

Annual Comprehensive Financial Report

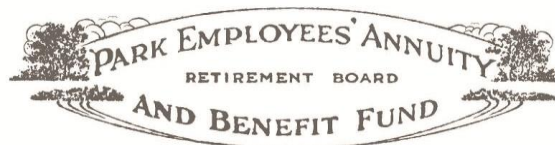
of the

Park Employees' and
Retirement Board Employees'
Annuity and Benefit Fund

Component Unit of the Chicago Park District
State of Illinois

For the years ended December 31, 2021 and 2020

Prepared by the Administrative Staff of the Retirement Board



Park Employees' Annuity and Benefit Fund
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Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Park Employees' and Retirement Board Employees'
Annuity and Benefit Fund
Illinois**

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

December 31, 2020

Christopher P. Morill

Executive Director/CEO

INTRODUCTION

Transmittal Letter

TRUSTEES

Edward L. Affolter, President
Brian Biggane, Vice President
Frank Hodorowicz, Secretary
Matthew Duggan
Cynthia Evangelisti
Steven J. Lux
Cecilia Prado

Retirement Board of the PARK EMPLOYEES' ANNUITY AND BENEFIT FUND

3500 S. Morgan Street
Suite 400
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Steve Swanson
Executive Director

Jaime L. McCabe
Comptroller

June 29, 2022

To the Members of the Park Employees' and
Retirement Board Employees' Annuity and Benefit Fund

The Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Fund) presents its Annual Comprehensive Financial Report (Annual Report) for the year ended December 31, 2021. The accuracy of the information contained in the report, including all disclosures, is the sole responsibility of the Fund. The intent of the Annual Report is to present the financial condition of the Fund and its related results of operations. The statements and disclosures contained in the Annual Report are necessary to assist the Fund's participants, taxpayers, and other interested parties in fully understanding the Fund's financial condition. Baker Tilly US, LLP has issued an unmodified opinion on the Fund's financial statements as of December 31, 2021. Readers of the Annual Report are encouraged to review the Independent Audit Report, located in the Financial Section of this report.

Fund Background

The Fund is a single employer, defined benefit plan covering the eligible public employees of the Chicago Park District. The Fund was created by an act of the Legislature of the State of Illinois, approved June 21, 1919 and effective July 1, 1919, covering the three major park systems of Chicago. With the statutory consolidation of the separate park districts of Chicago on May 1, 1934, the Chicago Park District was created authorizing the Fund to cover its employees. The Fund is administered in accordance with Chapter 40 of the Illinois Compiled Statutes, Act 5, Articles 1 and 12.

Responsibilities of the Board of Trustees

The Board of Trustees is composed of seven members. Four members are elected by the active participants for four-year terms and the Chicago Park District Board of Commissioners appoints three members for three-year terms. Elected members' terms are staggered so that one member is elected each year. All Trustees serve the Fund without compensation. The Board of Trustees elects a President, Vice President, and Secretary from within its ranks at its annual meeting in July. These elected office holders each have a prescribed set of duties. The Board of Trustees has various duties and responsibilities which include: invest funds in accordance with state law and its internal investment policy; approve the appointments of all necessary consultants and advisors; develop and approve all rules, regulations, and policies governing the operation of the Fund; review and approve all applications for disability, annuities, and other benefits; and monitor the financial and operational activities of the Fund. The day-to-day operations of the Fund are the responsibility of the Executive Director.

Overview

At December 31, 2021, total Fund membership, including active, inactive, disability, retired members and beneficiaries is 10,614. The Fund's fiduciary net position increased by \$66.4 million during 2021 resulting in a net position restricted for pension benefits of \$414.7 million. The additions to the Fund, which include employer and employee contributions and net investment income, totaled \$148.7 million. During 2021, the Chicago Park District contributed the required tax levy contribution equal to 1.1 times the total employee contributions received two years prior. In addition to the required tax levy contribution, the Chicago Park District made supplemental contributions of \$69.7 million. The total Fund deductions for 2021 were \$82.3 million, which is an increase in comparison to the total deductions from prior year. Fund deductions include

INTRODUCTION

Overview (continued)

annuity payments, disability and death benefits, refund of employee contributions, and administrative expenses. For a full understanding of the Fund's financial condition, we encourage the reader to review the Financial Section as well as the Actuarial Section of this report.

Accounting Method and Internal Controls

The Annual Report was prepared to conform with the principles of governmental accounting and reporting as pronounced by the Governmental Accounting Standards Board (GASB) and the American Institute of Certified Public Accountants (AICPA). In recording assets and liabilities, revenues and expenses, the accrual basis of accounting is used. All revenues including contributions are recognized when earned and expenses are recorded when incurred.

The Fund employs a system of internal controls to adequately safeguard its assets and assure the reliability of its financial records which includes the financial statements, supporting schedules and statistical tables. The internal control structure is designed to provide reasonable, but not absolute assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of control should not exceed the benefits likely to be derived, and that the valuation costs and benefits require estimates and judgments by management. An evaluation of the internal control structure during the Fund's annual independent audit disclosed no material weaknesses. Management, with the assistance of its outside auditors, continually reviews the system of internal control to insure its adequacy and effectiveness.

Actuarial Status

The Fund's independent actuary, Segal Consulting, conducts an actuarial valuation of the Fund annually. Each actuarial valuation involves a projection of the benefits expected to be paid in the future to all members of the Fund. The projection is based on the characteristics of members at the valuation date, the benefit provisions in effect on that date, and assumptions of future events and conditions. Segal Consulting also conducts an actuarial experience review every five years. These studies serve as the basis for recommended changes in actuarial assumptions and methods adopted by the Fund.

The funded ratio is the Fund's actuarial value of assets divided by the Fund's actuarial accrued liability. At December 31, 2021, the actuarial value of assets is \$388,163,499 and the actuarial accrued liability is \$1,211,991,973. The Fund's funded ratio at December 31, 2021 is 32.0% compared to 28.7% for the year ended December 31, 2020. The unfunded actuarial accrued liability at December 31, 2021 amounted to \$823,828,474. The Fund's actuarial accrued liability decreased during the current year, which resulted in an increase in the Fund's funded ratio. The calculations of these figures are discussed further within the note disclosures of the Financial Section and within the Actuarial Section of this report.

Investment Policy and Performance

The Fund's investment policy was developed to insure the long-term financing of its funding requirements. Utilizing the services of Marquette Associates, Inc., the Trustees review the investment policy on an on-going basis making amendments as needed. The Fund's current investment policy, which details investment authority, asset allocation, diversification, liquidity, performance measurement, and objectives, is provided in the Investment Section of this report. The policy is designed to obtain the highest expected return on investments consistent with the level of risk for a public pension fund with the funded status described above.

As of December 31, 2021, the fair value of investments was \$396,037,174, which compares to \$329,229,908 as of December 31, 2020. As of December 31, 2021, the Fund's annual investment rate of return was 14.6% compared to 9.3% for December 31, 2020. The Fund's 14.6% rate of return exceeded the portfolio's annual targeted rate of return of 7.25% even during times of instability within the financial markets. A more enhanced discussion about the Fund's performance history can be found in the Investment Section of this report.

Public Act 102-0263

On August 6, 2021, Public Act 102-0263 was signed into law. This will have a lasting impact on our Pension Fund in three critical areas. The first impact requires the Chicago Park District to make employer contributions calculated on an actuarial basis instead of based on a multiple of employee contributions. The Park District will be required to make annual contributions, determined by the independent actuaries, to ensure Fund is **100% funded** within 35 years and the Park District was also required to make a \$40 million supplemental employer contribution to the Fund in 2021.

INTRODUCTION

Public Act 102-0263 (continued)

The second impact allows the Park District to sell pension obligation bonds to provide supplemental contributions to the Fund at its discretion. The Park District can issue up to \$75 million in pension obligation bonds in any given year. In total, the Park District can issue up to \$250 million in pension obligation bonds.

The third impact creates a third tier of participants' benefits beginning on January 1, 2022, which requires larger employee contributions for tier 3 participants, but provides eligibility for a retirement annuity at an earlier age than tier 2 participants.

GFOA Award

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Park Employees' and Retirement Board Employees' Annuity and Benefit Fund for its Annual Comprehensive Financial Report for the year ended December 31, 2020. In order to be awarded a Certificate of Achievement, a public pension 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 our current Annual Comprehensive Financial Report 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.

Governmental Accounting Standards Board

The Fund is currently in full compliance with all pronouncements from the Governmental Accounting Standards Board.

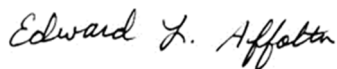
Retirement Board

The annual election for an employee representative to the Retirement Board was to be held on Friday, June 24, 2022. Only one candidate was nominated and therefore declared as winner. Matthew Duggan was re-elected for a four year term beginning July 1, 2022.

Acknowledgments

All the statistical and financial information compiled and presented in this Annual Report is due to the combined efforts of the administrative staff of the Fund. Their efforts are hereby acknowledged with thanks and appreciation.

On behalf of the Retirement Board,



Edward L. Affolter, President

INTRODUCTION

PARK EMPLOYEES' ANNUITY AND BENEFIT FUND MEMBERS

as of December 31, 2021

Elected by the Employees

Matthew Duggan
Term expires June 30, 2022

Frank Hodorowicz
Term expires June 30, 2023

Brian Biggane
Term expires June 30, 2024

Edward L. Affolter
Term expires June 30, 2025

Appointed by the Chicago Park District Board of Commissioners

Steven J. Lux
Term expires June 30, 2023

Cynthia Evangelisti
Term expires June 30, 2024

Cecilia Prado
Term expires June 30, 2024

OFFICERS

Edward L. Affolter, President

Brian Biggane, Vice President

Frank Hodorowicz, Secretary

ADMINISTRATIVE STAFF

Steve Swanson, Executive Director

Jaime L. McCabe, Comptroller

CONSULTANTS

Jacobs, Burns, Orlove & Hernandez, Attorney

Baker Tilly US, LLP, Auditor

The Segal Company, Consulting Actuary

Marquette Associates, Inc., Investment Consultant*

* Terminated effective December 31, 2021

CUSTODIAN

The Northern Trust Company of Chicago

INVESTMENT ADVISORS

Ariel Investments - *Chicago*

Ativo Capital – *Chicago*

Denali Advisors – *San Diego*

Entrust – *New York*

GoldPoint Partners, LLC – *New York*

Great Lakes Advisors, LLC - *Chicago*

HarbourVest Partners, LLC – *Boston*

Industry Funds Managements (IFM) – *New York*

LM Capital Group, LLC – *San Diego*

MacKay Shields, LLC – *New York*

Mesirow Financial Capital Partners – *Chicago*

National Investment Services - *Milwaukee*

Northern Trust Asset Management - *Chicago*

Parametric – *Washington*

PineBridge Investments – *New York*

Principal Global Investors – *Des Moines*

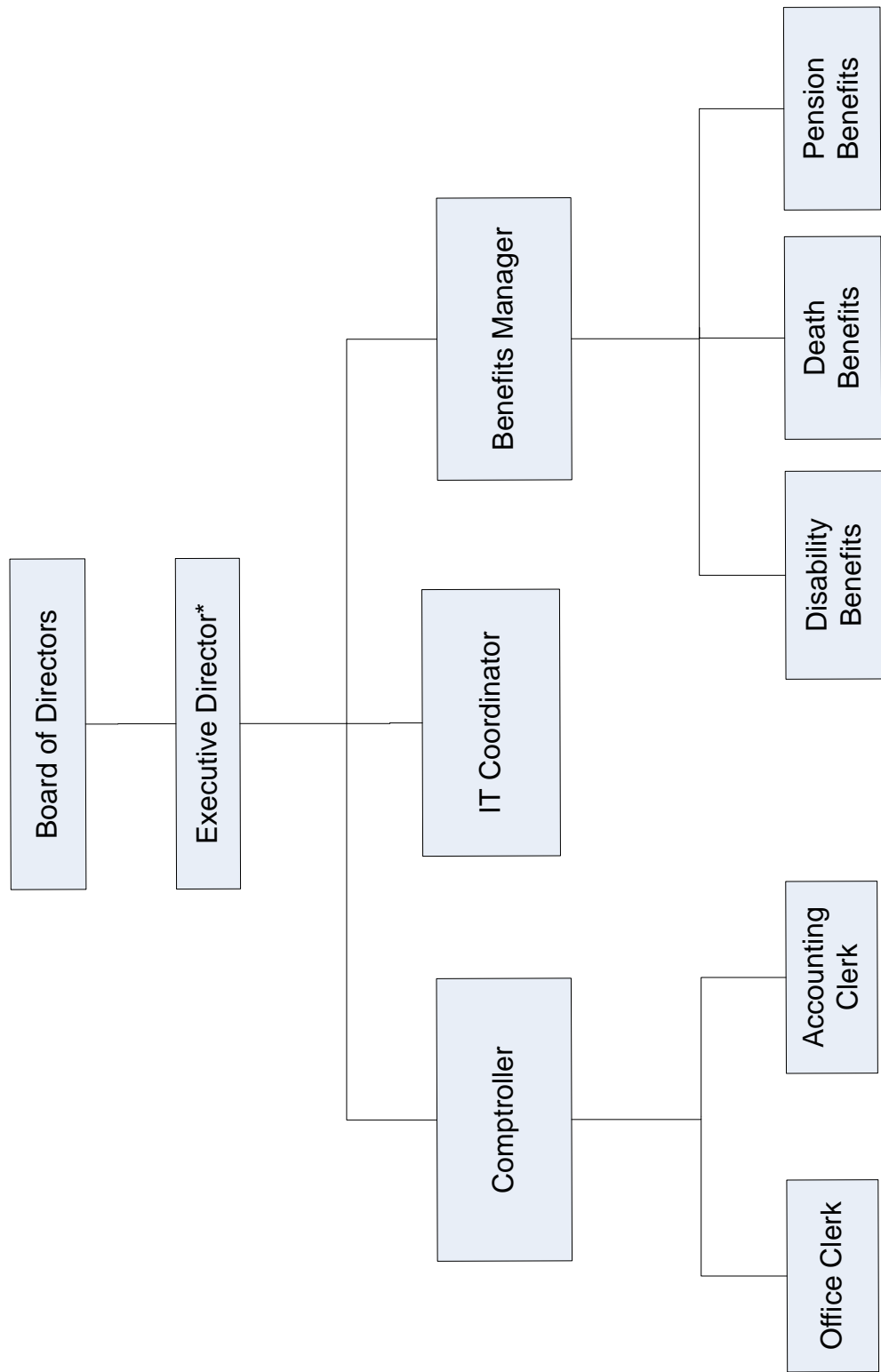
UBS Realty Investors, LLC – *Hartford*

ULLICO Investment Company – *Washington D.C.*

William Blair & Company - *Chicago*

PARK EMPLOYEES’ AND RETIREMENT BOARD EMPLOYEES’
ANNUITY AND BENEFIT FUND

ORGANIZATION CHART



*The Executive Director is responsible for the handling of all investment matters. The Fund does not internally manage any investments. For a listing of the Fund's investment managers and associated investment fees, see page 44. For a listing of the Fund's brokers and associated commissions, see page 52.

Independent Auditor's Report

To the Retirement Board of
Park Employees' and Retirement Board Employees'
Annuity and Benefit Fund of Chicago

Opinion

We have audited the accompanying financial statements of Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Fund), a component unit of the Chicago Park District, as of and for the years December 31, 2021 and 2020, 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 financial statements referred to above present fairly, in all material respects, the financial position of the Fund as of December 31, 2021 and 2020, and the changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

Responsibilities of Management for the Financial Statements

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

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' 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 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.

Independent Auditor's Report (continued)

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 estimate 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 required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Fund's basic financial statements. The supplementary information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated in all material respects, in relation to the basic financial statements as a whole.



Chicago, Illinois
June 27, 2022

Management's Discussion and Analysis

Management Discussion and Analysis for the Year Ended December 31, 2021

The Management Discussion and Analysis (MD&A) of the Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Fund) financial performance provides an overview and analysis of the Fund's financial activities for the years ended December 31, 2021 and 2020. Please read the MD&A in conjunction with the basic financial statements and the accompanying note disclosures to have a better understanding of the financial condition and performance of the Fund. Information provided for the year ended December 31, 2019 is presented for comparative purposes only.

Using this Report

The Management Discussion and Analysis introduces the Fund's basic financial statements. The basic financial statements include the Statements of Fiduciary Net Position and the Statements of Changes in Fiduciary Net Position, which are prepared on an accrual basis of accounting in accordance with Government Accounting Standards Board (GASB) pronouncements and reflect the Fund's overall financial condition.

The Statements of Fiduciary Net Position reports the Fund's assets at fair value and liabilities as amounts owed as of the statement date, resulting in the net position restricted for pension benefits.

The Statements of Changes in Fiduciary Net Position illustrate the additions and deductions made to the Fund during the statement date. These additions include employee and employer contributions, as well as net investment income. The deductions consist of benefit payments, refunds of contributions and administrative and general expenses. The net result indicates an increase or decrease in Fund net position restricted for pension benefits.

The accompanying notes are an integral part of the financial statements. They provide information essential to achieve full understanding of the Fund's financial statements.

The required supplementary information, presented following the notes to the financial statements, is required by GASB. These schedules offer the reader additional details, which may be useful in evaluating the financial condition and performance of the Fund. The schedules include the Schedule of Changes in Employer's Net Pension Liability and Related Ratios, the Schedule of Employer Contributions, the Schedule of Investment Returns, as well as related disclosures. Other supplementary information consists of schedules of Tax Levies Receivable, Administrative and General Expenses, Professional Expenses, and Investment Expenses.

Financial Highlights

- a) The Fund's fiduciary net position increased during the year by \$66.4 million or 19.0 percent compared to a decrease of \$6.3 million or 1.8 percent for the year ended December 31, 2020.
- b) The Fund's 2021 investment return of 14.6 percent exceeded the portfolio's annual targeted rate of return of 7.25 percent.
- c) The Fund's five-year rate of return of 9.9 percent exceeded the portfolio's annual targeted rate of return of 7.25 percent.
- d) The Fund's ten-year rate of return of 9.5 percent exceeded the portfolio's annual targeted rate of return of 7.25 percent.
- e) For the year ended December 31, 2021, the additions to the Fund's fiduciary net position of \$148.7 million is \$74.0 million more than the year ended December 31, 2020 additions.
- f) For the year ended December 31, 2021, the deductions to the Fund's fiduciary net position of \$82.3 million is \$1.4 million more when compared to the deductions for the year ended December 31, 2020.
- g) The Fund's actuarially computed funded ratio is 32.0 percent at December 31, 2021, which is 3.3 percent more than at December 31, 2020.

Management's Discussion and Analysis (continued)

Net Position Restricted for Pension Benefits

The Fund's net position restricted for pension benefits at December 31, 2021 is \$414,658,650. This is \$66,364,135 more than the December 31, 2020 net position restricted for pension benefits of \$348,294,515. This compares to a decrease of \$6,261,773 for the year ended December 31, 2020. The statutorily required contribution due from employer is the tax levy that is paid by the Chicago Park District. Under the current law, the tax multipliers used for the 2021, 2020 and 2019 tax levies were 1.1 times the amount of employee contributions received from two years prior. Employee contributions in the year 2020 were less than previous years due to the hiring freeze brought on the global pandemic. This decrease in contributions received is the direct result of the decrease in contributions due from employer in the current year. The Fund's investment portfolio increases and decreases from year to year depending on the strength of the financial markets. Fortunately, the Fund's diversified portfolio was able to produce strong positive returns for the year. The following tables are comparative summaries of fiduciary net position restricted for pension benefits:

Statements of Fiduciary Net Position – Current Year

	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>Increase (Decrease)</u>
Assets			
Contributions due from employer	\$ 13,566,840	\$ 14,376,581	\$ (809,741)
Miscellaneous receivables and other assets	6,245,375	5,934,932	310,443
Property and equipment	124,839	131,686	(6,847)
Investments, at fair value	396,037,174	329,229,908	66,807,266
Invested securities lending collateral	<u>16,779,808</u>	<u>16,670,194</u>	<u>109,614</u>
Total assets	<u>\$432,754,036</u>	<u>\$366,343,301</u>	<u>\$ 66,410,735</u>
Liabilities			
Accrued expense and other liabilities	\$ 1,315,578	\$ 1,378,592	\$ (63,014)
Securities lending collateral	<u>16,779,808</u>	<u>16,670,194</u>	<u>109,614</u>
Total liabilities	<u>\$ 18,095,386</u>	<u>\$ 18,048,786</u>	<u>\$ 46,600</u>
Fiduciary net position restricted for pension benefits	<u>\$414,658,650</u>	<u>\$348,294,515</u>	<u>\$ 66,364,135</u>

Statements of Fiduciary Net Position – Prior Period

	<u>December 31, 2020</u>	<u>December 31, 2019</u>	<u>Increase (Decrease)</u>
Assets			
Contributions due from employer	\$ 14,376,581	\$ 14,572,731	\$ (196,150)
Miscellaneous receivables and other assets	5,934,932	6,720,620	(785,688)
Property and equipment	131,686	145,461	(13,775)
Investments, at fair value	329,229,908	334,338,923	(5,109,015)
Invested securities lending collateral	<u>16,670,194</u>	<u>19,769,592</u>	<u>(3,099,398)</u>
Total assets	<u>\$366,343,301</u>	<u>\$375,547,327</u>	<u>\$ (9,204,026)</u>
Liabilities			
Accrued expense and other liabilities	\$ 1,378,592	\$ 1,221,447	\$ 157,145
Securities lending collateral	<u>16,670,194</u>	<u>19,769,592</u>	<u>(3,099,398)</u>
Total liabilities	<u>\$ 18,048,786</u>	<u>\$ 20,991,039</u>	<u>\$ (2,942,253)</u>
Fiduciary net position restricted for pension benefits	<u>\$348,294,515</u>	<u>\$354,556,288</u>	<u>\$ (6,261,773)</u>

Management's Discussion and Analysis (continued)

Changes in Fiduciary Net Position

The Fund's total additions during the year ended December 31, 2021 increased by \$73,978,386 as compared to a decrease of \$17,673,120 for the year ended December 31, 2020. Even during times of instability within the financial markets over the past few years, the Fund has remained steadfast in our convictions to our diversified investment strategy and has recorded a net investment gain during the year of \$53,108,732 as compared to net investment gain of \$28,131,778 in 2020 and a net investment gain of \$52,032,781 in 2019. Additions from employer contributions increased from \$33,939,927 in 2020 to \$83,349,261 in 2021. The Chicago Park District recognizes the financial burden the Fund is currently facing. In 2021, Public Act 102-0263 was signed into law which required the Chicago Park District to make a \$40 million supplement employer contribution to the Fund. In 2021, 2020 and 2019, the Fund also received voluntary contributions from the Chicago Park District in addition to the tax levy of approximately \$29.7 million, \$20.7 million, and \$13.0 million, respectively. The employee contributions decreased slightly during the year from \$12,634,900 in 2020 to \$12,226,998 in 2021. Due to the COVID-19 global pandemic, the Chicago Park District was on a hiring freeze for the first half of 2021, which resulted in fewer employee contributions.

The number of retirees and beneficiaries has decreased from 2,843 and 2,775 in 2019 and 2020, respectively, to 2,752 in 2021. During the year, the Fund experienced an increase of applications for retirement than in the prior year but still saw a significant amount of deaths. While the Fund's total number of retirees and beneficiaries decreased slightly, the total benefit payments in 2021 increased in comparison to 2020 mainly due to annual increases. The following tables are comparative summaries of changes in fiduciary net position restricted for pension benefits:

Statements of Changes in Fiduciary Net Position – Current Year

	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>Increase (Decrease)</u>
Additions			
Employer contributions	\$ 83,349,261	\$ 33,939,927	\$ 49,409,334
Employee contributions	12,226,998	12,634,900	(407,902)
Net investment (loss) income (includes security lending activities)	<u>53,108,732</u>	<u>28,131,778</u>	<u>24,976,954</u>
Total additions	<u>\$ 148,684,991</u>	<u>\$ 74,706,605</u>	<u>\$ 73,978,386</u>
Deductions			
Retirement benefits	\$ 65,655,719	\$ 64,754,238	\$ 901,481
Spousal benefits	12,126,482	12,298,065	(171,583)
Child benefits	17,400	21,250	(3,850)
Disability benefits	459,127	377,695	81,432
Death benefits	<u>277,500</u>	<u>311,000</u>	<u>(33,500)</u>
Total benefits	78,536,228	77,762,248	773,980
Refund of contributions	2,066,616	1,607,760	458,856
Administrative and general expenses	<u>1,718,012</u>	<u>1,598,370</u>	<u>119,642</u>
Total deductions	<u>\$ 82,320,856</u>	<u>\$ 80,968,378</u>	<u>\$ 1,352,478</u>
Net increase (decrease)	66,364,135	(6,261,773)	72,625,908
Beginning of year net position	<u>348,294,515</u>	<u>354,556,288</u>	<u>(6,261,773)</u>
End of year net position	<u>\$414,658,650</u>	<u>\$348,294,515</u>	<u>\$ 66,364,135</u>

Management's Discussion and Analysis (continued)

Changes in Fiduciary Net Position (continued)

Statements of Changes in Fiduciary Net Position – Prior Period

	<u>December 31, 2020</u>	<u>December 31, 2019</u>	<u>Increase (Decrease)</u>
Additions			
Employer contributions	\$ 33,939,927	\$ 27,682,089	\$ 6,257,838
Employee contributions	12,634,900	12,664,855	(29,955)
Net investment (loss) income (includes security lending activities)	<u>28,131,778</u>	<u>52,032,781</u>	<u>(23,901,003)</u>
Total additions	<u>\$ 74,706,605</u>	<u>\$ 92,379,725</u>	<u>\$(17,673,120)</u>
Deductions			
Retirement benefits	\$ 64,754,238	\$ 63,644,273	\$ 1,109,965
Spousal benefits	12,298,065	12,187,742	110,323
Child benefits	21,250	18,450	2,800
Disability benefits	377,695	387,046	(9,351)
Death benefits	<u>311,000</u>	<u>228,500</u>	<u>82,500</u>
Total benefits	77,762,248	76,466,011	1,296,237
Refund of contributions	1,607,760	2,084,438	(476,678)
Administrative and general expenses	<u>1,598,370</u>	<u>1,528,861</u>	<u>69,509</u>
Total deductions	<u>\$ 80,968,378</u>	<u>\$ 80,079,310</u>	<u>\$ 889,068</u>
Net increase (decrease)	(6,261,773)	12,300,415	(18,562,188)
Beginning of year net position	<u>354,556,288</u>	<u>342,255,873</u>	<u>12,300,415</u>
End of year net position	<u>\$348,294,515</u>	<u>\$354,556,288</u>	<u>\$ (6,261,773)</u>

Actuarial Update

The actuarial valuation for the year ended December 31, 2021 includes the changes in actuarial assumptions and methods recommended by the Fund's actuary, Segal Consulting, and adopted by the Board of Trustees in 2018. The valuations for 2021 and 2020 also reflect GASB 67 requirements that improve financial reporting for local governmental pension plans. The notes to the financial statements include information about the individual components of the Fund's net pension liability. The net pension liability is equal to the difference between the total pension liability and the Fund's fiduciary net position. The Fund's required supplementary information provides the reader with a more enhanced look on how the total pension liability, the fiduciary net position and net pension liability is measured.

The Fund's actuarially computed funded ratio is 32.0 percent at December 31, 2021, which is 3.3 percent more than at December 31, 2020. The funded ratio is based on the percentage of the actuarial value of assets available to pay the actuarial accrued liability.

Management's Discussion and Analysis (continued)

Investment Performance

The Fund's annual investment return for the year ended December 31, 2021 was 14.6 percent, which is higher than the 9.3 percent return reported for the year ended December 31, 2020, but lower than the 17.0 percent return reported for the year ended December 31, 2019. In 2021, every asset class in the investment portfolio, other than fixed income, generated positive returns for the year. The Fund's U.S. equity portfolio, which returned 27.5 percent and the International equity portfolio, which returned 9.7 percent, were the primary drivers of the Fund's return in 2021. Performance in 2021 was also helped by strong returns in the Fund's Private Equity portfolio, which returned 29.4 percent, the Fund's Real Estate portfolio, which returned 17.9 percent, and the Fund's Infrastructure portfolio which returned 13.5 percent. The Fund's 14.6 percent return for 2021 underperformed its performance benchmark by approximately 110 basis points. The Fund's underperformance vs. its benchmark in 2021 was driven by the underperformance of the Private Equity and Real Estate portfolios relative to their benchmarks, as well as the Fund's underweights to both asset classes relative to its policy benchmark. In addition, the Fund's overweight to cash weighed on performance. Over the trailing three-year period, the Fund underperformed its performance benchmark by 110 basis points. Over the trailing five-year period, the Fund underperformed its performance benchmark by 90 basis points. Over the trailing ten-year period, the Fund returned 9.5 percent, outperforming the performance benchmark by 20 basis points, outperforming the 7.25 percent actuarial rate of return, and ranked in the 55th percentile as measured against its peers.

Supplemental Employer Contributions

In 2021, in addition to the contributions required by 40 ILCS 5/12-149, the employer budgeted a supplemental contribution of \$29.7 million to the Fund. On August 6, 2021, Public Act 102-0263 was signed into law which required the Chicago Park District to contribute a \$40 million supplement contribution, for a total employer contribution of \$83.3 million in 2021. In 2020, in addition to the contributions required by 40 ILCS 5/12-149, the employer made a supplemental contribution of \$20.7 million to the Fund, for total employer contributions of \$33.9 million. In 2019, in addition to the contributions required, the employer made a supplemental contribution of \$13.0 million to the Fund, for total employer contributions of \$27.7 million. Starting in 2022, the Chicago Park District will make employer contributions calculated on an actuarial basis instead of a multiple of employee contributions. This is to ensure that the Fund is 100% funded within 35 years.

Contacting the Fund's Financial Management

This report is intended to provide a general overview of the Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago for its employees and other interested parties. If you have questions, requests, or need additional information, please visit the Fund's website at www.chicagoparkpension.org or contact the Fund at 3500 S. Morgan Street, Suite 400, Chicago, IL 60609.

Financial Statements

Statements of Fiduciary Net Position

December 31, 2021 and 2020

Assets	2021	2020
Receivables:		
Contributions from employer	\$ 13,566,840	\$ 14,376,581
Employee contributions	305,713	262,539
Workers' compensation offset of duty disability benefits, net of allowance for loss of \$16,615 in 2021 and 2020	63,934	55,067
Accrued investment income	221,950	214,752
Miscellaneous receivables	<u>72,277</u>	<u>21,148</u>
Total receivables	<u>14,230,714</u>	<u>14,930,087</u>
Investments, at fair value:		
Common stocks	52,485,719	46,568,393
Fixed income	25,851,555	27,974,249
Collective investment funds	127,783,646	107,283,908
Mutual funds	20,423,662	18,355,546
Hedged equity	29,066,132	25,951,241
International equity	24,580,477	21,343,216
Private equity	24,296,348	20,885,335
Real estate	32,743,837	31,443,567
Infrastructure	37,319,370	24,460,163
Short-term investments	<u>21,486,428</u>	<u>4,964,290</u>
Total investments, at fair value	<u>396,037,174</u>	<u>329,229,908</u>
Invested securities lending collateral	16,779,808	16,670,194
Property and equipment, net	124,839	131,686
Prepaid annuity benefits	5,528,333	5,349,711
Other prepaid expenses	<u>53,168</u>	<u>31,715</u>
	<u>5,581,501</u>	<u>5,381,426</u>
Total assets	<u>\$ 432,754,036</u>	<u>\$ 366,343,301</u>

See notes to financial statements

Statements of Fiduciary Net Position

December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
Liabilities		
Accounts payable	\$ 353,081	\$ 488,079
Accrued benefits payable	886,252	805,298
Accrued payroll liabilities	45,023	46,022
Unamortized rent abatement	31,222	39,193
Securities lending collateral	<u>16,779,808</u>	<u>16,670,194</u>
Total liabilities	<u>18,095,386</u>	<u>18,048,786</u>
Net Position		
Net position restricted for pension benefits	<u>\$ 414,658,650</u>	<u>\$ 348,294,515</u>

See notes to financial statements

Financial Statements

Statements of Changes in Fiduciary Net Position

Years Ended December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
Additions		
Contributions:		
Employer contributions	\$ 83,349,261	\$ 33,939,927
Employee contributions	<u>12,226,998</u>	<u>12,634,900</u>
Total contributions	<u>95,576,259</u>	<u>46,574,827</u>
Investment income:		
Net appreciation in fair value of investments	47,381,030	23,730,507
Interest	812,437	1,370,695
Dividends	778,145	748,054
Partnership and real estate income	<u>5,734,697</u>	<u>3,812,192</u>
	54,706,309	29,661,448
Less investment expense	<u>1,617,207</u>	<u>1,590,121</u>
Net income from investing activities	<u>53,089,102</u>	<u>28,071,327</u>
Security lending activities:		
Securities lending income	38,248	222,105
Borrower rebates	(3,609)	(118,869)
Bank fees	<u>(15,464)</u>	<u>(42,855)</u>
Net Income from securities lending activities	<u>19,175</u>	<u>60,381</u>
Other income	<u>455</u>	<u>70</u>
Total additions	<u>\$ 148,684,991</u>	<u>\$ 74,706,605</u>

See notes to financial statements

Statements of Changes in Fiduciary Net Position

Years Ended December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
Deductions		
Benefits		
Annuity payments	\$ 77,799,601	\$ 77,073,553
Disability and death benefits	<u>736,627</u>	<u>688,695</u>
Total benefits	<u>78,536,228</u>	<u>77,762,248</u>
Refunds of contributions	2,066,616	1,607,760
Administrative and general expenses	<u>1,718,012</u>	<u>1,598,370</u>
Total deductions	<u>82,320,856</u>	<u>80,968,378</u>
Net increase (decrease)	66,364,135	(6,261,773)
Net Position Restricted for Pension Benefits		
Beginning of year	<u>348,294,515</u>	<u>354,556,288</u>
End of year	<u>\$ 414,658,650</u>	<u>\$ 348,294,515</u>

See notes to financial statements

Notes to Financial Statements

1. Summary of Significant Accounting Policies

The Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Fund) is the administrator of a single employer defined benefit plan (PERS) established by the State of Illinois to provide annuities and benefits for substantially all employees of the Chicago Park District.

The accounting policies of the Fund conform to accounting principles generally accepted in the United States of America as applicable to governmental units. The accepted standard-setting body for establishing governmental accounting and financial reporting principles is the Governmental Accounting Standards Board (GASB).

Reporting Entity

As defined by generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB), the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the appointed officials of the primary government are financially accountable. Financial accountability is defined as:

- (1) Appointment of a voting majority of the component unit's board and either a) the ability to impose will by the primary government, or b) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the primary government; or
- (2) Fiscal dependency on the primary government.

Based upon the required criteria, the Fund has no component units. The Fund is considered a component unit fund of the Chicago Park District and, as such, is included in the Chicago Park District's financial statements as a pension trust fund. Accordingly, these financial statements present only the Park Employees' and Retirement Board Employees' Annuity and Benefit Fund and are not intended to present fairly the financial position of the Chicago Park District and the result of its operations in conformity with generally accepted accounting principles.

Fund Accounting

The Fund uses a fund to report on its fiduciary net position and the changes in its fiduciary net position. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. A fund is a separate accounting entity with a self-balancing set of accounts. The Fund is classified in this report in the fiduciary category.

Measurement Focus and Basis of Accounting

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The Fund is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets, deferred outflows of resources, liabilities and deferred inflows of resources associated with the operation of these funds are included on the balance sheet.

The Pension Fund is accounted for using the accrual basis of accounting. Consequently, its additions are recognized when they are earned and its deductions are recognized when they are incurred. The financial statements are prepared using the accrual basis of accounting.

Notes to Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Investments

Income on all investments is recognized on the accrual basis. Gains and losses on sales and exchanges of investments are recognized on the transaction date of such sale or exchange. Dividend income is recognized based on the dividends declared.

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Fair values for bonds, stocks and mutual funds are determined by quoted market prices. Investments for which market quotations are not readily available are valued at their fair values as determined by the bank administrator under the direction of the Board of Trustees, with the assistance of a valuation service.

Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items using the consumption method.

Capital Assets

Capital assets, which include property and equipment are defined by the government as the cost of any major outlays for additions and improvements. Depreciation has been provided using the straight-line method over periods ranging from 3-7 years. Leasehold improvements are amortized using the straight-line method over the remaining term of the lease.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results may differ from those estimates.

Risk and Uncertainties

The Fund invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of the investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statement of fiduciary net position.

Administrative Expenses

Administrative expenses are budgeted and approved by the Fund's Board of Trustees. Funding for these expenses is included in the employer contributions as determined by the annual actuarial valuation.

Notes to Financial Statements (continued)

2. Plan Description

Plan Administration

The Fund is a defined benefit single-employer pension plan. Although this is a single-employer pension plan, the defined benefits and employee and minimum employer contributions are governed by Illinois Compiled Statutes (40 ILCS 5/12-1) and may be amended only by the Illinois legislature.

The Plan is governed by a seven-member board. Three members are appointed by the park commissioner's and four members of the board are elected from among the employees.

Plan Membership

At December 31, 2021 and 2020, membership of the Fund was as follows:

	<u>2021</u>	<u>2020</u>
Retirees and beneficiaries currently receiving benefits	2,752	2,775
Vested terminated members entitled to benefits	169	158
Current employees	2,694	2,890

Benefits Provided

As provided for in the Illinois Compiled Statutes, the Fund provides retirement benefits as well as death and disability benefits to employees grouped into two tiers. Tier 1 is for employees that contributed prior to January 1, 2011 and Tier 2 is for employees that contributed after that date. The following is a summary of the Fund as provided for in Illinois Compiled Statutes.

Tier 1

Covered employees attaining the age of 50 or more with ten or more years of creditable service are entitled to receive a service retirement pension. The retirement pension is based upon the average of the four highest consecutive years of salary within the last ten years of service. If the employee retires prior to the attainment of age 60, the rate associated with the service is reduced by one-quarter percent for each full month the employee is under age 60. There is no reduction if the participant has 30 years of service. Employees with four years of service at age 60 may receive a retirement benefit.

Tier 2

Covered employees attaining the age of 62 or more with ten or more years of creditable service are entitled to receive discounted service retirement pension. Employees attaining the age 67 or more, with at least 10 years of service are entitled to receive a nondiscounted annuity benefit. The annuity is discounted one-half percent for each full month the employee is under age 67. The retirement pension is based upon the average of the eight highest consecutive years of salary within the last ten years of service prior to retirement. Pensionable salary is limited to \$116,740 in 2021 and \$115,929 in 2020.

Notes to Financial Statements (continued)

2. Plan Description (continued)

Post-Retirement Increase

Tier 1

An employee annuitant under Tier 1 who retires at age 50 or older with at least 30 years of service is eligible to receive an increase of three percent, based on the annuity granted at retirement, payable following the first 12 months of benefits on either the next January or July. If the employee annuitant retires before the age of 60 with less than 30 years of service, then the increases begin on the January or July following the later of the attainment of age 60 or 12 months of benefits received.

Tier 2

An employee annuitant under Tier 2 that is eligible to receive an increase in the annuity benefit, shall receive an annual increase equal to the lesser of three percent or one-half the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12 month period ending with the September preceding the increase. The increase is based on the amount of the originally granted benefit (simple). This increase begins after age 67 on the first January following one full year of benefits received.

Surviving Spouse Pension

Tier 1

Upon the death of an employee annuitant under Tier 1, the surviving spouse, meeting certain eligibility requirements, is entitled to a spousal annuity. The surviving spouse is entitled to the lesser of a money purchase calculation, 50 percent of the highest salary or 75 percent of the granted annuity. With 20 years of service, the entitlement becomes the higher of the eligible money purchase calculation or 50 percent of retiree's annuity at the time of death. The surviving spouse is also eligible to receive an increase of three percent compounded, on the January following one full year after the date of death of the employee or annuitant.

Tier 2

The annuity payable to the surviving spouse of an employee annuitant under Tier 2 is equal to 66 2/3 percent of the participant's earned retirement annuity at the time of death without reduction due to age. The surviving spouse is also eligible to receive an increase equal to the lesser of three percent or one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12 month period ending with the September preceding the increase, on the January following one full year after the date of death of the employee or annuitant.

Child Annuity

Under Tier 1 and Tier 2, unmarried children under the age of 18 of a deceased employee or annuitant having at least two years of service are entitled to a benefit. The child's annuity is an amount equal to \$100 a month when there is a surviving spouse or \$150 when there is no surviving spouse, subject to maximum limitations.

Notes to Financial Statements (continued)

2. Plan Description (continued)

Ordinary Disability Benefit

Under Tier 1 and Tier 2, an employee who becomes disabled as the result of any cause other than an accidental injury incurred while in the performance of an act of duty is entitled to an ordinary disability benefit at the amount equal to 45 percent of the employee's annual salary at the time of disablement. An employee can receive ordinary disability for a period equal to one fourth of his/her service credits up to a maximum of five years, exclusive of the disability period. Tier 2 participants have salary limitations similar to employee contributions.

Duty Disability Benefit

Under Tier 1 and Tier 2, an employee who becomes disabled as the result of a work related injury incurred while in the performance of an act of duty is entitled to a duty disability benefit in the amount equal to 75 percent of the employee's annual salary at the time of injury, reduced by any benefits received by the employee under the provisions of the Workers' Compensation Act. Tier 2 participants have salary limitations similar to employee contributions.

Contributions

Participants are required by Illinois Compiled Statutes (ILCS) to contribute 9.0 percent of their salary to the Fund except for those participants hired on or after January 1, 2022. Participants hired after January 1, 2022 are required to contribute 11.0 percent of their salary. If a participant leaves covered employment before the age of 55, accumulated participant contributions are refundable without interest. For payment year 2021, the District is required by state statute to contribute to the Fund one-fourth of the amount, as determined by an actuary retained by the Fund, equal to the sum of (i) the Park District's portion of the projected normal cost for that fiscal year, plus (ii) an amount determined by an actuary retained by the Fund, using a 35-year period starting on December 31, 2020 with the entry age normal actuarial cost method, that is sufficient to bring the total actuarial assets of the Fund up to 100% of the total actuarial accrued liabilities of the Fund by the end of 2055. In accordance with state statute, by 2059, the Fund should be 100% funded and going forward the District is required to contribute amounts each year to remain 100% funded. The District had no legal obligations to fund pension costs above that allowed by statute. The District's contributions to the Fund were \$83,349,261 and \$33,939,927 for the years ended December 31, 2021 and 2020, respectively.

3. Deposits and Investments

Investment Policy

Illinois Compiled Statutes authorize the Fund to make deposits/investments in insured commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, corporate and municipal debentures and obligations, insured mortgage notes and loans, mutual funds meeting certain requirements, common and preferred stocks, stock options, real estate, collective investment funds, and private equity partnerships. The Fund allows funds to be invested in any type of security authorized by the Illinois Pension Code.

The Fund's policy in regard to the allocation of invested assets is established and may be amended by the Board. It is the policy of the Board to pursue an investment strategy that reduces risk through prudent diversification of the portfolio across a broad selection of distinct asset classes. The Fund's investment policy discourages the use of cash equivalents, except to meet liquidity needs and aims to refrain from dramatically shifting asset class allocations over the short term.

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Investment Policy (continued)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2021 and 2020 are summarized below in the following table:

Asset Class	2021		2020	
	Target	Long-Term Expected Real Rate of Return	Target	Long-Term Expected Real Rate of Return
Fixed income	17.5%	0.40%	20.5%	1.15%
Domestic equity	28.5	6.40	28.5	6.40
International equity	17.8	6.80	18.0	7.05
Emerging market	2.2	8.50	2.0	9.00
Hedge equity	7.0	2.75	7.0	3.32
Private equity	7.0	10.40	7.0	10.40
Real estate/real assets	10.0	3.90	10.0	4.50
Infrastructure	10.0	5.40	7.0	5.75

Fair Value of Investments

The Fund's investments are reported at fair value in the accompanying statement of fiduciary net position. The methods used to measure fair value may produce an amount that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Fund believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The Fund categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2021 and 2020.

Investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent), as a practical expedient are not classified in the fair value hierarchy.

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Fair Value of Investments (continued)

Equity securities and short-term investment securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Debt securities classified in Level 2 or Level 3 are valued using matrix pricing techniques maintained by the various pricing vendors. Matrix pricing is used to value securities based on the securities relationship to a benchmark's quoted price. Equity securities classified in Level 2 are securities with a theoretical price calculated by applying a standardized formula to derive a price from a related security.

Equity securities classified in Level 2 are valued with last trade data having limited trading volume.

The valuation method for certain fixed income and alternative investments is based on the investments' NAV per share (or its equivalent), provided by the investment managers. The NAV is based on the fair value of the underlying investments held by the Fund less its liabilities. This practical expedient is not used when it is determined to be probable that the Fund will sell the investment for an amount different than the reported NAV.

Financial Statements

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Fair Value of Investments (continued)

The following table summarizes the valuation of the Fund's investments by the fair value hierarchy levels for the years ended December 31, 2021 and 2020:

Investment Type	2021			
	Level 1	Level 2	Level 3	Total
Investments measured at fair value				
Equity securities:				
Common stock	\$ 52,485,718	\$ 62,647,394	\$ -	\$ 115,133,112
Common stock, foreign	<u>20,423,662</u>	<u>31,267,354</u>	-	<u>51,691,016</u>
Total equity securities	<u>72,909,380</u>	<u>93,914,748</u>	-	<u>166,824,128</u>
Debt securities:				
Government bonds	-	5,472,483	-	5,472,483
Government agencies	-	1,703,484	-	1,703,484
Corporate bonds	-	11,306,534	49	11,306,583
Government mortgage-backed securities	-	6,011,911	-	6,011,911
Index linked government bonds	-	<u>1,357,094</u>	-	<u>1,357,094</u>
Total debt securities	-	<u>25,851,506</u>	<u>49</u>	<u>25,851,555</u>
Short-term investment securities:				
Funds short-term investments	<u>21,486,428</u>	-	-	<u>21,486,428</u>
Total short-term investment securities	<u>21,486,428</u>	-	-	<u>21,486,428</u>
Total investments measured by fair value level	<u>\$ 94,395,808</u>	<u>\$ 119,766,254</u>	<u>\$ 49</u>	<u>214,162,111</u>
Investments measured at net asset value (NAV):				
Hedged equity				29,066,132
Collective investments funds				33,868,899
International equity				24,580,477
Private equity				24,296,348
Real estate				32,743,837
Infrastructure				<u>37,319,370</u>
Total investments measured at NAV				<u>181,875,063</u>
Total investments measured at fair value				<u>\$ 396,037,174</u>
Collateral from securities lending		<u>\$ 16,779,808</u>		<u>\$ 16,779,808</u>

Financial Statements

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Fair Value of Investments (continued)

Investment Type	2020			
	Level 1	Level 2	Level 3	Total
Investments measured at fair value				
Equity securities:				
Common stock	\$ 46,492,783	\$ 51,208,980	\$ -	\$ 97,701,763
Common stock, foreign	<u>18,355,546</u>	<u>29,843,179</u>	-	<u>48,198,725</u>
Total equity securities	<u>64,848,329</u>	<u>81,052,159</u>	-	<u>145,900,488</u>
Debt securities:				
Government bonds	-	10,817,301	-	10,817,301
Government agencies	-	1,073,332	-	1,073,332
Corporate bonds	-	10,581,011	26	10,581,037
Government mortgage-backed securities	-	5,083,696	-	5,083,696
Index linked government bonds	-	<u>418,883</u>	-	<u>418,883</u>
Total debt securities	-	<u>27,974,223</u>	<u>26</u>	<u>27,974,249</u>
Short-term investment securities:				
Funds short-term investments	<u>4,964,290</u>	-	-	<u>4,964,290</u>
Total short-term investment securities	<u>4,964,290</u>	-	-	<u>4,964,290</u>
Total investments measured by fair value level	<u>\$ 69,812,619</u>	<u>\$ 109,026,382</u>	<u>\$ 26</u>	<u>178,839,027</u>
Investments measured at net asset value (NAV):				
Hedged equity				25,951,241
Collective investments funds				26,307,359
International equity				21,343,216
Private equity				20,885,335
Real estate				31,443,567
Infrastructure				<u>24,460,163</u>
Total investments measured at NAV				<u>150,390,881</u>
Total investments measured at fair value				<u>\$ 329,229,908</u>
Collateral from securities lending		<u>\$ 16,670,194</u>		<u>\$ 16,670,194</u>

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Fair Value of Investments (continued)

Investments measured at NAV for fair value are not subject to level classification. The valuation methods for investments measured at the NAV per share (or its equivalent) for the years ended December 31, 2021 and 2020 are presented on the following tables:

2021				
Investments Measured at Net Asset Value (NAV)	Fair Value	Underfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Hedged equity	\$ 29,066,132	\$ -	Monthly	5 days
International equity	24,580,477	-	Daily/Quarterly	5-30 days
Private equity	24,296,348	7,944,992	N/A	N/A
Real estate	32,743,837	-	Quarterly	60-90 days
Infrastructure	37,319,370	-	Quarterly	90 days
Collective investment funds	33,868,899	-	Daily	1-3 days

2020				
Investments Measured at Net Asset Value (NAV)	Fair Value	Underfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Hedged equity	\$ 25,951,241	\$ -	Monthly	5 days
International equity	21,343,216	-	Daily/Quarterly	5-30 days
Private equity	20,885,335	12,132,839	N/A	N/A
Real estate	31,443,567	-	Quarterly	60-90 days
Infrastructure	24,460,163	-	Quarterly	90 days
Collective investment funds	26,307,359	-	Daily	1-3 days

Hedged Equity

The hedged equity investment consists of one open-end long/short equity hedge fund of funds portfolio that primarily invests both long and short in publicly traded US equities.

International Equity

The international equity investment consists of two fund's portfolio that primarily invests both long and short in publicly traded international equities.

Private Equity Partnerships

The private equity investments consist of ten closed-end limited partnership private equity fund of funds. Generally, the types of partnership strategies included in these portfolios are venture capital, buyouts, special situations, mezzanine, and distressed debt. Private equity partnerships have an approximate life of 10-15 years and are considered illiquid. Redemptions are restricted over the life of the partnership. During the life of the partnerships, distributions are received as underlying investments are realized. The Fund has no plans to liquidate the total portfolio.

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Fair Value of Investments (continued)

Real Estate

The real estate investments consists of two core open-end estate funds and one value-added open-end real estate fund that primarily invest in U.S. commercial real estate.

Infrastructure

The infrastructure investments consist of two core open-end infrastructure funds that primarily invest in global infrastructure assets.

The Fund shall apply the prudent investor rule in investing for funds under its supervision. The prudent investor rule means that in making investments, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, with regards to preservation of capital and income and not speculation. The funds belonging to the Fund must be invested exclusively for the benefit of their members and in accordance with the respective Fund's investment goals and objectives.

Collective Investment Funds

The collective investment funds consist of core plus fixed income commingled fund and an opportunistic fixed income commingled fund that primarily invest in US dollar denominated bonds with exposure to both investment grade and below investment grade securities.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the value of an investment. The Fund does not maintain a policy relative to interest rate risk. The Board of Trustees recognized that its investments are subject to short-term volatility. However, their goal is to maximize total return within prudent risk parameters.

As of December 31, 2021, the Fund's investments were as follows (expressed in thousands):

Investment Type	Fair Value	Maturity (in Years)			
		Less Than 1	1-5	6-10	More Than 10
Corporate bonds	\$11,307	\$ -	\$ 3,479	\$ 5,210	\$ 2,618
Government agencies	1,704	100	1,382	222	-
Government bonds	5,472	-	1,248	2,742	1,482
Index linked government bonds	1,357	-	345	439	573
Government mortgage backed	<u>6,012</u>	<u>-</u>	<u>21</u>	<u>366</u>	<u>5,625</u>
Total	<u>\$25,852</u>	<u>\$ 100</u>	<u>\$ 6,475</u>	<u>\$ 8,979</u>	<u>\$10,298</u>

Financial Statements

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Interest Rate Risk (continued)

As of December 31, 2020, the Fund's investments were as follows (expressed in thousands):

Investment Type	Fair Value	Maturity (in Years)			
		Less Than 1	1-5	6-10	More Than 10
Corporate bonds	\$10,581	\$ 302	\$ 2,991	\$ 5,651	\$ 1,637
Government agencies	1,073	-	586	487	-
Government bonds	10,817	430	3,426	3,501	3,460
Index linked government bonds	419	-	-	419	-
Government mortgage backed	5,084	-	57	271	4,756
Total	<u>\$27,974</u>	<u>\$ 732</u>	<u>\$ 7,060</u>	<u>\$10,329</u>	<u>\$ 9,853</u>

Some investments are more sensitive to interest rate changes than others. Variable and floating rate collateralized mortgage obligations (CMOs), asset-backed securities (ABS), interest-only and principal-only securities are examples of investments whose fair values may be highly sensitive to interest rate changes.

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's investment policy requires diversification of the investment portfolio to minimize risk of loss resulting from over-concentration in a particular type of security, risk factor, issuer or maturity.

Investments that represent five percent or more of the Fund's net position (except those issued or guaranteed by the U.S. Government) are separately identified as follows:

	2021	2020
Collective investment funds, common stock:		
NTGI QM collective daily US market cap equity	\$ 50,377,620	\$ 41,374,954
NTGI QM collective daily all country world index	22,856,315	21,171,394
Mackay Shields Core Plus Bond CIT – CL 1	26,285,714	19,212,298
Hedged equity, parametric defensive equity fund	29,066,132	25,951,241
Mutual funds, William Blair	N/A	18,355,546

Custodial Credit Risk - Deposits

With respect to deposits, custodial credit risk refers to the risk that, in the event of a bank failure, the government's deposits may not be returned to it. As of December 31, 2021 and 2020, the Fund's bank deposits were covered by FDIC insurance.

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Custodial Credit Risk - Investments

With respect to investments, custodial credit risk refers to the risk that, in the event of the failure of the counterparty to the investment, the Fund will not be able to recover the value of its investments that are in possession of an outside party. As of December 31, 2021 and 2020, no investments were exposed to custodial credit risk.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund maintains a highly diversified portfolio of debt securities encompassing a wide range of credit ratings. Each fixed income manager is given a specific set of guidelines to invest within, based on the mandate for which it was hired. The guidelines specify which range of credit the manager may invest. These ranges include investment grade and high yield categories.

The Fund's investment policy authorizes investments in any type of security allowed for in Illinois statutes regarding the investment of public funds. The following tables present the Fund's ratings as of December 31, 2021 and 2020 (expressed in thousands).

2021				
S & P Credit Rating	Fair Value	Corporate Bonds	Government Agencies	Government Mortgage Backed
AA	\$ 2,144	\$ 440	\$ 1,704	\$ -
A	1,251	1,251	-	-
BBB	8,436	8,436	-	-
BB	1,180	1,180	-	-
NR	-	-	-	-
US Government Agency	6,012	-	-	6,012
Total	<u>\$ 19,023</u>	<u>\$ 11,307</u>	<u>\$ 1,704</u>	<u>\$ 6,012</u>

2020				
S & P Credit Rating	Fair Value	Corporate Bonds	Government Agencies	Government Mortgage Backed
AA	\$ 1,275	\$ 355	\$ 920	\$ -
A	2,072	2,072	-	-
BBB	7,003	7,003	-	-
BB	870	870	-	-
CCC	281	281	-	-
NR	-	-	-	-
US Government Agency	5,237	-	153	5,084
Total	<u>\$ 16,738</u>	<u>\$ 10,581</u>	<u>\$ 1,073</u>	<u>\$ 5,084</u>

Notes to Financial Statements (continued)

3. Deposits and Investments (continued)

Foreign Currency Risk

Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value of an investment or a deposit. Forward currency contracts may be used to manage exposure to foreign currencies. The Fund has not adopted a formal policy related to foreign currency risk. At December 31, 2021 and 2020, the Fund had \$51.7 and \$48.2 million, respectively, in foreign investments, all of which was in mutual funds that were held in U.S. dollars. At December 31, 2021 and 2020, the Fund had \$24.6 million and \$21.3 million in foreign investments in two international equity hedge funds all of which were held in U.S. dollars.

Rate of Return

For the years ended December 31, 2021 and 2020, the annual money-weighted rate of return on plan investments, net of investment expense, was 14.6 percent and 9.3 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

4. Securities Lending

Under the provisions of state statutes, the Fund lends securities (both equity and fixed income) to qualified and Fund approved brokerage firms for collateral that will be returned for the same securities in the future. The Fund's custodian, the Northern Trust Co., manages the securities lending program, which includes the securities of the Fund as well as other lenders, and receives cash, U.S. Treasury securities or letters of credit as collateral. The collateral received cannot be pledged or sold by the Fund unless the borrower defaults. However, the Fund does have the right to close the loan at any time. All security loan agreements are initially collateralized at 102 percent of the loaned securities. Whenever adjustments are needed to reflect changes in the fair value of the securities loaned, the collateral is adjusted accordingly. Cash collateral is invested in the lending agent's short-term investment pool, which at year end has a weighted average maturity of 75 days. As December 31, 2021 and 2020, the Fund had loaned to borrowers securities with a fair value of \$16,382,613 and \$16,344,210 respectively. As of December 31, 2021, the fair value of the collateral received by the Fund was \$16,779,808 and the collateral invested by the Fund was \$16,779,601. As of December 31, 2020, the fair value of the collateral received by the Fund was \$16,670,194 and the collateral invested by the Fund was \$16,671,069.

At year end, the Fund has no credit risk exposure to the borrowers because the amounts the Fund owes the borrowers exceed the amounts the borrowers owe the Fund.

Financial Statements

Notes to Financial Statements (continued)

5. Capital Assets

Capital asset activity for the years ended December 31, 2021 and 2020 were as follows:

	<u>2021</u>	<u>2020</u>
Furniture and equipment	\$ 85,601	\$ 85,601
Computer software	246,769	228,026
Leasehold improvements	<u>2,271</u>	<u>2,271</u>
	334,641	315,898
Less accumulated depreciation and amortization	<u>209,802</u>	<u>184,212</u>
Net property and equipment	<u>\$ 124,839</u>	<u>\$ 131,686</u>

Depreciation and amortization expense was \$25,590 and \$24,667 for 2021 and 2020, respectively.

6. Operating Leases

The Fund has entered into an operating lease for office space through April 30, 2026. During the fiscal year, the Fund exercised a one-time cancellation option to terminate this lease effective April 30, 2022. For the period after April 30, 2022, the Fund entered into a new lease for office space through April 30, 2032. The total rental expense was \$262,013 and \$192,731 for 2021 and 2020, respectively.

Following is a schedule of minimum future rental payments under the noncancelable operating lease at December 31, 2021:

Years ending December 31:	
2022	\$ 110,279
2023	116,472
2024	119,972
2025	123,568
2026	127,272
2027	131,096
2028-2032	<u>610,276</u>
Total	<u>\$ 1,338,935</u>

The Fund leases office equipment under noncancelable operating leases that expire at various dates through July, 2027. Total rent expense incurred under these operating leases was \$28,653 and \$28,161 for 2021 and 2020, respectively.

Minimum future rental payments under noncancelable operating leases having remaining terms in excess of one year as of December 31, 2021, are as follows:

Years ending December 31:	
2022	\$ 21,364
2023	21,607
2024	22,040
2025	22,486
2026-2027	<u>32,437</u>
Total	<u>\$ 119,934</u>

Notes to Financial Statements (continued)

7. Commitments

The Fund has committed to purchase \$95,000,000 interests in private equity partnerships. At December 31, 2021 and 2020, the Fund had a remaining contractual obligation of \$7,944,992 and \$12,132,839 respectively, to purchase additional interests in the private equity partnerships.

8. Deferred Compensation Plan

The Fund is a governmental eligible employer as defined by Code Section 457(e)(1)(A) and has established a deferred compensation plan (457(b)) for eligible employees. Individual contributions to the plan are equal to the amount of salary reductions elected by each participant for the year up to a maximum allowable by Internal Revenue Service regulations. Total employee contributions were \$55,650 and \$48,550 for 2021 and 2020, respectively. Employer contributions are not allowed.

Notes to Financial Statements (continued)

9. Pension Liability of the Participating Employer

Net Pension Liability

The components of the net pension liability as of December 31, 2021 and 2020 were as follows:

	2021	2020
Total pension liability	\$ 1,211,991,973	\$ 2,277,440,135
Plan fiduciary net position	414,658,650	348,294,515
Plan net pension liability	797,333,323	1,929,145,620
Plan fiduciary net position as a percentage of the total pension liability	34.21%	15.29%

The schedule of changes in the employer's net pension liability and related ratios, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information related to the funded status of the Fund.

Actuarial Assumptions

The total pension liability above was determined by an actuarial valuation performed as of December 31, 2021 and 2020 using the following actuarial methods and assumptions applied to all periods included in the measurement:

Actuarial valuation date	December 31, 2021
Actuarial cost method	Entry age normal
Actuarial assumptions:	
Projected salary increases	20% to 2.75%
Inflation	2.50%
Investment rate of return	7.25%, net of investment expense
Cost of living adjustments	Retirees – 3% of the original benefit for employees who first became a participant before January 1, 2011. Retirees – lesser of 3% and ½ CPI of the original benefit for employees who first become a participant on or after January 1, 2011. Beneficiary – 3% compounded for beneficiaries of employees who first became a participant by January 1, 2011.
Asset valuation method	Fair value

Notes to Financial Statements (continued)

9. Pension Liability of the Participating Employer (continued)

Actuarial Assumptions (continued)

Actuarial valuation date	December 31, 2020
Actuarial cost method	Entry age normal
Actuarial assumptions:	
Projected salary increases	20% to 2.75%
Inflation	2.50%
Investment rate of return	2.22%, net of investment expense
Cost of living adjustments	Retirees – 3% of the original benefit for employees who first became a participant before January 1, 2011. Retirees – lesser of 3% and ½ CPI of the original benefit for employees who first become a participant on or after January 1, 2011. Beneficiary – 3% compounded for beneficiaries of employees who first became a participant by January 1, 2011.
Asset valuation method	Fair value

Post-retirement mortality rates relating to 2020 and 2021, for healthy annuitants were based on 110 percent of PubG-2010 Healthy Annuitant Table, with mortality improvements projected generationally using scale MP-2017. For active participants, mortality rates were based on 110 percent of PubG-2010 Healthy Employee Table, with mortality improvements projected generationally using scale MP-2017.

The actuarial assumptions used in the December 31, 2021 and December 31, 2020 valuations were based on the results of an actuarial experience study for a five-year period ending December 31, 2018.

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent, for December 31, 2021. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the 9 percent contribution rate for Tier 1 and Tier 2, and 11% for Tier 3 for 2022 and thereafter.

The discount rate used to measure the total pension liability was 2.22 percent, for December 31, 2020. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the 9 percent contribution rate for 2021 and thereafter. Employer contributions will be made at the 1.1 multiple of member contributions from two years prior to 2021 and thereafter. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the Fund's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. The projected benefit payments through 2026 were discounted at the expected long-term rate of returns (7.25 percent). Starting in 2027, the projected benefit payments were discounted at the municipal bond index (2.12 percent, based on the Bond Buyer 20-GO Municipal Bond Index as of December 26, 2020). Therefore, a single equivalent blended discount rate of 2.22 percent was calculated using the long-term expected rate of return and municipal bond index.

Notes to Financial Statements (continued)

9. Pension Liability of the Participating Employer (continued)

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate as of December 31, 2021. The table below presents the pension liability of the Fund calculated using the discount rate of 7.25 percent as well as what the net pension liability would be if it were to be calculated using a discount rate that is 1 percentage point lower (6.25 percent) or 1 percentage point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate	1% Increase (8.25%)
Net pension liability	\$ 937,845,142	\$ 797,333,323	\$ 680,060,469

For comparison purposes, the net pension liability as of December 31, 2020, calculated using the discount rate of 2.22 percent, as well as what the net pension liability would be if it were to be calculated using a discount rate that is 1 percentage point lower (1.22 percent) or 1 percentage point higher (3.22 percent) than the current rate:

	1% Decrease (1.22%)	Current Discount Rate	1% Increase (3.22%)
Net pension liability	\$ 2,323,041,621	\$ 1,929,145,620	\$ 1,614,340,720

10. Subsequent Event

Subsequent to December 31, 2021, the investment markets have experienced significant volatility. It is highly likely that the values of the Fund's investments have changed by material amounts since year end.

11. Effect of New Accounting Standards on Current-Period Financial Statements

The Governmental Account Standards Board (GASB) has approved the following:

- Statement No. 87, *Leases*;
- Statement No. 91, *Conduit Debt*;
- Statement No. 92, *Omnibus 2020*;
- Statement No. 93, *Replacement of Interbank Offered Rates*;
- Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*;
- Statement No. 96, *Subscription-Based Information Technology Arrangements*; and
- 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. 99, *Omnibus 2022*

The statements listed above through Statement No. 93 had their required effective dates postponed by one year with the issuance of Statement No. 95, *Postponement of Effective Dates of Certain Authoritative Guidance*, with the exception of Statement No. 87, which was postponed by one and a half years.

Financial Statements

Required Supplementary Information

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios Last Eight Fiscal Years

	2014	2015	2016	2017
Total Pension Liability				
Service cost	\$ 12,975,774	\$ 13,417,795	\$ 13,763,768	\$ 20,115,813
Interest	64,929,834	65,921,805	66,523,889	68,982,467
Change of benefit terms	-	-	93,579,710	36,183,940
Differences between expected and actual experience	5,447,687	682,159	(4,556,757)	2,785,815
Change of assumptions	-	-	198,725,863	370,422,560
Benefit payments, including refunds of employee contributions	(70,536,042)	(70,602,016)	(74,077,877)	(78,138,027)
Net change in total pension liability	<u>12,817,253</u>	<u>9,419,743</u>	<u>293,958,596</u>	<u>420,352,568</u>
Total Pension Liability, Beginning	<u>888,023,364</u>	<u>900,840,617</u>	<u>910,260,360</u>	<u>1,204,218,956</u>
Total Pension Liability, Ending (a)	<u>\$ 900,840,617</u>	<u>\$ 910,260,360</u>	<u>\$ 1,204,218,956</u>	<u>\$ 1,624,571,524</u>
Plan Fiduciary Net Position				
Employer contributions	\$ 11,225,438	\$ 30,588,976	\$ 30,890,241	\$ 20,920,614
Employee contributions	10,831,434	12,368,636	12,246,115	13,675,292
Net investment income (loss)	27,490,520	8,823,613	30,920,231	51,082,314
Benefit payments, including refunds of employee contributions	(70,536,042)	(70,602,016)	(74,077,877)	(78,138,027)
Administrative expenses	(1,458,831)	(1,533,700)	(1,537,698)	(1,682,136)
Other	<u>100,518</u>	<u>88,113</u>	<u>102,572</u>	<u>91,779</u>
Net change in plan fiduciary net position	<u>(22,346,963)</u>	<u>(20,266,378)</u>	<u>(1,456,416)</u>	<u>5,949,836</u>
Plan Fiduciary Net Position, Beginning	<u>435,768,679</u>	<u>413,421,716</u>	<u>393,155,338</u>	<u>391,698,922</u>
Plan Fiduciary Net Position, Ending (b)	<u>\$ 413,421,716</u>	<u>\$ 393,155,338</u>	<u>\$ 391,698,922</u>	<u>\$ 397,648,758</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 487,418,901</u>	<u>\$ 517,105,022</u>	<u>\$ 812,520,034</u>	<u>\$ 1,226,922,766</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	45.89%	43.19%	32.53%	24.48%
Covered Payroll	118,987,507	122,382,584	121,126,918	135,315,008
Employer's Net Pension Liability as a Percentage of Covered Payroll	409.64%	422.53%	670.80%	906.72%

Notes to Schedule:

Changes in assumption: For the measurement date December 31, 2021, the discount rate was changed from 2.22% as of December 31, 2020 to 7.25% as of December 31, 2021.

The Fund implemented GASB Statement No. 67 in fiscal year 2014. Information prior to fiscal year 2014 is not available.

Financial Statements

Required Supplementary Information (continued)

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

	2018	2019	2020	2021
Total Pension Liability				
Service cost	\$ 38,102,341	\$ 33,317,058	\$ 51,348,187	\$ 60,952,502
Interest	59,290,982	69,086,515	58,440,058	51,017,625
Change of benefit terms	-	-	-	-
Differences between expected and actual experience	5,001,084	15,529,818	(2,309,221)	846,816
Change of assumptions	(3,471,090)	359,734,367	203,245,789	(1,097,662,261)
Benefit payments, including refunds of employee contributions	(76,526,820)	(78,550,449)	(79,370,008)	(80,602,844)
Net change in total pension liability	22,396,497	399,117,309	231,354,805	(1,065,448,162)
Total Pension Liability, Beginning	<u>1,624,571,524</u>	<u>1,646,968,021</u>	<u>2,046,085,330</u>	<u>2,277,440,135</u>
Total Pension Liability, Ending (a)	<u>\$ 1,646,968,021</u>	<u>\$ 2,046,085,330</u>	<u>\$ 2,277,440,135</u>	<u>\$ 1,211,991,973</u>
Plan Fiduciary Net Position				
Employer contributions	\$ 27,638,402	\$ 27,682,089	\$ 33,939,927	\$ 83,349,261
Employee contributions	12,125,457	12,664,855	12,634,900	12,226,998
Net investment income (loss)	(17,196,812)	51,982,545	28,071,327	53,089,102
Benefit payments, including refunds of employee contributions	(76,526,820)	(78,550,449)	(79,370,008)	(80,602,844)
Administrative expenses	(1,501,039)	(1,528,861)	(1,598,370)	(1,718,012)
Other	67,927	50,236	60,451	19,630
Net change in plan fiduciary net position	(55,392,885)	12,300,415	(6,261,773)	66,364,135
Plan Fiduciary Net Position, Beginning	<u>397,648,758</u>	<u>342,255,873</u>	<u>354,556,288</u>	<u>348,294,515</u>
Plan Fiduciary Net Position, Ending (b)	<u>\$ 342,255,873</u>	<u>\$ 354,556,288</u>	<u>\$ 348,294,515</u>	<u>\$ 414,658,650</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 1,304,712,148</u>	<u>\$ 1,691,529,042</u>	<u>\$ 1,929,145,620</u>	<u>\$ 797,333,323</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	20.78%	17.33%	15.29%	34.21%
Covered Payroll	133,112,100	139,204,051	138,942,498	134,515,373
Employer's Net Pension Liability as a Percentage of Covered Payroll	980.16%	1215.14%	1388.45%	592.75%

Notes to Schedule:

Changes in assumption: For the measurement date December 31, 2021, the discount rate was changed from 2.22% as of December 31, 2020 to 7.25% as of December 31, 2021.

The Fund implemented GASB Statement No. 67 in fiscal year 2014. Information prior to fiscal year 2014 is not available.

Required Supplementary Information (continued)

Schedule of Employer Contributions Last Ten Fiscal Years

	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contributions	Contribution deficiency	Covered Payroll	Contributions as a percentage of covered payroll
2012**	\$16,786,671	\$5,268,363	\$11,518,308	\$58,231,511	9.05%
2013	41,834,857	15,707,814	26,127,043	117,781,596	13.34
2014	35,307,186	11,225,438	24,081,748	118,987,507	9.43
2015	36,273,994	30,588,976	5,685,018	122,382,584	24.99
2016	37,130,268	30,890,241	6,240,027	121,126,918	25.50
2017	45,253,238	20,920,614	24,332,624	135,315,008	15.46
2018	50,929,734	27,638,402	23,291,332	133,112,100	20.76
2019	61,887,790	27,682,089	34,205,701	139,204,051	19.89
2020	67,297,212	33,939,927	33,357,285	138,942,498	24.43
2021	70,492,027	83,349,261	(12,857,234)	134,515,373	61.96

** For the six months ended December 31, 2012, as a result of Public Act 097-0973, the Fund's year end was changed from June 30th to December 31st.

Notes to Schedule

Methods and assumptions used to determine contribution rates.

Valuation date	December 31, 2021
Actual cost method	Entry Age
Amortization method	Level percentage of payroll
Amortization period	21 years (closed period)
Asset valuation method	5-year smoothed fair value
Actuarial assumption:	
Investment rate of return	7.25%, net of investment expense
Projected salary increases	20% to 2.75% based on service
Inflation rate	2.50%

Required Supplementary Information (continued)

	Schedule of Investment Returns Last Eight Fiscal Years							
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Annual money-weighted rate of return, net of investment	5.60%	5.61%	5.77%	5.58%	-5.10%	17.00%	9.30%	14.60%

Notes to Schedule

The Fund implemented GASB Statement No. 67 in fiscal year 2014. Information prior to fiscal year 2014 is not available.

Supplementary Information

Tax Levies Receivable
Years Ended December 31, 2021 and 2020

<u>Levy Year</u>	<u>Tax Levy</u>	<u>Collections</u>	<u>Tax Levies Receivable</u>	<u>Allowance for Uncollectible Taxes</u>	<u>Allowance for Uncollectible Write-offs as a Percentage of Tax Levy</u>	<u>Net Tax Levies Receivable</u>
At December 31, 2021:						
2021	\$13,566,840	\$ -	\$13,566,840	\$ -	\$ -	\$13,566,840*
At December 31, 2020:						
2020	\$13,152,470	\$ -	\$13,152,470	\$ -	\$ -	\$13,152,470

* Collected in March 2022

Financial Statements

Supplementary Information (continued)

Schedule of Administrative and General Expenses
Years Ended December 31, 2021 and 2020

	2021	2020
Actuary expense	\$ 67,843	\$ 50,200
Auditing	29,450	29,450
IT consultant	38,497	41,660
Conference and convention expense	2,691	7,807
Contributions for annuities of Retirement Board employees	94,718	102,627
Depreciation	25,590	24,667
Equipment rental	28,653	28,161
Filing fee – State of Illinois	8,000	8,000
File storage expense	11,563	9,036
Hospitalization	107,495	93,629
Legal	76,569	78,908
Legislative consultant	36,000	36,000
Office supplies and expenses	30,312	22,492
Postage	10,778	7,970
Insurance - surety bond and other	17,281	13,311
Rent expense	262,013	192,731
Salaries	806,483	788,767
Payroll tax	11,221	10,752
Bank fees	19,694	19,243
Telephone	9,353	9,167
Transportation	1,523	1,939
Trustees' election expense	<u>22,285</u>	<u>21,853</u>
	<u>\$ 1,718,012</u>	<u>\$ 1,598,370</u>

Supplementary Information (continued)

Schedule of Professional Expenses
Years Ended December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
Legal	\$ 76,569	\$ 78,908
Actuary expense	67,843	50,200
Auditing	29,450	29,450
IT consultant	38,497	41,660
Legislative consultant	<u>36,000</u>	<u>36,000</u>
	<u>\$248,359</u>	<u>\$236,218</u>

Financial Statements

Supplementary Information (continued)

Schedule of Investment Expenses
Years Ended December 31, 2021 and 2020

	<u>2021</u>	<u>2020</u>
U.S. Equity		
Great Lakes Advisors, LLC	\$ 68,283	\$ 52,911
Ariel Investments	212,507	147,872
Northern Trust Quantitative Advisors	<u>10,332</u>	<u>9,355</u>
	<u>291,122</u>	<u>210,138</u>
Non U.S. Equity		
Ativo Capital	106,037	82,812
Northern Trust Quantitative Advisors	<u>14,579</u>	<u>12,510</u>
	<u>120,616</u>	<u>95,322</u>
Fixed Income		
Entrust Global	20,935	2,177
LM Capital Group, LLC	33,372	26,638
National Investment Services	39,330	1,692
Mackay Shields, LLC	-	41,778
Chicago Equity Partners	-	19,131
ULLICO Investment Company	<u>-</u>	<u>29,024</u>
	<u>93,637</u>	<u>120,440</u>
Hedged Equity		
Parametric	<u>82,008</u>	<u>76,609</u>
	<u>82,008</u>	<u>76,609</u>
Real Estate		
Principal Global Investors	166,486	156,242
UBS Realty Investors, LLC (Trumbull)	<u>154,827</u>	<u>187,908</u>
	<u>321,313</u>	<u>344,150</u>
Private Equity		
HarbourVest Partners, LLC	56,250	75,000
Mesirow Financial Capital Partners	132,961	175,817
GoldPoint Partners, LLC (NYL)	<u>6,867</u>	<u>25,000</u>
	<u>196,078</u>	<u>275,817</u>
Infrastructure		
ULLICO Infrastructure	241,239	215,606
IFM Global Infra (US) L.P.	<u>101,194</u>	<u>89,539</u>
	<u>342,433</u>	<u>305,145</u>
Other		
Custody, Northern Trust Co.	70,000	62,500
Investment consultant	<u>100,000</u>	<u>100,000</u>
	<u>170,000</u>	<u>162,500</u>
Total	<u>\$1,617,207</u>	<u>\$1,590,121</u>

INVESTMENT

INTRODUCTION

The Fund is authorized to invest in bonds, notes, and other obligations of the U.S. Government; corporate debentures and obligations; insured mortgage notes and loans; common and preferred stocks; stock options; real estate; collective investment funds; and private equity partnerships as set forth in the Illinois Compiled Statutes. Income on all investments is recognized on the accrual basis. Gains and losses on sales and exchanges of investments are recognized on the transaction date of such sale or exchange. Dividend income is recognized based on dividends declared. Investments are reported at fair value. Short term investments are reported at cost, which approximates fair value. Fair value for bonds and stocks are determined by quoted market prices and for investments for which market quotations are not readily available are valued at their fair values as determined by a bank administrator under the direction of the Board of Trustees, with the assistance of a valuation service.

The Investment Section was prepared by staff with assistance from Meketa Investment Group, the Fund's investment consultant and Northern Trust Company, the Fund's custodian. Return calculations were prepared using a time-weighted rate of return methodology in accordance with the performance presentation standards of the CFA Institute.

Investment Recap

Market Environment

The U.S. stock market increased by 19% during the year ending December 31, 2021 (fiscal year), as measured by the Dow Jones Total US Stock Index. Within the U.S. stock market, there was some differentiation in returns between large-cap, mid-cap, and small-cap stocks over the year, with returns of 26.5%, 22.6%, and 14.8% for the Russell 1000, Russell Mid-Cap and Russell 2000 respectively. In addition, there was an observable rotation from growth stocks to value stocks compared to prior year. Outperformance of value stocks jumped from 2.9% from prior year to 25.4% in 2021; whereas outperformance of growth stocks decelerated from their prior year growth of 38.3% to 25.9%.

Over the full year, US stocks outperformed other regions, with the S&P 500 returning 28.7% for the year, compared to the MSCI EAFE at 11.3%, and a decline of -2.5% for the MSCI EM index. The MSCI China index was a notable outlier with a full year return of -21.7%. Within fixed income, higher inflation led the Bloomberg TIPS index to increase 6.0% over the full year, while the Bloomberg Aggregate index declined by -1.5% on higher rates. Economic growth in the US registered at levels not seen in over 40 years at 5.7% over the year, while Europe's economic output increased 5.4% and China at 8.1%. Inflation remained stubbornly high, with CPI increasing 7.0% in the US over the year, the highest reading since 1981.

Performance Commentary

The Pension Fund posted a calendar year return of 14.6%, net of fees, outperforming the custom benchmark by 1.1%. In absolute terms, the best performing asset class for the year was Private Equity, which returned 29.6%, net of fees. The worst performing asset class for the year was Fixed Income, which returned -1.2%, net of fees.

The Fund posted a three-year annualized return of 13.9%, net of fees, underperforming the custom benchmark by 1.1%. On a five-year basis, the Fund returned 9.9%, net of fees, 0.9% below the custom benchmark. On a ten-year basis, the Fund returned 9.5%, 0.3% ahead of the custom benchmark.

The fixed income market, as measured by the Bloomberg US Aggregate Index, returned -1.5% during the year. The Fund's fixed income portfolio returned -1.2%, net of fees, over that period, outperforming the benchmark by 0.3%. At the end of the year, the Fund's fixed income assets comprised 17.2% of the total Fund's assets.

The broad U.S. stock market, as measured by the Dow Jones Total US Stock Index, returned 25.7% during the year. The Fund's U.S. Equity portfolio returned 27.5%, net of fees, over that period, outperforming the benchmark by 1.8%. The outperformance of the U.S. Equity portfolio was the result of an overweight to small- and mid-cap value stocks, which significantly outpaced their growth counterparts in 2021. Outperformance from actively managed funds within the US Equity portfolio helped to offset the drag from the value tilt in the portfolio. The U.S. Equity portfolio was led by the Ariel Small/Mid Cap Value strategy, which returned 33.7%, net of fees, for the year, surpassing the Russell 2500 Value index by nearly 6%. Meanwhile, the All-Cap

INVESTMENT

Investment Recap (continued)

Performance Commentary (continued)

Core, Mid-Cap Core, and Large-Cap portfolios all posted strong albeit less robust gains for the year. At the end of the year, the Fund's U.S. stock market assets comprised 29.3% of the total Fund's assets.

The international stock market, as measured by the MSCI ACWI ex US Index, returned 7.8% during the year. The Fund's International Equity portfolio returned 9.7%, net of fees, over that period, outperforming the benchmark by 1.9%. The International portfolio was led by the Ativo International Equity ex US portfolio, which returned 15.3%, net of fees, for the year, outperforming its benchmark by 4.0%. At the end of the year, the Fund's international stock market assets comprised 19.3% of the total Fund's assets.

The real estate market, as measured by the NCREIF Fund Index, returned 21.0% during the year. The Fund's real estate portfolio returned 17.9%, net of fees, over that period, underperforming the benchmark by 3.1%. At the end of the year, the Fund's real estate assets comprised 8.3% of the total Fund's assets.

INVESTMENT

Summary of Investments

Years ended December 31, 2021 and December 31, 2020

Type of Investment	December 31, 2021				December 31, 2020			
	<u>Fair Value</u>	<u>%</u>	<u>Book Value</u>	<u>%</u>	<u>Fair Value</u>	<u>%</u>	<u>Book Value</u>	<u>%</u>
Fixed income	\$25,851,555	7	\$25,950,430	9	\$27,974,249	8	\$26,439,946	10
Domestic equities	115,133,112	29	60,045,679	21	97,701,763	30	59,274,871	23
International equities	76,271,493	19	55,099,769	19	69,541,941	21	52,268,157	20
Collective investments	33,868,899	9	33,435,290	11	26,307,359	8	25,910,900	10
Hedged equity	29,066,132	8	18,700,000	6	25,951,241	8	19,700,000	8
Private equity	24,296,348	6	34,603,587	12	20,885,335	6	35,158,606	13
Real estate	32,743,837	8	18,481,499	6	31,443,567	10	21,205,054	8
Infrastructure	37,319,370	9	25,037,921	9	24,460,163	7	15,255,402	6
Short-term	<u>21,486,428</u>	<u>5</u>	<u>21,486,428</u>	<u>7</u>	<u>4,964,290</u>	<u>2</u>	<u>4,964,290</u>	<u>2</u>
Total Assets	<u>\$396,037,174</u>	<u>100</u>	<u>\$293,187,225</u>	<u>100</u>	<u>\$329,229,908</u>	<u>100</u>	<u>\$260,177,226</u>	<u>100</u>

INVESTMENT

Statement of Investment Policy for the Park Employees' Annuity and Benefit Fund of Chicago

ADOPTED 10/94

REVISED 8/1/98; 5/19/99; 2/16/00; 5/20/03; 2/29/08; 4/21/11; 7/16/15, 2/21/19, 12/17/20, 6/17/21

The purpose of this statement is to establish the investment policy for the management of the assets of the Park Employees' Annuity and Benefit Fund.

Distinction of Responsibilities

The Trustees are responsible for establishing the investment policy that is to guide the investment of Fund assets. The target allocation that the Trustees deem appropriate for the Fund is displayed below. The Fund's investments are distributed to a number of asset classes to minimize investment risk through diversification and simultaneously provide enhanced investment performance. The Trustees review the investment policy every three to five years.

Investment managers appointed by the Trustees to execute the policy will invest Fund assets in accordance with established guidelines but will apply their own judgments concerning relative investment values. In particular, the investment managers are accorded full discretion, within established guidelines and policy limits, to select individual investments and diversify their portfolios.

Allocation of Assets

It is the Trustees' policy to invest the Fund's assets in the following proportions:

Asset Category	Board Approved Policy		
	Target (%)	Range (%)	
U.S. Equity	28.5%	18.5%	38.5%
Non-U.S. Equity	20.0	10.0	30.0
Private Equity	7.0	0.0	15.0
Hedged Equity	7.0	0.0	12.0
Real Estate	10.0	5.0	15.0
Infrastructure	10.0	0.0	13.0
U.S. Bonds	17.5	12.5	22.5
	<u>100.0%</u>		

Normal cash flows (contributions and benefit payments) will be used to maintain the allocation as close as practical to the target allocation. If normal cash flows are insufficient to maintain the allocation within the permissible range as of any calendar quarter-end, the Trustees shall transfer balances as necessary between the asset types to bring the allocation back within the permissible ranges.

Active and Passive Investments

The Board of Trustees has directed that a prescribed percentage of specific asset classes be invested passively through the use of index funds. The Board of Trustees has approved the following passive investment percentages:

Asset Category	% Indexed
U.S. Equity	51.9%
Non-U.S. Equity	42.9%
U.S. Bonds	0.0%

INVESTMENT

Statement of Investment Policy for the Park Employees' Annuity and Benefit Fund of Chicago (continued)

Diversification

The portfolio is to be diversified within each asset class to reduce the impact of large losses in individual investments in a manner that is consistent with Retirement Board policy, and otherwise at the discretion of each investment manager.

Liquidity

The cash flow needs of the Fund are approximately 15% of the total Fund assets annually.

Individual Investment Management Performance Benchmark

Individual performance benchmarks will be established by the Board of Trustees and used to evaluate individual manager's performance.

Investment Objective

The investment objective of the Fund is to equal or exceed the rate of return of a benchmark comprised of 28.5% Dow Jones U.S. Total Stock Market Index, 20.0% MSCI All Country World Ex-US Index, 17.5% BarCap Aggregate Index, 7% Prequin Private Equity 1Q Lagged Index, 7% HFRX Hedged Equity Index, 10.0% NCREIF ODCE Index, and 10% CPI + 4% on a net-of-fee basis. As a secondary benchmark, the Fund is to achieve an above-median ranking in a universe of other public funds over a reasonable measurement period.

INVESTMENT

Schedule of Investment Performance

	Years ended December 31, 2021 - 2016						Year ended December 31, 2021		
	<u>12/31/21</u>	<u>12/31/20</u>	<u>12/31/19</u>	<u>12/31/18</u>	<u>12/31/17</u>	<u>12/31/16</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>
Total Fund	14.6%	9.3%	17.0%	-5.1%	14.2%	8.4%	13.9%	9.9%	9.5%
Benchmark Portfolio	15.7	11.4	16.6	-3.0	13.8	6.7	15.0	10.8	9.2
Public Funds Median Return	13.8	13.0	19.5	-4.4	14.7	7.4	15.5	11.2	9.6
Actuarial Assumed Rate of Return	7.25	7.25	7.25	7.50	7.50	7.50	7.25	7.35	7.42
Consumer Price Index	7.0	1.4	2.3	1.9	2.2	2.1	3.5	2.9	2.1
Fixed Income	-1.2%	9.3%	7.7%	0.0%	3.4%	2.5%	5.2%	3.8%	3.1%
Bloomberg US Aggregate	-1.5	7.5	8.7	0.0	3.5	2.6	4.8	3.6	2.9
Universe Median	-0.9	7.7	8.9	-0.2	5.2	4.3	5.1	3.8	3.3
U.S. Equities	27.5%	14.3%	28.8%	-11.5%	18.1%	14.0%	23.3%	14.4%	14.6%
Dow Jones Total US Stock Index	25.7	20.8	30.9	-5.3	21.2	12.6	25.7	17.9	16.2
Universe Median	25.7	17.6	29.9	-6.1	20.2	12.7	24.4	16.8	15.5
Non-U.S. Equities	9.7%	12.3%	24.2%	-16.5%	28.4%	9.7%	15.2%	10.4%	8.4%
MSCI ACWI Ex US	7.8	10.7	21.5	-14.2	27.2	4.5	13.2	9.6	7.3
Universe Median	7.7	12.2	22.8	-15.1	28.3	4.3	14.0	10.0	8.1
Hedged Equities	17.7	4.6	16.3	-2.9%	10.1%	2.9%	12.7%	8.9%	7.3%
HFRX Hedged Equity	12.1	4.6	10.7	-9.4	10.0	0.1	9.1	5.3	4.1
Universe Median	8.4	7.9	7.7	-2.1	5.8	2.0	8.6	6.0	5.2
Risk Parity	n/a	n/a	n/a	-6.0%	10.4%	12.6%	n/a	n/a	n/a
60% MSCI World/40% BarCap Agg	n/a	n/a	n/a	-5.1	14.5	5.7	n/a	n/a	n/a
Real Estate	17.9%	-1.2%	3.3%	7.5%	6.4%	9.1%	6.3%	6.5%	9.0%
NCREIF-ODCE	21.0	0.3	4.4	7.4	6.7	7.8	8.2	7.7	9.4
Universe Median	20.4	0.5	5.0	7.3	6.4	7.1	8.3	7.7	9.1
Infrastructure	13.2%	1.0%	11.2%	15.3%	10.9%	9.2%	8.3%	10.2%	n/a
CPI+4%	11.0%	5.4%	6.4%	6.0	6.2	6.2	7.5	6.9	6.1
Private Equity	29.6%	22.3%	9.8%	4.8%	14.9%	6.1%	20.3%	15.9%	13.8%
Prequin Real Time	31.5	25.6	15.2	10.9	19.2	10.5	23.9	20.3	16.6

NOTE: The basis for the calculations is a time-weighted rate of return based on the market rate of return.

As of February 1, 2019, the Policy Benchmark consists of 28.5% Dow Jones U.S. Total Stock Market Index, 20.0% MSCI All Country World Ex-US Index, 17.5% BarCap Aggregate Index, 7% Prequin Private Equity 1Q Lagged Index, 7% HFRX Hedged Equity Index, 10.0% NCREIF ODCE Index, and 10% CPI+4%. Prior to February 1, 2019, the Policy Benchmark consisted of 28.5% Wilshire 5000 Stock Index, 20.0% MSCI All Country World Ex-US Index, 25.5% BarCap Aggregate Index, 7% Venture Economics All Private Equity Index, 10% HFRX Hedged Equity Index, and 9.0% NCREIF ODCE Index. Prior to August 1, 2016, the Policy Benchmark consisted of 32.5% Wilshire 5000 Stock Index, 16.0% MSCI All Country World Ex-US Index, 25.5% BarCap Aggregate Index, 7% Venture Economics All Private Equity Index, 10% HFRX Hedged Equity Index, and 9.0% NCREIF ODCE Index. Prior to December 1, 2013, the Policy Benchmark consisted of 27% BarCap Aggregate, 27% Wilshire 5000, 17% MSCI ACWI ex U.S., 12% NCREIF ODCE, 10% HFRX Hedged Equity, and 7% Venture Economics All Private Equity Index. Prior to April 1, 2011, the Policy Benchmark consists of 35% BarCap Aggregate, 38% Wilshire 5000, 12% MSCI ACWI ex U.S., 10% NCREIF Property Index, and 5% Venture Economics All Private Equity Index. Prior to February 29, 2008, the Policy Benchmark consisted of 35% BarCap Aggregate, 38% Wilshire 5000, 12% MSCI EAFE, 10% NCREIF Property Index, and 5% Venture Economics All Private Equity Index.

INVESTMENT

Schedule of Ten Largest Stock and Bond Holdings

For the year ended

December 31, 2021

U.S. Stocks*

Shares	Holdings	Fair Value
57,162	Mattel, Inc.	\$1,232,413
28,172	Lazard, Ltd.	1,229,144
22,743	KKR & Co, Inc.	1,694,354
22,674	Madison Square Garden Entertainment Corp.	1,594,889
15,944	Apple	2,831,205
15,568	First American Financial Corp.	1,217,885
8,980	Affiliated Managers Group, Inc.	1,477,300
7,681	Microsoft Corp	2,583,201
5,103	Jones Lang LaSalle, Inc.	1,374,442
446	Amazon	1,487,711

International Stocks*

Shares	Holdings	Fair Value
20,035	Taiwan Semicon Man	\$445,204
244	Safestore Holdings PLC	465,997
207	Beijer Ref	452,572
165	Addtech	394,396
126	Lifco	377,279
102	Investment AB Latour	416,845
99	Benefit One Inc.	423,410
67	Vitrolife	413,924
58	InMode	408,648
42	MIPS	548,947

Bonds*

Holdings	Fair Value
US Treasury Note 2/15/2013 4.50%	\$1,042,945
US Treasury Note 05/15/2031 1.625%	888,057
T 1 7/8 11/15/51	828,772
T 1 1/8 10/31/26	651,308
Treasury INFL IX N/B 02/15/2051 0.125%	571,622
Boeing CO 05/01/2030 5.15%	528,904
US Treasury Note 09/30/2025 3.00%	511,297
FNMA PL#MA4443 10/01/2036	499,518
Federal Home Loan Bank 04/15/2025 0.50%	491,464
Santanger Holdings USA Inc 06/02/2025 3.45%	472,840

* A complete listing of all individual securities held is available for review upon request.

INVESTMENT

Schedule of Investment Brokerage Commissions

Broker Name	Shares*	Commission
Cabrera Capital Markets LLC	313,929	\$8,262
Loop Capital Markets LLC	279,819	7,612
Williams Capital Group LP	203,395	4,068
Academy Securities Inc	156,327	3,127
CastleOak Sec/Cantor Clearing	124,998	2,500
Penserra Securities LLC	82,515	1,650
Blayloack Robert Van LLC	50,842	1,017
Jonestrading Institutional Services LLC.	30,268	605
Broker commissions under \$500	<u>89,497</u>	<u>2,194</u>
Total Broker Commissions	<u>1,331,590</u>	<u>\$31,035</u>

** Total shares traded at an average cost of \$0.02 per share.*



101 North Wacker Drive, Suite 500 Chicago, IL 60606
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June 1, 2022

Board of Trustees
Park Employees' Annuity and Benefit Fund of Chicago
3500 S. Morgan St. Suite 400
Chicago, Illinois 60609

Dear Board Members:

We are pleased to submit this annual Actuarial Valuation and Review as of December 31, 2021. It summarizes the actuarial data used in the valuation, establishes the net pension liability under Governmental Accounting Standards Board (GASB) Statement No. 67 and the funding requirements for the fiscal year ending December 31, 2022, and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Park Employees' Annuity and Benefit Fund of Chicago.

Asset and Membership Data

The census information and financial information on which our calculations were based was prepared by the Fund staff. That assistance is gratefully acknowledged. We have not subjected the census data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data.

Plan Changes

The plan provisions are unchanged since the last actuarial valuation.

Actuarial Assumptions and Methods

The actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the Fund's actuary. The assumptions and methods used for the December 31, 2021 actuarial valuation were based on an experience analysis covering the five-year period ending December 31, 2017, and were adopted by the Board, effective for the December 31, 2018, valuation. These actuarial assumptions and methods comply with the parameters set by the Actuarial Standards of Practice and the parameters for disclosure in GASB Statement No. 67. The investment return assumption is based on the Fund being invested according to the target asset allocation in the Investment Policy Statement. To the extent that the liquidation of assets to pay benefit payments and expenses requires a shift in investment allocation to more liquid, lower return asset classes, a lower discount rate may be required in the future.

Funding Adequacy

The funding policy of the Fund, adopted by the Board, is to have contributions sufficient to amortize the unfunded actuarial accrued liability over the 30-year period ending December 31, 2042. However, the actual amount of employer contributions each year is set by statute. Effective August 6, 2021, House Bill 417, or Public Act 102-0263 (P.A. 102-0263), was enacted, which updated the method and amount of employer contributions. Under P.A. 102-0263, employer contributions are now the sum of employer normal cost plus a 35-year closed-period amortization of the unfunded actuarial accrued liability as of December 31, 2022, phased in from 2020 to 2023.

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The Board is in the process of reviewing the funding policy in light of the enactment of P.A. 102-0263 and current model practice with respect to actuarial funding policies for public sector retirement plans.

This report includes the following schedules for the Actuarial and Financial sections of the Comprehensive Annual Financial Report, which were prepared by Segal:

- Actuarial
 - Active Member Valuation Data
 - Retirees and Beneficiaries Added to and Removed from Rolls
 - Solvency Test
 - Analysis of Financial Experience
- Financial
 - Schedule of Changes in Employer's Net Pension Liability
 - Schedule of Employer's Net Pension Liability
 - Schedule of Employer Contributions

Limitation of Actuarial Measurements

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

Qualifications

The actuarial calculations were directed under our supervision. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:



Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose

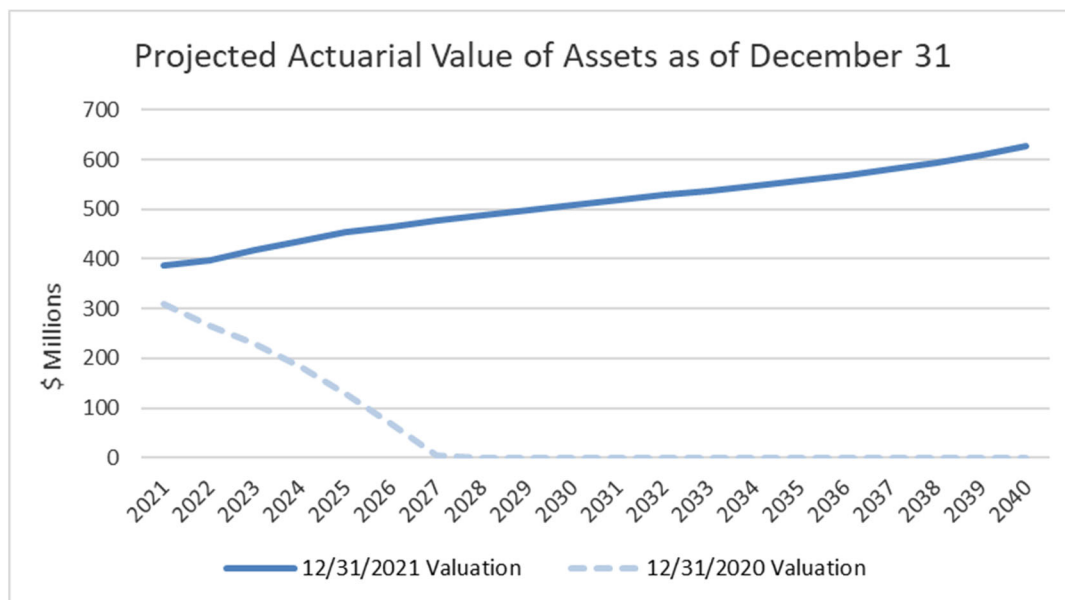
This report has been prepared by Segal to present a valuation of the Park Employees' Annuity and Benefit Fund of Chicago (the Fund) as of December 31, 2021. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Fund, as outlined in 40 ILCS 5/12 and administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of December 31, 2021, provided by Fund staff;
- The assets of the Fund as of December 31, 2021, provided by Fund staff;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Valuation Highlights

The following key findings were the result of this actuarial valuation:

1. Under the employer contribution provisions contained in P.A. 102-0263, the Fund is now projected to remain solvent and reach a goal of 100% funding by 2057. The graph below shows a 20-year projection of the actuarial value of assets, with and without the contribution provisions of P.A. 102-0263. A 40-year projection of the Fund's financial status is shown in Exhibit V.



2. The revised funding approach mandated by the Illinois Pension Code and amended by P.A. 102-0263 targets 100% funding of the actuarial accrued liability over a period of 35 years beginning December 31, 2022.

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Section 1: Actuarial Valuation Summary (continued)

Valuation Highlights (continued)

3. The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of December 31, 2021, is 32.0%, compared to 28.7% as of December 31, 2020. This ratio is a measure of funded status, and its history is a measure of funding progress. Using the fair value of assets, the funded ratio as of December 31, 2021, is 34.2%, compared to 29.3% as of December 31, 2020. These measurements are not necessarily appropriate for assessing the sufficiency of Fund assets to cover the estimated cost of settling the Fund's benefit obligation or the need for or the amount of future contributions.
4. Employer contributions to the Fund are mandated by statute and target 100% funding of the total actuarial accrued liability of the Fund over a 35-year periods ending December 31, 2057. For the fiscal year beginning January 1, 2022, the actuarially determined contribution amount (ADC) based on the Board's funding policy is \$71,021,948. Based on the employer contributions set in statute, the employer has budgeted \$52,036,900, including a supplemental contribution of \$10,100,400, for the fiscal year beginning January 1, 2022. Compared to the ADC, the contribution deficiency is \$18,985,048.
5. We have calculated the employer contribution for the fiscal year beginning January 1, 2023, to be \$56,874,515.
6. For the year ended December 31, 2021, Segal has determined that the asset return on a fair value basis was 15.0%. After gradual recognition of investment gains and losses under the actuarial smoothing method, the actuarial rate of return was 9.4%. This represents an experience gain when compared to the assumed rate of 7.25%. As of December 31, 2021, the actuarial value of assets (\$388.2 million) represents 93.6% of the fair value (\$414.7 million).
7. The portion of deferred investment gains and losses recognized in the calculation of the December 31, 2021, actuarial value of assets resulted in a gain of \$7,490,822. Additionally, the demographic and liability experience resulted in a \$343,584 net loss.
8. The total unrecognized investment gain as of December 31, 2021, is \$26,494,029. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience. This implies that earning the assumed rate of investment return of 7.25% per year (net of investment expenses) on a fair value basis will result in investment gains on the actuarial value of assets in the next few years. Therefore, if the actual fair value return is equal to the assumed 7.25% rate and all other actuarial assumptions are met, the contribution requirements would decrease over the next few years.
9. As mentioned above, the current method used to determine the actuarial value of assets yields an amount that is 93.6% of the fair value of assets as of December 31, 2021. Guidelines in Actuarial Standard of Practice No. 44 (Selection and Use of Asset Valuation Methods for Pension Valuations) recommend that asset values fall within a reasonable range around the corresponding fair value. We believe the actuarial asset method currently complies with these guidelines.
10. When measuring pension liability for GASB purposes, the same actuarial cost method (Entry Age method) that is used for funding purposes is used to determine the Total Pension Liability. In large part due to the funding changes included in P.A. 102-0263, as of December 31, 2021, the GASB blended discount rate calculation results in the same discount rate (7.25%) as used for plan funding purposes. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report will not differ from the actuarial accrued liability (AAL) measure for funding. We note that the same is true for the normal cost component of the annual plan cost for funding and financial reporting.

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Section 1: Actuarial Valuation Summary (continued)

Valuation Highlights (continued)

11. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's fiduciary net position. The Plan's fiduciary net position is equal to the fair value of assets. The NPL as of December 31, 2021, is \$797,333,323, compared to the NPL as of December 31, 2020, of \$1,929,145,620, which was based on a blended discount rate of 2.22%.
12. This actuarial report as of December 31, 2021, is based on financial data as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the cost of the plan, while increases in asset values (in excess of expected) will decrease the cost of the plan.

Summary of Key Valuation Results

	<u>2022</u>	<u>2021</u>
Contributions for fiscal year beginning:		
Actuarially determined contribution requirement	\$71,021,948	\$70,492,027
Expected employer contributions provided by the Fund	52,036,900	13,159,843
Actual employer contribution	--	82,254,543
Funding elements for fiscal year beginning:		
Employer normal cost, including administrative expenses	\$6,295,812	\$5,772,874
Fair value of assets	414,658,650	348,294,515
Actuarial value of assets	388,163,499	342,131,743
Actuarial accrued liability	1,211,991,973	1,190,365,644
Unfunded actuarial accrued liability	823,828,474	848,233,901
Funded ratio (based on actuarial value of assets)	32.03%	28.74%
GASB information:		
Long-term expected rate of return	7.25%	7.25%
Municipal bond index	2.06%	2.12%
Single equivalent discount rate	7.25%	2.22%
Total pension liability	\$1,211,991,973	\$2,277,440,135
Plan fiduciary net position	414,658,650	348,294,515
Net pension liability	797,333,323	1,929,145,620
Plan fiduciary net position as a percentage of total pension liability	34.21%	15.29%
Demographic data for plan year beginning:		
Number of retired participants and beneficiaries	2,752	2,775
Number of vested former participants	169	158
Number of active participants	2,694	2,890
Total salary supplied by the Fund	\$131,000,642	\$135,162,943
Average salary	48,627	46,769

Section 1: Actuarial Valuation Summary (continued)

Important Information About Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits:** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data:** An actuarial valuation for the plan is based on data provided to the actuary by the Fund staff. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets:** The valuation is based on the fair value of assets as of the valuation date, as provided by the Fund staff. The Fund staff uses an “actuarial value of assets” that differs from fair value to gradually reflect year-to-year changes in the fair value of assets in determining the contribution requirements.
- **Actuarial assumptions:** In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.

The user of Segal’s actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement of the plan’s assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the Fund.
- If the Board is aware of any event or trend that was not considered in the valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal’s valuation is based on our understanding of applicable guidance in these areas and of the Fund’s provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

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Section 1: Actuarial Valuation Summary (continued)

Important Information About Actuarial Valuations (continued)

- The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

As Segal has no discretionary authority with respect to the management or assets of the Fund, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Fund.

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Section 2: Actuarial Valuation Results

A. Membership Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive members, retirees, and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

Member Population: 2012 – 2021

Census Date (December 31)	Active Members	Vested Terminated Members*	Retired and Beneficiaries**	Ratio of Actives to Retirees and Beneficiaries
December 31, 2012	3,053	152	2,906	1.05
December 31, 2013	3,076	148	2,904	1.06
December 31, 2014	2,973	147	2,891	1.03
December 31, 2015	3,063	145	2,876	1.07
December 31, 2016	3,114	149	2,870	1.09
December 31, 2017	3,543	150	2,876	1.23
December 31, 2018	3,187	145	2,854	1.12
December 31, 2019	3,132	147	2,843	1.05
December 31, 2020	2,890	158	2,775	1.04
December 31, 2021	2,694	169	2,752	1.08

*Excludes terminated members due a refund of employee contributions.

** Excludes QILDROs

Section 2: Actuarial Valuation Results (continued)

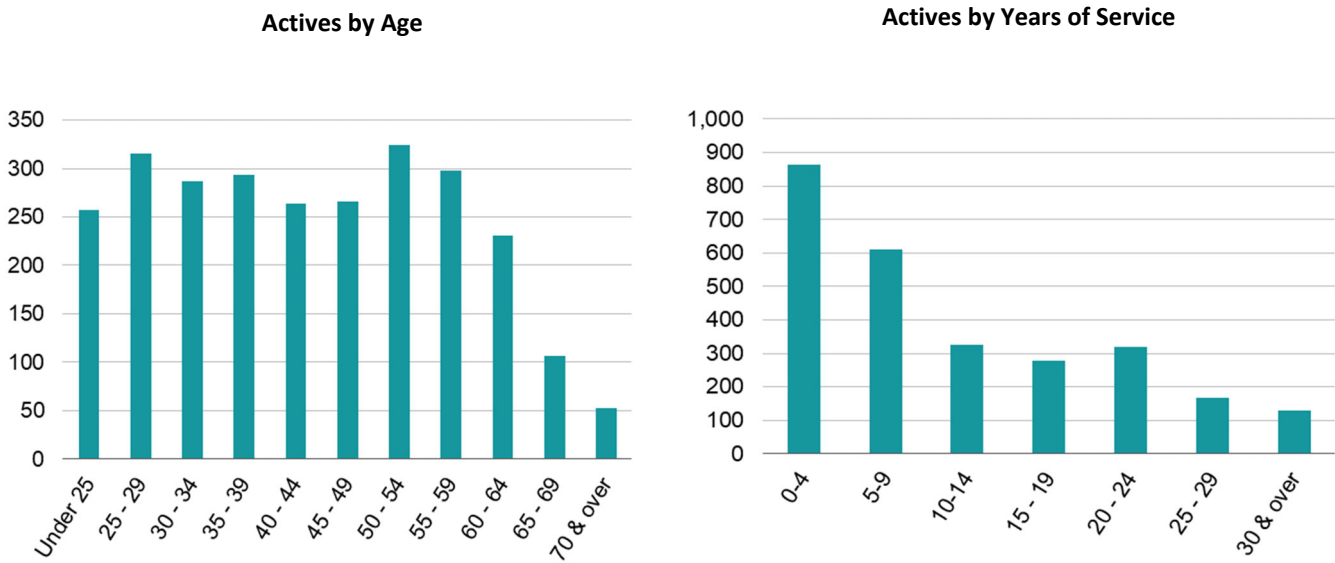
A. Membership Data (continued)

Active Members

Plan costs are affected by the age, years of service and payroll of active members. In this year’s valuation, there were 2,694 active members with an average age of 43.8, average years of service of 11.6 years, and average salary of \$48,627. The 2,890 active participants in the prior valuation had an average age of 42.9, average years of service of 10.9 years and average salary of \$46,769.

These graphs show a distribution of active members by age and by years of service.

Distribution of Active Members as of December 31, 2021



Inactive Participants

In this year’s valuation, there were 169 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 4,999 members entitled to a return of their employee contributions.

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Section 2: Actuarial Valuation Results (continued)

A. Membership Data (continued)

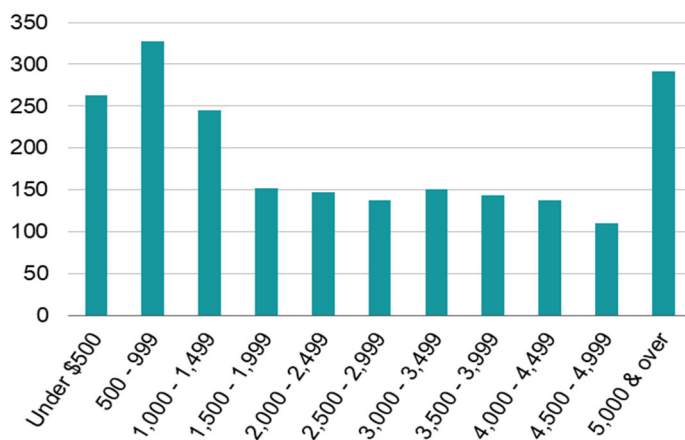
Retirees and Beneficiaries

As of December 31, 2021, 2,104 retirees, 639 beneficiaries, and 9 dependent children were receiving total monthly benefits of \$6,531,098. For comparison, in the previous valuation, there were 2,116 retirees, 648 beneficiaries, and 11 dependent children receiving total monthly benefits of \$6,383,953.

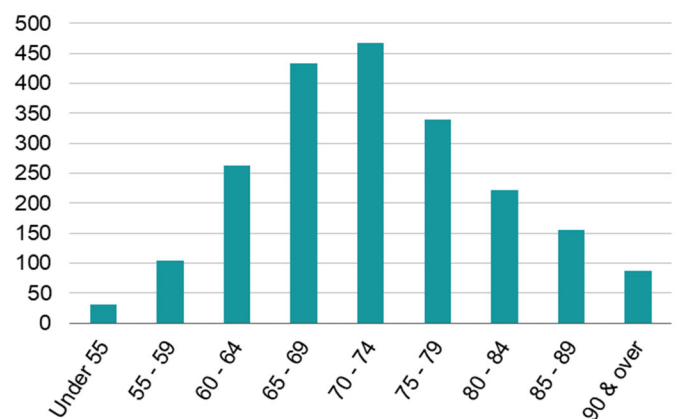
These graphs show a distribution of the current retirees and beneficiaries based on their monthly amount and age.

Distribution of Retirees as of December 31, 2021

Retirees by Monthly Amount



Retirees by Age



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Section 2: Actuarial Valuation Results (continued)

B. Financial Information

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to fair value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize fair value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

Determination of Actuarial Value of Assets for Fiscal Years Ended December 31

			<u>2021</u>		<u>2020</u>
1.	Actuarial value of assets as of prior valuation date		\$342,131,743		\$349,960,428
2.	Employer and employee contributions and other income		95,576,259		46,574,827
3.	Benefits and expenses		82,320,856		80,968,378
4.	Expected investment income		25,285,076		24,125,367
5.	Total investment income, including income for securities lending		53,108,277		28,131,708
6.	Investment gain/(loss): (5) – (4)		27,823,201		4,006,341
7.	Expected actuarial value of assets: (1) + (2) - (3) + (4)		380,672,677		339,692,314
8.	Calculation of unrecognized return				
		Original Amount*	Percent Recognized	Percent Recognized	
(a)	Year ended December 31, 2021	\$27,823,201	20%	--	--
(b)	Year ended December 31, 2020	4,006,341	20%	20%	801,268
(c)	Year ended December 31, 2019	26,879,470	20%	20%	5,375,894
(d)	Year ended December 31, 2018	-44,600,621	20%	20%	-8,920,124
(e)	Year ended December 31, 2017	23,345,719	20%	20%	4,669,144
(f)	Year ended December 31, 2016	2,566,234	0%	20%	513,247
(g)	Total recognized return		<u>7,490,822</u>		<u>2,439,429</u>
9.	Actuarial value of assets as of current valuation date: (7) + (8g)		<u>\$388,163,499</u>		<u>\$342,131,743</u>

* Total return minus expected return on actuarial value

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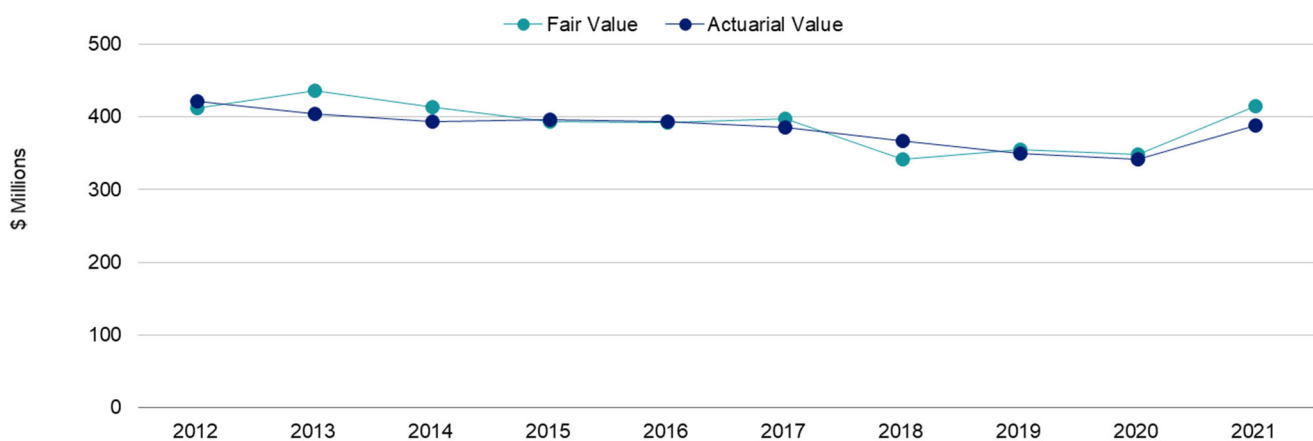
Section 2: Actuarial Valuation Results (continued)

B. Financial Information (continued)

Both the actuarial value and fair value of assets are representations of the Fund's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the fair value of assets. The actuarial asset value is significant because the Fund's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the fair value over the past ten valuation dates.

Actuarial Value of Assets vs. Fair Value of Assets as of December 31, 2020



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Section 2: Actuarial Valuation Results (continued)

C. Actuarial Experience

To calculate the actuarially determined contribution requirement, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience. If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total gain is \$7,076,267: \$7,490,822 from investment gains net of \$414,555 in losses from all other sources. The net experience variation from individual sources other than investments was 0.3% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

Actuarial Experience for Year Ended December 31, 2021

1. Net gain from investments*	\$7,490,822
2. Net loss from administrative expenses	(70,971)
3. Net loss from other experience	<u>(343,584)</u>
4. Net experience gain: (1) + (2) + (3)	\$7,076,267

* Details on the next page

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Section 2: Actuarial Valuation Results (continued)

C. Actuarial Experience (continued)

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Fund's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets for the year ended December 31, 2021 was 7.25%. The actual rate of return on an actuarial basis for the year ended December 31, 2021, was 9.40%.

Since the actual return for the year was more than the assumed return, the Fund experienced an actuarial gain during the fiscal year ended December 31, 2021, with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

Investment Experience

1. Actual return	\$32,775,898
2. Average value of assets	348,759,672
3. Actual rate of return: (1) ÷ (2)	9.40%
4. Assumed rate of return	7.25%
5. Expected return: (2) x (4)	25,285,076
6. Actuarial gain: (1) – (5)	<u>\$7,490,822</u>

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the fair value investment return for the last ten valuation years, including five-year and ten-year averages.

Investment Return

Fiscal Year Ended		
<u>December 31</u>	<u>Fair Value**</u>	<u>Actuarial Value*</u>
December 31, 2012	6.3%*	1.0%
December 31, 2013	16.9%	6.5%
December 31, 2014	6.9%	10.4%
December 31, 2015	1.9%	8.2%
December 31, 2016	8.4%	8.0%
December 31, 2017	14.2%	10.0%
December 31, 2018	-5.1%	5.4%
December 31, 2019	17.0%	6.6%
December 31, 2020	9.3%	8.0%
December 31, 2021	14.6%	9.4%
Average Returns		
Last 5 years	9.7%	7.9%
Last 10 years	8.8%	7.3%

* As determined by Segal

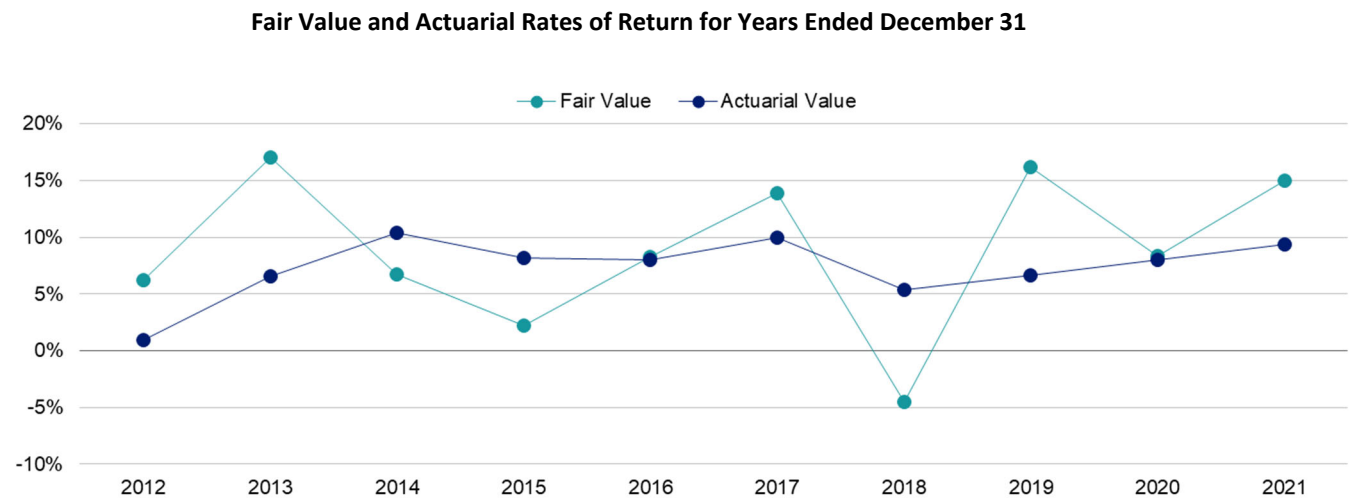
** As determined by Investment Consultant

Section 2: Actuarial Valuation Results (continued)

C. Actuarial Experience (continued)

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the fair value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling the actuarially required contribution.

This chart illustrates how this leveling effect has actually worked over the years 2012 - 2021.



Administrative Expenses

Administrative expenses for the year ended December 31, 2021 totaled \$1,718,012 compared to the assumption of \$1,593,091. This resulted in a loss of \$70,971 for the year when adjusted for timing.

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Section 2: Actuarial Valuation Results (continued)

C. Actuarial Experience (continued)

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements, and
- salary increases different than assumed.

The net loss from this other experience for the year ended December 31, 2021, amounted to \$343,584, which is 0.03% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Fund for the year ended December 31, 2021 is shown in the chart below.

Experience Due to Changes in Demographics for Year Ended December 31, 2021

1. Turnover	-\$1,850,118
2. Retirement	-4,588,264
3. Experience among retired members and beneficiaries related to mortality	4,262,544
4. Salary/service increase for continuing actives	3,089,510
5. Other	<u>-1,257,256</u>
6. Net Loss	<u>\$ 343,584</u>

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Section 2: Actuarial Valuation Results (continued)

D. Development of Employer Costs

At the discretion of the Board, the actuarial valuation includes the calculation of a funding policy benchmark contribution amount referred to as the actuarially determined contribution. The amount of actuarially determined contribution is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the actuarially determined contribution of 52.24% of payroll.

The actuarially determined contribution is calculated on a level percentage of pay basis and is based on a closed 30-year period, which ends on December 31, 2042. As of January 1, 2022, there are 21 years remaining on the amortization period. The Board is in the process of reviewing the funding policy in light of the enactment of P.A. 102-0263 and current model practice with respect to actuarial funding policies for public sector retirement plans.

The chart compares this valuation's actuarially determined contribution with the prior valuation.

	Actuarially Determined Contribution			
	Year Beginning January 1			
	2022		2021	
	<u>Amount</u>	<u>% of Payroll</u>	<u>Amount</u>	<u>% of Payroll</u>
1. Total normal cost*	\$17,019,445	12.52%	\$16,948,567	12.06%
2. Administrative expenses	1,722,354	1.27%	1,593,091	1.13%
3. Expected employee contributions*	<u>-12,351,030</u>	<u>-9.09%</u>	<u>-12,768,784</u>	<u>-9.09%</u>
4. Employer normal cost: (1) + (2) + (3)	6,390,769	4.70%	5,772,874	4.11%
5. Employer normal cost, adjusted for timing*	6,617,040	4.87%	5,977,267	4.25%
6. Actuarial accrued liability	1,211,991,973		1,190,365,644	
7. Actuarial value of assets	<u>388,163,499</u>		<u>342,131,743</u>	
8. Unfunded/(overfunded) actuarial accrued liability: (6) – (7)	<u>823,828,474</u>		<u>848,233,901</u>	
9. Payment on unfunded actuarial accrued liability	<u>64,404,908</u>	47.38%	<u>64,514,760</u>	45.92%
10. Actuarially determined contribution, adjusted for timing*: (5) + (9)	<u>71,021,948</u>	<u>52.24%</u>	<u>70,492,027</u>	<u>50.18%</u>
11. Projected payroll	\$135,940,548		\$140,488,179	

* Recommended contributions are assumed to be paid at the middle of every month.

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Section 2: Actuarial Valuation Results (continued)

D. Development of Employer Costs (continued)

The actuarially determined contribution as of January 1, 2022, is based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

The chart reconciles the actuarially determined contribution from the prior valuation to the amount determined in this valuation.

Reconciliation of Actuarially Determined Contribution from January 1, 2021 to January 1, 2022

Actuarially Determined Contribution as of January 1, 2021	\$70,492,027
Effect of expected change in amortization payment due to payroll growth	1,612,869
Effect of change in administrative expense assumption	133,840
Effect of change in other actuarial assumptions	0
Effect of contributions more than the recommended contribution	-896,587
Effect of investment gains	-559,678
Effect of other gains and losses on accrued liability	30,974
Effect of net other changes	<u>208,503</u>
Total change	<u>\$529,921</u>
Actuarially Determined Contribution as of January 1, 2022	\$71,021,948

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Section 2: Actuarial Valuation Results (continued)

E. Risk

Since the actuarial valuation results are dependent on a given set of assumptions and data as of a specific date, there is a risk that emerging results may differ significantly as actual experience differs from the assumptions.

This report does not contain a detailed analysis of the potential range of future measurements, but does include a brief discussion of some risks that may affect the Fund. Upon request, a more detailed assessment of the risks can be provided to enable a better understanding of the risks specific to this Fund.

Investment Risk (the risk that returns will be different than expected)

Since the Plan's assets are much larger than contributions, investment performance may create significant volatility in contribution requirements. For example, if the actual return on the fair value of assets for the next Plan Year were 1% different from the assumed (either higher or lower), the projected unfunded actuarial liability would change by 0.1%, or about \$0.8 million and the actuarially determined contribution requirements would increase or decrease by approximately \$0.05 million. The fair value rate of return over the last 10 years has ranged from a low of -5.1% to a high of 17.0%, with an average of 8.8%.

Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the Plan's funding policy and actuarially determined contribution requirement.

Contribution Risk

The Plan's funding policy contribution requires payment of the Employer's normal cost and an amortization payment according to a schedule sufficient to pay down unfunded actuarial liability over time. If the Plan's funding policy contribution were adhered to, contribution risk would be negligible.

Employer contribution requirements are set by statute and were increased with the enactment of P.A. 102-0263, effective August 6, 2021. Employer contributions to the Fund under P.A. 102-0263 target 100% funding of the total actuarial liability of the Fund over a 35-year period ending December 31, 2057. Under this revised approach, if employer contribution requirements are adhered to, contribution risk would also be negligible.

Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.
- Individual salary increases higher or lower than assumed.

Actual Experience Over the Last 10 years and Implications for the Future

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The investment gain/(loss) for a year has ranged from a gain of \$37 million to a loss of \$45 million.
- The non-investment gain/(loss) for a year has ranged from a gain of \$5 million to a loss of \$9 million.
- The funded percentage on the actuarial value of assets has ranged from a low of 28.74% to a high of 45.53%.

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Section 3: Supplemental Information

Exhibit A – Table of Fund Coverage

Category	Year Ended December 31		Change From Prior Year
	2021	2020	
Active members in valuation:			
Number	2,694	2,890	-6.8%
Average age	43.8	42.9	+0.9
Average years of service	11.6	10.9	+0.7
Total salary supplied by the Fund	\$131,000,642	\$135,162,943	-3.1%
Average salary	\$48,627	\$46,769	+4.0%
Total active vested members with at least 10 years of service	1,254	1,235	+1.5%
Vested terminated members	169	158	+7.0%
Non-vested terminated members eligible for a return of contributions	4,999	4,906	+1.9%
Service retirees:			
Number in pay status*	2,104	2,116	-0.6%
Average age	72.6	72.5	+0.1
Average monthly benefit	\$2,634	\$2,561	+2.9%
Beneficiaries:			
Number in pay status	648	659	-1.7%
Average age	79.4	79.3	+0.1
Average monthly benefit	\$1,526	\$1,464	+4.2%
Total number of members	10,614	10,729	-1.1%

* Excluding QILDROS

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Section 3: Supplemental Information (continued)

Exhibit B – Participants in Active Service as of December 31, 2021 By Age, Years of Service, and Average Payroll provided by the Fund

Age	Total	Years of Service								
		0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	257	246	11	-	-	-	-	-	-	-
	\$23,433	\$23,377	\$24,690	-	-	-	-	-	-	-
25 – 29	315	166	143	6	-	-	-	-	-	-
	\$29,608	\$27,756	\$31,391	\$38,379	-	-	-	-	-	-
30 – 34	287	87	127	65	8	-	-	-	-	-
	\$44,651	\$35,362	\$50,111	\$46,461	\$44,300	-	-	-	-	-
35 – 39	294	80	70	63	62	19	-	-	-	-
	\$51,862	\$42,487	\$58,272	\$52,703	\$53,267	\$60,347	-	-	-	-
40 – 44	264	67	55	40	45	49	8	-	-	-
	\$57,414	\$44,306	\$61,227	\$61,325	\$62,132	\$61,987	\$66,879	-	-	-
45 – 49	266	60	62	36	31	49	24	4	-	-
	\$59,324	\$36,363	\$60,383	\$67,775	\$75,707	\$68,223	\$60,630	\$67,432	-	-
50 – 54	324	54	43	46	57	63	42	18	1	-
	\$57,337	\$35,057	\$54,451	\$54,643	\$63,151	\$61,688	\$73,230	\$65,857	\$81,969	-
55 – 59	298	61	35	33	29	62	41	24	13	-
	\$56,856	\$39,256	\$52,209	\$49,622	\$54,572	\$63,639	\$71,244	\$71,794	\$70,096	-
60 – 64	231	28	41	21	29	45	31	19	8	9
	\$54,926	\$37,784	\$49,206	\$42,171	\$54,992	\$59,046	\$60,192	\$70,532	\$72,840	\$76,265
65 – 69	106	12	18	11	13	19	14	7	7	5
	\$56,171	\$36,325	\$54,627	\$48,420	\$57,560	\$53,127	\$66,784	\$69,407	\$70,565	\$65,977
70 & Over	52	4	7	4	3	13	6	5	7	3
	\$47,880	\$12,325	\$32,900	\$25,754	\$57,556	\$56,463	\$53,516	\$70,225	\$48,570	\$62,748
Total	2,694	865	612	325	277	319	166	77	36	17
	\$48,627	\$32,156	\$48,553	\$52,725	\$59,558	\$61,941	\$66,921	\$69,549	\$66,941	\$70,853

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Section 3: Supplemental Information (continued)

Exhibit C – History of Active Member Valuation Data

Actuarial Valuation Date	Active Members	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase
12/31/2012	3,053	2.55%	\$113,934,756*	3.77%	\$37,319	1.18%
12/31/2013	3,076	0.75%	115,617,428	1.48%	37,587	0.72%
12/31/2014	2,973	(3.35%)	120,376,477	4.12%	40,490	7.72%
12/31/2015	3,063	3.03%	126,294,812	4.92%	41,232	1.83%
12/31/2016	3,114	1.67%	124,502,908	(1.42%)	39,982	(3.03%)
12/31/2017	3,543	13.78%	134,258,328	7.84%	37,894	(5.22%)
12/31/2018	3,187	(10.05%)	129,923,175	(3.23%)	40,767	7.58%
12/31/2019	3,132	(1.73%)	136,105,381	4.76%	43,456	6.60%
12/31/2020	2,890	(7.73%)	135,162,943	(0.69%)	46,769	7.62%
12/31/2021	2,694	(6.78%)	131,000,642	(3.08%)	48,627	3.97%
Average Increase/(Decrease)						
Last 5 years		(2.50%)		1.12%		4.11%
Last 10 years		(0.79%)		1.85%		2.90%

* Annualized for short plan year.

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Section 3: Supplemental Information (continued)

Exhibit D - Reconciliation of Member Data

	Active Members	Inactive Members	Retirees	Beneficiaries	Total
Number as of December 31, 2020	2,890	5,064	2,116	659	10,729
New participants	112	N/A	N/A	N/A	112
Terminations	(147)	147	-	-	-
Retirements	(65)	(19)	84	N/A	-
New disabilities	-	-	N/A	N/A	-
Died with beneficiary	(2)	-	(38)	40	-
Died without beneficiary	(2)	(1)	(58)	(51)	(112)
Refunds	(101)	(27)	-	-	(128)
Rehires	8	(8)	-	-	-
Data adjustments	<u>1</u>	<u>12</u>	<u>-</u>	<u>-</u>	<u>13</u>
Number as of December 31, 2021	2,694	5,168	2,104	648	10,614

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Section 3: Supplemental Information (continued)

Exhibit E - Schedule of Pensioners and Beneficiaries Added to and Removed from Rolls

<u>Fiscal Year</u>	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls – End of Year</u>		<u>% Increase in Avg. Annual Allowances</u>	<u>Average Annual Allowances</u>
	<u>Number</u>	<u>Annual Allowances</u>	<u>Number</u>	<u>Annual Allowances</u>	<u>Number*</u>	<u>Annual Allowances</u>		
2012	71	\$2,470,960	91**	\$1,290,060	2,888	\$65,161,241	2.6	\$22,563
2013	147	4,594,883	147	2,788,285	2,888	66,967,839	2.8	23,188
2014	126	4,085,581	138	2,781,597	2,876	68,271,823	2.4	23,738
2015	94	1,823,238	106	2,271,591	2,864	67,823,470	-0.7	23,681
2016	126	5,283,834	133	2,711,190	2,857	70,396,114	4.0	24,640
2017	107	3,628,199	104	1,952,677	2,860	72,071,636	2.3	25,200
2018	135	5,446,939	153	2,967,901	2,842	74,550,674	4.1	26,232
2019	128	4,578,087	140	3,174,168	2,830	75,954,593	2.3	26,839
2020	80	3,824,254	146	3,171,408	2,764	76,607,439	3.3	27,716
2021	91	4,194,340	112	2,428,607	2,743	78,373,172	3.1	28,572

* Does not include child beneficiaries receiving a pension.

** Includes removal of 21 QILDROs for participant count purposes.

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Section 3: Supplemental Information (continued)

Exhibit F – Summary Statement of Income and Expenses on a Fair Value Basis at Fiscal Year Ended December 31

	2021	2020
Net position at fair value at the beginning of the year	\$348,294,515	\$354,556,288
Contribution income:		
Employer contributions	\$83,349,261	\$33,939,927
Employee contributions	12,226,998	12,634,900
Less administrative expenses	<u>-1,718,012</u>	<u>-1,598,370</u>
Net contribution income	93,858,247	44,976,457
Securities lending income	19,175	60,381
Other income	455	70
Investment income:		
Interest, dividends and other income	\$7,325,279	\$5,930,941
Asset appreciation	47,381,030	23,730,507
Less investment expenses	<u>-1,617,207</u>	<u>-1,590,121</u>
Net investment income	<u>53,089,102</u>	<u>28,071,327</u>
Total income available for benefits	\$146,966,979	\$73,108,235
Less benefit payments:		
Annuity payments	-\$77,799,601	-\$77,073,553
Disability and death	-736,627	-688,695
Refund of contributions	-2,066,616	-1,607,760
Net benefit payments	-\$80,602,844	-\$79,370,008
Change in reserve for future benefits	\$66,364,135	-\$6,261,773
Net position at fair value at the end of the year	\$414,658,650	\$348,294,515

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Section 3: Supplemental Information (continued)

Exhibit G – Summary Statement of Fund Assets at Fiscal Year Ended December 31

	2021	2020
Accounts receivable	\$14,230,714	\$14,930,087
Investments, at fair value:		
Collective investment funds	\$127,783,646	\$107,283,908
Bonds	25,851,555	27,974,249
Common and preferred stocks	52,485,719	46,568,393
Real estate	32,743,837	31,443,567
Private equity partnerships	24,296,348	20,885,335
Hedged equity	29,066,132	25,951,241
Infrastructure	37,319,370	24,460,163
Mutual funds	20,423,662	18,355,546
International equity	24,580,477	21,343,216
Short-term investments	<u>21,486,428</u>	<u>4,964,290</u>
Total investments at fair value	396,037,174	329,229,908
Invested securities lending collateral	16,779,808	16,670,194
Prepaid annuity benefits	5,528,333	5,349,711
Furniture and fixtures, net	124,839	131,686
Prepaid expenses	<u>53,168</u>	<u>31,715</u>
Total assets	\$432,754,036	\$366,343,301
Less accounts payable:		
Accounts payable	-\$398,104	-\$534,101
Accrued benefits and member contributions payable	-886,252	-805,298
Securities lending collateral	-16,779,808	-16,670,194
Due to broker	0	0
Deferred rent	<u>-31,222</u>	<u>-39,193</u>
Total accounts payable	-\$18,095,386	-\$18,048,786
Net position at fair value	\$414,658,650	\$348,294,515
Net position at actuarial value	\$388,163,499	\$342,131,743

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Section 3: Supplemental Information (continued)

Exhibit H – Development of the Fund Through December 31, 2021

Fiscal Year Ended December 31	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2012**	\$5,268,363	\$5,371,084	\$4,121,362	\$723,802	\$33,281,012	\$421,448,001
2013	15,707,814	10,732,730	26,107,300	1,367,443	68,335,967	404,292,435
2014	11,225,438	10,831,434	39,408,258	1,458,831	70,536,042	393,762,692
2015	30,588,976	12,368,636	31,067,518	1,533,700	70,602,016	395,652,106
2016	30,890,241	12,246,115	30,432,110	1,537,699	74,077,876	393,604,997
2017	20,920,614	13,675,292	37,038,766	1,682,136	78,138,027	385,419,506
2018	27,638,402	12,125,457	19,651,105	1,501,039	76,526,820	366,806,612
2019	27,682,089	12,664,855	22,886,182	1,528,861	78,550,449	349,960,428
2020	33,939,927	12,634,900	26,564,866	1,598,370	79,370,008	342,131,743
2021	83,349,261	12,226,998	32,776,353	1,718,012	80,602,844	388,163,499

* On an actuarial basis, net of investment fees, and includes other income.

** Intra-year numbers represent 6 months of activity

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Section 3: Supplemental Information (continued)

Exhibit I – Development of Unfunded Actuarial Accrued Liability

	Plan Year Ended December 31	
	2021	2020
1. Unfunded actuarial accrued liability at beginning of year	\$848,233,901	\$820,642,552
2. Normal cost at beginning of year	18,541,658	19,158,980
3. Total contributions	95,576,259	46,574,827
4. Interest		
(a) Unfunded actuarial accrued liability and normal cost	\$62,841,228	\$60,885,611
(b) Total contributions	<u>3,135,787</u>	<u>1,528,086</u>
(c) Total interest: (4a) – (4b)	<u>59,705,441</u>	<u>59,357,525</u>
5. Expected unfunded actuarial accrued liability: (1) + (2) – (3) + (4c)	\$830,904,741	\$852,584,230
6. Changes due to (gain)/loss from:		
(a) Investments	(\$7,490,822)	(\$2,439,429)
(b) Demographics and other	<u>414,555</u>	<u>(1,910,900)</u>
(c) Total changes due to (gain)/loss: (6a) + (6b)	(\$7,076,267)	(\$4,350,329)
7. Assumption changes	<u>0</u>	<u>0</u>
8. Unfunded accrued liability at end of year: (5) + (6c) + (7)	<u>\$823,828,474</u>	<u>\$848,233,901</u>

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Section 3: Supplemental Information (continued)

Exhibit J - Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability

For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability

For Pensioners: The single-sum value of lifetime benefits to existing pensioners. This sum takes into account life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Actuarial Cost Method:

A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.

Actuarial Gain or Loss:

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent:

Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV):

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is:

- a. Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b. Multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

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Section 3: Supplemental Information (continued)

Exhibit J - Definitions of Pension Terms (continued)

Actuarial Present Value of Future Plan Benefits:

The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation:

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).

Actuarial Value of Assets (AVA):

The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined:

Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC):

The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Fund's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method:

A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment:

The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Section 3: Supplemental Information (continued)

Exhibit J - Definitions of Pension Terms (continued)

Assumptions or Actuarial

Assumptions:

The estimates upon which the cost of the Fund is calculated including:

- a. Investment return - the rate of investment yield that the Fund will earn over the long-term future;
- b. Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates;
- c. Retirement rates - the rate or probability of retirement at a given age;
- d. Turnover rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;
- e. Salary increase rates - the rates of salary increase due to inflation and productivity growth.

Closed Amortization Period:

A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.

Decrements:

Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan:

A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan:

A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost:

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Experience Study:

A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio:

The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes calculate a market funded ratio, using the fair value of assets (MVA), rather than the AVA.

GASB:

Governmental Accounting Standards Board.

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Section 3: Supplemental Information (continued)

Exhibit J - Definitions of Pension Terms (continued)

GASB 67 and GASB 68:	Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment Return:	The rate of earnings of the Fund from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL):	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period with level percentage of payroll is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never decrease, but will become smaller each year, in relation to covered payroll, if the actuarial assumptions are realized.
Plan Fiduciary Net Position:	Fair value of assets.
Total Pension Liability (TPL):	The actuarially accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded Actuarial Accrued Liability:	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

ACTUARIAL

Section 4: Reporting Information

Exhibit I - Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1	Pensioners as of the valuation date (including 639 beneficiaries and 9 dependent children)	2,752
2	Members inactive as of the valuation date with vested rights	169
3	Members active as of the valuation date	2,694
	Fully vested	1,254
	Not vested	1,440
4	Other non-vested inactive members as of the valuation date	4,999

The actuarial factors as of the valuation date are as follows:

5	Employer normal cost, including administrative expenses	\$6,390,769
6	Actuarial accrued liability	1,211,991,973
	Retirees and beneficiaries	\$814,929,192
	Inactive members with vested rights	25,926,438
	Active members	371,136,343
7	Actuarial value of assets (\$414,658,650 at fair value)	388,163,499
8	Unfunded actuarial accrued liability: (6) – (7)	\$823,828,474
9	Funded ratio: (8) ÷ (7)	32.0%

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Section 4: Reporting Information (continued)

Exhibit I – Summary of Actuarial Valuation Results (continued)

Actuarially Determined Contribution Split by Tier

		<u>Total</u>		<u>Tier I</u>		<u>Tier II</u>	
		<u>Amount</u>	<u>% of Payroll</u>	<u>Amount</u>	<u>% of Payroll</u>	<u>Amount</u>	<u>% of Payroll</u>
1	Total normal cost	\$17,019,455	12.52%	\$12,329,966	15.11%	\$4,689,479	8.63%
2	Administrative expenses*	1,722,354	1.27%	1,679,083	2.06%	43,271	0.05%
3	Expected employee contributions	<u>-12,351,030</u>	<u>-9.09%</u>	<u>-7,402,216</u>	<u>-9.07%</u>	<u>-4,948,814</u>	<u>-9.10%</u>
4	Employer normal cost: (1) + (2) + (3)	6,390,769	4.70%	6,606,833	8.10%	-216,064	-0.40%
5	Employer normal cost, adjusted for timing**	6,617,040	4.87%	6,840,754	8.39%	-223,714	-0.41%
6	Actuarial accrued liability	1,211,991,973		1,181,542,922		30,449,051	
7	Actuarial value of assets	388,163,499					
8	Unfunded actuarial accrued liability: (6) - (7)	823,828,474					
9	Payment on unfunded actuarial accrued liability	64,404,908	47.38%				
10	Actuarially determined contribution, adjusted for timing**: (5) + (9)	<u>71,021,948</u>	<u>52.24%</u>				
11	Estimated employer contributions provided by the Fund***	52,036,900					
12	Projected payroll	135,940,548		81,576,771		54,363,777	

* Administrative expenses are split by % of accrued liability.

** Recommended contributions are assumed to be paid at the middle of every month.

*** The Park District has been absorbing the 3% loss on collections, however, the Park District is not guaranteed to do so in the future.

Note: Tier 2a, effective January 1, 2022, will be included in this exhibit for the next valuation.

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Section 4: Reporting Information (continued)

Exhibit II - Comparison of Employer Contribution to Actuarially Determined Contribution

Fiscal Year Ended December 31	Actuarially Determined Contribution (ADC)*	Actual Contributions	Percentage Contributed
2012	\$16,786,671	\$5,268,636	31.4%
2013	41,834,857	15,707,814	37.5%
2014	35,307,186	11,225,438	31.8%
2015	36,273,994	30,588,976	84.3%
2016	37,130,268	30,890,241	83.2%
2017	45,253,238	20,920,614	46.2%
2018	50,929,734	27,638,402	54.3%
2019	61,887,790	27,682,089	44.7%
2020	67,297,212	33,939,927	50.4%
2021	70,492,027	83,349,261	118.2%
2022	71,021,948	--	--

* Prior to 2015, this amount was the Annual Required Contribution (ARC)

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Section 4: Reporting Information (continued)

Exhibit III - Schedule of Funding Progress

Valuation Date December 31	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
2012	\$421,448,001	\$971,807,222	\$550,359,221	43.37%	\$58,231,511	472.56%**
2013	404,292,435	888,023,364	483,730,929	45.53%	117,781,596	410.70%
2014	393,762,692	900,840,617	507,077,925	43.71%	118,987,507	426.16%
2015	395,652,106	910,260,360	514,608,254	43.47%	122,382,584	420.49%
2016	393,604,997	1,005,493,093	611,888,096	39.15%	121,126,918	505.16%
2017	385,419,506	1,039,279,444	653,859,938	37.09%	135,315,008	483.21%
2018	366,806,612	1,142,297,965	775,491,353	32.11%	133,112,100	582.59%
2019	349,960,428	1,170,602,980	820,642,552	29.90%	139,204,051	589.52%
2020	342,131,743	1,190,365,644	848,233,901	28.74%	138,942,498	610.50%
2021	388,163,499	1,211,991,973	823,828,474	32.03%	134,515,373	612.44%

* Not less than zero

** Adjusted for annualized covered payroll

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Section 4: Reporting Information (continued)

Exhibit IV - Solvency Test at December 31

	2021	2020	2019	2018	2017
1 Actuarial accrued liability (AAL)					
a. Active member contributions	\$175,568,599	\$174,600,431	\$173,843,745	\$164,316,381	\$173,903,043
b. Retirees and beneficiaries	814,929,192	795,731,449	789,231,586	778,565,525	706,084,520
c. Active and inactive members (employer financed)	<u>221,494,182</u>	<u>220,033,764</u>	<u>207,527,649</u>	<u>199,416,059</u>	<u>159,291,881</u>
d. Total	\$1,211,991,973	\$1,190,365,644	\$1,170,602,980	\$1,142,297,965	\$1,039,279,444
2 Actuarial value of assets	388,163,499	342,131,743	349,960,428	366,806,612	385,419,506
3 Cumulative portion of AAL covered					
a. Active member contribution	100.0%	100.0%	100.0%	100.0%	100.0%
b. Retirees and beneficiaries	26.1%	21.1%	22.3%	26.0%	30.0%
c. Active and inactive members (employer financed)	0.0%	0.0%	0.0%	0.0%	0.0%
	2016	2015	2014	2013	2012
1 Actuarial accrued liability (AAL)					
a. Active member contributions	\$172,808,623	\$173,241,768	\$169,952,178	\$171,065,449	\$166,554,660
b. Retirees and beneficiaries	694,881,116	625,396,307	625,641,580	621,827,982	662,153,615
c. Active and inactive members (employer financed)	<u>137,803,354</u>	<u>111,622,285</u>	<u>105,246,859</u>	<u>95,129,933</u>	<u>143,098,947</u>
d. Total	\$1,005,493,093	\$910,260,360	\$900,840,617	\$888,023,364	\$971,807,222
2 Actuarial value of assets	393,604,997	395,652,106	393,762,692	404,292,435	421,448,001
3 Cumulative portion of AAL covered					
a. Active member contribution	100.0%	100.0%	100.0%	100.0%	100.0%
b. Retirees and beneficiaries	31.8%	35.6%	35.8%	37.5%	38.5%
c. Active and inactive members (employer financed)	0.0%	0.0%	0.0%	0.0%	0.0%

Section 4: Reporting Information (continued)

Exhibit V – Projection of Contributions, Liabilities, and Assets

Based on the results of the December 31, 2021, actuarial valuation, we have projected valuation results for a 40-year period (the “projection period”) commencing with Fiscal Year 2022.

For purposes of the projections, all assets, contributions, and benefit payments have been included. Our projections of contributions, liabilities, and assets are based on the actuarial assumptions, membership data and benefit provisions that were used for the regular actuarial valuation.

In order to determine projected contributions, liabilities, and assets, certain calculations needed to be made that are not normally required in a regular actuarial valuation. Benefit payout requirements, actuarial liabilities, and payroll were estimated over the projection period from 2022 through 2061 by projecting the membership of the Fund over the projection period, taking into account the impact of new entrants into the Fund over the projection period.

To make the required projections, assumptions needed to be made regarding the age and salary distribution of new entrants as well as the size of the active membership of the Fund. The assumptions regarding the profile of new entrants to the Fund were based on the recent experience of the Fund with regard to new entrants. The size of the active membership of the Fund was assumed to remain constant over the projection period. The results of our projections are shown on the following pages.

For purposes of this projection, budgeted supplemental contributions for future years are included. It reflects a budgeted employer contribution of \$41.9 million and a supplemental contribution of \$10.1 million for 2022.

Plan provisions for Tier 2a are effective January 1, 2022, per HB 417 legislation. Tier 1 and 2 member contributions are 9% and Tier 2a member contributions are 11% for Fiscal Year 2021 and thereafter. Employer Contributions are Employer Normal Cost plus a 35-year closed period amortization of unfunded actuarial accrued liability as of December 31, 2022 (phased in from 2020 to 2023).

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Section 4: Reporting Information (continued)

Exhibit V – Projection of Contributions, Liabilities, and Assets (continued)

Fiscal Year	Employee Contributions	Employer Contributions	Supplemental Contributions	Payroll	Normal Cost	Benefit Payouts	Estimated Expenses	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2021								\$1,211,992.0	\$388,163.5	\$823,828.5	32.0%
2022	\$12,351.0	\$41,936.9	\$10,100.4	\$135,940.5	\$17,019.4	\$84,459.7	\$1,778.1	1,230,593.3	396,869.5	833,723.8	32.3%
2023	12,246.5	56,874.5	0.0	133,620.0	16,804.2	85,741.3	1,840.4	1,248,984.5	419,004.3	829,980.2	33.5%
2024	12,239.6	57,150.6	0.0	132,371.3	16,635.3	87,156.2	1,904.8	1,267,061.6	436,324.9	830,736.7	34.4%
2025	12,256.7	57,744.2	0.0	131,443.1	16,489.0	88,574.3	1,971.5	1,284,822.9	453,314.0	831,508.8	35.3%
2026	12,293.3	58,385.3	0.0	130,794.6	16,357.3	90,118.5	2,040.5	1,302,130.4	465,033.3	837,097.2	35.7%
2027	12,322.9	59,352.4	0.0	130,108.4	16,182.8	91,808.2	2,111.9	1,318,754.6	476,444.3	842,310.3	36.1%
2028	12,358.0	60,376.0	0.0	129,523.5	16,022.5	93,713.2	2,185.8	1,334,438.1	487,372.6	847,065.5	36.5%
2029	12,385.9	61,405.0	0.0	128,873.2	15,813.3	95,640.1	2,262.3	1,349,037.6	497,905.6	851,132.0	36.9%
2030	12,427.8	62,500.1	0.0	128,385.9	15,643.4	97,659.7	2,341.5	1,362,420.5	508,087.1	854,333.3	37.3%
2031	12,468.7	63,621.0	0.0	127,892.8	15,463.5	99,722.3	2,423.4	1,374,443.4	517,957.0	856,486.4	37.7%
2032	12,525.7	64,777.1	0.0	127,572.2	15,305.0	101,642.6	2,508.2	1,385,178.1	527,703.6	857,474.5	38.1%
2033	12,587.9	65,953.9	0.0	127,307.9	15,143.6	103,504.7	2,596.0	1,394,588.2	537,411.2	857,177.0	38.5%
2034	12,662.8	67,145.8	0.0	127,190.0	14,981.7	105,394.1	2,686.9	1,402,549.1	547,079.5	855,469.6	39.0%
2035	12,736.7	68,363.2	0.0	127,046.3	14,815.7	106,959.9	2,780.9	1,409,286.5	557,065.1	852,221.4	39.5%
2036	12,834.9	69,597.3	0.0	127,191.3	14,662.8	108,694.4	2,878.3	1,414,551.1	567,256.3	847,294.8	40.1%
2037	12,918.6	70,863.4	0.0	127,157.2	14,498.9	107,701.6	2,979.0	1,421,050.3	580,509.1	840,541.2	40.9%
2038	13,017.7	72,142.6	0.0	127,281.0	14,336.0	109,123.4	3,083.3	1,426,372.7	594,569.4	831,803.2	41.7%
2039	13,120.3	73,443.5	0.0	127,434.0	14,170.7	110,097.8	3,191.2	1,430,894.0	609,981.9	820,912.1	42.6%
2040	13,254.0	74,786.9	0.0	127,946.3	14,051.5	110,860.3	3,302.9	1,434,825.0	627,136.6	807,688.5	43.7%
2041	13,401.3	76,161.3	0.0	128,619.0	13,950.0	111,408.0	3,418.5	1,438,364.6	646,424.3	791,940.3	44.9%
2042	13,565.0	77,591.7	0.0	129,483.4	13,894.6	111,586.7	3,538.1	1,441,916.2	668,453.2	773,463.0	46.4%
2043	13,751.3	79,056.2	0.0	130,610.0	13,871.3	111,367.7	3,662.0	1,445,927.3	693,888.5	752,038.8	48.0%
2044	13,963.7	80,550.8	0.0	132,035.2	13,881.6	110,998.8	3,790.1	1,450,622.6	723,186.1	727,436.5	49.9%
2045	14,188.8	82,077.2	0.0	133,600.5	13,916.2	110,197.8	3,922.8	1,456,525.3	757,115.4	699,409.9	52.0%
2046	14,443.6	83,632.9	0.0	135,510.9	13,992.6	109,399.0	4,060.1	1,463,765.8	796,066.2	667,699.6	54.4%
2047	14,699.6	85,229.9	0.0	137,441.6	14,098.3	108,480.4	4,202.2	1,472,596.4	840,565.8	632,030.6	57.1%
2048	14,969.5	86,842.9	0.0	139,514.4	14,226.9	107,523.5	4,349.3	1,483,196.8	891,081.8	592,115.0	60.1%
2049	15,252.9	88,446.8	0.0	141,719.6	14,362.1	106,538.9	4,501.5	1,495,730.9	948,078.5	547,652.5	63.4%
2050	15,542.0	90,067.4	0.0	143,977.7	14,531.7	105,195.9	4,659.0	1,510,747.4	1,012,414.8	498,332.5	67.0%
2051	15,859.6	91,663.1	0.0	146,551.3	14,734.1	104,088.8	4,822.1	1,528,216.9	1,084,376.6	443,840.3	71.0%
2052	16,179.7	93,221.2	0.0	149,137.2	14,955.1	103,170.6	4,990.9	1,548,141.4	1,164,278.4	383,863.0	75.2%
2053	16,510.0	94,688.5	0.0	151,710.4	15,180.2	102,062.0	5,165.6	1,570,900.8	1,252,794.3	318,106.5	79.8%
2054	16,849.1	95,994.2	0.0	154,554.3	15,433.4	101,009.8	5,346.4	1,596,672.1	1,350,344.2	246,327.8	84.6%
2055	17,209.7	97,001.1	0.0	157,518.8	15,699.8	99,801.4	5,533.5	1,625,849.5	1,457,442.0	168,407.5	89.6%
2056	17,593.7	97,390.5	0.0	160,724.3	16,005.3	98,925.2	5,727.1	1,658,378.1	1,573,813.0	84,565.1	94.9%
2057	17,984.7	92,359.0	0.0	163,993.7	16,322.0	97,768.9	5,927.6	1,694,802.7	1,694,802.7	0.0	100.0%

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Section 4: Reporting Information (continued)

Exhibit V – Projection of Contributions, Liabilities, and Assets (continued)

Fiscal Year	Employee Contributions	Employer Contributions	Supplemental Contributions	Payroll	Normal Cost	Benefit Payouts	Estimated Expenses	Total Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability	Funded Ratio
2058	\$18,402.5	\$4,997.1	\$0.0	\$167,556.7	\$16,681.1	\$96,778.6	\$6,135.1	\$1,735,279.6	\$1,735,279.6	\$0.0	100.0%
2059	18,837.0	5,167.8	0.0	171,273.3	17,058.4	95,586.8	6,349.8	1,780,330.6	1,780,330.6	0.0	100.0%
2060	19,290.0	5,351.0	0.0	175,203.2	17,458.4	94,344.5	6,572.0	1,830,364.3	1,830,364.3	0.0	100.0%
2061	19,762.9	5,545.6	0.0	179,347.3	17,881.0	93,745.6	6,802.1	1,885,099.2	1,885,099.2	0.0	100.0%

Exhibit VI - Actuarial Assumptions and Actuarial Cost Method

Rationale for Assumptions:

The information and analysis used in supporting each assumption that has a significant effect on this actuarial valuation is shown in the Experience Review dated October 25, 2018. Current data is reviewed in conjunction with each annual valuation.

Mortality Rates:

Healthy Post-Retirement Mortality:

110% of PubG-2010 Healthy Annuitant Table, with mortality improvements projected generationally using scale MP-2017

Pre-retirement:

110% of PubG-2010 Healthy Employee Table, with mortality improvements projected generationally using scale MP-2017

The mortality tables specified above were determined to contain provisions appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the most recent experience study rate.

Termination Rates:

Select and ultimate termination rates are based on recent experience of the Fund. Ultimate rates applicable for members with eight or more years of service are shown for sample ages in the table below. Select rates are as follows:

Years of Service	Rate (%)
0 - 0.99	17.5
1 - 1.99	13.0
2 - 2.99	13.0
3 - 3.99	12.5
4 - 4.99	12.5
5 - 5.99	10.0
6 - 6.99	10.0
7 - 7.99	10.0

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Section 4: Reporting Information (continued)

Exhibit VI - Actuarial Assumptions and Actuarial Cost Method (continued)

Ultimate rates:

<u>Age</u>	<u>Rate (%)</u>
20	7.0
25	7.0
30	6.0
35	4.0
40	4.0
45	4.0
50	3.0
55	3.0

Retirement Rates:

For employees first hired prior to January 1, 2011, rates of retirement for each age from 50 to 75 based on the recent experience of the Fund were used. Sample rates are shown below.

<u>Age</u>	<u>Rate (%)</u>	
	<u><30 Years of Service</u>	<u>30+ Years of Service</u>
50	2.5	30.0
55	2.0	20.0
60	5.0	5.0
65	15.0	15.0
70	20.0	20.0
75	100.0	100.0

For employees first hired on or after January 1, 2011, rates of retirement for each age from 62 to 75 were used. Sample rates are shown below.

<u>Age</u>	<u>Rate (%)</u>
62	50.0
65	20.0
67	50.0
70	20.0
75	100.0

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Section 4: Reporting Information (continued)

Exhibit VI - Actuarial Assumptions and Actuarial Cost Method (continued)

Salary Increases:	Assumed salary increases are based on the recent experience of the Fund were used. Rates are shown below. <table><tr><th><u>Years of Service</u></th><th><u>Rate (%)</u></th></tr><tr><td>0 - 0.99</td><td>20.00</td></tr><tr><td>1 - 1.99</td><td>7.50</td></tr><tr><td>2 - 2.99</td><td>5.00</td></tr><tr><td>3 - 3.99</td><td>3.50</td></tr><tr><td>4 - 4.99</td><td>3.50</td></tr><tr><td>5+</td><td>2.75</td></tr></table>	<u>Years of Service</u>	<u>Rate (%)</u>	0 - 0.99	20.00	1 - 1.99	7.50	2 - 2.99	5.00	3 - 3.99	3.50	4 - 4.99	3.50	5+	2.75
<u>Years of Service</u>	<u>Rate (%)</u>														
0 - 0.99	20.00														
1 - 1.99	7.50														
2 - 2.99	5.00														
3 - 3.99	3.50														
4 - 4.99	3.50														
5+	2.75														
Valuation of Inactive Vested Participants:	The liability for an inactive member is equal to his or her existing account balance, or, if the participant has at least 10 years of service, twice the existing account balance.														
Unknown Data for Participants:	Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.														
Spouse:	75% of members were assumed to be married and female spouses are assumed to be two years younger than males.														
Disability Benefit Valuation:	Disability benefits are valued in normal cost by annualizing the actual monthly disability payment amounts for the month prior to the valuation date.														
Investment Return:	7.25% per year, net of investment expenses														
Inflation:	2.50% per year														
Payroll Growth:	2.50% per year														
Administrative Expenses:	Equal to actual expenses for the prior year, increased by 3.5% each year.														
Actuarial Value of Assets:	The actuarial value of assets was determined by smoothing unexpected gains and losses over a period of 5 years. The gain or loss for a year is calculated as the total investment income on the fair value of assets, minus expected investment return on the prior actuarial value of assets. The final actuarial value is equal to the expected actuarial value plus (or minus) 20% of the calculated gain (or loss) in the prior 5 years.														
Actuarial Cost Method:	Entry Age Normal. Under this method, a normal cost is calculated for each employee that is the level annual contribution as a percent of pay required to be made from the employee's date of hire for as long as he/she remains active so that sufficient assets will be accumulated to provide his/her benefit. The accrued liability is the difference between the present value of all future benefits and the present value of all future normal costs.														
Tier 2a Election:	No Tier 2 members are assumed to elect Tier 2a provisions.														

Section 4: Reporting Information (continued)

Exhibit VII - Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership:	Any person employed by the Chicago Park District in a position requiring service for 6 months or more in a calendar year is required to become a member of the Fund as a condition of employment.
Employee Contributions:	All members of Tier 1 and Tier 2 are required to contribute 9% of salary to the Fund as follows: 7% for the retirement pension, 1% for the spouse's pension, and 1% for the automatic increases in the retirement pension. All members of Tier 2a are required to contribute 11% of salary to the Fund as follows: 9% for the retirement pension, 1% for the spouse's pension, and 1% for the automatic increases in the retirement pension. In addition, employees are required to contribute \$3.60 per month toward the cost of the single sum death benefit.
Tiers:	Tier 1: First hired before January 1, 2011. Tier 2: First hired on or after January 1, 2011. Tier 2a: First hired on or after January 1, 2022.
Retirement Pension:	<p>a. Eligibility – An employee may retire at age 50 with at least 10 years of service or at age 60 with 4 years of service. If retirement occurs before age 60, the retirement pension is reduced $\frac{1}{4}$ of 1% of each month that the age of the member is below 60. However, there is no reduction if the employee has at least 30 years of service.</p> <p>b. Amount – The retirement pension is based on the average of the 4 highest consecutive years of salary within the last 10 years. For an employee who withdraws from service on or after December 31, 2003, the amount of the retirement pension is 2.4% of highest average salary for each year of service.</p> <p>The maximum pension payable is 80% of the highest annual salary.</p> <p>An employee who was a participant before July 1, 1971 is entitled to the pension provided under the money purchase formula if it provides a greater pension than that provided under the above fixed benefit formula.</p> <p>An employee who first becomes a participant on or after January 1, 2011 is subject to the following provisions:</p> <ol style="list-style-type: none">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 2022, the annual salary is limited to \$119,892.41. Limitations for future years shall automatically be increased by the lesser of 3% or one-half the percentage change in the Consumer Price Index-U during the preceding calendar year.

Section 4: Reporting Information (continued)

Exhibit VII - Summary of Plan Provisions (continued)

Retirement Pension (continued):

3. A participant is eligible to retire with unreduced benefits after attainment of 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 $\frac{1}{2}$ of 1% for each month that the age of the member is below 67.

An employee who first becomes a participant on or after January 1, 2022 or elects Tier 2a is subject to the following provision:

A participant is eligible to retire with unreduced benefits after attainment of age 65 with at least 10 years of service credit. However, a participant may elect to retire at age 60 with at least 10 years of service credit and receive a retirement annuity reduced by $\frac{1}{2}$ of 1% for each month that the age of the member is below 65; otherwise, the same as Tier 2.

Post-Retirement Increase:

An employee retiring at age 60 or over, or an employee with 30 or more years of service, is entitled to automatic annual increases of 3% of the originally granted pension following one year's receipt of pension payments. In the case of an employee with less than 30 years of service who retires before age 60, the increases begin following the later of attainment of age 60 and receipt of one year's pension payments.

Automatic annual increases (AAI) in the retirement annuity for employees who first became a participant on or after January 1, 2011 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.

Surviving Spouse's Pension:

A surviving spouse is entitled to a pension upon the death of an employee while in service or on retirement. If the surviving spouse is age 60 or over and the employee or retiree had at least 20 years of service, the minimum surviving spouse's pension is 50% of the deceased employee's or retired employee's pension at the date of death. If the age of the surviving spouse is less than 60, the pension is reduced $\frac{1}{2}$ of 1% for each month the surviving spouse is under age 60. If the employee had less than 20 years of service, the surviving spouse is entitled to a pension under the money purchase formula, taking into account employee and employer contributions toward the surviving spouse's pension.

Surviving spouse's pensions are subject to annual increases of 3% per year based on the current amount of pension.

For employees who first become a participant on or after January 1, 2011, the initial survivor's annuity is equal to $66\frac{2}{3}\%$ 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 during the preceding calendar year, based on the originally granted survivor's annuity.

Section 4: Reporting Information (continued)

Exhibit VII - Summary of Plan Provisions (continued)

Children's Pension:	Unmarried children of a deceased employee under the age of 18 are entitled to a children's pension. If either parent is living, the pension is \$100.00 per month. If no parent survives, the pension for each child is \$150.00 per month. The total amount payable to a spouse or children may not exceed 60% of the employee's final salary.
Single Sum Death Benefit:	<p>A death benefit is payable upon the death of an employee in service in addition to any other benefits payable to the surviving spouse or minor children. The death benefit payable is as follows:</p> <p>\$3,000 benefit during the first year of service, \$4,000 benefit during the second year of service, \$5,000 benefit during the third year of service, \$6,000 benefit during the fourth through ninth year of service, and \$10,000 benefit if death occurs after ten or more years of service.</p> <p>Upon the death of a retired member with ten or more years of service, the \$10,000 maximum benefit is reduced to \$6,000 if death occurs during the first year of retirement. Thereafter, it is reduced by \$1,500 for each year or fraction of a year while on retirement, but shall not be less than \$3,000.</p>
Ordinary Disability Benefit:	An ordinary disability benefit is payable after eight consecutive days of absence for illness without pay. The amount of the benefit is 45% of salary. The benefit is payable for a period not to exceed $\frac{1}{4}$ of the length of service or five years, whichever is less.
Occupational Disability Benefit:	Upon disability resulting from an injury incurred while on duty, an employee is entitled to a disability benefit of 75% of salary from the first day of absence without pay. The benefit is payable during the period of disability until the employee attains age 65 if disability is incurred before age 60, or for a period of five years if disability is incurred after age 60.
Occupational Death Benefit:	Upon the death of an employee resulting from an injury incurred in the performance of duty, the surviving spouse is entitled to an occupational death benefit of 50% of salary. Each unmarried child under the age of 18 is entitled to a benefit of \$100 per month. The combined payments to a family may not exceed 75% of the employee's final salary. The total payments are reduced by Workmen's Compensation benefits.
Refunds:	An employee who terminates employment before qualifying for a pension is entitled to a refund of employee contributions. The refund is payable to any employee who withdraws before age 55, regardless of the length of service. It is also payable to an employee who withdraws between age 55 and 60 with less than 10 years of service, and to an employee who withdraws after age 60 with less than 5 years of service. An employee who is unmarried at date of retirement is entitled to a refund of the full amount contributed for the spouse's pension, without interest.
Plan Year:	January 1 through December 31. Prior to December 31, 2012, the plan year was July 1 through June 30.

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Section 4: Reporting Information (continued)

Exhibit VII - Summary of Plan Provisions (continued)

Employer Contributions: Per HB 417 establishing Public Act 102-0263.

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Section 5: GASB 67 Information

Exhibit 1 - Net Pension Liability

The components of the Net Pension Liability of the Fund at December 31, 2021 were as follows:

Total Pension Liability	\$1,211,991,973
Plan Fiduciary Net Position	414,658,650
Net Pension Liability	797,333,323
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	34.21%

Actuarial assumptions. The Total Pension Liability was determined by an actuarial valuation as of December 31, 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	Service-based ranging from 20.00% to 2.75%
Single equivalent discount rate	7.25%, net of pension plan investment expense, including inflation
Cost of living adjustments	3% of original benefit for employees who first became a participant before January 1, 2011; the lesser of 3% and ½ of CPI of original benefit for employees and beneficiaries of employees who first became a participant on or after January 1, 2011; 3% compounded for beneficiaries of employees who first became a participant by January 1, 2011.

For healthy annuitants, mortality rates were based on the 110% of PubG-2010 Healthy Annuitant Table, with mortality improvements projected generationally using scale MP-2017. For active participants, mortality rates were based on 110% of PubG-2010 Healthy Employee Table, with mortality improvements projected generationally using scale MP-2017.

The actuarial assumptions used in the December 31, 2021, valuation were based on the results of an experience study for the five-year period ending December 31, 2018.

Discount rate: The discount rate used to measure the Total Pension Liability was 7.25%. The projection of cash flows used to determine the discount rate assumed member contributions will be made at the 9% contribution rate for Tier 1 and Tier 2, and 11% for Tier 2a, for 2022 and thereafter.

Employer contributions will be made per statute. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. The projected benefit payments were discounted at the expected long-term rate of return (7.25%). No projected benefit payments were discounted at the municipal bond index (2.06%, based on the Bond Buyer 20-GO Municipal Bond Index as of December 31, 2021).

Sensitivity of the net pension liability to changes in the discount rate. The following presents the Net Pension Liability of the Fund, calculated using the discount rate of 7.25%, as well as what the Fund's Net Pension Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability as of December 31, 2021	\$937,845,142	\$797,333,323	\$680,060,469

ACTUARIAL

Section 5: GASB 67 Information (continued)

Exhibit 2 - Schedules of Changes in Net Pension Liability

	<u>2021</u>	<u>2020</u>
Total Pension Liability		
Service cost	\$60,952,502	\$51,348,187
Interest	51,017,625	58,440,058
Change of benefit terms	0	0
Differences between expected and actual experience	846,816	-2,309,221
Changes of assumptions	-1,097,662,261	203,245,789
Benefit payments, including refunds of employee contributions	-80,602,844	-79,370,008
Net change in Total Pension Liability	-1,065,448,162	231,354,805
Total Pension Liability – beginning	2,277,440,135	2,046,085,330
Total Pension Liability – ending (a)	1,211,991,973	2,277,440,135
Plan Fiduciary Net Position		
Contributions – employer	83,349,261	33,939,927
Contributions – employee	12,226,998	12,634,900
Net investment income	53,089,102	28,071,327
Benefit payments, including refunds of employee contributions	-80,602,844	-79,370,008
Administrative expense	-1,718,012	-1,598,370
Other	<u>19,630</u>	<u>60,451</u>
Net change in Plan Fiduciary Net Position	66,364,135	-6,261,773
Plan Fiduciary Net Position – beginning	348,294,515	354,556,288
Plan Fiduciary Net Position – ending (b)	414,658,650	348,294,515
Fund's Net Pension Liability – ending (a) – (b)	797,333,323	1,929,145,620
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	34.21%	15.29%
Covered payroll	\$134,515,373	\$138,942,498
Fund's Net Pension Liability as percentage of covered payroll	592.75%	1,388.45%

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Section 5: GASB 67 Information (continued)

Exhibit 3 - Schedule of Employer Contribution – Last Ten Fiscal Years

Fiscal Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2012	\$16,786,671	\$5,268,363	\$11,518,308	\$58,231,511	9.05%
2013	41,834,857	15,707,814	26,127,043	117,781,596	13.34%
2014	35,307,186	11,225,438	24,081,748	118,987,507	9.43%
2015	36,273,994	30,588,976	5,685,018	122,382,584	24.99%
2016	37,130,268	30,890,241	6,240,027	121,126,918	25.50%
2017	45,253,238	20,920,614	24,332,624	135,315,008	15.46%
2018	50,929,734	27,638,402	23,291,332	133,112,100	20.76%
2019	61,887,790	27,682,089	34,205,701	139,204,051	19.89%
2020	67,297,212	33,939,927	33,357,285	138,942,498	24.43%
2021	70,492,027	83,349,261	(12,857,234)	134,515,373	61.96%

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Section 5: GASB 67 Information (continued)

Notes to Exhibit 3

Valuation date	Actuarially determined contribution amount is determined as of December 31, with appropriate interest to the middle of the year.
Methods and assumptions used to establish “actuarially determined contribution” for the fiscal year ended December 31, 2021:	
Actuarial cost method	Entry Age Actuarial cost method
Amortization method	21-year closed, level percentage of payroll amortization
Asset valuation method	5-year smoothed fair value
Actuarial assumptions:	
Investment rate of return	7.25%, net of investment expense
Projected salary increases	Service-based ranging from 20.00% to 2.75%
Mortality	For healthy annuitants, mortality rates were based on 110% of PubG-2010 Healthy Annuitant Table, with mortality improvements projected generationally using scale MP-2017. For active participants, mortality rates were based on 110% of PubG-2010 Healthy Employee Table, with mortality improvements projected generationally using scale MP-2017.
Cost of living adjustments	3% of original benefit for employees who first became a participant before January 1, 2011; the lesser of 3% and 1/2 of CPI of original benefit for employees and beneficiaries of employees who first became a participant on or after January 1, 2011; 3% compounded for beneficiaries of employees who first became a participant by January 1, 2011.
Other assumptions:	Same as those used in the December 31, 2021, actuarial funding valuations based on the results of an experience study for the five-year period ending December 31, 2018.

Statistical Section Overview

The information in this section is not covered by the Independent Auditor’s Report but is presented as supplemental data for the benefit of the readers of the Annual Comprehensive Financial Report. The objectives of the statistical section information are to provide financial statement users with additional historical perspective, context, and detail to assist in using the financial statements, notes to financial statements, and required supplementary information, to better understand and assess the Fund’s overall financial health.

Contents

Membership Statistics	
These schedules provide financial data regarding the Fund’s members.	104-117
Other Financial Data	
These schedules provide additional information regarding members as well as data regarding refunds and disability.	118-119
GASB No. 44	
Additional schedules to address the requirements defined by GASB No. 44.	120-122

STATISTICAL

MEMBERSHIP STATISTICS

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Active participants	2,694	2,890
Retired employees' - annuities	2,104	2,116
Surviving spouses' - annuities	639	648
Children - annuities	9	11
Member retirements granted during the year	84	75
New members	112	90
Withdrawals with refund	128	104

The above schedule provides details about the changes in the number of active participants, as well as the changes in the number and type of annuitants for the year.

STATISTICAL

**Active Members and Total Annual Salaries by Age
for the year ended December 31, 2021**

Table I

<u>Age at 12/31/21</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>
18	-	\$ -	1	\$ 4,171	1	\$ 4,171
19	8	38,494	3	10,002	11	48,496
20	8	64,553	5	77,925	13	142,478
21	21	415,145	23	467,071	44	882,216
22	26	435,234	21	390,390	47	825,624
23	39	786,769	34	691,177	73	1,477,946
24	22	487,409	25	385,881	47	873,290
25	26	641,474	21	441,395	47	1,082,869
26	37	982,244	36	821,270	73	1,803,514
27	30	877,327	24	541,425	54	1,418,752
28	35	1,150,102	35	963,009	70	2,113,111
29	29	888,538	34	1,087,352	63	1,975,890
30	33	1,303,343	29	979,092	62	2,282,435
31	40	1,394,230	27	1,132,656	67	2,526,886
32	26	1,238,210	26	1,373,727	52	2,611,937
33	27	1,024,147	31	1,370,253	58	2,394,400
34	28	1,316,758	21	839,758	49	2,156,516
35	34	1,942,719	23	1,007,411	57	2,950,130
36	42	2,047,033	29	1,335,098	71	3,382,131
37	35	1,653,300	16	854,515	51	2,507,815
38	29	1,672,803	30	1,648,862	59	3,321,665
39	35	1,708,718	15	852,230	50	2,560,948
40	36	2,002,109	22	944,399	58	2,946,508
41	35	1,854,016	22	1,177,148	57	3,031,164
42	30	2,011,921	18	755,928	48	2,767,849
43	40	2,245,353	21	959,210	61	3,204,563
44	24	1,421,735	23	1,221,961	47	2,643,696
45	31	1,912,781	19	990,475	50	2,903,256
46	32	1,806,402	19	1,007,543	51	2,813,945
47	29	1,516,151	28	1,483,378	57	2,999,529
48	31	2,069,456	27	1,661,384	58	3,730,840
49	34	1,986,893	17	859,501	51	2,846,394
50	33	2,182,820	24	1,335,727	57	3,518,547
51	28	1,607,359	32	1,754,935	60	3,362,294
52	50	2,770,065	22	1,302,433	72	4,072,498
53	42	2,386,291	24	1,213,374	66	3,599,665
54	45	2,518,026	21	1,006,522	66	3,524,548

STATISTICAL

Active Members and Total Annual Salaries by Age for the year ended December 31, 2021

Table I
(continued)

Age at 12/31/21	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
55	40	\$ 2,240,307	25	\$ 1,400,409	65	\$ 3,640,716
56	30	1,636,875	21	950,719	51	2,587,594
57	41	2,347,383	38	1,996,059	79	4,343,442
58	31	1,896,764	27	1,272,484	58	3,169,248
59	39	2,414,316	18	1,049,378	57	3,463,694
60	27	1,692,909	19	942,453	46	2,635,362
61	23	1,632,627	24	1,353,919	47	2,986,546
62	29	1,411,193	20	1,000,212	49	2,411,405
63	29	1,635,817	17	980,404	46	2,616,221
64	31	1,512,459	13	685,404	44	2,197,863
65	21	1,202,223	11	534,172	32	1,736,395
66	11	747,619	10	522,726	21	1,270,345
67	16	779,328	6	348,143	22	1,127,471
68	11	542,525	9	347,398	20	889,923
69	8	642,466	9	407,513	17	1,049,979
70	11	586,434	2	156,413	13	742,847
71	10	566,542	2	137,759	12	704,301
72	5	231,240	2	69,247	7	300,487
73	4	227,644	2	106,997	6	334,641
74	7	236,076	-	-	7	236,076
75	2	67,524	1	17,131	3	84,655
76	3	87,592	-	-	3	87,592
77	1	17,598	1	45,726	2	63,324
78	1	20,686	-	-	1	20,686
79	-	-	1	106,587	1	106,587
80	-	-	1	47,193	1	47,193
81	1	42,202	1	46,649	2	88,851
82	1	109,535	-	-	1	109,535
84	1	34,934	-	-	1	34,934
85	1	99,620	-	-	1	99,620
88	-	-	1	11,391	1	11,391
	<u>1,565</u>	<u>\$ 77,022,366</u>	<u>1,129</u>	<u>\$ 49,485,074</u>	<u>2,694</u>	<u>\$ 126,507,440</u>
				<u>Male</u>	<u>Female</u>	<u>Both</u>
Average Age:				44.7	42.7	43.8
Average Salary:				\$ 49,216	\$ 43,831	\$ 46,959

Note: The average salary reported by The Segal Company is annualized in order to take a conservative approach in reporting. The variances are immaterial in nature.

STATISTICAL

**Active Members and Total Annual Salaries by Length of Service
for the year ended December 31, 2021**

Table II

Years of Service	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
< 1	103	\$ 871,012	65	\$ 302,338	168	\$ 1,173,350
1	27	394,735	21	506,832	48	901,567
2	132	4,681,537	110	2,856,106	242	7,537,643
3	137	5,054,730	99	2,571,045	236	7,625,775
4	106	4,092,817	65	2,343,551	171	6,436,368
5	93	3,972,504	76	2,896,311	169	6,868,815
6	91	5,107,111	58	2,222,258	149	7,329,369
7	59	3,296,821	46	1,952,153	105	5,248,974
8	64	3,615,135	39	2,011,602	103	5,626,737
9	46	2,552,652	40	1,968,451	86	4,521,103
10	59	3,605,199	46	2,472,537	105	6,077,736
11	29	1,620,434	16	653,719	45	2,274,153
12	25	918,938	15	754,896	40	1,673,834
13	43	2,386,285	10	584,475	53	2,970,760
14	47	2,246,010	35	1,757,380	82	4,003,390
15	35	1,945,167	42	2,112,164	77	4,057,331
16	52	2,895,427	34	1,879,008	86	4,774,435
17	33	2,555,102	18	1,031,220	51	3,586,322
18	21	1,240,204	14	829,868	35	2,070,072
19	19	1,372,846	9	616,117	28	1,988,963
20	37	2,194,125	27	1,354,299	64	3,548,424
21	32	2,018,119	29	1,803,633	61	3,821,752
22	43	2,948,647	31	1,874,215	74	4,822,862
23	39	2,490,108	25	1,469,253	64	3,959,361
24	30	1,934,016	26	1,595,848	56	3,529,864
25	27	1,766,928	32	2,014,441	59	3,781,369
26	18	962,710	19	1,272,157	37	2,234,867
27	13	951,643	16	1,193,083	29	2,144,726
28	9	599,736	10	710,878	19	1,310,614
29	11	802,240	11	834,998	22	1,637,238
30	17	1,105,445	13	856,455	30	1,961,900
31	13	944,019	6	361,760	19	1,305,779
32	8	579,321	10	732,332	18	1,311,653
33	5	404,768	1	64,391	6	469,159
34	2	180,403	2	126,389	4	306,792

STATISTICAL

Active Members and Total Annual Salaries by Length of Service for the year ended December 31, 2021

Table II
(continued)

Years of Service	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
35	10	\$ 619,457	5	\$ 375,118	15	\$ 994,575
36	8	550,350	2	132,459	10	682,809
37	4	270,295	-	-	4	270,295
38	1	93,852	-	-	1	93,852
39	4	249,342	2	119,001	6	368,343
40	5	447,080	-	-	5	447,080
41	3	178,245	1	81,969	4	260,214
42	1	74,269	-	-	1	74,269
43	3	150,557	1	65,379	4	215,936
48	-	-	1	78,336	1	78,336
49	1	82,025	-	-	1	82,025
52	-	-	1	46,649	1	46,649
	<u>1,565</u>	<u>\$ 77,022,366</u>	<u>1,129</u>	<u>\$ 49,485,074</u>	<u>2,694</u>	<u>\$ 126,507,440</u>

	<u>Male</u>	<u>Female</u>	<u>Both</u>
Average Service:	11.6	11.6	11.6
Average Salary:	\$ 49,216	\$ 43,831	\$ 46,959

Note: The average salary reported by The Segal Company is annualized in order to take a conservative approach in reporting. The variances are immaterial in nature.

STATISTICAL

Retirement Pensions by Age and Annual Payments for the year ended December 31, 2021

Table III

Age at 12/31/21	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
50	1	\$ 15,174	-	\$ -	1	\$ 15,174
51	3	88,389	-	-	3	88,389
52	8	129,538	3	105,069	11	234,607
53	6	100,510	4	173,502	10	274,012
54	9	196,349	7	267,201	16	463,550
55	10	255,685	5	171,829	15	427,514
56	13	394,513	9	323,188	22	717,701
57	13	582,163	6	173,645	19	755,808
58	21	709,205	6	141,750	27	850,955
59	19	706,744	9	267,930	28	974,674
60	25	883,414	17	587,609	43	1,471,023
61	32	1,151,364	15	451,215	46	1,602,579
62	47	1,696,938	20	447,636	67	2,144,574
63	48	1,898,282	14	479,237	62	2,377,519
64	37	1,587,435	14	330,924	52	1,918,359
65	50	1,522,434	20	741,383	69	2,263,817
66	69	2,567,155	25	823,799	94	3,390,954
67	68	2,489,038	26	861,975	94	3,351,013
68	73	2,473,041	30	891,284	103	3,364,325
69	59	1,968,617	33	774,418	92	2,743,035
70	75	2,804,865	33	942,645	108	3,747,510
71	79	2,462,787	34	1,002,189	113	3,464,976
72	63	2,415,806	20	563,079	83	2,978,885
73	58	1,789,859	19	526,453	77	2,316,312
74	68	2,218,006	21	546,051	89	2,764,057
75	48	1,367,146	17	311,629	65	1,678,775
76	54	1,421,299	13	288,352	67	1,709,651
77	34	1,237,811	22	488,250	56	1,726,061
78	48	1,695,051	17	398,652	65	2,093,703
79	48	1,465,640	18	274,017	66	1,739,657
80	30	957,595	13	386,903	43	1,344,498
81	34	1,295,488	15	211,504	49	1,506,992
82	25	852,396	13	261,693	38	1,114,089
83	42	1,197,468	8	170,061	50	1,367,529
84	29	912,147	7	64,817	36	976,964
85	20	466,097	12	352,522	32	818,619

STATISTICAL

Retirement Pensions by Age and Annual Payments for the year ended December 31, 2021

Table III
(continued)

Age at 12/31/21	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
86	29	\$ 940,618	4	\$ 103,001	33	\$ 1,043,619
87	23	945,994	12	145,914	35	1,091,908
88	17	577,047	3	92,794	20	669,841
89	18	469,598	11	133,637	29	603,235
90	15	303,856	2	30,092	17	333,948
91	7	228,797	4	119,800	11	348,597
92	8	227,275	-	-	8	227,275
93	9	258,957	4	52,861	13	311,818
94	8	266,682	4	63,522	12	330,204
95	1	6,415	2	16,559	3	22,974
96	1	51,645	1	26,027	2	77,672
97	2	152,120	2	46,539	4	198,659
98	1	59,119	1	19,038	2	78,157
99	2	55,453	-	-	2	55,453
100	1	45,052	1	5,514	2	50,566
	<u>1,508</u>	<u>\$ 50,564,077</u>	<u>596</u>	<u>\$ 15,657,709</u>	<u>2,104</u>	<u>\$ 66,221,786</u>
				<u>Male</u>	<u>Female</u>	<u>Both</u>
			Average Age:	72.8	72.1	72.6
			Average Annual:	\$ 33,531	\$ 26,271	\$ 31,474

Note: The average salary reported by The Segal Company is annualized in order to take a conservative approach in reporting. The variances are immaterial in nature.

STATISTICAL

Retirement Pensions by Age at Time of Retirement for the year ended December 31, 2021

Table IV

<u>Age at 12/31/21</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>
50	156	\$ 4,747,107	46	\$ 1,298,306	202	\$ 6,045,413
51	102	4,218,270	29	1,286,587	131	5,504,857
52	85	3,407,678	26	830,341	111	4,238,019
53	72	2,947,545	26	933,073	98	3,880,618
54	89	3,710,270	35	1,316,073	124	5,026,343
55	98	3,117,947	49	1,156,833	147	4,274,780
56	93	2,840,328	30	710,843	123	3,551,171
57	74	2,542,911	25	865,448	99	3,408,359
58	72	2,176,561	29	713,413	101	2,889,974
59	52	1,886,659	27	702,961	79	2,589,620
60	98	3,075,757	47	811,937	145	3,887,694
61	66	2,365,344	32	671,856	98	3,037,200
62	86	2,201,916	41	902,745	127	3,104,661
63	45	1,313,469	20	477,306	65	1,790,775
64	45	1,410,041	19	355,302	64	1,765,343
65	69	2,161,697	31	676,509	100	2,838,206
66	48	1,275,012	18	517,041	66	1,792,053
67	42	1,321,619	19	383,223	61	1,704,842
68	22	911,349	19	414,812	41	1,326,161
69	21	920,954	7	111,978	28	1,032,932
70	18	439,379	4	80,805	22	520,184
71	16	486,755	4	95,932	20	582,687
72	8	206,521	4	134,276	12	340,797
73	2	33,168	1	8,159	3	41,327
74	7	170,475	2	25,230	9	195,705
75	7	205,699	-	-	7	205,699
76	5	202,317	1	4,790	6	207,107
77	1	25,333	4	158,962	5	184,295
78	1	7,683	-	-	1	7,683
79	3	41,874	1	12,968	4	54,842
80	2	112,580	-	-	2	112,580
81	1	36,359	-	-	1	36,359

STATISTICAL

**Retirement Pensions by Age at Time of Retirement
for the year ended December 31, 2021**

Table IV
(continued)

<u>Age at 12/31/21</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>
82	1	\$ 36,283	-	\$ -	1	\$ 36,283
85	<u>1</u>	<u>7,217</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>7,217</u>
	<u>1,508</u>	<u>\$ 50,564,077</u>	<u>596</u>	<u>\$ 15,657,709</u>	<u>2,104</u>	<u>\$ 66,221,786</u>
			<u>Male</u>	<u>Female</u>	<u>Both</u>	
Average Age:			58.7	59.3	58.8	
Average Annual Payments:			\$ 33,531	\$ 26,271	\$31,474	

STATISTICAL

**Surviving Spouses' Pension by Age and Annual Payments
for the year ended December 31, 2021**

Table V

<u>Age at 12/31/21</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age at 12/31/21</u>	<u>Number</u>	<u>Annual Payments</u>
43	1	\$ 3,957	78	23	\$ 459,537
50	2	6,471	79	26	532,094
52	1	36,661	80	14	211,694
53	3	27,294	81	26	428,053
54	3	60,636	82	27	447,029
55	2	46,959	83	32	556,356
56	2	22,406	84	19	336,283
57	3	35,471	85	22	356,372
58	5	44,615	86	17	236,556
59	4	49,753	87	20	393,951
60	5	85,767	88	17	242,112
61	6	114,876	89	15	290,465
62	14	271,264	90	22	412,647
63	6	157,543	91	15	342,420
64	8	149,329	92	13	237,990
65	7	171,152	93	11	201,230
66	12	385,715	94	19	318,084
67	13	212,586	95	6	118,731
68	13	315,349	96	9	143,405
69	11	214,119	97	8	103,757
70	20	390,515	98	5	74,545
71	22	472,281	99	1	8,063
72	9	175,694	100	<u>3</u>	<u>34,477</u>
73	16	316,743		<u>639</u>	<u>\$ 11,854,296</u>
74	22	419,862			
75	24	436,405			
76	11	207,301			
77	24	537,721			

Average Age: 79.4
Average Annual Payments: \$ 18,551

STATISTICAL

Surviving Spouses' Pension by Age at Commencement for the year ended December 31, 2021

Table VI

<u>Age at Commencement</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age at Commencement</u>	<u>Number</u>	<u>Annual Payments</u>
27	1	\$ 4,449	62	13	\$ 259,826
28	2	13,136	63	13	254,100
29	2	6,052	64	23	390,100
30	1	16,592	65	16	372,845
31	2	12,819	66	16	307,758
33	2	26,373	67	27	489,943
34	1	8,555	68	15	361,149
35	1	2,971	69	24	508,954
36	4	44,964	70	18	340,105
37	2	10,594	71	19	365,290
38	3	22,424	72	19	291,300
39	5	87,502	73	12	181,491
40	2	47,604	74	19	323,223
41	5	85,719	75	15	252,558
42	6	122,334	76	21	363,563
43	5	79,691	77	16	354,037
44	8	99,089	78	16	277,859
45	8	119,501	79	13	210,028
46	5	87,190	80	17	244,817
47	4	86,286	81	7	129,580
48	8	182,915	82	10	150,472
49	10	221,066	83	10	131,564
50	13	238,667	84	10	144,827
51	8	167,744	85	9	107,303
52	5	112,642	86	3	41,936
53	14	278,227	87	5	131,174
54	13	335,167	88	2	32,737
55	14	359,373	89	1	1,436
56	10	231,040	90	7	99,206
57	12	299,190	91	3	68,129
58	17	400,630	92	1	13,974
59	14	265,680	96	<u>1</u>	<u>9,833</u>
60	17	378,352		<u>639</u>	<u>\$ 11,854,296</u>
61	14	188,641			

Average Age: 65.5
Average Annual Payments: \$ 18,551

STATISTICAL

Annuities and Refunds by Type

Table VII

Last Ten Years

<u>Year Ended</u>	<u>Retirement</u>	Surviving <u>Spouse</u>	<u>Children</u>	<u>Refunds</u>	
				<u>Employees'</u>	<u>Pensioners'</u>
December 31, 2012*	\$26,428,994	\$ 5,529,729	\$10,859	\$ 789,406	\$188,506
December 31, 2013	54,256,588	11,319,614	21,619	2,033,334	82,829
December 31, 2014	55,519,537	11,665,763	20,800	2,427,646	301,745
December 31, 2015	56,094,931	11,823,316	17,100	1,493,229	554,946
December 31, 2016	58,967,909	12,043,511	18,000	2,228,079	281,414
December 31, 2017	59,488,303	12,252,673	15,900	1,834,626	191,179
December 31, 2018	61,178,336	12,108,228	16,900	2,589,760	136,207
December 31, 2019	63,644,273	12,187,742	18,450	1,792,130	292,308
December 31, 2020	64,754,238	12,298,065	21,250	1,592,251	15,509
December 31, 2021	65,655,719	12,126,482	17,400	1,947,282	119,334

Death and Disability Benefits

Table VIII

Last Ten Years

<u>Year Ended</u>	<u>Death Benefit</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Total</u>
December 31, 2012*	\$136,775	\$187,808	\$ 8,935	\$333,518
December 31, 2013	266,000	302,316	53,667	621,983
December 31, 2014	279,500	281,640	39,411	600,551
December 31, 2015	317,000	207,846	93,648	618,494
December 31, 2016	255,000	184,173	99,790	538,963
December 31, 2017	305,000	217,423	(26,959) (a)	495,464
December 31, 2018	229,000	219,793	48,596	497,389
December 31, 2019	228,500	291,886	95,160	615,546
December 31, 2020	311,000	280,742	96,953	688,695
December 31, 2021	277,500	445,581	13,546	736,627

(a) Reflects net of recoveries of prior duty disability payments in accordance with state statute.

* For the six months ended December 31, 2012, as a result of Public Act 097-0973, the Fund's year end was changed from June 30th to December 31st.

STATISTICAL

Number of Active Participants

Table IX

Last Ten Years

<u>Year Ended</u>	<u>Male Participants</u>	<u>Female Participants</u>	<u>Total</u>
December 31, 2012	1,829	1,224	3,053
December 31, 2013	1,819	1,257	3,076
December 31, 2014	1,742	1,231	2,973
December 31, 2015	1,796	1,267	3,063
December 31, 2016	1,800	1,314	3,114
December 31, 2017	2,114	1,429	3,543
December 31, 2018	1,871	1,316	3,187
December 31, 2019	1,818	1,314	3,132
December 31, 2020	1,683	1,207	2,890
December 31, 2021	1,565	1,129	2,694

Active Participants Statistical Averages

Table X

Last Ten Years

<u>Year Ended</u>	<u>Male</u>			<u>Female</u>			<u>Combined</u>		
	<u>Annual Salary</u>	<u>Age</u>	<u>Service</u>	<u>Annual Salary</u>	<u>Age</u>	<u>Service</u>	<u>Annual Salary</u>	<u>Age</u>	<u>Service</u>
December 31, 2012	\$19,201	43.3	10.1	\$16,829	39.7	8.9	\$18,250	41.9	9.6
December 31, 2013	37,809	43.1	10.0	32,664	39.5	8.9	35,706	41.6	9.6
December 31, 2014	41,199	43.4	10.7	35,245	39.8	9.6	38,734	41.9	10.3
December 31, 2015	40,361	43.0	10.5	34,578	40.0	9.6	37,969	41.8	10.1
December 31, 2016	41,248	42.7	10.4	34,041	39.5	9.3	38,207	41.3	9.9
December 31, 2017	35,986	41.9	8.9	32,383	39.6	8.7	34,532	41.0	8.8
December 31, 2018	40,973	42.6	9.8	35,712	39.9	9.5	38,800	41.5	9.7
December 31, 2019	44,525	43.0	10.2	38,312	40.1	9.6	41,919	41.8	10.0
December 31, 2020	47,895	43.9	11.0	42,647	41.6	10.8	45,703	42.9	10.9
December 31, 2021	49,216	44.7	11.6	43,831	42.7	11.6	46,959	43.8	11.6

STATISTICAL

Retirees and Beneficiaries Receiving Benefits Last Ten Years

Table XI

<u>Year Ended</u>	<u>Retirees</u>	<u>Surviving Spouses</u>	<u>Children</u>	<u>Total</u>
December 31, 2012	2,090	798	18	2,906
December 31, 2013	2,102	786	16	2,904
December 31, 2014	2,101	773	17	2,891
December 31, 2015	2,097	767	12	2,876
December 31, 2016	2,113	744	13	2,870
December 31, 2017	2,115	745	16	2,876
December 31, 2018	2,136	706	12	2,854
December 31, 2019	2,144	686	13	2,843
December 31, 2020	2,116	648	11	2,775
December 31, 2021	2,104	639	9	2,752

Average Annual Retirees/Surviving Spouses' Benefit Payments Last Ten Years

Table XII

<u>Year Ended</u>	<u>Average Annual Payments</u>	
	<u>Retiree</u>	<u>Spouse</u>
December 31, 2012	\$25,747	\$14,018
December 31, 2013	26,330	14,500
December 31, 2014	26,855	15,062
December 31, 2015	26,683	15,525
December 31, 2016	28,048	16,119
December 31, 2017	28,678	16,577
December 31, 2018	29,571	17,101
December 31, 2019	29,808	17,127
December 31, 2020	30,613	17,750
December 31, 2021	31,474	18,551

STATISTICAL

Other Financial Data

Funded Ratio Last Ten Years

Table I

	(1)	(2)	(3)	(4)
	Actuarial	Unfunded	Statutory	%
	Value of	Accrued	Reserve	Percent
<u>Year Ended</u>	<u>Assets</u>	<u>Liabilities</u>	<u>Requirements</u>	<u>Funded</u>
			<u>(1) + (2)</u>	<u>(1) / (3)</u>
December 31, 2012	\$421,448,001	\$550,359,221	\$971,807,222	43.4%
December 31, 2013	404,292,435	483,730,929	888,023,364	45.5
December 31, 2014	393,762,692	507,077,925	900,840,617	43.7
December 31, 2015	395,652,106	514,608,254	910,260,360	43.5
December 31, 2016	393,604,997	611,888,096	1,005,493,093	39.1
December 31, 2017	385,419,506	653,859,938	1,039,279,444	37.1
December 31, 2018	366,806,612	775,491,353	1,142,297,965	32.1
December 31, 2019	349,960,428	820,642,552	1,170,602,980	29.9
December 31, 2020	342,131,743	848,233,901	1,190,365,644	28.7
December 31, 2021	388,163,499	823,828,474	1,211,991,973	32.0

Ratio of Unfunded Liability to Payroll Last Ten Years

Table II

	Covered	Unfunded	Liability
<u>Year Ended</u>	<u>Payroll</u>	<u>Liability</u>	<u>% of Payroll</u>
December 31, 2012	\$ 58,231,511	\$550,359,221	472.6%
December 31, 2013	117,781,596	483,730,929	410.7
December 31, 2014	118,987,507	507,077,925	426.2
December 31, 2015	122,382,584	514,608,254	420.5
December 31, 2016	121,126,918	611,888,096	505.2
December 31, 2017	135,315,008	653,859,938	483.2
December 31, 2018	133,112,100	775,491,353	582.6
December 31, 2019	139,204,051	820,642,552	589.5
December 31, 2020	138,942,498	848,233,901	610.5
December 31, 2021	134,515,373	823,828,474	612.4

STATISTICAL

Other Financial Data

Revenue by Sources

Table III

Last Ten Years

<u>Year Ended</u>	<u>Employer Contributions</u>	<u>Employee Contributions</u>	<u>Net Investment Income/(Loss) (a)</u>	<u>Total</u>
December 31, 2012*	\$ 5,268,363	\$ 5,371,084	\$24,956,796	\$35,596,243
December 31, 2013	15,804,452	10,732,730	66,642,528	93,179,710
December 31, 2014	11,225,438	10,831,434	27,591,038	49,647,910
December 31, 2015	30,588,976	12,368,636	8,911,726	51,869,338
December 31, 2016	30,890,241	12,246,115	31,022,803	74,159,159
December 31, 2017	20,920,614	13,675,292	51,174,093	85,769,999
December 31, 2018	27,638,402	12,125,457	(17,128,885)	22,634,974
December 31, 2019	27,682,089	12,664,855	52,032,781	92,379,725
December 31, 2020	33,939,927	12,634,900	28,131,778	74,706,605
December 31, 2021	83,349,261	12,226,998	53,108,732	148,684,991

(a) includes income from securities lending

* For the six months ended December 31, 2012, as a result of Public Act 097-0973, the Fund's year end was changed from June 30th to December 31st.

STATISTICAL

Required Schedules (GASB No. 44)

Average Benefit Payments

Last Ten Years

(Dollars in Thousands)

Table I

	Years of Credited Service						
	<u>0 – 5</u>	<u>5 – 10</u>	<u>10 – 15</u>	<u>15 – 20</u>	<u>20 – 25</u>	<u>25 – 30</u>	<u>30+</u>
Period 7/1/12 to 12/31/12							
Average monthly benefit	\$ 444	\$ 1,040	\$ 687	\$ 1,245	\$ 2,199	\$ 3,727	\$ 4,432
Average final average salary	\$ 6,780	\$ 5,896	\$ 2,590	\$ 3,180	\$ 4,638	\$ 5,510	\$ 5,677
Number of retired members	9	5	6	7	4	4	16
Period 1/1/13 to 12/31/13							
Average monthly benefit	\$ 581	\$ 822	\$ 1,311	\$ 1,288	\$ 2,221	\$ 3,234	\$ 3,877
Average final average salary	\$ 7,186	\$ 4,677	\$ 4,797	\$ 3,344	\$ 4,428	\$ 4,780	\$ 5,076
Number of retired members	10	17	21	12	16	14	20
Period 1/1/14 to 12/31/14							
Average monthly benefit	\$ 299	\$ 736	\$ 941	\$ 1,364	\$ 2,615	\$ 3,762	\$ 4,608
Average final average salary	\$ 5,274	\$ 4,072	\$ 3,198	\$ 3,320	\$ 4,844	\$ 5,705	\$ 5,893
Number of retired members	13	8	11	15	13	9	21
Period 1/1/15 to 12/31/15							
Average monthly benefit	\$ 466	\$ 914	\$ 1,019	\$ 1,623	\$ 2,323	\$ 3,478	\$ 3,740
Average final average salary	\$ 7,554	\$ 5,306	\$ 3,671	\$ 3,652	\$ 4,401	\$ 5,433	\$ 4,752
Number of retired members	8	10	16	14	7	7	22
Period 1/1/16 to 12/31/16							
Average monthly benefit	\$ 391	\$ 869	\$ 1,087	\$ 1,546	\$ 1,984	\$ 3,249	\$ 3,973
Average final average salary	\$ 6,774	\$ 5,489	\$ 3,956	\$ 3,407	\$ 3,949	\$ 4,619	\$ 4,838
Number of retired members	13	13	11	12	11	12	27
Period 1/1/17 to 12/31/17							
Average monthly benefit	\$ 608	\$ 1,113	\$ 1,168	\$ 1,554	\$ 2,414	\$ 3,041	\$ 4,732
Average final average salary	\$ 7,626	\$ 6,255	\$ 4,107	\$ 3,824	\$ 4,909	\$ 4,502	\$ 5,605
Number of retired members	12	13	16	18	8	9	22
Period 1/1/18 to 12/31/18							
Average monthly benefit	\$ 445	\$ 992	\$ 1,091	\$ 2,184	\$ 2,033	\$ 3,543	\$ 4,438
Average final average salary	\$ 5,497	\$ 5,913	\$ 4,057	\$ 5,639	\$ 3,948	\$ 5,185	\$ 5,641
Number of retired members	5	7	19	14	17	9	31
Period 1/1/19 to 12/31/19							
Average monthly benefit	\$ 628	\$ 1,313	\$ 788	\$ 1,675	\$ 2,166	\$ 4,016	\$ 4,414
Average final average salary	\$ 8,882	\$ 8,164	\$ 3,028	\$ 4,052	\$ 4,230	\$ 5,991	\$ 5,568
Number of retired members	13	11	15	14	11	9	20
Period 1/1/20 to 12/31/20							
Average monthly benefit	\$ 641	\$ 1,015	\$ 945	\$ 1,974	\$ 2,340	\$ 4,115	\$ 4,252
Average final average salary	\$ 8,277	\$ 5,351	\$ 3,211	\$ 4,895	\$ 4,602	\$ 6,403	\$ 5,377
Number of retired members	13	3	7	14	7	10	21
Period 1/1/21 to 12/31/21							
Average monthly benefit	\$ 696	\$ 1,344	\$ 1,073	\$ 2,166	\$ 2,906	\$ 4,449	\$ 4,648
Average final average salary	\$ 9,195	\$ 7,749	\$ 3,735	\$ 5,348	\$ 4,966	\$ 6,872	\$ 6,092
Number of retired members	10	3	12	9	13	6	31

STATISTICAL

Required Schedules (GASB No. 44)

Principal Participating Employers Current Year and Nine Years Ago

Table II

	December 31, 2021			December 31, 2012		
<u>Participating Government</u>	<u>Covered Employees'</u>	<u>Rank</u>	<u>Percentage of Total System</u>	<u>Covered Employees'</u>	<u>Rank</u>	<u>Percentage of Total System</u>
Chicago Park District Retirement Board of the Park Employees' Annuity and Benefit Fund	2,686	1	99.70%	3,042	1	99.64%
	<u>8</u>	2	<u>0.30</u>	<u>11</u>	2	<u>0.36</u>
Total (3 Governments)	<u>2,694</u>		<u>100.00%</u>	<u>3,053</u>		<u>100.00%</u>

Changes in Fiduciary Net Position Last Ten Years (Dollars in Thousands)

Table III

	For the years ended December 31,								Six Months Ended
	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>12/31/12</u>
ADDITIONS									
Employer Contributions	\$83,349	\$33,940	\$27,682	\$27,638	\$20,921	\$30,890	\$30,589	\$11,226	\$ 5,268
Employee Contributions	12,227	12,635	12,665	12,126	13,675	12,246	12,369	10,831	5,371
Investment Income (Loss)	<u>53,109</u>	<u>28,132</u>	<u>52,033</u>	<u>(17,129)</u>	<u>51,174</u>	<u>31,023</u>	<u>8,912</u>	<u>27,591</u>	<u>24,957</u>
Total Additions	148,685	74,707	92,380	22,635	85,770	74,159	51,870	49,648	35,596
DEDUCTIONS (see Table IV)									
Benefit Payments	78,536	77,762	76,466	73,801	72,252	71,568	68,554	67,807	32,303
Refunds	2,067	1,608	2,084	2,726	5,886*	2,509	2,048	2,729	978
Administrative Expenses	<u>1,718</u>	<u>1,599</u>	<u>1,529</u>	<u>1,501</u>	<u>1,682</u>	<u>1,538</u>	<u>1,534</u>	<u>1,459</u>	<u>724</u>
Total Deductions	82,321	80,969	80,079	78,028	79,820	75,615	72,136	71,995	34,005
Changes in Fiduciary Net Position	<u>\$66,364</u>	<u>\$ (6,262)</u>	<u>\$12,301</u>	<u>\$ (55,393)</u>	<u>\$ 5,950</u>	<u>\$ (1,456)</u>	<u>\$ (20,266)</u>	<u>\$ (22,347)</u>	<u>\$ 1,591</u>

*Includes refund of increased contributions and reduced disability benefits per court order.

STATISTICAL

Required Schedules (GASB No. 44)

Benefit and Refund Deductions from Fiduciary Net Position by Type

Table IV

Last Ten Years

(Dollars in Thousands)

TYPE OF BENEFIT	For the years ended December 31,									Six Months Ended
	2021	2020	2019	2018	2017	2016	2015	2014	2013	12/31/12
Age and Service Benefits										
Retirees	\$65,656	\$64,754	\$63,644	\$61,178	\$59,488	\$58,968	\$56,095	\$55,520	\$54,256	\$26,429
Spousal	12,126	12,298	12,188	12,108	12,253	12,044	11,823	11,666	11,320	5,529
Children	17	21	18	17	16	18	17	21	22	11
Death Benefits	278	311	229	229	305	255	317	280	266	137
Disability Benefits										
Member-Duty	13	97	95	49	(27)	99	94	39	54	9
Member-Non-Duty	446	281	292	220	217	184	208	281	302	188
Total Benefits	<u>\$78,536</u>	<u>\$77,762</u>	<u>\$76,466</u>	<u>\$73,801</u>	<u>\$72,252</u>	<u>\$71,568</u>	<u>\$68,554</u>	<u>\$67,807</u>	<u>\$66,220</u>	<u>\$32,303</u>
TYPE OF REFUND										
Separation	\$ 1,947	\$ 1,592	\$ 1,792	\$ 2,590	\$ 1,835	\$ 2,228	\$ 1,493	\$ 2,427	\$ 2,033	\$ 789
Death	120	16	292	136	191	281	555	302	83	189
Refund of increased contributions and reduced disability benefits	-	-	-	-	3,860	-	-	-	-	-
Total Refunds	<u>\$ 2,067</u>	<u>\$ 1,608</u>	<u>\$ 2,084</u>	<u>\$ 2,726</u>	<u>\$ 5,886</u>	<u>\$ 2,509</u>	<u>\$ 2,048</u>	<u>\$ 2,729</u>	<u>\$ 2,116</u>	<u>\$ 978</u>

Retired Members by Type of Benefit

Table V

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement		
		1	2	3
\$ 1 - \$ 250	140	80	51	9
251 - 500	247	183	64	-
501 - 750	245	180	65	-
751 - 1,000	198	147	51	-
1,001 - 1,250	189	133	56	-
1,251 - 1,500	164	113	51	-
1,501 - 1,750	126	82	44	-
1,751 - 2,000	129	69	60	-
Over 2,000	<u>1,314</u>	<u>1,117</u>	<u>197</u>	<u>-</u>
Total	<u>2,752</u>	<u>2,104</u>	<u>639</u>	<u>9</u>

Type of Retirement

- 1 Normal Retirement for age and service, including incentive retirements
- 2 Beneficiary payment, normal surviving spouse
- 3 Beneficiary payments, child(ren)