748**	

Changes in Fair Value of Assets

Transactions	December 31, 2021	December 31, 2020
Additions		
1. Contributions		
a. Contributions from Employers	$ 3,128,484	$ 3,291,529
b. Contributions from Plan Members	3,124,691	3,192,954
c. Total	$ 6,253,175	$ 6,484,483
2. Net Investment Income		
a. Interest and Dividends	$ 2,487,484	$ 1,754,641
b. Net Appreciation	25,086,046	20,664,547
c. Net Securities Lending Income	43,639	11,219
d. Total	$ 27,617,169	$ 22,430,407
e. Less Investment Expense	595,421	578,452
f. Net Investment Income (Loss)	$ 27,021,748	$ 21,851,955
g. Employee Transfers	42,007	714,659
3. Total Additions (1c. + 2f. + 2g. + 2.h)	$ 33,316,930	$ 29,051,097
Deductions		
4. Benefits and Expenses		
a. Retirement Benefits	$ 18,953,020	$ 18,221,111
b. Refund of Contributions and Death Benefit	455,017	898,786
c. Administrative Expenses	157,851	158,367
d. Miscellaneous - Benefit Expenses	—	20,439
5. Total Deductions	$ 19,565,888	$ 19,298,703
6. Net Increase (Decrease) (3. – 5.)	$ 13,751,042	$ 9,752,394
Net Position Held in Trust for Pension Benefits		
a. Beginning of Year	$ 221,439,748	$ 211,687,354
b. End of Year	$ 235,190,790	$ 221,439,748

Determination of Actuarial Value of Assets

Development of Actuarial Value of Assets	
1. Actuarial Value of Assets as of December 31, 2020	$ 209,707,146
2. Unrecognized Return as of December 31, 2020	11,732,602
3. Fair Value of Assets as of December 31, 2020 (1. + 2.)	$ 221,439,748
4. Contributions	
a. Member (includes purchased service)	$ 3,124,691
b. Employer	3,128,484
c. Miscellaneous contributions	42,007
d. Total	$ 6,295,182
5. Distributions	
a. Benefit payments	$ 18,953,020
b. Refund of contributions	455,017
c. Administrative expenses	157,851
d. Total	$ 19,565,888
6. Expected Return at 7.25% on	
a. Item 1.	$ 15,203,768
b. Item 2.	850,614
c. Item 4.d.	224,208
d. Item 5.d.	696,854
e. Total (a. + b. + c. – d.)	$ 15,581,736
7. Actual Return on Fair Value for Fiscal Year, net of Investment Expenses	$ 27,021,748
8. Return to be Spread for Fiscal year (7. – 6e.)*	$ 11,440,012
9. Total Fair Value of Assets as of December 31, 2020	$ 235,190,790
10. Return to be Spread	

Fiscal Year	Return to be Spread	Unrecognized Percent	Unrecognized Return
2021	$ 11,440,012	80.00%	$ 9,152,010
2020	6,935,557	60.00%	4,161,334
2019	20,290,155	40.00%	8,116,062
2018	(23,263,383)	20.00%	(4,652,677)
2017	16,577,084	0.00%	—
			$ 16,776,729

11. Actuarial Value of Assets (9. —10.)	$ 218,414,061
12. Recognized rate of return for the Year on Actuarial Value of Assets	10.82%
13. Rate of Return for the Year on Market Value of Assets (reported by Cook County — net of inv. expenses)	12.85%

* Annual Return to be Spread calculation is based on assumed 7.25% investment return which includes an assumption that all expenses and revenues are paid mid–year on average.

Schedule of Funding Progress

The liabilities and assets resulting from the last ten actuarial valuations are as follows:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) (Actuarial Value)	Funded Ratio (Actuarial Value)	Covered Payroll	Percentage of Covered Payroll (Fair Value)
	(a)	(b)	(b–a)	(a/b)	(c)	(b–a)/(c)
2012	$ 172,566,956	$ 273,136,730	$ 100,569,774	63.18%	$ 26,252,071	383.09%
2013	182,554,587	277,560,212	95,005,625	65.77%	29,485,857	322.21%
2014	189,917,999	285,960,963	96,042,964	66.41%	29,811,912	322.16%
2015	193,729,042	291,739,068	98,010,026	66.40%	32,007,657	306.21%
2016	198,244,885	300,259,728	102,014,843	66.02%	34,509,011	295.62%
2017	204,273,172	302,213,539	97,940,367	67.59%	35,078,173	279.21%
2018	202,894,946	313,013,137	110,118,191	64.82%	34,071,319	323.20%
2019	203,486,292	319,710,584	116,224,292	63.65%	35,056,459	331.53%
2020	209,707,146	331,146,777	121,439,631	63.33%	35,159,979	345.39%
2021	218,414,061	344,389,208	125,975,147	63.42%	35,059,352	359.32%

Schedule of Employer Contributions

The required contributions and actual percentages contributed over the last ten years are as follows:

Fiscal year Ended December 31,	Actuarially Determined Contribution (ADC)	Employer Contribution	Percentage Contributed
2012	$ 7,626,778	$ 2,117,976	27.77%
2013	8,590,721	1,403,628	16.34%
2014	9,608,247	1,523,316	15.85%
2015	10,921,946	1,763,345	16.14%
2016	10,166,661	1,971,946	19.40%
2017	10,230,872	2,242,489	21.92%
2018	10,678,782	3,481,281	32.60%
2019	10,195,691	3,345,462	32.81%
2020	13,027,669	3,291,529	25.27%
2021	13,554,738	3,128,484	23.08%

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

GASB 67 Schedule of Changes in Net Pension Liability

	202	2020	2019	2018	2017	2016	2015
Total Pension Liability							
Service Cost	$ 12,842,866	$ 11,099,720	$ 7,981,035	$ 9,426,212	$ 10,698,297	$ 11,224,976	$ 9,656,955
Interest	17,698,797	18,774,499	20,343,569	19,182,488	20,384,471	19,482,189	19,471,424
Benefit changes	—	—	—	—	—	—	—
Difference between expected and actual experience	6,666,390	(2,400,863)	(420,786)	608,525	(1,344,952)	(6,776,942)	(270,033)
Changes of assumptions	5,065,445	41,724,080	71,398,627	(26,452,372)	(21,473,767)	(26,186,535)	28,495,220
Benefit payments, including refund of contributions	(19,408,037)	(19,140,336)	(18,323,398)	(17,817,279)	(16,670,896)	(16,462,185)	(15,920,776)
Net change in Total Pension Liability	22,865,461	50,057,100	80,979,047	(15,052,426)	(8,406,847)	(18,718,497)	41,432,790
Total Pension Liability – beginning	546,436,340	496,379,240	415,400,193	430,452,619	438,859,466	457,577,963	416,145,173
Total Pension Liability – ending (a)	569,301,801	546,436,340	496,379,240	415,400,193	430,452,619	438,859,466	457,577,963
Plan Fiduciary Net Position							
Contributions – employer	3,128,484	3,291,529	3,345,462	3,481,281	2,242,489	1,971,946	1,763,345
Contributions – member	3,124,691	3,192,954	3,020,322	3,127,980	3,300,222	3,184,051	2,771,533
Net investment income	27,021,748	21,851,955	33,653,650	(8,422,851)	30,500,015	10,477,792	2,549,975
Benefit payments, including refund of contributions	(19,408,037)	(19,140,336)	(18,323,398)	(17,817,279)	(16,670,896)	(16,462,185)	(15,920,776)
Administrative expense	(157,851)	(158,367)	(154,352)	(159,489)	(163,275)	(157,577)	(143,953)
Other	42,007	714,659	(252,406)	(182,512)	(40,007)	(133,999)	(6,928)
Net change in Plan Fiduciary Net Position	13,751,042	9,752,394	21,289,278	(19,972,870)	19,168,548	(1,119,972)	(8,986,804)
Plan Fiduciary Net Position – beginning	221,439,748	211,687,354	190,398,076	210,370,946	191,202,398	192,322,370	201,309,174
Plan Fiduciary Net Position – ending (b)	235,190,790	221,439,748	211,687,354	190,398,076	210,370,946	191,202,398	192,322,370
Net Pension Liability – ending (a) – (b)	$334,111,011	$324,996,592	$ 284,691,886	$225,002,117	$220,081,673	$247,657,068	$265,255,593

GASB 67 Net Pension Liability (Asset)

	2021	2020	2019	2018	2017	2016	2015
Total Pension Liability	$569,301,801	$546,436,340	$496,379,240	$415,400,193	$430,452,619	$438,859,466	$457,577,963
Plan Fiduciary Net Position	235,190,790	221,439,748	211,687,354	190,398,076	210,370,946	191,202,398	192,322,370
Net Pension Liability	$334,111,011	$324,996,592	$284,691,886	$225,002,117	$220,081,673	$247,657,068	$265,255,593
Ratio of Plan Fiduciary Net Position to Total Pension Liability	41.31%	40.52%	42.65%	45.83%	48.87%	43.57%	42.03%
Covered–employee payroll	$ 35,059,352	$ 35,159,979	$ 35,056,459	$ 34,071,319	$ 35,078,173	$ 34,509,011	$ 32,007,657
Net Pension Liability as a percentage of covered covered–employee payroll	952.99%	924.34%	812.10%	660.39%	627.40%	717.66%	828.73%

GASB 67 Sensitivity of Net Pension Liability

	1% Decrease (2.17%)	Current Discount Rate (3.17%)	1% Increase (4.17%)
Total Pension Liability	$ 664,321,919	$ 569,301,801	$ 493,375,161
Fiduciary Net Position	235,190,790	235,190,790	$ 235,190,790
Net Pension Liability	$ 429,131,129	$ 334,111,011	$ 258,184,371

The discount rate used to measure the total pension liability was 3.17%. The discount rate used to measure the total pension liability at December 31, 2020 was 3.22%. The projection of cash flows used to determine the discount rate assumed that FPEABF contributions will continue to follow the current funding policy, which levies a tax annually equal to the total amount of contributions made by the members in the calendar year 2 years prior to the year of the levy, multiplied by 1.30. Based on this assumption, the Fund's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current fund members. A municipal bond rate of 2.05% was used in the development of the blended GASB discount rate after that point. The 2.05% rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index as of December 31, 2021. The rate used for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System). Based on the long-term rate of return of 7.00% and the municipal bond rate of 2.05%, the blended GASB discount rate would be 3.17%. Please see the supporting exhibits for additional detail.

GASB 67 AND 68 Actuarial Assumptions and Methods

Measurement Date:	December 31, 2021	December 31, 2020
Valuation Date (VD):	December 31, 2020	December 31, 2019
Membership Data:		
Retirees	391	390
Beneficiaries	147	142
Inactive Vested Members	1,468	1,465
Active Employees	521	546
Total	2,527	2,543
Single Equivalent Interest Rate (SEIR):		
Long–Term Expected Rate of Return	7.00%	7.25%
Municipal Bond Index Rate at Measurement Date	2.05%	2.12%
Fiscal Year in which Fiduciary Net Position is Projected to be Depleted	2043	2042
Single Equivalent Interest Rate at Measurement Date	3.17%	3.22%
Actuarial Assumptions:		
– Projected Salary Increases	3.00%-5.00%	3.50%-8.00%
– Inflation Assumption	2.50%	2.75%

The projection of cash flows used to determine the discount rate assumed that FPEABF contributions will continue to follow the current funding policy based on the tax levy. Based on this assumption, the Fund's fiduciary net position is projected to be insufficient to make all projected future benefit payments of current fund members. A municipal bond rate of 2.05% was used in the development of the blended GASB discount rate after that point. The 2.05% rate is based on the 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate (Municipal Bond Index Rate). The rate used for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System). Based on the long-term rate of return of 7.00% and the municipal bond rate of 2.05%, the blended GASB discount rate would be 3.17%. See the preceding exhibits for more detail.

GASB 67 AND 68 Actuarial Assumptions and Methods (continued)

Investment Rate of Return Detail

The long-term expected rate of return on the Fund's investments was determined based on the results of an experience review. The results of the experience review were adopted by the Board at the Board's March 2022 Meeting. The rate of return assumption was based on the target asset allocation of the fund. In the experience review, best estimate ranges of expected future real rates of return (net of inflation) for the portfolio were developed, based on the expected returns of each major asset class and their weights in the portfolio. An econometric model that forecasts a variety of economic environments and then calculates asset class returns based on functional relationships between the economic variables and the asset classes was then used. Expected Investment expenses were subtracted and expected inflation was added to arrive at the long term expected nominal return. A value for the expected long term expected return was selected for the portfolio such that there was a better than 50% likelihood of the emerging returns exceeding the expected return.

Best estimates of arithmetic real rates of return (net of inflation) for each major asset class included in the Fund's target asset allocation as of December 31, 2021 are listed in the table below:

Asset Category	Target Allocation	Long–Term Expected Real Rate of Return
Domestic Equities	32.00%	5.33%
International Equity	27.00%	5.63%
Fixed Income	21.00%	1.18%
Real Estate Funds	9.00%	4.27%
Hedge Funds	10.00%	2.70%
Short-term Investment	1.00%	0.00%
Total	100.00%	

Summary of Benefit Provisions

Participant. A person employed by the Forest Preserve District whose salary or wages is paid in whole or in part by the Forest Preserve District. An employee in service on or after January 1, 1984 shall be deemed as a participant regardless of when he or she became an employee.

Service. For all purposes except the minimum retirement annuity and ordinary disability benefit, service during four months in any calendar year constitutes one year of service. For the minimum retirement annuity, all service is computed in whole calendar months. Service for any 15 days in a calendar month shall constitute a month of service.

For purposes of the minimum retirement annuity, service shall include:

a. Any time during which the employee performed the duties of his or her position and contributed to the Fund.
b. Vacations and leaves of absence with whole or part pay.
c. Periods during which the employee receives a disability benefit from the Fund, and
d. Certain periods of accumulated sick leave.

Retirement Annuity — Eligibility (Tier 1). An employee who withdraws from service with 10 or more years of service is entitled to a retirement annuity upon attainment of age 50.

Retirement Annuity — Amount (Tier 1)

Money Purchase Annuity (Tier 1). The amount of annuity based on the sum accumulated from the employee's salary deductions for age and service annuity plus 1/10 of the sum accumulated from the contributions by the Forest Preserve District for age and service annuity for each completed year of service after the first 10. Except that when the employee retires after age 60, the full amount of contributions by the Employer are used.

Minimum Formula Annuity (Tier 1). The amount of annuity provided is equal to 2.4% of final average salary for each year of service. Final average salary is the highest average monthly salary for any 48 consecutive months within the last 10 years of service. Salary for pension purposes is actual salary earned exclusive of overtime or extra salary. The maximum amount of annuity is 80% of final average salary.

If an employee retires before age 60, the annuity is reduced by .5% for each full month or fraction thereof that the employee is under age 60 when the annuity begins, unless the employee has 30 or more years of service, in which case there is no reduction for retirement before age 60.

If the Minimum Formula Annuity is greater than the Money Purchase Annuity, the employee is entitled to receive the Minimum Formula Annuity.

Automatic Increase in Retirement Annuity (Tier 1). Employees who retire from service having attained age 60 or more, or, if retirement occurs on or after January 1, 1991, with at least 30 years of service, 3% of the annuity beginning January of the year following the year in which the first anniversary of retirement occurs. If retirement is before age 60 with less than 30 years of service, increases begin in January of the year immediately following the year in which age 60 is attained. Beginning January 1, 1998, increases are calculated as 3% of the monthly annuity payable at the time of the increase.

Summary of Benefit Provisions (continued)

Optional Plan of Contributions and Benefits (Tier 1). During the period through June 30, 2005, an employee may establish optional credit for additional benefits by making additional contributions of 3% of salary. The additional benefit is equal to 1% of final average salary for each year of service for which optional contributions have been paid. The additional benefit shall be included in the calculation of the automatic annual increase and the calculation of the survivor's annuity.

Surviving Spouse's Annuity — Death in Service (Tier 1).

Money Purchase Annuity (Tier 1). The amount of annuity based on the accumulated salary deductions and Forest Preserve District contributions for both the employee and the spouse.

Minimum Formula Annuity (Tier 1). A minimum annuity is provided for the eligible surviving spouse of an employee who dies in service with any number of years of service. The amount of such minimum spouse's annuity is equal to 65% of the annuity the employee would have been entitled to as of the date of death, provided the spouse on such date is age 55 or older, or that the employee had 30 or more years of service. If the spouse is under age 55 and the employee had less than 30 years of service, the amount of the spouse's annuity shall be discounted by .5% for each month that the spouse is less than age 55 on the date of the employee's death. The amount of the surviving spouse's annuity shall not be less than 10% of the employee's final average salary as of the date of death.

If the Minimum Formula Annuity is greater than the Money Purchase Annuity, the surviving spouse shall be entitled to receive the Minimum Formula Annuity.

Surviving Spouse's Annuity – Death after Retirement (Tier 1). The amount of the annuity is the greater of the money purchase annuity or the minimum formula annuity. The surviving spouse of an annuitant who dies on or after July 1, 2002 shall be entitled to an annuity of 65% of the employee's annuity at the time of death if the employee had at least 10 years of service, reduced by .5% per month that the spouse is under age 55 at the time of the employee's death. There is no reduction for age if the employee had at least 30 years of service.the employee had at least 30 years of service.

Automatic Annual Increase in Surviving Spouse's Annuity (Tier 1). On the January 1 occurring on or immediately after the first anniversary of the deceased employee's death, the surviving spouse's annuity shall be increased by 3% of the amount of annuity payable at the time of the increase. On each January 1, thereafter, the annuity shall be increased by an additional 3% of the amount of annuity payable at the time of the increase.

Child's Annuity. Annuities are provided for unmarried children of a deceased employee who are under age 18. An adopted child is entitled to the child's annuity if such child was legally adopted at least one year before the child's annuity becomes payable. The child's annuity is payable under the following conditions:

(a) the death of the employee was a duty related death; or (b) if the death is not a duty related death, the employee died while in service and had completed at least four years of service from the date of his or her original entrance in service and at least two years from the latest re-entrance: or (c) if the employee died while in receipt of an annuity, he or she must have withdrawn from service after attainment of age 50.

The amount of the annuity is the greater of 10% of the employee's final salary at the date of death or $140 per month for each child.

Summary of Benefit Provisions (continued)

Duty Disability Benefits. Duty disability benefits are payable to an employee who becomes disabled as a result of an accidental injury incurred while in the performance of an act of duty. Benefits begin on the first regular and normal work date for which the employee does not receive a salary. The amount of the duty disability benefit is equal to 75% of the employee's salary at the date of injury, reduced by the amount the employee receives from Workers' Compensation. However, if the disability, in any measure has resulted from any physical defect or disease that existed at the time such injury was sustained, the duty disability benefit shall be 50% of salary. The 8.5% of salary normally contributed by the employee for pension purposes is contributed on their behalf during the period of approved disability.

If the disability commences prior to age 60, duty disability benefits are payable during disability until the employee attains age 65. If the disability begins after age 60, the benefit is payable during disability for a period of 5 years.

Recipients of duty disability benefits also have a right to receive child's disability benefits of $10 per month on account of each unmarried child less than age 18. Total children's disability benefits shall not exceed 15% of the employee's salary.

Ordinary Disability Benefits. Ordinary disability benefits are provided for employees who become disabled as the result of any cause other than injury incurred in the performance of an act of duty. The amount of the benefit is 50% of the employee's annual salary at the time of disability. The 8.5% of salary normally contributed by the employee for pension purposes is contributed on their behalf during the period of approved disability.

Ordinary disability benefits are payable after the first 30 days of disability provided the employee is not then in receipt of salary. Ordinary disability benefits are payable until the first of the following shall occur:

a. the disability ceases; or
b. the date that total payments equal the lesser of (1) 1/4 of the total service rendered prior to disability, and (2) five years.

An employee unable to return to work at the expiration of ordinary disability benefit is entitled to an annuity beginning on the date of the employee’s withdrawal from service regardless of age on such date.

Death Benefit. Upon the death of an active or retired employee, a death benefit of $1,000 is payable to the employee's designated beneficiary or to the employee's estate if no beneficiary has been designated.

Refund to Employee upon Withdrawal From Service. Upon withdrawal from service, an employee under the age of 55 (or age 62 if Tier 2), or anyone with less than 10 years of service is eligible for a refund. The employee is entitled to a refund of the amount accumulated to his or her credit for age and service annuity and the survivor's annuity together with the total amount contributed for the automatic annual increase, without interest. Upon receipt of such refund, the employee forfeits all rights to benefits from the Fund.

Election of Refund in Lieu of Annuity. If an employee's annuity or spouse's annuity is less than $150.00 per month, such employee or spouse annuitant may elect a refund of the employee's accumulated contributions in lieu of a monthly annuity.

Refund For Surviving Spouse's Annuity. If an employee is unmarried at the time of retirement, all contributions for surviving spouse's annuity will be refunded with interest at the rate of 3% per year, compounded annually.

Summary of Benefit Provisions (continued)

Refund of Remaining Amounts. In the event that the total amount accumulated to the account of an employee from employee contributions for annuity purposes has not been paid to the employee and surviving spouse as a retirement or surviving spouse's annuity before the death of the survivor(s) of the employee, a refund of any excess amount shall be paid to the children of the employee, in equal parts, or if there are no children, to the beneficiaries of the employee or the administrator of the estate.

Employee Contributions. Employees contribute through salary deductions 8.5% of salary to the Fund, 6.5% being for the retirement annuity. 1.5% being for the surviving spouse's annuity, and .5% being for the automatic increase in retirement annuity.

Employer Contributions. The Forest Preserve District levies a tax annually equal to the total amount of contributions made by employees in the calendar year 2 years prior to the year of the levy, multiplied by 1.30.

Employer Pick–up of Employee Contributions. Since April 15, 1982, regular employee contributions have been designated for federal income tax purposes as being made by the employer. The employee's W-2 salary is therefore reduced by the amount of contribution. For pension purposes, the salary remains unchanged. For purposes of benefits, refunds, and financing, these contributions are treated as employee contributions.

Persons Who First Become Participants On or After January 1, 2011 (Tier 2)

The following changes to the aforementioned provisions apply to persons who first become participants on or after January 1, 2011:

1. The highest salary for annuity purposes is equal to the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest by the number of months in that period.
2. For 2011, the annual salary is limited to the Social Security wage base of $106,800. Limitations for future years shall automatically be increased by the lesser of 3% or one-half of percentage change in the Consumer Price Index-U for the 12 months ending in September.
3. A participant is eligible to retire with unreduced benefits at age 67 with at least 10 years of service credit. However, a participant may elect to retire at age 62 with at least 10 years of service credit and receive a retirement annuity reduced by one-half of 1% for each month that his or her age is under 67.
4. The initial survivor's annuity is equal to 66-2/3% of the participant's earned retirement annuity at the date of death, subject to automatic annual increases of the lesser of 3% or one-half of the increase in the Consumer Price Index-U for the 12 months ending in September, based on the originally granted survivor's annuity.
5. Automatic annual increases in the retirement annuity then being paid are equal to the lesser of 3% or one-half the annual change in the Consumer Price Index-U, whichever is less, based on the originally granted retirement annuity.
6. Refund upon withdrawal from service. Upon withdrawal from service, an employee who withdraws from service before age 62 regardless of length of service or withdraws with less than 10 years of service regardless of age is entitled to a refund of total contributions made by the employee without interest.

Description of Actuarial Methods and Valuation Procedures

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the **Entry Age Actuarial Cost Method** of funding.

Sometimes called a "funding method," this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension Fund benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the Fund is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability. Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each Member would have been eligible to join the Fund if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the Fund.

The Normal Cost for the Fund is determined by summing individual results for each active Member and determining an average normal cost rate by dividing the summed individual normal costs by the total payroll of Members before assumed retirement age.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the Normal Cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date.)

The **Unfunded Actuarial Accrued Liability** is the excess of the Actuarial Accrued Liability over the Actuarial Value of Fund Assets actually on hand on the valuation date. The Unfunded Actuarial Accrued Liability is amortized as a level percent of payroll over an open 30-year period.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the Unfunded Actuarial Accrued Liability.

Asset Valuation Method

The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The Fair Value of assets at the valuation date is reduced by the sum of the following:

(i) 80% of the return to be spread during the first year preceding the valuation date,
(ii) 60% of the return to be spread during the second year preceding the valuation date,
(iii) 40% of the return to be spread during the third year preceding the valuation date, and
(iv) 20% of the return to be spread during the fourth year preceding the valuation date.

The return to be spread is the difference between (1) the actual investment return on Fair Value and (2) the expected return on Fair Value.

Description of Actuarial Methods and Valuation Procedures (continued)

Valuation Procedures

No actuarial liability is included for members who terminated non-vested prior to the valuation date, except those due a refund of contributions.

Annual increases in salary were limited to the dollar amount defined under Internal Revenue Code Exhibit 401(a)(17) for affected members.

Summary of Actuarial Assumptions

The actuarial assumptions used for the December 31, 2021 actuarial valuation are summarized below.

The mortality rate, termination rate, retirement rate, and salary assumptions are based on an experience analysis of the Fund over the period 2017 through 2020. These assumptions were adopted by the Board as of December 31, 2021, based on the recommendation from the actuary.

Interest Rate. 7.00% per year, compounded annually.

Price Inflation Rate. 2.50% per year, compounded annually.

Real Wage Growth: 0.50% per year, compounded annually

General Wage Growth: 3.00% per year, compounded annually

Mortality Rates. All mortality rates use Pub-2010 General Amount Weighted Median Mortality Tables.

Mortality Projections. All mortality rates are projected from 2010 using generational improvement with Scale MP-2021.

Deaths After Retirement. Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Retirees. Rates for male members are set forward one year and multiplied by 107% at all ages. Rates for female members are set forward 2 years and multiplied by 109% at all ages. Because the retiree tables have no rates prior to age 50, the Pub-2010 General Amount Weighted Median Mortality Table for Employees is used for ages less than 50.

Deaths After Retirement (Survivors of Deceased members). Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Contingent Survivors. Because the contingent survivor tables have no rates prior to age 45, the Pub-2010 General Amount Weighted Median Mortality Table for Employees is used for ages less than 45.

Deaths Prior to Retirement. Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Employees for all employees.

Termination Rates. Termination rates based on the recent experience of the Fund were used. The following is a sample of the termination rates used:

Service at Termination	Rate
0	15.0%
5	8.0%
10	6.0%
15	3.5%
20	3.5%
25+	2.5%

Summary of Actuarial Assumptions (continued)

Retirement Rates for Tier I Members. For persons who became participants prior to January 1, 2011, rates of retirement for each age from 50 to 80 based on the recent experience of the Fund. The following are samples of the rates of retirement used:

Age	With Less Than 30 Years of Service at Retirement	With 30 Years or More Years of Service at Retirement
<50	0.0%	28.0%
50 – 58	3.5%	28.0%
59	12.0%	28.0%
60-64	12.0%	21.0%
65-79	20.0%	21.0%
80+	100.0%	100.0%

Retirement Rates for Tier II Members. For persons who became or will become participants on or after January 1, 2011, rates of retirement for each age from 62 to 75 were used. The following are samples of the rates of retirement that were used:

	Rates of Retirement	
Age	Males	Females
62	.400	.350
64	.225	.150
67	.400	.350
70	.450	.200
75	1.000	1.000

Summary of Actuarial Assumptions (continued)

Salary Increases.

Service	Wage Growth	Merit and Longevity	Total
0	3.00%	2.00%	5.00%
1	3.00%	2.00%	5.00%
2	3.00%	2.00%	5.00%
3	3.00%	2.00%	5.00%
4	3.00%	1.50%	4.50%
5	3.00%	1.50%	4.50%
6	3.00%	1.00%	4.00%
7	3.00%	0.50%	3.50%
8	3.00%	0.50%	3.50%
9	3.00%	0.50%	3.50%
10	3.00%	0.50%	3.50%
>10	3.00%	0.00%	3.00%

Projected Salary Increase Rate for New Entrants. 3.00% per year (for projection in Section III)

Loading for Reciprocal Benefits. Costs and liabilities of active employees were loaded by 1% for reciprocal annuities where the County is the last employer. It was assumed that 50% of inactive members with one or more year of service would receive a reciprocal annuity where the County is not the last employer. These reciprocal annuities were valued as of the member's retirement date as 10 times an inactive member's accumulated contributions.

Summary of Actuarial Assumptions (continued)

Marital Status. 70% of male members are assumed to be married. 40% of female members are assumed to be married.

Spouse's Age. The spouse of a male employee is assumed to be four years younger than the employee. The spouse of a female employee is assumed to be two years older than the age of the employee.

Inactives For Tier 1 inactives with 10 or more years of service, benefits were estimated based on service and pay and valued as deferred to age 62 annuities. For Tier 2 inactives with ten or more years of service, benefits were estimated based on service and pay and valued as deferred to age 67 annuities.

Annual increase in administrative expenses: 2.50% per year, compounded annually.

Timing of Assumptions: All withdrawals, deaths, retirements and salary increases are assumed to occur July 1 of each year. The timing of retirement changes from mid-year to beginning of year at and after 100% retirement age.

Reported Compensation: Compensation as of the valuation date as furnished by the Fund's office.

Valuation Compensation: Reported compensation adjusted to reflect the pay increases and the probability of decrement during the year.

Normal Cost: Normal cost rate reflects the impact of new entrants during the year.

Changes Since Prior Valuation:

The assumptions used for the December 31, 2021 actuarial valuation are based on the experience study prepared as of December 31, 2020 and adopted by the Board of Trustees on March 3, 2022. Material assumptions and methods that were changed since the prior valuation:

- The investment return assumption was lowered from 7.25% to 7.00%
- The inflation assumption was lowered from 2.75% to 2.50%
- The real wage growth assumption was decreased from 0.75% to 0.50%
- The general wage inflation assumption was lowered from 3.50% to 3.00%
- The withdrawal rates, retirement rates, mortality and annual rate of salary increase assumptions were changed
- The marriage assumption was changed from assuming spouses of female employees were four years older than female employees to assume that spouses of female employees are two years older than female employees
- The marital status assumption for female members was lowered from 70% assumed to be married to 40% assumed to be married.
- The assumed retirement age for Tier 1 deferred vested members was increased from 55 to 62.
- The assumed annual increase in administrative expense was lowered from 5.00% to 2.50%.

Glossary of Terms

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension Fund for a group of Fund members to the years of service that give rise to that cost.
Actuarial Present Value of Future Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Determined Contribution	Disclosure measure of annual pension cost.
GASB 67	Governmental Accounting Standards Board Statement Number 67
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature Fund. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the Fund as a whole.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.

June 2, 2022

Board of Trustees
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
Chicago, Illinois

Ladies and Gentlemen:

Presented in this report is information to assist the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("FPEABF" or "the Fund" or "the Plan") in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 for the December 31, 2021 Measurement Date. The calculations in this report have been made on a basis that is consistent with our understanding of this accounting standard (GASB 74 and 75). Please note that the discount rate used to determine the Total OPEB Liability (TOL) changed from 2.12% at the Prior Measurement Date to 2.05% at the current Measurement Date.

The information is based on an actuarial valuation performed by Cavanaugh Macdonald (CMC) as of December 31, 2021, with plan asset information provided by FPEABF for its fiscal year ended December 31, 2021. CMC performs the actuarial valuation annually.

The valuation was based upon data, furnished by FPEABF staff, concerning active, inactive and retired members along with pertinent financial information. This information was reviewed for completeness and internal consistency but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different, and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for FPEABF including actuarial assumptions and methods and the funding policy.

The economic and demographic assumptions used in the valuation were adopted by the Board and first reflected in the December 31, 2021 valuation. The Board's recent practice is to review the experience of the FPEABF every four years to determine if any changes to the valuation assumptions are warranted. The assumptions used in the valuation meet the parameters set by the Actuarial Standards of Practice and are based on recommendations made and approved by the Board as part of an Experience Study covering plan years from January 1, 2017 through December 31, 2020. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown beginning on page 119.

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of FPEABF, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of FPEABF. In addition, the calculations were completed in compliance with applicable law and, in our opinion, meet the requirements of GASB 74 and 75.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 74 and 75 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

We note that as we are preparing this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions prior to the next experience study.

The actuary prepared, or assisted in preparing, the following supporting information for the actuarial valuation:

- Changes in the GASB 74/75 Total OPEB Liability (TOL)
- GASB 74 Components of the Net OPEB Liability
- GASB 74 Schedule of Employer Contributions
- GASB 74 Schedule of Changes in Net OPEB Liability
- GASB 74 Schedule of the Net OPEB Liability
- GASB 74 Sensitivity of the Net OPEB Liability
- GASB 75 OPEB Expense
- Membership Data
- Solvency Test
- Summary of Substantive Plan Provisions
- Summary of Assumptions and Methods
- Description of Actuarial Methods

We, Larry F. Langer, ASA, Alisa Bennett, FSA, and Wendy T. Ludbrook, FSA are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

Respectfully submitted,

Larry Langer, ASA, EA, FCA, MAAA
Principal and Consulting Actuary

Alisa Bennett, FSA, EA, FCA, MAAA
President

Bradley R. Wild, ASA, EA, FCA, MAAA
Senior Actuary

Ryan Gundersen
Senior Consultant

Overview

The Forest Preserve Employees' Annuity and Benefit Fund of Cook County ("FPEABF" or "the Fund" or "the Plan") offers health benefits to retired employees of the Forest Preserve District and their eligible dependents. This report presents the results of the actuarial valuation of the Fund benefits as of the valuation date of December 31, 2021.

Purpose

This report had been prepared at the request of the Fund for use in financial reporting of FPEABF under GASB 74 and GASB 75. It may not be appropriate for other purposes, such as analyzing proposed design alternatives, funding, pricing or option evaluation. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Cavanaugh Macdonald.

Membership

	Year Ended December 31,	
Summary of Membership Data	**2021**	**2020**
Annuitants Currently Receiving Benefits	261	271
Covered Spouses of Annuitants Currently Receiving Benefits	78	81
Separated Employees Entitled To Benefits But Not Yet Receiving Them	47	43
Active Employees	516	521
Total Number of Members	902	916

Changes in Plan Provisions

The following changes in benefits and other plan provisions in the Retiree Health Insurance actuarial valuation have been made since the last valuation performed as of December 31, 2020 and are effective with the December 31, 2021 valuation:

- The 2022 subsidy percentages for member health benefits were changed as follows:
  - Choice Plan
    - Annuitants without Medicare changed from 45% to 44%.
    - Annuitants with Medicare changed from 38% to 44%.
    - Survivors without Medicare changed from 52% to 44%.
    - Survivors with Medicare changed from 38% to 44%.
  - Choice Plus Plan
    - Annuitants without Medicare changed from 42% to 44%.
    - Annuitants with Medicare changed from 33% to 44%.
    - Survivors without Medicare changed from 48% to 44%.
    - Survivors with Medicare changed from 38% to 44%.

Changes in Actuarial Assumptions, Methods, or Procedures

The following changes in the actuarial assumptions or valuation procedures in the Retiree Health Insurance actuarial valuation have been made since the last valuation performed as of December 31, 2020 and are effective with the December 31, 2021 valuation:

- Mortality rates were updated to the Pub-2010 General Amount Weighted Median Mortality Tables:
  - Deaths after retirement are based on the Pub-2010 General Amount Weighted Median Mortality Table for Retirees with rates set forward one year and multiplied by 107% at all ages for male retirees and set forward 2 years and multiplied by 109% at all ages for female retirees;
  - Deaths after retirement for survivors of deceased members are based the Pub-2010 General Amount Weighted Median Mortality Table for Contingent Survivors;
  - Deaths prior to retirement are based on the Pub 2010 General Amount Weighted Median Mortality Table for Employees
  - All mortality rates are projected from 2010 using the generational mortality improvement scale MP-2021;
- Price inflation was reduced 2.75% to 2.50%;
- Wage inflation was reduced from 3.50% to 3.00%;
- Rates of retirement were reduced overall for Tier I regular members. Tier II retirement rates remained unchanged;
- Withdrawal rates increased overall and changed from an age-based to service-based table;
- The spouse's age assumption for active members at retirement decreased from 4 years older to 2 years older for female members' spouses. Male members' spouse's age difference remained unchanged;
- Retiree health care plan participation rates for active members upon retirement was decreased from 65% to 60%. Deferred vested member retiree plan participation was reduced from 40% to 35%;
- Health care plan election for active members at retirement on a pre and post-Medicare basis was updated to reflect recent experience. Current plan election rates on a pre-Medicare basis are 90% Choice and 10% Choice Plus. On a post-Medicare basis the plan election rates are 60% Choice and 40% Choice Plus;

Changes in Actuarial Assumptions, Methods, or Procedures (continued)

- The per capita plan costs were updated to reflect the most recent year of claims experience, drug rebates and Employer Group Waiver Plan (EGWP) subsidies. Additionally, working premium rates were updated for 2022;
- Health care cost trend rates that apply to expected claims, premiums and retiree contributions were updated for pre and post-Medicare; and
- The discount rate used to measure the Total OPEB Liability was changed from 2.12% as of the December 31, 2020 valuation to 2.05% as of the December 31, 2021 valuation, based on the Municipal Bond 20-year Index Rate as of December 31, 2021. The 2.05% rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index as of December 31, 2021. The rate used for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate (formerly published monthly by the Board of Governors of the Federal Reserve System).

The impact on the December 31, 2021 Total OPEB Liability due to the changes in provisions and assumptions is shown below.

Changes in the GASB 74/75 Total OPEB Liability (TOL)

		TOL	% Change
December 31, 2020	**$**	**49,201,023**	
Expected Growth Due to Passage of Time		2,502,171	5.1%
Demographic Experience		(1,034,303)	-2.1%
Updated Per Capita Health Plan Experience		(4,724,850)	-9.6%
Change in Plan Provisions		4,049,971	8.2%
Change in Trend Assumption		(1,798,540)	-3.7%
Change in Discount Rate		587,314	1.2%
Change in Other Assumptions*		(250,037)	-0.5%
Total Change in TOL	**$**	**(668,274)**	**-1.4%**
December 31, 2021	**$**	**48,532,749**	**-1.4%**

* Includes changes in TOL based on the changes in assumptions from the previous valuation due to new assumptions adopted based on the recommendations in the 2021 experience study.

GASB 74 Components of the Net OPEB Liability

Valuation Date (VD):	December 31, 2021
Prior Measurement Date:	December 31, 2020
Measurement Date (MD):	December 31, 2021
Membership Data:	
Retirees and Beneficiaries	261
Inactive Members Eligible for Allowances	47
Active Employees	516
Total	824
Single Equivalent Interest Rate (SEIR):	
Long–Term Expected Rate of Return	7.00%
Municipal Bond Index Rate at Prior Measurement Date	2.12%
Municipal Bond Index Rate at Measurement Date	2.05%
Year in which Fiduciary Net Position is Projected to be Depleted	2021
Single Equivalent Interest Rate at Prior Measurement Date	2.12%
Single Equivalent Interest Rate at Measurement Date	2.05%
Net OPEB Liability:	
Total OPEB Liability (TOL)	$ 48,532,749
Fiduciary Net Position (FNP)	—
Net OPEB Liability (NOL = TOL – FNP)	$ 48,532,749
FNP as a percentage of TOL	0.00%

Fiscal Year Ending December 31, 2021

Total OPEB Liability	$ 48,532,749
Fiduciary Net Position	—
Net OPEB Liability	$ 48,532,749
Ratio of Fiduciary Net Position to Total OPEB Liability	0.00%

GASB 74 Schedule of Employer Contributions

	2021	2020	2019	2018	2017
Actuarially determined employer contribution	$ 4,275,965	$ 4,409,455	$ 4,004,996	$ 3,353,628	$ 4,681,598
Actual employer contributions	802,133	660,611	953,678	606,110	1,305,075
Annual contribution deficiency (excess)	$ 3,473,832	$ 3,748,844	$ 3,051,318	$ 2,747,518	$ 3,376,523
Covered employee payroll	$ 35,059,352	$ 35,164,564	$35,058,531	$ 34,071,319	$ 35,078,173
Actual contributions as a percentage of covered payroll	2.29%	1.88%	2.72%	1.78%	3.72%

GASB 74 Schedule of Changes in Net OPEB Liability

	2021	2020	2019	2018	2017
Total OPEB Liability					
Service Cost	$ 2,222,582	$ 1,903,291	$ 1,331,088	$ 2,197,459	$ 2,349,531
Interest	1,081,722	1,245,850	1,516,095	1,613,714	1,937,384
Benefit changes	4,049,971	(1,816,766)	(2,350,490)	(7,184,763)	(1,738,947)
Difference between expected and actual experience	(5,759,153)	(66,097)	(320,932)	(2,029,921)	(611,268)
Changes of assumptions	(1,461,263)	4,866,962	8,656,072	(7,310,288)	(1,979,137)
Benefit payments	(802,133)	(660,611)	(953,678)	(606,110)	(1,305,075)
Net change in Total OPEB Liability	$ (668,274)	$ 5,472,629	$ 7,878,155	$ (13,319,909)	$ (1,347,512)
Total OPEB Liability – beginning	$ 49,201,023	$ 43,728,394	$ 35,850,239	$ 49,170,148	$ 50,517,660
Total OPEB Liability – ending (a)	$ 48,532,749	$ 49,201,023	$ 43,728,394	$ 35,850,239	$ 49,170,148
Plan Fiduciary Net Position					
Employer contributions	$ 802,133	$ 660,611	$ 953,678	$ 606,110	$ 1,305,075
Net investment income	—	—	—	—	—
Net Benefit payments	$ (802,133)	(660,611)	(953,678)	(606,110)	(1,305,075)
Administrative expense	—	—	—	—	—
Other	—	—	—	—	—
Net change in Plan Fiduciary Net Position	$ —	$ —	$ —	$ —	$ —
Plan Fiduciary Net Position – beginning	$ —	$ —	$ —	$ —	$ —
Plan Fiduciary Net Position – ending (b)	$ —	$ —	$ —	$ —	$ —
Net OPEB Liability – ending (a) – (b)	$ 48,532,749	$ 49,201,023	$ 43,728,394	$ 35,850,239	$ 49,170,148

GASB 74 Schedule of the Net OPEB Liability

	2021	2020	2019	2018	2017
Total OPEB Liability	$ 48,532,749	$ 49,201,023	$ 43,728,394	$ 35,850,239	$ 49,170,148
Plan Fiduciary Net Position	—	—	—	—	—
Net OPEB Liability	$ 48,532,749	$ 49,201,023	$ 43,728,394	$ 35,850,239	$ 49,170,148
Ratio of Plan Fiduciary Net Position to Total OPEB Liability	0.00%	0.00%	0.00%	0.00%	0.00%
Covered employee payroll	$ 35,059,352	$ 35,164,564	$ 35,058,531	$ 34,071,319	$ 35,078,173
Net OPEB Liability as a percentage of covered employee payroll	138.43%	139.92%	124.73%	105.22%	140.17%

GASB 74 Sensitivity of the Net OPEB Liability

Sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability as of December 31, 2021, calculated using the discount rate of 2.05%, as well as what the Plan's Net OPEB Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.05%) or 1-percentage-point higher (3.05%) than the current rate:

	1% Decrease (1.05%)	Current Discount Rate (2.05%)	1% Increase (3.05%)
Total OPEB Liability	$ 58,193,857	$ 48,532,749	$ 40,981,603
Fiduciary Net Position	—	—	—
Net OPEB Liability	$ 58,193,857	$ 48,532,749	$ 40,981,603

Sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rates. The following presents the Net OPEB Liability as of December 31, 2021, calculated using the healthcare cost trend rates as summarized in this report, as well as what the Plan's Net OPEB Liability would be if it were calculated using trend rates that are 1-percentage-point lower or 1- percentage-point higher than the current healthcare cost trend rates:

	1% Decrease	Current Trend Rate	1% Increase
Total OPEB Liability	$ 40,161,817	$ 48,532,749	$ 59,271,782
Fiduciary Net Position	—	—	—
Net OPEB Liability	$ 40,161,817	$ 48,532,749	$ 59,271,782

Summary of Substantive Plan Provisions

Eligibility. Tier 1 retirement (hired before January 1, 2011)

- Age 50 and 10 years of service

Tier 2 retirement (hired on or after January 1, 2011)

- Age 62 and 10 years of service

All active employee members who separate with 10 or more years of service can receive postretirement health benefits under the Plan upon receipt of annuity benefits. In some cases, employees that retire with less than 10 years of service with Forest Preserve may be eligible for Health Benefits due to reciprocity or if they are Tier 1 and qualify for Money Purchase annuity benefits.

Surviving dependents of actively employed members and surviving dependents of annuitants are eligible for postretirement health benefits under the Plan upon receipt of annuity benefits.

Annuitants may cover their spouses and dependent children under the age of 26 and all disabled children (no age limitation if enrolled in the Plan prior to age 26). Eligible dependents that are between ages of 25 and 30 can be in the Plan if he/she is on active duty with the United States Armed Forces.

Effective January 1, 2019, all future plan participants who are ineligible for free Medicare Part A must purchase Medicare Part A and Part B in order to receive coverage under the health plan administered by FPEABF. FPEABF will provide a reduced monthly premium for annuitants and spouses who are ineligible for premium free Medicare Part A.

Medical Plans.

Non–Medicare retirees can choose from:

- United Healthcare Choice
- United Healthcare Choice Plus

Medicare eligible retirees can choose from:

- United Healthcare Choice
- United Healthcare Choice Plus

When Medicare is primary, the medical benefits coordinate by reducing the plan allowed charge amount by Medicare's payment, and then subsequently applying any applicable plan copays, coinsurances or deductibles to the remainder. A retail and mail pharmacy benefit through CVS/Caremark is included with the election of any medical plan. For Medicare primary participants, prescriptions are provided via an Employer Group Waiver Plan, with the same copays as the commercial prescription plan.

Summary of Substantive Plan Provisions (continued)

Contributions.

FPEABF pays the following percentage subsidies of the total premium, including the cost of family coverage:

	Participant		Fund	
	Choice	Choice Plus	Choice	Choice Plus
Retiree Annuitant w/o Medicare	56%	56%	44%	44%
Retiree Annuitant with Medicare	56%	56%	44%	44%
Survivor Annuitant w/o Medicare	56%	56%	44%	44%
Survivor Annuitant with Medicare	56%	56%	44%	44%

The following are the annual working rates effective January 1, 2021. These rates represent an estimated cost of self–insured coverage and include administrative expenses.

	Choice	Choice Plus
Single w/o Medicare	$ 17,400	$ 23,636
Two w/o Medicare	$ 34,800	$ 47,271
Single with Medicare	$ 4,693	$ 4,200
Two with Medicare	$ 9,386	$ 8,400

Summary of Assumptions and Methods

The actuarial assumptions used for the December 31, 2021 actuarial valuation are summarized below. The mortality rates, termination rates, retirement rates, salary, inflation, participation, and Medicare primary assumptions are based on an experience analysis of FPEABF, over the period 2017 through 2020. These assumptions were adopted by the Board on March 3, 2022. Per capita cost and medical trend rate assumptions are revisited annually. The next experience analysis is scheduled to occur after the December 31, 2024 actuarial valuation, with expected implementation of updated assumptions beginning with the December 31, 2025 actuarial valuation. This analysis will cover the four-year period from 2021 through 2024.

Valuation Date. December 31, 2021

Measurement Date. December 31, 2021

Discount Rate. 2.05% at December 31, 2021 (Municipal Bond Index Rate)
2.12% at December 31, 2020 (Municipal Bond Index Rate)

Benefit payments are funded on a pay-as-you-go basis. The discount rate is the single equivalent rate which results in the same present value as discounting future benefit payments made from assets at the long term expected rate of return and discounting future benefit payments funded on a pay-as-you-go basis on the Municipal Bond 20-year Index Rate.

Mortality Rates. All mortality rates use Pub-2010 General Amount Weighted Median Mortality Tables

Mortality Projections. All mortality rates are projected from 2010 using generational mortality improvement with Scale MP-2021.

Deaths After Retirement. Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Retirees. Rates for male members are set forward one year and multiplied by 107% at all ages. Rates for female members are set forward 2 years and multiplied by 109% at all ages. Because the retiree tables have no rates prior to age 50, the Pub-2010 General Amount Weighted Median Mortality Table for Employees is used for ages less than 50.

Deaths After Retirement (Survivors of Deceased members). Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Contingent Survivors. Because the contingent survivor tables have no rates prior to age 45, the Pub-2010 General Amount Weighted Median Mortality Table for Employees is used for ages less than 45.

Deaths Prior to Retirement. Mortality rates are based on the Pub-2010 General Amount Weighted Median Mortality Table for Employees for all employees.

Summary of Assumptions and Methods (continued)

Termination Rates. Termination rates based on the recent experience of the Fund were used. The following is a sample of the termination rates used:

Service at Termination	Rate
0	15.0%
5	8.0%
10	6.0%
15	3.5%
20	3.5%
25+	2.5%

Retirement Rates for Tier I Members. For persons who became participants prior to January 1, 2011, rates of retirement for each age from 50 to 80 based on the recent experience of the Fund. The following are samples of the rates of retirement used:

Age	With Less than 30 Years of Service at Retirement	With 30 Years or More Years of Service at Retirement
<50	0.0%	28.0%
50-58	3.5%	28.0%
59	12.0%	28.0%
60-64	12.0%	21.0%
65-79	20.0%	21.0%
80+	100.0%	100.0%

Summary of Assumptions and Methods (continued)

Retirement Rates for Tier II Members. For persons who became or will become participants on or after January 1, 2011, rates of retirement for each age from 62 to 75 were used. The following are samples of the rates of retirement that were used:

	Male	Female
Age	Less than 30 years of service	Less than 30 years of service
62	.400	.350
64	.225	.150
67	.400	.350
70	.450	.200
75	1.000	1.000

Inflation Rate. 2.50% per year, compounded annually

Salary Increases.

Service	Wage Growth	Merit and Longevity	Total
0	3.00%	2.00%	5.00%
1	3.00%	2.00%	5.00%
2	3.00%	2.00%	5.00%
3	3.00%	2.00%	5.00%
4	3.00%	1.50%	4.50%
5	3.00%	1.50%	4.50%
6	3.00%	1.00%	4.00%
7	3.00%	0.50%	3.50%
8	3.00%	0.50%	3.50%
9	3.00%	0.50%	3.50%
10	3.00%	0.50%	3.50%
>10	3.00%	0.00%	3.00%

Disability Rates. Included in termination and retirement rates.

Summary of Assumptions and Methods (continued)

Anticipated Plan Participation. 60% of eligible employees are assumed to elect retiree health benefits. Of those who elect retiree medical benefits, 94% are assumed to be eligible for free Medicare Part A. For those assumed to be ineligible for free Medicare Part A, a reduced premium will be provided by FPEABF.

35% of vested terminated employees are assumed to elect retiree medical benefits upon retirement and are assumed to retire at age 61.

Based on recent experience, future annuitants are assumed to elect from among the available plans as follows:

% Who Elect	Choice PPO	Choice Plus PPO
Pre–Medicare	90%	10%
Post–Medicare	60%	40%

Current annuitants who elect coverage are assumed to remain in coverage. Current annuitants who have waived or deferred coverage are not assumed to participate in the future.

Summary of Assumptions and Methods (continued)

Dependent Coverage.

35% of future annuitants are assumed to cover a dependent. 35% of surviving dependents are assumed to elect coverage upon the death of an actively employed member and are assumed to commence benefits when the actively employed member would have reached age 61. Male members are assumed to be 4 years older than female spouses and female members are assumed to be 2 years younger than male spouses. Actual ages were used for dependents of current annuitants.

Medicare Coordination.

Medicare is assumed to remain the primary payer for current and future retirees and spouses who are at least age 65 and who are currently on Medicare. Medicare is assumed to become primary for 100% of retirees and spouses who retired before January 1, 2019 and who are not yet age 65, when they attain that age. However, five percent of this group is assumed to be ineligible for free Medicare Part A and a reduced premium will be provided by FPEABF. For all other retirees and spouses, Medicare is assumed to be the primary payer at the time they reach age 65.

Per Capita Health Plan Costs.

Estimated net annual per capita incurred claim costs per covered adult for fiscal year 2022 at age 65, reflecting administrative expenses, drug rebates and EGWP subsidies.

	Choice PPO	Choice Plus PPO
Not Medicare Eligible	$ 18,916	$ 19,963
Medicare Eligible	$ 4,572	$ 4,087

Per capita medical costs were developed using claims, enrollment, drug rebates and EGWP subsidies for the period from January 1, 2021 through December 31, 2021 provided by the Fund. The resulting costs were adjusted for age morbidity.

The valuation relies on the accuracy of the rate calculations. We understand that the rates represent only medical and prescription drug benefit costs for annuitants under the Fund.

Summary of Assumptions and Methods (continued)

Age–based Morbidity.

Per capita costs are adjusted to reflect expected cost differences due to age and gender. The morbidity factors for pre-Medicare morbidity were developed from "Health Care Costs—From Birth to Death" sponsored by the Society of Actuaries and prepared by Dale H. Yamamoto (May 2013). Table 4 from Mr. Yamamoto's study formed the basis of Medicare morbidity factors that are gender distinct and assumed a cost allocation of 60% for pharmacy, 20% for inpatient, 10% for outpatient, and 10% for professional services. Adjustments were made to Table 4 factors for inpatient costs at age 70 and below to smooth out what appears to be a spike in utilization for Medicare retirees gaining healthcare for the first time through Medicare. While such retirees were included in the study, their specific experience is not applicable for a valuation of an employer retiree medical plan where participants had group active coverage before retirement. Morbidity factors at sample ages are shown below:

Age	Male	Female
50	0.4612	0.5736
55	0.6085	0.6667
60	0.7829	0.7791
65	1.0000	0.9438
70	1.1873	1.1094
75	1.2752	1.2009
80	1.3381	1.2697
85	1.3479	1.3171
90	1.3235	1.3303

Health Care Cost Trend Rates.

Health care cost trend rates apply to expected claims, premiums and retiree contributions:

Year	Pre– Medicare	Post– Medicare
2022	7.000%	5.500%
2023	6.750%	5.250%
2024	6.500%	5.125%
2025	6.250%	5.000%
2026	6.000%	4.750%
2027	5.750%	4.500%
2028	5.500%	4.500%
2029	5.250%	4.500%
2030	5.000%	4.500%
2031	4.750%	4.500%
2032+	4.500%	4.500%

Summary of Assumptions and Methods (continued)

Census Data.

The active, deferred vested and retiree census were provided by the Fund.

Actuarial Cost Method.

The entry age actuarial cost as a percentage of earnings was used.

Amortization Method.

30 years open, level dollar.

Assets.

The valuation assumes FPEABF or the District has not set aside any assets to prefund its retiree medical liabilities.

Retiree Drug Subsidy and Employer Group Waiver Plan.

FPEABF will no longer be receiving the Retiree Drug Subsidy due to their switch to an EGWP plan effective January 1, 2017. Per capita claims costs for fiscal year 2022 include approximately 28% savings due to drug rebates and EGWP subsidies.

IBNR.

The calculations do not include any explicit amount for incurred but not reported claims (IBNR).

Miscellaneous.

The valuation was prepared on an on-going plan basis. This assumption does not imply that an obligation to continue the plan actually exists.

COVID-19.

The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.

Benefits Not Valued.

On May 21, 2020, the Levin case was decided in the plaintiff's favor. As of the date of the report, a minimum number have enrolled in FPEABF and CEABF retiree health care plan as a result of the Levin case. Given the limited amount of elections, we have not included additional cost impact of the Levin case beyond those in the census data submitted for the valuation.

Description of Actuarial Methods

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the **Entry Age Actuarial Cost Method** of funding.

Sometimes called a "funding method," this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cos**t is computed as the level percentage of pay which, if paid from the earliest time each Member would have been eligible to join the Plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the Plan.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of funding that would have accumulated had annual contributions equal to the Normal Cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date).

The **Unfunded Actuarial Accrued Liability** is the excess of the Actuarial Accrued Liability over the Actuarial Value of Plan Assets actually on hand on the valuation date. The Unfunded Actuarial Accrued Liability is amortized as a level dollar amount over an open 30-year period.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the Unfunded Actuarial Accrued Liability.

Glossary of Terms

Actuarially determined contribution	A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Actuarial present value of projected benefit payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial valuation	The determination, as of a point in time (the actuarial valuation date), of the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial valuation date	The date as of which an actuarial valuation is performed.
Ad hoc postemployment benefit changes	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic hoc postemployment benefit changes	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority.
Covered–employee payroll	The payroll for employees that are provided with OPEB through the OPEB plan.
Discount rate	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: a. The actuarial present value of benefit payments projected to be made in future periods in which (1) the amount of the OPEB plan's fiduciary net position is projected (under the requirements of this Statement) to be greater than the benefit payments that are projected to be made in that period and (2) OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on OPEB plan investments. b. The actuarial present value of projected benefit payments not included in (a), calculated using a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

Glossary of Terms (continued)

Entry age actuarial cost method	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the Actuarial accrued liability.
Healthcare cost trend rates	The rates of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
Inactive employees	Individuals no longer employed by an employer in the OPEB plan, or the beneficiaries of those individuals. Inactive employees include individuals who have accumulated benefits under the terms of an OPEB plan but are not yet receiving benefit payments.
Measurement period	The period between the prior and the current measurement dates.
Net OPEB liability	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit OPEB plan that meets the criteria in paragraph 4 of GASB Statement Nos. 74 and 75. Other postemployment benefits (OPEB) (such as death benefits, life insurance, disability, and long- term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
Projected benefit payments	All benefits estimated to be payable through the OPEB plan (including amounts to be paid by employers or non-employer contributing entities as the benefits come due) to current active and inactive employees as a result of their past service and their expected future service.
Real rate of return	The rate of return on an investment after adjustment to eliminate inflation.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total OPEB liability	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service.

Schedule of Active Member Valuation Data — Pension Benefits

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase In Average Pay
12/31/12	467	$ 26,252,071	$ 56,214	1.1%
12/31/13	534	29,485,857	55,217	-1.8%
12/31/14	525	29,811,912	56,785	2.8%
12/31/15	568	32,007,657	56,352	-0.8%
12/31/16	572	34,509,011	60,330	7.1%
12/31/17	548	35,078,173	64,011	6.1%
12/31/18	536	34,071,319	63,566	-0.7%
12/31/19	546	35,056,459	64,206	1.0%
12/31/20	521	35,159,979	67,486	5.1%
12/31/21	516	35,059,352	67,944	0.7%

Schedule of Retirees and Beneficiaries Added To and Removed From Rolls — Pension Benefits

	Added–To–Rolls		Removed–From–Rolls		Rolls–End–of–Year			
Year Ended	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits	Average Annual Benefit	% Increase in Average Annual Benefit
2012	30	$ 1,051,757	17	$ 259,746	511	$ 13,032,318	$ 25,504	3.8%
2013	48	1,547,583	28	324,780	531	14,255,121	26,846	5.3%
2014	32	1,287,991	28	629,998	535	14,913,114	27,875	3.8%
2015	24	1,007,969	30	656,536	529	15,264,547	28,855	3.5%
2016	21	888,082	20	414,711	530	15,737,918	29,694	2.9%
2017	26	1,094,739	29	724,309	527	16,108,348	30,566	2.9%
2018	31	1,628,543	27	677,580	531	17,059,311	32,127	5.1%
2019	27	1,202,929	26	587,149	532	17,675,090	33,224	3.4%
2020	29	1,386,031	23	507,321	538	18,553,800	34,487	3.8%
2021	28	1,528,995	30	990,982	536	19,091,813	35,619	3.3%

Schedule of Retirees and Beneficiaries Added To and Removed From Rolls — Postemployment Healthcare

	Added–To–Rolls		Removed–From–Rolls		Rolls–End–of–Year			
Year Ended	Number	Annual Benefits	Number	Annual Benefits*	Number	Annual Benefits	Average Annual Benefit	% Increase in Average Annual Benefit
2012	18	$ 91,062	16	$ 218,153	281	$ 1,197,385	$ 4,261	-10.2%
2013	24	120,344	14	(277,417)	291	1,595,146	5,482	28.7%
2014	18	87,347	22	88,900	287	1,771,393	6,172	12.6%
2015	8	132,420	17	79,925	278	1,823,888	6,561	6.3%
2016	16	(206,717)**	13	67,620	281	1,549,551	5,514	-15.9%
2017	13	(179,554)**	21	73,922	273	1,305,075	4,780	-13.3%
2018	12	(661,677)**	12	37,288	273	606,110	2,220	-53.6%
2019	12	395,705	14	48,137	271	953,678	3,519	58.5%
2020	15	(245,139)**	15	47,928	271	660,611	2,438	-30.70%
2021	7	196,332	17	54,810	261	802,133	3,073	26.10%

* Includes Liability from changes in benefit levels.

** Employer contribution decreased, resulting in reduction of employer paid benefits from the level in prior years.

Solvency Test — Pension Benefits

	Accrued Liabilities For				Percent of Accrued Liabilities Covered By Assets		
Fiscal Year	(1) Active and Inactive Member Accumulated Contributions	(2) Member Currently Receiving Benefits	(3) Active and Inactive Member Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
2012	$ 30,638,516	$ 155,638,787	$ 86,859,427	$ 172,566,956	100%	91%	0%
2013	29,531,719	169,355,865	78,672,628	182,554,587	100%	90%	0%
2014	29,765,059	177,169,877	79,026,027	189,917,999	100%	90%	0%
2015	31,403,346	180,566,467	79,769,255	192,729,042	100%	89%	0%
2016	32,875,566	183,610,860	83,773,302	198,244,885	100%	90%	0%
2017	32,887,656	184,465,544	84,860,339	204,273,172	100%	93%	0%
2018	33,549,681	195,126,716	84,336,740	202,894,946	100%	87%	0%
2019	34,895,654	200,024,745	84,790,185	203,486,292	100%	84%	0%
2020	35,812,867	209,018,919	86,314,991	209,707,146	100%	83%	0%
2021	37,194,547	225,330,728	81,863,933	218,414,061	100%	80%	0%

Solvency Test — Postemployment Healthcare

	Accrued Liabilities For				Percent of Accrued Liabilities Covered By Assets		
Fiscal Year	(1) Active and Inactive Member Accumulated Contributions	(2) Member Currently Receiving Benefits	(3) Active and Inactive Member Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
2012	$ —	$ 25,571,863	$ 20,141,897	$ —	0%	0%	0%
2013	—	26,785,364	20,328,289	—	0%	0%	0%
2014	—	27,165,388	20,046,785	—	0%	0%	0%
2015	—	26,560,776	22,918,014	—	0%	0%	0%
2016	—	23,482,726	21,225,463	—	0%	0%	0%
2017	—	22,654,735	20,756,005	—	0%	0%	0%
2018	—	19,477,243	16,372,996	—	0%	0%	0%
2019	—	23,020,257	20,708,137	—	0%	0%	0%
2020	—	25,495,929	23,705,094	—	0%	0%	0%
2021	—	26,263,421	22,269,328	—	0%	0%	0%

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STATISTICAL Section

This section contains additional schedules that are designed to supplement the information in the Annual Comprehensive Financial Report:

Statements of Changes in Plan Net Position — Pension Benefits and Postemployment Healthcare provides details on the specific sources and uses of funds.

Schedules of Retired Members by Benefit Type — Pension Benefits and Postemployment Healthcare provide details on the monthly pension amounts for retirement and survivor members, including those with postemployment healthcare.

Schedule of Average Benefit Payments — Pension Benefits and Postemployment Healthcare provide details on years of credited service, average monthly pension, average monthly final average salary, and the number of new retirees, including those with postemployment healthcare.

Additional Schedules Required by Employer provide details on historical financial, investment and actuarial performance.

For year ended December 31, 2021, with comparative totals for 9 years

	2021	2020	2019	2018	2017
Additions:					
Employer contributions	$ 3,128,484	$ 3,291,529	$ 3,345,462	$ 3,481,281	$ 2,239,632
Employee contributions	3,124,691	3,192,954	3,020,322	3,127,980	3,300,222
Net investment and net securities lending income (loss)	27,021,748	21,851,955	33,653,650	(8,422,851)	30,500,015
Other	42,007	714,659	—	—	14,250
Total additions	33,316,930	29,051,097	40,019,434	(1,813,590)	36,054,119
Deductions:					
Benefits					
Retirement	15,648,029	15,138,348	14,436,019	13,844,830	13,253,194
Survivors	3,109,832	2,928,375	2,878,661	2,761,444	2,630,286
Disability	195,159	174,827	168,593	127,495	232,999
Refunds					
Death	37,835	240,476	14,500	348,881	18,018
Separation	291,286	454,178	588,197	493,684	313,756
Other	125,896	204,132	237,428	240,945	222,643
Employee transfers to (from) Cook County	—	—	252,406	182,512	54,257
Net administrative and miscellaneous expenses	157,851	158,367	154,352	159,489	160,418
Total deductions	19,565,888	19,298,703	18,730,156	18,159,280	16,885,571
Net increase (decrease)	13,751,042	9,752,394	21,289,278	(19,972,870)	19,168,548
Net Position:					
Beginning of period	221,439,748	211,687,354	190,398,076	210,370,946	191,202,398
End of period	$ 235,190,790	$ 221,439,748	$ 211,687,354	$ 190,398,076	$210,370,946

For year ended December 31, 2021, with comparative totals for 9 years (continued)

	2016	2015	2014	2013	2012
Additions:					
Employer contributions	$ 1,971,946	$ 1,763,345	$ 1,520,316	$ 1,403,628	$ 2,117,976
Employee contributions	3,184,051	2,771,533	2,645,164	2,687,211	2,426,776
Net investment and net securities lending income (loss)	10,477,792	2,549,975	13,525,606	30,383,512	22,209,855
Other	—	11,442	—	691	6,062
Total additions	15,633,789	7,096,295	17,691,086	34,475,042	26,760,669
Deductions:					
Benefits					
Retirement	12,896,736	12,820,708	12,464,872	11,719,920	10,714,092
Survivors	2,523,376	2,281,100	2,206,512	2,052,205	1,901,171
Disability	301,487	183,060	172,196	277,873	347,509
Refunds					
Death	118,565	41,539	75,826	111,783	174,789
Separation	434,654	486,280	644,017	545,613	786,951
Other	187,367	108,089	241,794	301,311	226,899
Employee transfers to (from) Cook County	133,999	18,370	175,370	(106,012)	205,887
Net administrative and miscellaneous expenses	157,577	143,953	142,067	119,019	111,662
Total deductions	16,753,761	16,083,099	16,122,654	15,021,712	14,468,960
Net increase (decrease)	(1,119,972)	(8,986,804)	1,568,432	19,453,330	12,291,709
Net Position:					
Beginning of period	192,322,370	201,309,174	199,740,742	180,287,412	167,995,703
End of period	$ 191,202,398	$ 192,322,370	$ 201,309,174	$ 199,740,742	$ 180,287,412

For year ended December 31, 2021, with comparative totals for 9 years

	2021	2020	2019	2018	2017
Additions:					
Employer contributions	$ 802,133	$ 660,611	$ 953,678	$ 606,110	$ 1,305,075
Annuitant healthcare benefits contributions*	—	—	—	—	—
Other	1,123,337	1,093,578	814,335	946,166	581,415
Total additions	1,925,470	1,754,189	1,768,013	1,552,276	1,886,490
Deductions:					
Healthcare Benefits	1,925,470	1,754,189	1,768,013	1,552,276	1,886,490
Net increase (decrease)	—	—	—	—	—
Net Position:					
Beginning of period	—	—	—	—	—
End of period	$ —	$ —	$ —	$ —	$ —

* Beginning 2017, the annuitants Healthcare contribution is netted against Healthcare benefits expense.

For year ended December 31, 2021, with comparative totals for 9 years (continued)

	2016	2015	2014	2013	2012
Additions:					
Employer contributions	$ 1,419,435	$ 1,698,692	$ 1,616,436	$ 1,459,517	$ 991,000
Annuitant healthcare benefits contributions	1,177,887	1,134,920	1,193,549	1,190,706	1,127,026
Other	317,217	228,836	204,853	158,692	206,385
Total additions	2,914,539	3,062,448	3,014,838	2,808,915	2,324,411
Deductions:					
Healthcare Benefits	2,914,539	3,062,448	3,014,838	2,808,915	2,324,411
Net increase (decrease)	—	—	—	—	—
Net Position:					
Beginning of period	—	—	—	—	—
End of period	$ —	$ —	$ —	$ —	$ —

Schedule of Retired Members by Benefit Type — Pension Benefits

As of December 31, 2021

Amount of Monthly Pension Benefit			Number of Recipients	Type of Pension Benefit		Benefit Payment Form		
				1	2	1	2	3
$ 1	—	500	49	27	22	29	17	3
501	—	1,000	59	32	27	37	22	0
1,001	—	1,500	63	30	33	48	15	0
1,501	—	2,000	47	33	14	32	15	0
2,001	—	2,500	37	22	15	24	13	0
2,501	—	3,000	36	21	15	23	13	0
3,001	—	3,500	49	37	12	38	11	0
3,501	—	4,000	39	34	5	18	21	0
4,001	—	4,500	38	31	7	21	17	0
4,501	—	5,000	23	20	3	12	11	0
5,001	—	5,500	26	26	0	7	19	0
5,501	—	6,000	17	16	1	5	12	0
6,001	—	6,500	19	19	0	2	17	0
6,501	—	7,000	13	13	0	2	11	0
7,001	—	7,500	7	7	0	2	5	0
7,501	—	8,000	6	6	0	1	5	0
8,001	—	8,500	4	4	0	0	4	0
8,501	—	9,000	1	1	0	0	1	0
9,001	—	9,500	0	0	0	0	0	0
9,501	—	10,000	2	2	0	0	2	0
10,001	—	10,500	0	0	0	0	0	0
10,501	—	11,000	0	0	0	0	0	0
11,001	—	11,500	0	0	0	0	0	0
11,501	—	12,000	0	0	0	0	0	0
12,001	—	12,500	0	0	0	0	0	0
12,501	—	13,000	0	0	0	0	0	0
13,001	—	13,500	0	0	0	0	0	0
13,501	—	14,000	0	0	0	0	0	0
14,001	—	14,500	1	0	0	0	0	0
14,501	—	15,000	0	0	0	0	1	0
Over $15,000			0	1	0	0	0	0
Totals			**536**	**382**	**154**	**301**	**232**	**3**

Type of Pension Benefit
1. Regular Retirement
2. Survivor Payment

Form of Benefit
1. Whole Life Annuity
2. Joint and Contingent Annuity
3. Temporary Annuit

As of December 31, 2021

Amount of Monthly Pension Benefit			Number of Recipients	Type of Pension Benefit		Benefit Payment Form		
				1	2	1	2	3
$ 1	—	500	4	1	3	4	0	0
501	—	1,000	15	5	10	11	4	0
1,001	—	1,500	25	5	20	23	2	0
1,501	—	2,000	17	6	11	13	4	0
2,001	—	2,500	22	14	8	15	7	0
2,501	—	3,000	23	10	13	18	5	0
3,001	—	3,500	28	19	9	21	7	0
3,501	—	4,000	22	20	2	13	9	0
4,001	—	4,500	25	20	5	15	10	0
4,501	—	5,000	14	12	2	10	4	0
5,001	—	5,500	17	17	0	6	11	0
5,501	—	6,000	11	10	1	5	6	0
6,001	—	6,500	10	10	0	2	8	0
6,501	—	7,000	11	11	0	2	9	0
7,001	—	7,500	4	4	0	2	2	0
7,501	—	8,000	5	5	0	0	5	0
8,001	—	8,500	4	4	0	0	4	0
8,501	—	9,000	1	1	0	0	1	0
9,001	—	9,500	0	0	0	0	0	0
9,501	—	10,000	2	2	0	0	2	0
10,001	—	10,500	0	0	0	0	0	0
10,501	—	11,000	0	0	0	0	0	0
11,001	—	11,500	0	0	0	0	0	0
11,501	—	12,000	0	0	0	0	0	0
12,001	—	12,500	0	0	0	0	0	0
12,501	—	13,000	0	0	0	0	0	0
13,001	—	13,500	0	0	0	0	0	0
13,501	—	14,000	0	0	0	0	0	0
14,001	—	14,500	0	0	0	0	0	0
14,501	—	15,000	1	1	0	0	1	0
	Over $15,000		0	0	0	0	0	0
Totals			**261**	**177**	**84**	**160**	**101**	**0**

Type of Pension Benefit
1. Regular Retirement
2. Survivor Payment

Form of Benefit
1. Whole Life Annuity
2. Joint and Contingent Annuity
3. Temporary Annuit

		Years of Credited Service						
		0–4	5–9	10–14	15–19	20–24	25–29	30+
2012	Average Monthly Pension	$ 0	$ 0	$ 2,765	$ 2,269	$ 2,321	$ 3,298	$ 3,930
	Average Monthly Final Average Salary	$ 0	$ 0	$ 7,434	$ 5,636	$ 4,079	$ 4,557	$ 4,941
	Number of New Retirees	0	0	2	2	8	4	5
2013	Average Monthly Pension	$ 321	$ 568	$ 1,439	$ 1,942	$ 2,864	$ 5,285	$ 3,732
	Average Monthly Final Average Salary	$ 6,012	$ 2,898	$5,512	$ 3,355	$ 4,971	$ 6,966	$ 4,691
	Number of New Retirees	3	2	6	1	9	1	14
2014	Average Monthly Pension	$ 1,331	$ 982	$ 1,427	$ 1,505	$ 2,760	$ 3,408	$ 3,173
	Average Monthly Final Average Salary	$ 15,150	$ 6,266	$ 4,789	$ 3,558	$ 4,810	$ 4,892	$ 4,044
	Number of New Retirees	1	4	4	4	3	7	6
2015	Average Monthly Pension	$ 639	$ 150	$ 1,141	$ 0	$ 2,069	$ 2,840	$ 3,591
	Average Monthly Final Average Salary	$ 6,768	$ 1,491	$ 4,313	$ 0	$ 5,402	$ 4,669	$ 4,500
	Number of New Retirees	2	1	2	0	2	2	5
2016	Average Monthly Pension	$ 177	$ 0	$ 0	$ 924	$ 0	$ 3,632	$ 3,640
	Average Monthly Final Average Salary	$ 5,805	$ 0	$ 0	$ 3,397	$ 0	$ 5,049	$ 4,671
	Number of New Retirees	2	0	0	1	0	5	4
2017	Average Monthly Pension	$ 402	$ 969	$ 1,696	$ 2,538	$ 1,773	$ 3,730	$ 3,843
	Average Monthly Final Average Salary	$ 5,788	$ 7,229	$ 5,836	$ 7,680	$ 4,704	$ 5,324	$ 4,829
	Number of New Retirees	5	3	2	1	2	7	5
2018	Average Monthly Pension	$ 449	$ 1,417	$ 1,062	$ 0	$ 2,968	$ 4,555	$ 4,562
	Average Monthly Final Average Salary	$ 7,589	$ 10,124	$ 4,330	$ 0	$ 5,464	$ 6,331	$ 5,868
	Number of New Retirees	2	1	5	0	3	8	7
2019	Average Monthly Pension	$ 490	$ 999	$ 1,227	$ 2,465	$ 2,835	$ 4,386	$ 3,589
	Average Monthly Final Average Salary	$ 8,159	$ 7,579	$ 5,703	$ 5,881	$ 4,638	$ 6,129	$ 4,507
	Number of New Retirees	1	3	5	1	1	2	5
2020	Average Monthly Pension	$ 0	$ 1,026	$ 1,791	$ 2,385	$ 4,460	$ 4,761	$ 3,991
	Average Monthly Final Average Salary	$ 0	$ 6,210	$ 6,995	$ 7,955	$ 6,512	$ 6,709	$ 5,290
	Number of New Retirees	0	4	1	2	3	3	6
2021	Average Monthly Pension	$ 373	$ 1,143	$ 1,521	$ 0	$ 2,334	$ 5,009	$ 4,481
	Average Monthly Final Average Salary	$ 6,142	$ 6,508	$ 5,161	$ 0	$ 4,429	$ 6,799	$ 5,810
	Number of New Retirees	2	1	2	0	1	4	6

		Years of Credited Service						
		0–4	5–9	10–14	15–19	20–24	25–29	30+
2012	Average Monthly Pension	$ 0	$ 0	$ 3,346	$ 0	$ 2,341	$ 2,647	$ 4,265
	Average Monthly Final Average Salary	$ 0	$ 0	$ 7,819	$ 0	$ 4,115	$ 3,889	$ 5,367
	Number of New Retirees	0	0	1	0	7	3	4
2013	Average Monthly Pension	$ 0	$ 737	$ 1,616	$ 1,942	$ 2,763	$ 5,285	$ 3,594
	Average Monthly Final Average Salary	$ 0	$ 4,049	$ 5,217	$ 3,355	$ 4,418	$ 6,966	$ 4,528
	Number of New Retirees	0	1	2	1	6	1	8
2014	Average Monthly Pension	$ 0	$ 0	$ 1,675	$ 0	$ 2,314	$ 3,643	$ 3,167
	Average Monthly Final Average Salary	$ 0	$ 0	$ 5,856	$ 0	$ 3,915	$ 5,155	$ 4,076
	Number of New Retirees	0	0	2	0	1	6	4
2015	Average Monthly Pension	$ 0	$ 0	$ 0	$ 0	$ 3,473	$ 0	$ 3,181
	Average Monthly Final Average Salary	$ 0	$ 0	$ 0	$ 0	$ 5,365	$ 0	$ 3,995
	Number of New Retirees	0	0	0	0	1	0	3
2016	Average Monthly Pension	$ 0	$ 0	$ 0	$ 0	$ 0	$ 3,611	$ 3,640
	Average Monthly Final Average Salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 4,996	$ 4,671
	Number of New Retirees	0	0	0	0	0	3	4
2017	Average Monthly Pension	$ 0	$ 0	$ 2,464	$ 0	$ 0	$ 4,040	$ 3,997
	Average Monthly Final Average Salary	$ 0	$ 0	$ 8,074	$ 0	$ 0	$ 5,623	$ 5,027
	Number of New Retirees	0	0	1	0	0	4	4
2018	Average Monthly Pension	$ 0	$ 0	$ 918	$ 0	$ 3,670	$ 5,077	$ 4,787
	Average Monthly Final Average Salary	$ 0	$ 0	$ 3,616	$ 0	$ 5,450	$ 7,165	$ 6,124
	Number of New Retirees	0	0	1	0	2	4	4
2019	Average Monthly Pension	$ 0	$ 1,580	$ 1,627	$ 2,024	$ 2,835	$ 4,386	$ 3,731
	Average Monthly Final Average Salary	$ 0	$ 9,782	$ 5,087	$ 4,142	$ 4,638	$ 6,129	$ 4,664
	Number of New Retirees	0	1	2	1	1	2	4
2020	Average Monthly Pension	$ 0	$ 735	$ 1,791	$ 0	$ 3,613	$ 4,666	$ 4,036
	Average Monthly Final Average Salary	$ 0	$ 3,752	$ 6,995	$ 0	$ 5,522	$ 6,306	$ 5,356
	Number of New Retirees	0	1	1	0	1	1	3
2021	Average Monthly Pension	$ 0	$ 0	$ 0	$ 0	$ 0	$ 5,780	$ 4,324
	Average Monthly Final Average Salary	$ 0	$ 0	$ 0	$ 0	$ 0	$ 7,718	$ 5,739
	Number of New Retirees	0	0	0	0	0	3	2

Schedule of Investment Rate of Return — Pension and Postemployment Healthcare Benefits Combined

Year Ended December 31,	Investment Rate of Return (Net of Fees)
2012	13.8%
2013	17.5%
2014	7.1%
2015	1.5%
2016	5.7%
2017	16.6%
2018	-4.3%
2019	18.6%
2020	11.4%
2021	12.9%

Schedule of Actuarial Value of Assets vs. Fair Value of Assets — Pension and Postemployment Healthcare Benefits Combined

Year Ended December 31,	Actuarial Value of Assets ARC	Fair Value of Assets	Actuarial Value as a Percentage of Fair Value
2012	$ 172,566,956	$ 180,287,412	95.7%
2013	182,554,587	199,740,742	91.4%
2014	189,917,999	201,309,174	94.3%
2015	193,729,043	192,322,370	100.7%
2016	198,244,885	191,202,398	103.7%
2017	204,273,172	210,370,946	97.1%
2018	202,894,946	190,398,076	106.6%
2019	203,486,292	211,687,354	96.1%
2020	209,707,146	221,439,748	94.7%
2021	218,414,061	235,190,790	92.9%

Schedule of Employer Contributions — Pension and Postemployment Healthcare Benefits Combined

Year Ended December 31,	Actuarially Required Contribution (ARC)	Tax Levy Requested	Actual Employer Contribution	Percentage of ARC Contributed
2012	$ 12,429,935	$ 3,188,505	$ 3,108,976	25.0%
2013	14,045,708	2,975,735	2,863,145	20.4%
2014	13,072,570	3,154,809	3,136,752	24.0%
2015	13,191,203	3,493,374	3,462,037	26.2%
2016	14,822,154	3,438,713	3,391,381	22.9%
2017	13,547,803	3,602,993	3,544,707	26.2%
2018	13,913,427	4,139,266	4,087,391	29.4%
2019	13,169,170	4,290,290	4,299,140	32.6%
2020	13,027,669	4,066,374	3,952,140	30.3%
2021	13,554,738	3,926,419	3,930,617	29.0%

Schedule of Financial Condition — Pension and Postemployment Healthcare Benefits Combined

	For year ended December 31, 2021, with comparative totals for 9 years				
	2021	**2020**	**2019**	**2018**	**2017**
Beginning Net Position (Fair Value)	$ 221,439,748	$ 211,687,354	$ 190,398,076	$ 210,370,946	$ 191,202,398
Additions:					
Employer contributions	3,930,617	3,952,140	4,299,140	4,087,391	3,544,707
Employer contributions	3,124,691	3,192,954	3,020,322	3,127,980	3,300,222
Annuitant Health Benefit Contributions	—*	—*	—*	—*	—*
Net investment income (loss)	27,021,748	21,851,955	33,653,650	(8,422,851)	30,500,015
Other	1,165,344	1,808,237	814,335	946,166	595,665
Total additions	35,242,400	30,805,286	41,787,447	(261,314)	37,940,609
Deductions:					
Benefits	20,878,490	19,995,739	19,251,286	18,286,045	18,002,969
Refunds	455,017	898,786	840,125	1,083,510	554,417
Employee transfers to (from) Cook County	—	—	252,406	182,512	54,257
Administrative Expenses	157,851	158,367	154,352	159,489	160,418
Total deductions	21,491,358	21,052,892	20,498,169	19,711,556	18,772,061
Ending Net Position (Fair Value)	$ 235,190,790	$ 221,439,748	$ 211,687,354	$ 190,398,076	$ 210,370,946
Actuarial Value of Assets	218,414,061	209,707,146	203,486,292	202,894,946	204,273,172
Actuarial Accrued Liabilities (AAL)	367,888,407	355,129,896	343,422,342	336,684,911	330,912,840
Unfunded AAL (UAAL) (Fair Value)	132,697,617	133,690,148	131,734,988	146,286,835	120,541,894
Unfunded AAL (UAAL) (Actuarial Value)	149,474,346	145,422,750	139,936,050	133,789,965	126,639,668
Funded Ratio (Fair Value)	63.9%	62.4%	61.6%	56.6%	63.6%
Funded Ratio (Actuarial Value)	59.4%	59.1%	59.3%	60.3%	61.7%

* Beginning 2017, the annuitants Healthcare contributions netted against Healthcare benefits expense.

Schedule of Financial Condition — Pension and Postemployment Healthcare Benefits Combined (continued)

	For year ended December 31, 2021, with comparative totals for 9 years				
	2016	2015	2014	2013	2012
Beginning Net Position (Fair Value)	$ 192,322,370	$ 201,309,174	$ 199,740,742	$ 180,287,412	$ 167,995,703
Additions:					
Employer contributions	3,391,381	3,462,037	3,136,752	2,863,145	3,108,976
Employer contributions	3,184,051	2,771,533	2,645,164	2,687,211	2,426,776
Annuitant Health Benefit Contributions	1,177,887	1,134,920	1,193,549	1,190,706	1,127,026
Net investment income (loss)	10,477,792	2,549,975	13,525,606	30,383,512	22,209,855
Other	317,217	240,278	204,853	159,383	212,447
Total additions	18,548,328	10,158,743	20,705,924	37,283,957	29,085,080
Deductions:					
Benefits	18,636,138	18,347,316	17,858,418	16,858,913	15,287,183
Refunds	740,586	635,908	961,637	958,707	1,188,639
Employee transfers to (from) Cook County	133,999	18,370	175,370	(106,012)	205,887
Administrative Expenses	157,577	143,953	142,067	119,019	111,662
Total deductions	19,668,300	19,145,547	19,137,492	17,830,627	16,793,371
Ending Net Position (Fair Value)	$ 191,202,398	$ 192,322,370	$ 201,309,174	$ 199,740,742	$ 180,287,412
Actuarial Value of Assets	198,244,885	193,729,043	189,917,999	182,554,587	172,566,956
Actuarial Accrued Liabilities (AAL)	330,207,622	322,764,141	315,234,847	306,919,270	304,451,002
Unfunded AAL (UAAL) (Fair Value)	139,005,224	130,441,771	113,925,673	107,178,528	124,163,590
Unfunded AAL (UAAL) (Actuarial Value)	131,962,737	129,035,098	125,316,848	124,364,683	131,884,046
Funded Ratio (Fair Value)	57.9%	59.6%	63.9%	65.1%	59.2%
Funded Ratio (Actuarial Value)	60.0%	60.0%	60.2%	59.5%	56.7%

Schedule of Funding Progress—Pension and Postemployment Healthcare Benefits Combined

Year Ended December 31,	Actuarial Accrued Liabilities (AAL)*	Actuarial Value of Assets	Fair Value of Net Position	Unfunded AAL (UAAL) (Actuarial Value)	Unfunded AAL (UAAL) (Fair Value)
2012	$ 304,451,002	$ 172,566,956	$ 180,287,412	$ 131,884,046	$ 124,163,590
2013	306,919,270	182,554,587	199,740,742	124,364,683	107,178,528
2014	315,234,847	189,917,999	201,309,174	125,316,848	113,925,673
2015	322,764,141	193,729,043	192,322,370	129,035,098	130,441,771
2016	330,207,622	198,244,885	191,202,398	131,962,737	139,005,224
2017	330,912,840	204,273,172	210,370,946	126,639,668	120,541,894
2018	336,684,911	202,894,946	190,398,076	133,789,965	146,286,835
2019	343,422,342	203,486,292	211,687,354	139,936,050	131,734,988
2020	355,129,896	209,707,146	221,439,748	145,422,750	133,690,148
2021	367,888,407	218,414,061	235,190,790	149,474,346	132,697,617

Schedule of Funding Progress — Pension Benefits

Year Ended December 31,	Actuarial Accrued Liabilities (AAL)*	Actuarial Value of Assets	Fair Value of Net Position	Unfunded AAL (UAAL) (Actuarial Value)	Unfunded AAL (UAAL) (Fair Value)
2012	$ 273,136,730	$ 172,566,956	$ 180,287,412	$ 100,569,774	$ 92,849,318
2013	277,560,212	182,554,587	199,740,742	95,005,625	77,819,470
2014	285,960,963	189,917,999	201,309,174	96,042,964	84,651,789
2015	291,739,068	193,729,043	192,322,370	98,010,025	99,416,698
2016	300,259,728	198,244,885	191,202,398	102,014,843	109,057,330
2017	302,213,539	204,273,172	210,370,946	97,940,367	91,842,593
2018	313,013,137	202,894,946	190,398,076	110,118,191	122,615,061
2019	319,710,584	203,486,292	211,687,354	116,224,292	108,023,230
2020	331,146,777	209,707,146	221,439,748	121,439,631	109,707,029
2021	344,389,208	218,414,061	235,190,790	125,975,147	109,198,418

* These amounts are determined using the assumed discount rate for the actuarial funding calculations. These discount rates differ from the GASB accounting rates assumptions utilized in the AAL detailed in the OPEB tables on pages 148 and 149.

Schedule of Funding Progress—Pension and Postemployment Healthcare Benefits Combined (continued)

Unfunded AAL (UAAL) (Fair Value)	Funded Ratio (Actuarial Value)	Funded Ratio (Fair Value)	Covered Payroll	UAAL as a Percentage of Covered Payroll (Actuarial Value)	UAAL as a Percentage of Covered Payroll (Fair Value)
$ 124,163,590	56.7%	59.2%	$ 26,252,071	502.4%	473.0%
107,178,528	59.5%	65.1%	29,485,857	421.8%	363.5%
113,925,673	60.2%	63.9%	29,811,912	420.4%	382.1%
130,441,771	60.0%	59.6%	32,007,657	403.1%	407.5%
139,005,224	60.0%	57.9%	34,509,011	382.4%	402.8%
120,541,894	61.7%	63.6%	35,078,173	361.0%	343.6%
146,286,835	60.3%	56.6%	34,071,319	392.7%	429.4%
131,734,988	59.3%	61.6%	35,056,459	399.2%	375.8%
133,690,148	59.1%	62.4%	35,159,979	413.6%	380.2%
132,697,617	59.4%	63.9%	35,059,352	426.3%	378.5%

Schedule of Funding Progress — Pension Benefits (continued)

Unfunded AAL (UAAL) (Fair Value)	Funded Ratio (Actuarial Value)	Funded Ratio (Fair Value)	Covered Payroll	UAAL as a Percentage of Covered Payroll (Actuarial Value)	UAAL as a Percentage of Covered Payroll (Fair Value)
$ 92,849,318	63.2%	66.0%	$ 26,252,071	383.1%	353.7%
77,819,470	65.8%	72.0%	29,485,857	322.2%	263.9%
84,651,789	66.4%	70.4%	29,811,912	322.2%	284.0%
99,416,698	66.4%	65.9%	32,007,657	306.2%	310.6%
109,057,330	66.0%	63.7%	34,509,011	295.6%	316.0%
91,842,593	67.6%	69.6%	35,078,173	279.2%	261.8%
122,615,061	64.8%	60.8%	34,071,319	323.2%	359.9%
108,023,230	63.6%	66.2%	35,056,459	331.5%	308.1%
109,707,029	63.3%	66.9%	35,159,979	345.4%	312.0%
109,198,418	63.4%	68.3%	35,059,352	359.3%	311.5%

Schedule of Funding Progress — Postemployment Healthcare

Year Ended December 31,	Actuarial Accrued Liabilities (AAL)*	Actuarial Value of Assets	Fair Value of Net Position	Unfunded AAL (UAAL) (Actuarial Value)	Unfunded AAL (UAAL) (Fair Value)
2012	$ 45,713,760	$ —	$ —	$ 45,713,760	$ 45,713,760
2013	47,113,653	—	—	47,113,653	47,113,653
2014	47,212,173	—	—	47,212,173	47,212,173
2015	49,478,790	—	—	49,478,790	49,478,790
2016	44,708,189	—	—	44,708,189	44,708,189
2017	43,410,740	—	—	43,410,740	43,410,740
2018	35,850,239	—	—	35,850,239	35,850,239
2019	43,728,394	—	—	43,728,394	43,728,394
2020	49,201,023	—	—	49,201,023	49,201,023
2021	48,532,749	—	—	48,532,749	48,532,749

Schedule of Components of Change in Unfunded Liability — Pension Benefits and Postemployment Healthcare Combined

Year Ended December 31,	Salary Increase Higher / (Lower) than Assumed	Investment Returns (Higher) / Lower than Assumed	Employer Contributions Higher / (Lower) than Normal Cost Plus Interest	Legislative Amendments
2012	$ 1,939,324	$ 8,635,210	$ 5,369,563	$ —
2013	(2,208,899)	(17,264,428)	10,855,083	—
2014	(2,333,548)	(6,069,280)	9,597,999	—
2015	(2,503,098)	(1,528,781)	9,379,058	—
2016	2,722,397	(2,010,983)	9,799,700	—
2017	1,473,961	(2,908,636)	10,005,461	—
2018	(2,525,529)	4,226,650	8,609,423	—
2019	(1,647,459)	1,313,800	7,772,328	—
2020	631,426	(3,998,593)	7,525,213	—
2021	(2,065,574)	(7,246,498)	7,758,576	—

Schedule of Funding Progress — Postemployment Healthcare (continued)

Unfunded AAL (UAAL) (Fair Value)	Funded Ratio (Actuarial Value)	Funded Ratio (Fair Value)	Covered Payroll	UAAL as a Percentage of Covered Payroll (Actuarial Value)	UAAL as a Percentage of Covered Payroll (Fair Value)
$ 45,713,760	0.0%	0.0%	$ 26,252,071	174.1%	174.1%
47,113,653	0.0%	0.0%	29,485,857	159.8%	159.8%
47,212,173	0.0%	0.0%	29,811,912	158.4%	158.4%
49,478,790	0.0%	0.0%	32,007,658	154.6%	154.6%
44,708,189	0.0%	0.0%	34,512,652	129.5%	129.5%
43,410,740	0.0%	0.0%	35,078,173	123.8%	123.8%
35,850,239	0.0%	0.0%	34,071,319	105.2%	105.2%
43,728,394	0.0%	0.0%	35,058,531	124.7%	124.7%
49,201,023	0.0%	0.0%	35,164,564	139.9%	139.9%
48,532,749	0.0%	0.0%	35,059,352	138.4%	138.4%

Schedule of Components of Change in Unfunded AAL — Pension Benefits and Postemployment Healthcare Combined (continued)

Changes in Actuarial Assumptions	Plan Changes	Other Sources (1)	Total Change in Unfunded Liability
$ —	$ —	$ 4,744,938	$ 20,689,035
—	—	1,098,881	(7,519,363)
—	—	(243,006)	952,165
—	—	(1,628,929)	3,718,250
—	—	(7,583,475)	2,927,639
(8,134,544)	(1,124,460)	(4,634,851)	(5,323,069)
(921,732)	(3,271,394)	1,032,879	7,150,297
224,927	(1,496,622)	(20,889)	6,146,085
—	(1,042,987)	2,371,641	5,486,700
7,646,679	1,748,227	(3,789,814)	4,051,596

(1) Includes but is not limited to health insurance, optional retirement experience and death, retirement and withdrawal experience.

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