

Comprehensive Annual Financial Report

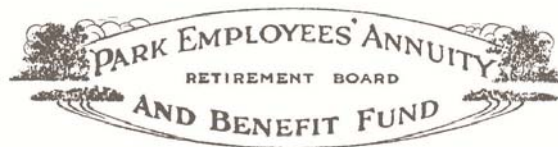
of the

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, 2015 and 2014

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 Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2014

Executive Director/CEO

INTRODUCTION

Transmittal Letter

TRUSTEES

Pamela A. Munizzi, President
Robert Geraghty, Vice President
Edward L. Affolter, Secretary
Brian Biggane
Frank C. Hodorowicz
Steven J. Lux
Cecilia Prado

Retirement Board of the PARK EMPLOYEES' ANNUITY AND BENEFIT FUND

55 East Monroe Street
Suite 2720
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Dean J. Niedospial
Executive Director

Jaime L. McCabe
Comptroller

June 28, 2016

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

Dear Members of the Retirement Board:

The Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Fund) presents its Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2015. The accuracy of the information contained in the report, including all disclosures, is the sole responsibility of the Fund. The intent of the CAFR is to present fairly the financial condition of the Fund and its related results of operations. The statements and disclosures contained in the CAFR are necessary to assist the Fund's participants, taxpayers and other interested parties towards fully understanding the Fund's financial condition. Readers of the CAFR are directed to review the Management Discussion and Analysis (MD&A) narrative of the Financial Section for important overview and analysis.

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 three members are appointed by the Chicago Park District Board of Commissioners 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.

INTRODUCTION

Overview

At December 31, 2015, total Fund membership, including active, inactive, disability, retired members and beneficiaries is 10,060. The Fund's fiduciary net position decreased by \$20.3 million during 2015 resulting in a net position restricted for pension benefits of \$393.1 million. The additions to the Fund, which include employer and employee contributions and net investment income, totaled \$51.9 million. During 2015, the Chicago Park District contributed a supplemental payment of \$12.5 million, in addition to the required tax levy contribution. The total Fund deductions for 2015 totaled \$72.1 million, which is relatively consistent with the total deductions from prior year. Fund deductions include 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 CAFR 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, 2015, the actuarial value of assets is \$395,652,106 and the actuarial accrued liability is \$910,260,360. The funded ratio at December 31, 2015 is 43.5% compared to 43.7% for the year ended December 31, 2014. The unfunded actuarial accrued liability at December 31, 2015 amounted to \$514,608,254. The calculations of these figures are discussed further within the note disclosures of the Financial Section or 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, 2015, the fair value of investments was \$369,309,533, which compares to \$398,052,964 as of December 31, 2014. As of December 31, 2015, the Fund's annual investment rate of return was 1.9% compared to 6.9% for December 31, 2014. The Fund's 1.9% rate of return outperformed its performance benchmark by approximately 50 basis points and outperformed the peer median by approximately 230 basis points. A more enhanced discussion about the Fund's performance history can be found in the Investment Section of this report.

INTRODUCTION

Technology

The Fund continues to review and upgrade its information systems. In 2014, the Fund determined that upgrading its existing benefit system is the most efficient option. The upgrade project was started towards the end of 2014 and is nearly complete. The Fund's nightly backup system has been upgraded and is now backed up in real time. It also allows the Fund to reduce the duration of downtime given any disaster scenario. The Fund periodically updates its website and allows visitors to access Board Meeting minutes, Comprehensive Annual Financial Reports, Investment Information, benefit forms, as well as keeping visitors apprised of the latest Pension Fund news.

Legislative Matters

On January 7, 2014, then Governor Quinn signed Senate Bill 1523 into law, which is now Public Act 098-0622. This legislation provides sustainable funding that addresses the long-term health of the Fund. It affects all stakeholders: the employer, employees and retirees and is phased in over a five-year period. A summary of the Public Act can be found on the Fund's website.

On October 14, 2015, the Fund was served a summons and complaint, which challenges Public Act 098-0622, on the grounds that this amendment to the Illinois Pension Code diminishes and impairs the benefits of participants in the Fund. On April 25, 2016, the Fund filed its answer to the complaint.

Public Act 098-0641 amended the Illinois Pension Code with respect to the Chicago Municipal and Laborers' Pension Funds in various ways that are similar to the amendments made to the Fund by Public Act 098-0622. On March 24, 2016, the Illinois Supreme Court issued an opinion striking down Public Act 098-0641 because it violated the Pension Protection clause of the Illinois Constitution, diminished, and impaired the benefits of participants in the funds in question. It is near certain that, the Circuit Court will find that Public Act 098-0622 is unconstitutional.

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 comprehensive annual financial report for the year ended December 31, 2014. In order to be awarded a Certificate of Achievement, a public pension fund must publish an easily readable and efficiently organized comprehensive annual 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 comprehensive annual 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

On March 16, 2016, elected Trustee Mario Gianfortune submitted his resignation from the Board of Trustees. At the March 17, 2016 Board of Trustees meeting, in accordance with Article 12-Section 157 "Board Vacancy", the remaining elected Trustees appointed Chicago Park District employee Brian Biggane to fill the vacancy created by the resignation.

The annual election for an employee representative to the Retirement Board was held on Friday, June 24, 2016. Brian Biggane was elected for a four-year term beginning July 1, 2016.

Acknowledgments

All the statistical and financial information compiled and presented in this CAFR is due to the combined efforts of the administrative staff of the Fund under the direction of the Executive Director, Dean J. Niedospial, and the Comptroller, Jaime L. McCabe. Their efforts are hereby acknowledged with thanks and appreciation.

On behalf of the Retirement Board,



Pamela A. Munizzi
President

**PARK EMPLOYEES' ANNUITY AND BENEFIT FUND
MEMBERS**

as of December 31, 2015

Elected by the Employees

Mario Gianfortune
Term expires June 30, 2016

Edward L. Affolter
Term expires June 30, 2017

Robert Geraghty
Term expires June 30, 2018

Frank C. Hodorowicz
Term expires June 30, 2019

Appointed by the Chicago Park District Board of Commissioners

Steven J. Lux

Pamela A. Munizzi

Cecilia Prado

OFFICERS

Pamela A. Munizzi, President
Robert Geraghty, Vice President
Edward L. Affolter, Secretary

ADMINISTRATIVE STAFF

Dean J. Niedospial, Executive Director
Jaime L. McCabe, Comptroller

CONSULTANTS

Jacobs, Burns, Orlove & Hernandez, Attorney

Bansley and Kiener, L.L.P., Auditor

The Segal Company, Consulting Actuary

Marquette Associates, Inc., Investment Consultant

CUSTODIAN

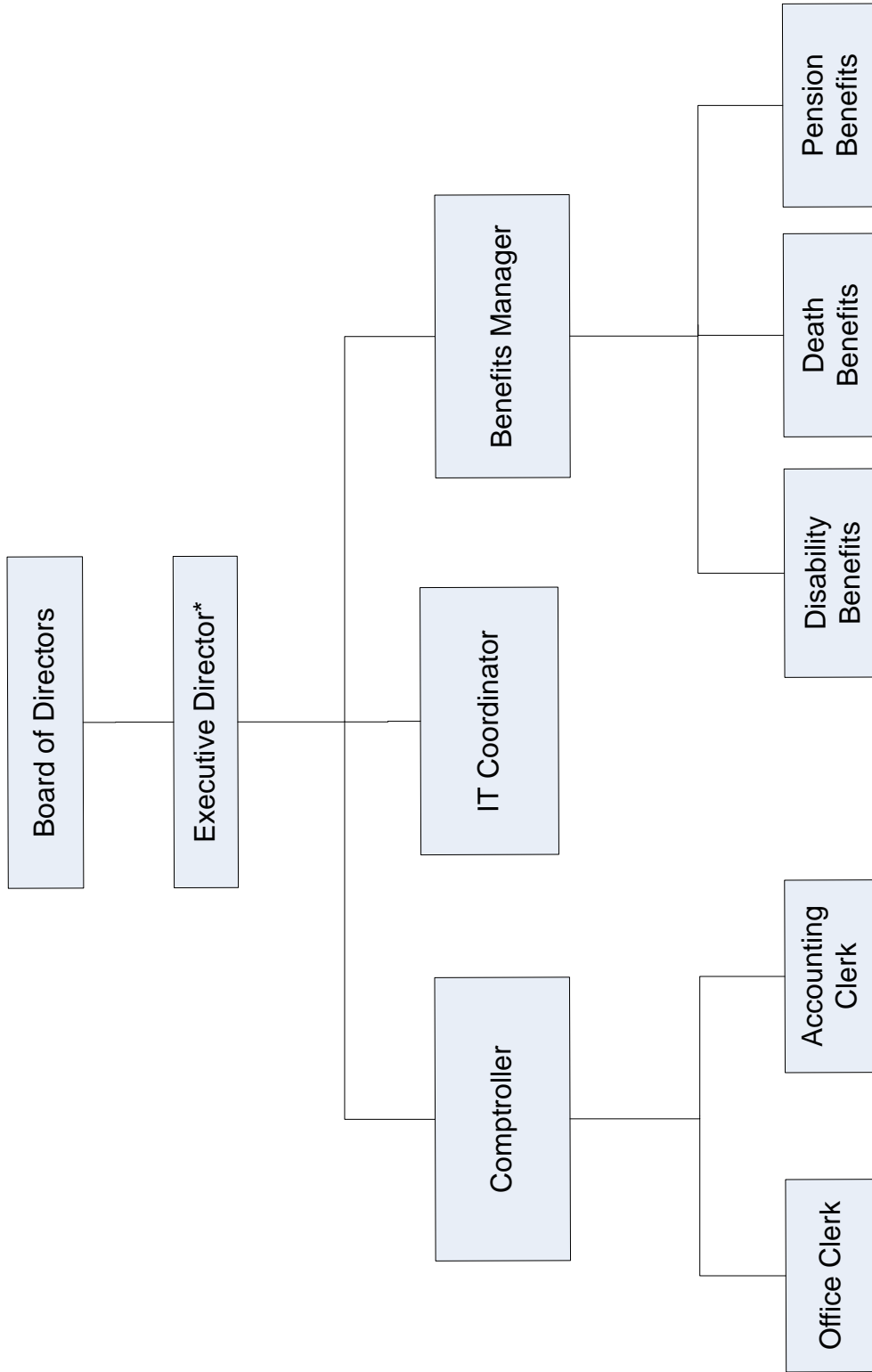
The Northern Trust Company of Chicago

INVESTMENT ADVISORS

Ariel Investments – Chicago
Chicago Equity Partners – Chicago
Entrust Capital, Inc. – New York
Great Lakes Advisors, LLC – Chicago
HarbourVest Partners, LLC – Boston
Industry Funds Management (IFM) – New York
Invesco – Atlanta
LM Capital Group, LLC – San Diego
Lombardia Capital Partners, LLC - Pasadena
MacKay Shields, LLC – New York
Mesirow Financial Capital Partners – Chicago
Goldpoint Partners, LLC – New York
Northern Trust Quantitative Advisors – Chicago
PineBridge Investments – New York
Principal Global Investors – Des Moines
RBC Global Asset Management – Minneapolis
UBS Realty Investors, LLC – Hartford
ULLICO Investment Company – Washington D.C.
William Blair & Company, LLC - 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. (Please see Schedule of Annual Investment Expenses for a listing of managers and other service providers).

Report of the Independent Auditor

BANSLEY AND KIENER, L.L.P.
Certified Public Accountants
O'Hare Plaza
8745 West Higgins Road, Suite 200
Chicago, Illinois 60631
Area Code 312.263.2700

The Retirement Board
Park Employees' and Retirement Board Employees'
Annuity and Benefit Fund of Chicago
Chicago, Illinois

We have audited the statements of fiduciary net position of the Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Fund), a Component Unit/Fund of the Chicago Park District, as of December 31, 2015 and 2014, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of Park Employees' and Retirement Board Employees' Annuity and Benefit Fund of Chicago as of December 31, 2015 and 2014, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Report of the Independent Auditor (Continued)

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other supplementary information on pages 9 through 13 and pages 28 and 29 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The schedules of tax levies receivable, administrative and general expenses, professional expenses, and investment expenses are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedules of tax levies receivable, administrative and general expenses, professional expenses, and investment expenses are the responsibility of management and were derived from and relate 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 information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Bansley and Kiener, L.L.P.
Certified Public Accountants
May 31, 2016

Management's Discussion and Analysis

Management Discussion and Analysis for the Year Ended December 31, 2015

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, 2015 and 2014. 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.

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, the Schedule of Employer's Net Pension Liability, 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 decreased during the year by \$20.3 million or 4.9% compared to a decrease of \$22.3 million or 5.1% for the year ended December 31, 2014.
- b) The Fund's annual investment return of 1.9% outperformed the portfolio benchmark return of 1.4%.
- c) The Fund's three-year rate of return of 8.8% outperformed the portfolio benchmark return of 7.4%.
- d) The Fund's five-year rate of return of 7.9% outperformed the portfolio benchmark return of 6.6%.
- e) The Fund's ten-year rate of return of 5.8% outperformed the portfolio benchmark return of 5.4%.
- f) For the year ended December 31, 2015, the additions to the Fund's fiduciary net position of \$51.9 million is \$2.2 million more than the year ended December 31, 2014 additions.
- g) For the year ended December 31, 2015, the deductions to the Fund's fiduciary net position of \$72.1 million increased slightly when compared to the deductions for the year ended December 31, 2014.
- h) The Fund's actuarially computed funded ratio is 43.5% at December 31, 2015, which is 0.2% less than at December 31, 2014.

Management’s Discussion and Analysis (Continued)

Net Position Restricted for Pension Benefits

The Fund’s net position restricted for pension benefits at December 31, 2015 is \$393,155,338. This is \$20,266,378 less than the December 31, 2014 net position restricted for pension benefits of \$413,421,716. This compares to a decrease of \$22,346,963 for the year ended December 31, 2014. The Fund’s investment portfolio, included in the total assets, increases and decreases from year to year. This fluctuation is directly related to the strength of the financial markets at the financial statement date. The following tables are comparative summaries of fiduciary net position restricted for pension benefits:

Statements of Fiduciary Net Position – Current Year

	<u>December 31, 2015</u>	<u>December 31, 2014</u>	Increase (Decrease)
Total Assets	\$ 439,880,016	\$ 460,221,616	\$ (20,341,600)
Total Liabilities	<u>46,724,678</u>	<u>46,799,900</u>	<u>(75,222)</u>
Net Position	<u>\$ 393,155,338</u>	<u>\$ 413,421,716</u>	<u>\$ (20,266,378)</u>

Statements of Fiduciary Net Position – Prior Period

	<u>December 31, 2014</u>	<u>December 31, 2013</u>	Increase (Decrease)
Total Assets	\$ 460,221,616	\$ 478,892,017	\$ (18,670,401)
Total Liabilities	<u>46,799,900</u>	<u>43,123,338</u>	<u>3,676,562</u>
Net Position	<u>\$ 413,421,716</u>	<u>\$ 435,768,679</u>	<u>\$ (22,346,963)</u>

Changes in Fiduciary Net Position

For the year ended December 31, 2015 investment income was \$8,911,726 as compared to investment income of \$27,591,038 for the year ended December 31, 2014. The decrease in investment income is primarily a result of a decrease in the Fund’s investment performance from 6.9% for the year ended December 31, 2014 to 1.9% for the year ended December 31, 2015. During 2015, the employer contributions include a supplemental payment of \$12.5 million made by the Chicago Park District and employee contributions were 10% in accordance with Public Act 098-0622, which increased the Fund’s total contribution income. However, the Fund still experienced a cash flow shortage and liquidated portfolio assets to supplement benefits payments made during the year. The Fund’s benefit payments in 2015 have remained relatively consistent to the prior year, as the number of retirees has not fluctuated much over the past year. 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, 2015</u>	<u>December 31, 2014</u>	Increase (Decrease)
ADDITIONS			
Employer contributions	\$ 30,588,976	\$ 11,225,438	\$ 19,363,538
Employee contributions	12,368,636	10,831,434	1,537,202
Net investment income (includes security lending activities)	<u>8,911,726</u>	<u>27,591,038</u>	<u>(18,679,312)</u>
Total additions	<u>\$ 51,869,338</u>	<u>\$ 49,647,910</u>	<u>\$ 2,221,428</u>

Management’s Discussion and Analysis (Continued)

Statements of Changes in Fiduciary Net Position – Current Year (Continued)

	<u>December 31, 2015</u>	<u>December 31, 2014</u>	Increase (Decrease)
DEDUCTIONS			
Retirement benefits	\$ 56,094,931	\$ 55,519,537	\$ 575,394
Spousal benefits	11,823,316	11,665,763	157,553
Child benefits	17,100	20,800	(3,700)
Disability benefits	301,494	321,051	(19,557)
Death benefits	<u>317,000</u>	<u>279,500</u>	<u>37,500</u>
Total benefits	68,553,841	67,806,651	747,190
Refund of contributions	2,048,175	2,729,391	(681,216)
Administrative and general expenses	<u>1,533,700</u>	<u>1,458,831</u>	<u>74,869</u>
Total deductions	<u>\$ 72,135,716</u>	<u>\$ 71,994,873</u>	<u>\$ 140,843</u>
Net increase (decrease)	(20,266,378)	(22,346,963)	2,080,585
Beginning of year net position	<u>413,421,716</u>	<u>435,768,679</u>	<u>(22,346,963)</u>
End of year net position	<u>\$393,155,338</u>	<u>\$413,421,716</u>	<u>\$ (20,266,378)</u>

Statements of Changes in Fiduciary Net Position – Prior Period

	<u>December 31, 2014</u>	<u>December 31, 2013</u>	Increase (Decrease)
ADDITIONS			
Employer contributions	\$ 11,225,438	\$ 15,804,452	\$ (4,579,014)
Employee contributions	10,831,434	10,732,730	98,704
Net investment income (includes security lending activities)	<u>27,591,038</u>	<u>66,642,528</u>	<u>(39,051,490)</u>
Total additions	<u>\$ 49,647,910</u>	<u>\$ 93,179,710</u>	<u>\$ (43,531,800)</u>
DEDUCTIONS			
Retirement benefits	\$ 55,519,537	\$ 54,256,588	\$ 1,262,949
Spousal benefits	11,665,763	11,319,614	346,149
Child benefits	20,800	21,619	(819)
Disability benefits	321,051	355,983	(34,932)
Death benefits	<u>279,500</u>	<u>266,000</u>	<u>13,500</u>
Total benefits	67,806,651	66,219,804	1,586,847
Refund of contributions	2,729,391	2,116,163	613,228
Administrative and general expenses	<u>1,458,831</u>	<u>1,464,081</u>	<u>(5,250)</u>
Total deductions	<u>\$ 71,994,873</u>	<u>\$ 69,800,048</u>	<u>\$ 2,194,825</u>
Net increase (decrease)	(22,346,963)	23,379,662	(45,726,625)
Beginning of year net position	<u>435,768,679</u>	<u>412,389,017</u>	<u>23,379,662</u>
End of year net position	<u>\$413,421,716</u>	<u>\$435,768,679</u>	<u>\$ (22,346,963)</u>

Management's Discussion and Analysis (Continued)

Actuarial Update

The actuarial valuations for the years ended December 31, 2015 and 2014 reflect the 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 43.5% at December 31, 2015, which is 0.2% less than at December 31, 2014. The funded ratio is based on the actuarial value of assets over the actuarial accrued liability.

Investment Performance

The Fund's annual investment return for the year ended December 31, 2015 was 1.9%, which is lower than 6.9% reported for the year ended December 31, 2014 and lower than the year ended December 31, 2013, which reported a 16.9% investment return. The Fund's 1.9% return for 2015 outperformed its performance benchmark by approximately 50 basis points and outperformed the peer median by approximately 230 basis points. The Fund's portfolio performance for the past five years ranked in the upper seventh percentile as measured against its peers. Over the trailing three-year and five-year periods, the Fund outperformed the performance benchmark by roughly 140 and 130 basis points, respectively. Over the trailing ten-year period, the Fund returned 5.8%, outperforming the performance benchmark by 40 basis points, however, underperforming the 7.5% actuarial rate of return.

Litigation Matters

Public Act 098-0622, which took effect January 1, 2015, affected all stakeholders: the employer, employees and retirees and is phased in over a five-year period. The main objective of the amendment is to provide sustainable funding that will secure the long-term health of the Fund.

Beginning in 2015, the multiplier for employer contributions increased to 1.70 times the total contribution by employees two years earlier. The multiplier increases in the year 2017 to 2.30 times the total contribution by employees and in the year 2019 to 2.90 times the total contribution by employees. The 2.90 multiplier will remain in effect until the Fund is 90% funded, after which time the Employer obligation is the lesser of the 2.90 multiplier or the amount necessary to maintain 90% funding. In addition to the increased multiplier, the Employer must make supplemental contributions in 2015 of \$12.5 million; in 2016 of \$12.5 million; and in 2019 of \$50 million.

Under Public Act 098-0622, employee contributions increased to 10% in 2015; 11% in 2017; and 12% in 2019. Employee contributions will remain at 12% until the Fund is 90% funded, at which time employee contributions will decrease to 10.5% and remain there as long as the Fund is 90% funded. For retirees who are eligible, the annual increase, or "COLA", is suspended for 2015, 2017 and 2019. In years 2016, 2018, 2020 and thereafter, the increase will be the lesser of ½ the Consumer Price Index-Urban ("CPI-U") or 3% of the annuity granted at retirement.

On October 14, 2015, the Fund was served a summons and complaint, which challenges Public Act 098-0622, on the grounds that this amendment to the Illinois Pension Code diminishes and impairs the benefits of participants in the Fund. On April 25, 2016, the Fund filed its answer to the complaint.

On March 24, 2016, the Illinois Supreme Court issued an opinion striking down Public Act 098-0641 because it violated the Pension Protection clause of the Illinois Constitution, diminished, and impaired the benefits of participants in the funds in question. Public Act 098-0641 amended the Illinois Pension Code with respect to the Chicago Municipal and Laborers' Pension Funds in various ways that are similar to the amendments made to the Fund by Public Act 098-0622. It is near certain that, the Circuit Court will find that Public Act 098-0622 is unconstitutional.

Management's Discussion and Analysis (Continued)

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 55 East Monroe Street, Suite 2720, Chicago, Illinois 60603.

Financial Statements

Statements of Fiduciary Net Position

December 31, 2015 and 2014

ASSETS	<u>2015</u>	<u>2014</u>
Receivables		
Contributions from employer	\$ 17,957,112	\$ 11,128,124
Employee contributions	497,386	385,754
Workers' compensation offset of duty disability benefits, net of allowance for loss of \$16,940 in 2015 and \$16,076 in 2014	90,965	131,038
Due from broker	1,357,269	75,067
Accrued investment income	452,093	501,640
Miscellaneous receivables	<u>65,232</u>	<u>75,420</u>
	<u>20,420,057</u>	<u>12,297,043</u>
Investments, at fair value		
Common and preferred stocks	53,062,089	60,342,493
Commons stocks – foreign	13,620,861	-
Fixed income	62,725,711	69,958,140
Collective investment funds	93,042,804	100,312,592
Mutual funds	16,017,830	12,613,552
Hedged equity	23,565,871	35,663,184
Real estate	41,728,500	46,031,161
Private equity	39,901,128	50,163,093
Infrastructure	20,826,213	-
Short-term investments	<u>4,818,526</u>	<u>22,968,749</u>
	<u>369,309,533</u>	<u>398,052,964</u>
Invested securities lending collateral	<u>45,712,100</u>	<u>45,579,952</u>
Property and equipment – net	<u>65,251</u>	<u>40,335</u>
Prepaid annuity benefits	4,308,029	4,190,601
Other prepaid expenses	<u>65,046</u>	<u>60,721</u>
	<u>4,373,075</u>	<u>4,251,322</u>
Total assets	<u>439,880,016</u>	<u>460,221,616</u>
 LIABILITIES		
Accounts payable	395,893	321,852
Accrued benefits payable	405,881	725,214
Accrued payroll liabilities	14,969	13,117
Unamortized rent abatement	79,051	87,022
Securities lending collateral	45,712,100	45,579,952
Due to broker	<u>116,784</u>	<u>72,743</u>
	<u>46,724,678</u>	<u>46,799,900</u>
Net position restricted for pension benefits	<u>\$ 393,155,338</u>	<u>\$ 413,421,716</u>

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

Financial Statements

Statements of Changes in Fiduciary Net Position

Years ended December 31, 2015 and 2014

	<u>2015</u>	<u>2014</u>
Additions		
Contributions		
Employer contributions	\$ 30,588,976	\$ 11,225,438
Employee contributions	<u>12,368,636</u>	<u>10,831,434</u>
Total contributions	<u>42,957,612</u>	<u>22,056,872</u>
Investment income		
Net appreciation in fair value of investments	5,476,079	24,707,166
Interest	2,253,469	2,483,215
Dividends	1,528,594	1,075,809
Partnership and real estate income	<u>1,789,661</u>	<u>1,644,343</u>
	11,047,803	29,910,533
Less investment expenses	<u>2,224,190</u>	<u>2,420,013</u>
Net income from investing activities	<u>8,823,613</u>	<u>27,490,520</u>
Security lending activities		
Securities lending income	148,071	107,507
Borrower rebates	20,310	24,043
Bank fees	<u>(80,418)</u>	<u>(59,774)</u>
Net income from securities lending activities	<u>87,963</u>	<u>71,776</u>
Other income	<u>150</u>	<u>28,742</u>
Total additions	<u>51,869,338</u>	<u>49,647,910</u>
Deductions		
Benefits		
Annuity payments	67,935,347	67,206,100
Disability and death benefits	<u>618,494</u>	<u>600,551</u>
Total benefits	<u>68,553,841</u>	<u>67,806,651</u>
Refund of contributions	<u>2,048,175</u>	<u>2,729,391</u>
Administrative and general expenses	<u>1,533,700</u>	<u>1,458,831</u>
Total deductions	<u>72,135,716</u>	<u>71,994,873</u>
Net decrease	(20,266,378)	(22,346,963)
Net position restricted for pension benefits		
Beginning of year	<u>413,421,716</u>	<u>435,768,679</u>
End of year	<u>\$ 393,155,338</u>	<u>\$ 413,421,716</u>

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

Notes to Financial Statements

Note 1 – Fund Description and Contribution Information

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 Fund is considered a component unit of the Chicago Park District's financial statements as a pension trust fund. The Fund is administered in accordance with the Illinois Compiled Statutes. The defined benefits as well as the employer and employee contribution levels of the Fund are mandated by Illinois State Statutes and may be amended only by the Illinois legislature. The Fund provides retirement, disability and death benefits to fund members and beneficiaries. At December 31, 2015 and 2014, Fund membership consists of:

	<u>2015</u>	<u>2014</u>
Retirees and beneficiaries currently receiving benefits	2,876	2,891
Current employees	3,063	2,973
Vested terminated members entitled to benefits	145	147

Pension legislation (Public Act 96-0889) was approved during 2010 and establishes two distinct classes of membership with different retirement eligibility conditions and benefit provisions. For convenience, the Fund uses a tier concept to distinguish these groups, generally:

Tier 1 – Participants that became members before January 1, 2011.

Tier 2 – Participants that first became members on or after January 1, 2011.

Tier 1 employees attaining the age of 50 with at least ten 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 employees attaining the age 62 with at least ten years or more of creditable service are entitled to receive a discounted service retirement pension. Employees attaining the age 67 or more, with at least 10 years of service are entitled to receive a non-discounted 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 10 years of service prior to retirement. Pensionable salary is limited to \$111,572 in 2015 and \$110,631 in 2014.

Post-Retirement Increase

Tier 1: An employee annuitant under Tier 1 who retires at age 60 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 age 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 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. 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.

Notes to Financial Statements (Continued)

Note 1 – Fund Description and Contribution Information (Continued)

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% of the highest salary or 75% of the granted annuity. With 20 years of service the entitlement becomes the higher of the eligible money purchase calculation or 50% of retiree's annuity at 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% 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 of three percent compounded, 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.

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% 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% 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

Covered employees are required by state statutes to contribute 9.0 percent of their salary to the Fund. If a covered employee leaves employment before the age of 55, accumulated employee contributions are refundable without interest. The District is required by state statute to contribute the remaining amounts necessary to finance the requirements of the Fund on an actuarially funded basis. It is required to levy a tax at a rate not more than an amount equal to the total amount of contributions by the employees to the Fund made in the fiscal year two years prior to the year for which the annual applicable tax is levied, multiplied by a factor of 1.1 annually. The District has no legal obligation to fund pension costs above that allowed by statute.

Notes to Financial Statements (Continued)

Note 1 – Fund Description and Contribution Information (Continued)

Benefit and Contribution Changes – Public Act 98-0622

Public Act 98-0622, which took effect January 1, 2015, was signed by the governor in January 2014 and includes benefit changes for both Tier 1 and Tier 2 members as well as increases the employer and employee contributions.

The retirement age is decreased for Tier 2 employees from 67 to 65, and from 62 to 60 for early retirement. The minimum retirement age for Tier 1 employees increases from 50 to 58 for those employees younger than 45 on January 1, 2015.

The annual annuity increase (AI) for current retirees changed to ½ of annual unadjusted percentage increase in the Consumer Price Index-Urban (CPI) or 3%, whichever is less, utilizing simple interest. Payment of AI is suspended in years 2015, 2017, and 2019. Spousal increase is not affected.

Duty disability benefits will decrease to 74% of the employees’ annual salary in 2015, 73% in 2017 and 72% in 2019.

Beginning in 2015, the multiplier for employer contributions will increase as follows:

<u>Year</u>	<u>Multiplier</u>
2015	1.7
2017	2.3
2019	2.9

The 2.9 multiplier remains in effect until the Fund is 90% funded, after which time the Employer obligation is the lesser of the 2.9 multiplier or the amount necessary to maintain 90% funding.

In addition, the Employer shall contribute to the Fund the following specified amounts:

<u>Year</u>	<u>Additional Contribution</u>
2015	\$12,500,000
2016	\$12,500,000
2019	\$50,000,000

Beginning in 2015, employee contributions will increase as follows:

<u>Year</u>	<u>Contribution Rate</u>
2015	10%
2017	11%
2019	12%

Employee contributions will remain at 12% until the Fund is 90% funded, at which time employee contributions will decrease to 10.5% and remain 10.5% as long as the Fund is 90% funded.

Net Pension Liability of Participating Employer

The components of the net pension liability as of December 31, 2015, were as follows:

Total pension liability	\$910,260,360
Plan fiduciary net position	393,155,338
Employer’s net pension liability	517,105,022
Plan fiduciary net position as a percentage of net pension liability	43.19%

Notes to Financial Statements (Continued)

Note 1 – Fund Description and Contribution Information (Continued)

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2015, using actuarial assumptions applied to all periods included in the measurement.

Inflation	2.75%
Salary increase	15% to 2.75%
Investment rate of return	7.50%, net of investment expense
Cost of living adjustments	Retirees - lesser of 3% and ½ CPI of the original benefit Beneficiary – 3% compounded

Post-retirement mortality rates were based on RP – 2000 Combined Healthy Mortality Tables set forward 1 year for females with generational projection from 2003 using scale AA for mortality improvements. Pre-retirement mortality rates are the same as post-retirement rates.

The actuarial assumptions used in the December 31, 2015 valuation were based on the results of an actuarial experience study for a five year period ending June 30, 2012.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate 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 are 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, 2015 are summarized in the following table:

	<u>Target allocation</u>	<u>Long-term expected real rate of return</u>
Fixed income	20.5%	1.75%
Domestic equity	32.5%	6.75%
International equity	14.0%	7.45%
Emerging market	2.0%	9.85%
Risk parity	3.0%	3.75%
Hedge funds	7.0%	3.75%
Private equity	7.0%	11.50%
Real assets	14.0%	4.55%

Discount Rate

The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that Employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. 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. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Notes to Financial Statements (Continued)

Note 1 – Fund Description and Contribution Information (Continued)

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability as of December 31, 2015, calculated using the discount rate of 7.5%, as well as what the net pension liability would be if it was calculated using a discount rate that is 1 percentage point lower (6.5%) or 1 percentage point higher (8.5%) than the current rate:

<u>Net pension liability</u>	1% Decrease <u>(6.5%)</u>	Current Discount Rate <u>(7.5%)</u>	1% Increase <u>(8.5%)</u>
December 31, 2015	\$614,722,758	\$517,105,022	\$435,018,062

Litigation – Public Act 098-0622

During 2015, the provisions of Public Act 098-0622 were implemented. However, pending litigation related to the constitutionality of Public Act 098-0622 may result in its nullification. The Fund description and contribution information does not reflect the impact of the reversal of Public Act 098-0622. See Note 10.

Note 2 – Summary of Significant Accounting Policies

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.

Basis of Accounting

The financial statements are prepared using the accrual basis of accounting. Employee and employer contributions are recognized when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Fund.

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.

Notes to Financial Statements (Continued)

Note 2 – Summary of Significant Accounting Policies (Continued)

Risks 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.

Methods Used to Value Investments

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 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.

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.

Recently Issued Accounting Pronouncements

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, was established to improve the standards for measurement, recognition and display of pension expense, liabilities and assets of employers of the plan. GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date- an amendment of GASB No. 68*, addresses an issue regarding application of the transition provisions of GASB No. 68. The Fund adopted both GASB 68 and GASB 71 during fiscal year 2015. The adoption of GASB No. 68 and 71 had no effect on the financial statements of the Fund, but will affect the financial statements of the Chicago Park District.

GASB Statement No. 72, *Fair Value Measurement and Application*, defines fair value and describes how fair value should be measured, what assets should be measured at fair value, and what information about fair value should be disclosed in the notes to the financial statements. The provisions for GASB 72 are effective for fiscal years beginning after June 15, 2015.

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement No. 68, and Amendments to Certain Provisions of GASB Statements No. 67 and 68*, was established to improve the usefulness of information about pensions included in the general purpose external financial reports of state and local governments for making decisions and assessing accountability. The Fund is currently evaluating the financial statement impact of GASB Statement No. 73. If applicable, this statement will be implemented for the year ended December 31, 2016.

GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, was established to identify the hierarchy of generally accepted accounting principles (GAAP). This hierarchy consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting these principles. This statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within the scope of authoritative GAAP. The provisions for GASB 76 are effective for fiscal years beginning after June 15, 2016.

Notes to Financial Statements (Continued)

Note 2 – Summary of Significant Accounting Policies (Continued)

Recently Issued Accounting Pronouncements (Continued)

GASB Statement No. 79, *Certain External Investment Pools and Pool Participants*, addresses accounting and financial reporting for certain external investment pools and pool participants. Specifically, it establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. The Fund is currently evaluating the financial statement impact of GASB Statement No. 79. If applicable, this statement will be implemented for the year ended December 31, 2016.

GASB Statement No. 82, *Pension Issues – an amendment of GASB Statements No. 67, No. 68 and No. 73*, addresses certain issues that have been raised with respect to these Statements. The Fund is currently evaluating the financial statement impact of GASB Statement No. 82. If applicable, this statement will be implemented for the year ended December 31, 2017.

Note 3 – Investment Policies, Asset Allocation and Money-Weighted Rate of Return

Investment Policy

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.

The following table represents the Board's adopted asset allocation policy as of December 31, 2015:

<u>Asset Class</u>	<u>Target</u>
Fixed income	20.5%
Domestic equity*	32.5%
International equity*	14.0%
Emerging market*	2.0%
Risk parity*	3.0%
Hedge equity	7.0%
Private equity	7.0%
Real assets	<u>14.0%</u>
	<u>100.0%</u>

* Includes collective investment funds

Money-Weighted Rate of Return

For the year ended December 31, 2015, the annual money-weighted rate of return on plan investments, net of investment expense, was 5.61%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 4 – Deposits and Investments

At December 31, 2015 and 2014, the Fund's book balances of cash were \$-0- and \$-0-, respectively. The actual bank balances were \$-0- and \$1,596 at December 31, 2015 and 2014, respectively. The Fund maintains cash balances at the Northern Trust Company Bank. Accounts at this institution may from time to time exceed amounts insured by the Federal Deposit Insurance Company.

The Fund's investments are held by a bank administered trust fund, except for the collective investment funds, private equity partnerships, real estate, hedged equity and certain fixed income investments. Investments that represent 5 percent or more of the Fund's net position (except those issued or guaranteed by the U.S. Government) are separately identified.

Financial Statements

Notes to Financial Statements (Continued)

Note 4 – Deposits and Investments (Continued)

	<u>2015</u>	<u>2014</u>
Investments At Fair Value As		
Determined by Quoted Price		
Short-term investments	\$ 4,818,529	\$ 22,968,749
Fixed income	54,001,179	59,457,724
Common stock - foreign	13,620,861	-
Common and preferred stocks	53,062,089	60,342,493
Mutual funds	<u>16,017,830</u>	<u>12,613,552</u>
	141,520,488	155,382,518
Investments At Fair Value As		
Determined by Bank Administrator		
Fixed income	8,724,532	10,500,416
Collective investment funds		
NTGI QM Collective Daily US Marketcap Equity	36,514,482	36,320,640
NTGI QM Collective Daily All Country World Index	20,290,115	31,262,333
Other	36,238,207	32,729,619
Private equity	39,901,128	50,163,093
Infrastructure	20,826,210	-
Real estate	41,728,500	46,031,161
Hedged equity		
Entrust Diversified Select Equity Fund	23,565,871	24,732,418
K2 Long Short Fund	<u>-</u>	<u>10,930,766*</u>
	<u>\$369,309,533</u>	<u>\$398,052,964</u>

* Does not represent 5 percent or more of the Fund's Net Position

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.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt securities that will adversely affect the fair value of an investment. The price of a debt security typically moves in the opposite direction of the change in interest rates.

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.

Financial Statements

Notes to Financial Statements (Continued)

Note 4 – Deposits and Investments (Continued)

At December 31, 2015 the following table shows the investments in debt securities by investment type and maturity (expressed in thousands).

December 31, 2015

<u>Security Type</u>	<u>Total Fair Value</u>	<u>Less Than 1 Year</u>	<u>1 – 6 Years</u>	<u>6 -10 Years</u>	<u>10+ Years</u>
Commercial mortgage backed	\$ 1,211	\$ -	\$ -	\$ -	\$ 1,211
Corporate bonds	16,385	688	8,285	3,880	3,532
Government agencies	1,556	-	1,079	477	-
Government bonds	17,875	1,487	8,416	5,468	2,504
Government mortgage backed	16,839	-	452	885	15,502
Non-government backed CMO's	<u>135</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>135</u>
Total	<u>\$54,001</u>	<u>\$ 2,175</u>	<u>\$18,232</u>	<u>\$10,710</u>	<u>\$22,884</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.

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 in which range of credit the manager may invest. These ranges include investment grade and high yield categories.

The following table presents the Fund's ratings as of December 31, 2015 (expressed in thousands).

December 31, 2015

<u>S&P Credit Rating</u>	<u>Fair Value</u>	<u>Comm'l Mortgage Backed</u>	<u>Corporate Bonds</u>	<u>Gov't Agencies</u>	<u>Gov't Bonds</u>	<u>Gov't Mortgage Backed</u>	<u>Non Gov't Backed CMO</u>
AAA	\$ 867	\$ 577	\$ 290	\$ -	\$ -	\$ -	\$ -
AA	3,410	361	1,759	1,155	-	-	135
A	6,333	273	6,060	-	-	-	-
BBB	7,070	-	6,868	202	-	-	-
BB	1,061	-	1,061	-	-	-	-
B	263	-	263	-	-	-	-
NR	960	-	84	199	-	677	-
US Gov't Agency	<u>34,037</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>17,875</u>	<u>16,162</u>	<u>-</u>
Total	<u>\$54,001</u>	<u>\$1,211</u>	<u>\$16,385</u>	<u>\$1,556</u>	<u>\$17,875</u>	<u>\$16,839</u>	<u>\$135</u>

Notes to Financial Statements (Continued)

Note 4 – Deposits and Investments (Continued)

Custodial Credit Risk

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the pension fund will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. A review of the Fund’s exposure to custodial credit risks reflects that there is none.

Note 5 – 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 103% 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 82 days. As of December 31, 2015 and 2014, the Fund had loaned to borrowers securities with a fair value of \$44,371,413 and \$44,419,210, respectively. As of December 31, 2015, the fair value of the collateral received by the Fund was \$45,712,100, and the collateral invested by the Fund was \$45,712,100. As of December 31, 2014, the fair value of the collateral received by the Fund was \$45,579,952 and the collateral invested by the Fund was \$45,579,952.

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.

Note 6 – Property and Equipment

Property and equipment are stated at cost. 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. Major outlays for additions and improvements are capitalized. Maintenance and repairs are charged to expense. A summary of property and equipment at December 31, 2015 and 2014 is as follows:

	<u>2015</u>	<u>2014</u>
Furniture and equipment	\$ 71,211	\$ 74,990
Computer software	114,041	76,769
Leasehold improvements	<u>2,271</u>	<u>2,271</u>
	187,523	154,030
Less accumulated depreciation and amortization	<u>122,272</u>	<u>113,695</u>
Net property and equipment	<u>\$ 65,251</u>	<u>\$ 40,335</u>

Depreciation and amortization expense was \$12,356 and \$12,611 for 2015 and 2014, respectively.

Note 7 – Operating Leases

The Fund has entered into an operating lease for office space through April 30, 2026. The lease provides that the lessee pay monthly base rent subject to annual increases, plus an escalation rent computed on costs incurred by the lessor. Upon executing the amendment, the Fund received rent abatements in the amount of \$115,587 which are being amortized over the life of the lease. The unamortized portion, deferred rent, amounted to \$79,051 and \$87,022 at December 31, 2015 and 2014, respectively. The total rental expense was \$163,057 and \$161,571 for 2015 and 2014, respectively.

Notes to Financial Statements (Continued)

Note 7 – Operating Leases (Continued)

Following is a schedule of minimum future rental payments for each of the next five years and in the aggregate under the non-cancelable operating lease at December 31, 2015:

<u>Year ended December 31</u>	<u>Amount</u>
2016	\$ 90,035
2017	92,364
2018	94,692
2019	97,021
2020	99,349
2021-2026	<u>568,931</u>
	<u>\$1,042,392</u>

The Fund leases office equipment under non-cancelable operating leases that expire at various dates through March, 2019. Total rent expense incurred under these operating leases was \$23,274 and \$22,461 for 2015 and 2014, respectively.

Minimum future rental payments under non-cancelable operating leases having remaining terms in excess of one year as of December 31, 2015 for each of the next four years and in the aggregate are:

<u>Year ended December 31</u>	<u>Amount</u>
2016	\$ 17,136
2017	17,136
2018	17,136
2019	<u>2,406</u>
	<u>\$ 53,814</u>

Note 8 – Commitments

The Fund has committed to purchase \$75,000,000 interest in private equity partnerships. At December 31, 2015 and 2014, the Fund had a remaining contractual obligation of \$5,037,177 and \$6,956,776, respectively, to purchase additional interest in the private equity partnerships. At December 31, 2014, the Fund committed \$20,000,000 for infrastructure investment funds, which was then invested during 2015.

Note 9 – Deferred Compensation Plan

The Fund is a governmental eligible employer within the meaning of 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 IRS regulations. Total employee contributions were \$43,430 and \$45,772 for 2015 and 2014, respectively. Employer contributions are not allowed.

Note 10 – Litigation

Public Act 098-0622, which took effect January 1, 2015, affected all stakeholders: the employer, employees and retirees and is phased in over a five-year period. The main objective of the amendment is to provide sustainable funding that will secure the long-term health of the Fund.

Notes to Financial Statements (Continued)

Note 10 – Litigation (Continued)

Beginning in 2015, the multiplier for employer contributions increased to 1.70 times the total contribution by employees two years earlier. The multiplier increases in the year 2017 to 2.30 times the total contribution by employees and in the year 2019 to 2.90 times the total contribution by employees. The 2.90 multiplier will remain in effect until the Fund is 90% funded, after which time the Employer obligation is the lesser of the 2.90 multiplier or the amount necessary to maintain 90% funding. In addition to the increased multiplier, the Employer must make supplemental contributions in 2015 of \$12.5 million; in 2016 of \$12.5 million; and in 2019 of \$50 million.

Under Public Act 098-0622, employee contributions increased to 10% in 2015; 11% in 2017; and 12% in 2019. Employee contributions will remain at 12% until the Fund is 90% funded, at which time employee contributions will decrease to 10.5% and remain there as long as the Fund is 90% funded. For retirees who are eligible, the annual increase, or “COLA”, is suspended for 2015, 2017 and 2019. In years 2016, 2018, 2020 and thereafter, the increase will be the lesser of ½ the Consumer Price Index-Urban (“CPI-U”) or 3% of the annuity granted at retirement.

On October 14, 2015, the Fund was served a summons and complaint, which challenges Public Act 098-0622, on the grounds that this amendment to the Illinois Pension Code diminishes and impairs the benefits of participants in the Fund. On April 25, 2016, the Fund filed its answer to the complaint.

On March 24, 2016, the Illinois Supreme Court issued an opinion striking down Public Act 098-0641 because it violated the Pension Protection clause of the Illinois Constitution, diminished, and impaired the benefits of participants in the funds in question. Public Act 098-0641 amended the Illinois Pension Code with respect to the Chicago Municipal and Laborers’ Pension Funds in various ways that are similar to the amendments made to the Fund by Public Act 098-0622. Based on the Supreme Court’s opinion, it is likely that, the Circuit Court will find that Public Act 098-0622 is unconstitutional. The effects of a reversal of Public Act 098-0622 on the Fund’s financial statements have not been determined but are presumed to be significant.

Financial Statements

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer's Net Pension Liability

	<u>12/31/15</u>	<u>12/31/14</u>
<i>Total pension liability</i>		
Service Cost	\$ 13,417,795	\$ 12,975,774
Interest	65,921,805	64,929,834
Differences between expected and actual experience	682,159	5,447,687
Benefit payments, including refunds of employee contributions	<u>(70,602,016)</u>	<u>(70,536,042)</u>
Net change in total pension liability	9,419,743	12,817,253
Total pension liability – beginning	<u>900,840,617</u>	<u>888,023,364</u>
Total pension liability – ending (a)	<u>910,260,360</u>	<u>900,840,617</u>
<i>Plan fiduciary net position</i>		
Contributions – employer	30,588,976	11,225,438
Contributions – employee	12,368,636	10,831,434
Net investment income	8,823,613	27,490,520
Benefit payments, including refunds of employee contributions	(70,602,016)	(70,536,042)
Administrative expenses	(1,533,700)	(1,458,831)
Other	<u>88,113</u>	<u>100,518</u>
Net change in plan fiduciary net position	(20,266,378)	(22,346,963)
Plan fiduciary net position – beginning	<u>413,421,716</u>	<u>435,768,679</u>
Plan fiduciary net position – ending (b)	<u>393,155,338</u>	<u>413,421,716</u>
Employer's net pension liability ending (a)-(b)	<u>\$517,105,022</u>	<u>\$487,418,901</u>

This is a 10 – year schedule – however, the information is not required to be presented retroactively. Information will be added to this schedule until 10 years of information is available.

Schedule of Employer's Net Pension Liability

	<u>12/31/15</u>	<u>12/31/14</u>
Total pension liability	\$910,260,360	\$900,840,617
Plan fiduciary net position	393,155,338	413,421,716
Employer's net pension liability	517,105,022	487,418,901
Plan fiduciary net position as a percentage of total pension liability	43.19%	45.89%
Covered-employee payroll	\$122,382,584	\$118,987,507
Employer's net pension liability as a percentage of Covered-employee payroll	422.53%	409.64%

This is a 10 – year schedule – however, the information is not required to be presented retroactively. Information will be added to this schedule until 10 years of information is available.

Required Supplementary Information (Unaudited) (Continued)

Schedule of Employer Contributions

<u>Period Ended</u>	<u>Actuarially Determined Contribution</u>	<u>Contributions in Relation to the Actuarially Determined Contributions</u>	<u>Contribution Deficiency</u>	<u>Covered Employee Payroll</u>	<u>Contributions as a Percentage of Covered Employee Payroll</u>
December 31, 2015	\$36,273,994	\$30,588,976	\$ 5,685,018	\$122,382,584	24.99%
December 31, 2014	35,307,186	11,225,438	24,081,748	118,987,507	9.43
December 31, 2013	41,834,857	15,707,814	26,127,043	117,781,596	13.34
December 31, 2012**	16,786,671	5,268,363	11,518,308	58,231,511	9.05
June 30, 2012	28,051,528	10,868,361	17,183,167	114,223,909	9.51
June 30, 2011	25,319,145	10,981,419	14,337,726	107,686,693	10.20
June 30, 2010	22,399,740	10,829,339	11,570,401	107,361,021	10.09
June 30, 2009	18,285,474	9,667,765	8,617,709	108,882,742	8.88
June 30, 2008	16,073,257	8,998,687	7,074,570	111,698,366	8.06
June 30, 2007	14,571,540	9,594,593	4,976,947	106,601,982	9.00

** For the six months ended December 31, 2012, as a result of Public Act 97-0973, the Fund's year end was changed from June 30th to December 31st.

Schedule of Investment Returns

<u>Year ended December 31</u>	<u>Annual Money-Weighted Rate of Return, net of investment expense</u>
2015	5.61%
2014	5.60%

This is a 10 – year schedule – however, the information is not required to be presented retroactively. Information will be added to this schedule until 10 years of information is available.

Notes to Required Supplementary Information

Valuation date	12/31/15
Actuarial cost method	Entry age (Project 2005-June 30, 2012)
Amortization method	Level dollar
Amortization period	27 years (closed period) (open period until June 30, 2012)
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return	7.5%, net of investment expense
Projected salary increases	15% to 2.75% based on service
Inflation rate	2.75%

Financial Statements

Additional Information

Tax Levies Receivable

<u>Levy Year (Calendar)</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, 2015:						
2015	\$17,957,112	\$ -	<u>\$17,957,112</u>	<u>\$ -</u>	0.00%	<u>\$17,957,112*</u>
At December 31, 2014:						
2014	\$11,128,124	\$ -	<u>\$11,128,124</u>	<u>\$ -</u>	0.00%	<u>\$11,128,124</u>

* collected in March 2016

Additional Information (Continued)

Administrative and General Expenses

	<u>2015</u>	<u>2014</u>
Actuary expense	\$ 53,597	\$ 52,250
Auditing	27,000	27,000
IT consultant	49,749	53,280
Conference and convention expense	19,128	13,996
Contributions for annuities of Retirement Board employees	112,589	94,949
Depreciation	12,356	12,611
Equipment rental	23,274	22,461
Filing fee – State of Illinois	8,000	8,000
File storage expense	5,567	5,647
Hospitalization	145,199	146,756
Legal	39,298	21,315
Legislative consultant	30,000	30,000
Office supplies and expenses	30,829	25,984
Postage	15,472	12,298
Insurance - surety bond and other	3,477	3,359
Rent expense	163,057	161,571
Salaries	747,428	711,742
Payroll tax	8,428	7,523
Unemployment taxes	8,678	7,150
Bank fees	21,788	20,920
Telephone	5,102	5,856
Transportation	2,462	2,731
Trustees' election expense	<u>1,222</u>	<u>11,432</u>
Total administrative and general expenses	<u>\$ 1,533,700</u>	<u>\$ 1,458,831</u>

Additional Information (Continued)

Professional Expenses

	<u>2015</u>	<u>2014</u>
Legal	\$ 39,298	\$ 21,315
Actuary	53,597	52,250
Auditing	27,000	27,000
IT consultant	49,749	53,280
Legislative consultant	<u>30,000</u>	<u>30,000</u>
Total	<u>\$199,644</u>	<u>\$183,845</u>

Additional Information (Continued)

Investment Expenses

	<u>2015</u>	<u>2014</u>
<u>U.S. EQUITY</u>		
Great Lakes Advisors, LLC	\$ 87,200	\$ 94,335
Ariel Investments	142,884	133,271
RBC Global Asset Management	<u>90,267</u>	<u>134,260</u>
	<u>320,351</u>	<u>361,866</u>
<u>NON - U.S. EQUITY</u>		
Lombardia Capital Partners	<u>77,014</u>	<u>-</u>
<u>FIXED INCOME</u>		
LM Capital Group, LLC	28,571	26,124
MacKay Shields, LLC	83,406	97,462
Chicago Equity Partners	38,465	40,271
ULLICO Investment Company	<u>62,679</u>	<u>75,788</u>
	<u>213,121</u>	<u>239,645</u>
<u>COLLECTIVE INVESTMENT FUNDS</u>		
Northern Trust Quantitative Advisors	43,261	53,535
Invesco	<u>57,036</u>	<u>8,512</u>
	<u>100,297</u>	<u>62,047</u>
<u>HEDGED EQUITY</u>		
Entrust Capital, Inc.	283,751	281,313
K2 Advisors, LLC	<u>31,426</u>	<u>228,481</u>
	<u>315,177</u>	<u>509,794</u>
<u>REAL ESTATE</u>		
Principal Global Investors	188,349	222,256
UBS Realty Investors, LLC	<u>271,341</u>	<u>353,983</u>
	<u>459,690</u>	<u>576,239</u>
<u>PARTNERSHIPS</u>		
HarbourVest Partners, LLC	231,801	257,556
Mesirow Financial Capital Partners	169,644	188,496
GoldPoint Partners, LLC	<u>25,354</u>	<u>65,370</u>
	<u>426,799</u>	<u>511,422</u>
<u>INFRASTRUCTURE</u>		
ULLICO Infrastructure	78,642	-
IFM Global Infra (US) L.P.	<u>63,099</u>	<u>-</u>
	<u>141,741</u>	<u>-</u>
<u>OTHER</u>		
Custody – Northern Trust Co.	70,000	59,000
Investment consultant – Marquette Associates	<u>100,000</u>	<u>100,000</u>
	<u>170,000</u>	<u>159,000</u>
Total	<u>\$2,224,190</u>	<u>\$2,420,013</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 transition 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 Marquette Associates, Inc., 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 rose 0.4% during the year ended December 31, 2015, as measured by the Dow Jones U.S. Total Stock Market 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 0.9%, -2.4%, and -4.4% for the Russell 1000, Russell Mid-Cap and Russell 2000, respectively. In addition, growth stocks significantly outperformed value stocks, with returns of 5.1% and -4.1% for the Russell 3000 Growth and Russell 3000 Value, respectively.

The non-U.S. equity markets (as measured by the MSCI ACWI ex US Index) significantly underperformed their U.S. counterparts, posting a return of -5.7% during the year. Emerging markets (as measured by the MSCI Emerging Markets Index), significantly underperformed non-U.S. developed markets, posting a return of -14.9% over the year.

The broad bond market, as measured by the Barclays Aggregate Index, returned 0.6% during the year. The credit sector (as measured by the Barclays U.S. Credit Index) underperformed the government sector (as measured by the Barclays U.S. Government Index) over the year with returns of -0.8% and 0.9%, respectively.

In the private equity market, the Cambridge All Private Equity Index posted a return of 5.4% during the year. Private equity had another strong year in 2015 but buyout activity did slow modestly towards the end of the year as the correction in the public equity markets and widening credit spreads began to have an effect on private markets in the fourth quarter. Global private equity fundraising in the fourth quarter came in at \$71 billion, which was down 30% from the fourth quarter of 2014, and down 5% in 2015 compared to a year earlier.

The Federal Reserve increased the Fed Funds rate by 0.25% in December. This was the first rate hike by the Fed since 2006. Real GDP increased at a 1.4% annualized rate in the fourth quarter of 2015. This was below than the 2.2% annualized rate in the fourth quarter of 2014 and a somewhat sluggish growth rate at this stage of an economic recovery. Inflation, as measured by the Consumer Price Index, posted an increase of 0.7% for the year ended December 31, 2015. The unemployment rate was 5.0% on December 31, 2015, an improvement from the 5.6% rate on December 31, 2014.

Performance Commentary

The Pension Fund posted a calendar year return of 1.9%, net of fees, outperforming the custom benchmark by 0.5%. The best performing asset class for the year was Real Estate, which returned 14.3%, net of fees. The worst performing asset class for the year was International Equity, which returned -4.9%, net of fees.

The Fund posted a three-year annualized return of 8.8%, net of fees, outperforming the custom benchmark by 1.4%. On a five-year basis, the Fund returned 7.9%, net of fees, outperforming the custom benchmark by 1.3%.

INVESTMENT

Investment Recap (Continued)

Performance Commentary (Continued)

The fixed income market, as measured by the Barclays Capital Aggregate Index, returned 0.6% during the year. The Fund's fixed income portfolio returned 0.9%, 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 17.1% of the total Fund's assets.

The broad U.S. stock market, as measured by the Dow Jones Total US Stock Index, returned 0.4% during the year. The Fund's U.S. Equity portfolio returned -0.4%, net of fees, over that period, underperforming the benchmark by 0.8%. The U.S. Equity portfolio was led by the Northern Trust Large-Cap Growth portfolio, which returned 5.5%, net of fees, for the year, performing in line with its benchmark. At the end of the year, the Fund's U.S. stock market assets comprised 28.9% of the total Fund's assets.

The international stock market, as measured by the MSCI ACWI ex US Index, returned -5.3% during the year. The Fund's International Equity portfolio returned -4.9%, net of fees, over that period, outperforming the benchmark by 0.4%. The International portfolio is comprised of an index manager, Northern Trust, and two active managers, William Blair and Lombardia. At the end of the year, the Fund's international stock market assets comprised 15.6% of the total Fund's assets.

The real estate market, as measured by the NCREIF - ODCE Index, returned 13.9% during the year. The Fund's real estate portfolio returned 14.3%, net of fees, over that period, outperforming the benchmark by 0.4%. At the end of the year, the Fund's real estate assets comprised 11.2% of the total Fund's assets.

The private equity market, as measured by the Cambridge All-Private Equity Index, returned 5.4% during the year. The Fund's private equity portfolio returned 8.0%, net of fees, over that period. At the end of the year, the Fund's private equity assets comprised 10.7% of the total Fund's assets.

INVESTMENT

Summary of Investments

Years ended December 31, 2015 and December 31, 2014

Type of Investment	December 31, 2015				December 31, 2014			
	Fair Value	%	Book Value	%	Fair Value	%	Book Value	%
Fixed income	\$ 62,725,711	17	\$ 63,126,425	21	\$ 69,958,140	18	\$ 68,674,951	22
Domestic equities	106,057,718	29	73,477,882	24	116,754,357	29	70,381,977	23
International equities	57,500,837	16	57,485,733	19	43,875,885	11	38,690,221	13
Risk parity	12,185,029	3	12,435,549	4	12,638,395	3	12,491,599	4
Hedge funds	23,565,871	6	15,787,404	5	35,663,184	9	21,302,355	7
Private equity	39,901,128	11	27,366,924	9	50,163,093	13	34,910,211	11
Real estate	41,728,500	11	26,906,011	9	46,031,161	11	38,648,113	13
Infrastructure	20,826,213	6	20,262,287	7	-	n/a	-	n/a
Short-term	<u>4,818,526</u>	<u>1</u>	<u>4,818,526</u>	<u>2</u>	<u>22,968,749</u>	<u>6</u>	<u>22,968,749</u>	<u>7</u>
Total Assets	<u>\$369,309,533</u>	<u>100</u>	<u>\$301,666,741</u>	<u>100</u>	<u>\$398,052,964</u>	<u>100</u>	<u>\$308,068,176</u>	<u>100</u>

* Investment assets do not reflect the amounts due to or from brokers at year end. Net due from broker is \$1,240,485 and \$2,324 at December 31, 2015 and 2014, respectively.

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

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:

Board Approved Policy			
<u>Asset Category</u>	<u>Target (%)</u>	<u>Range (%)</u>	
U.S. Equity	32.5%	22.5%	42.5%
Non U.S. Equity	16.0	11.0	21.0
Private Equity	7.0	0.0	14.0
Long-Short Equity	10.0	0.0	15.0
Real Estate	9.0	4.0	14.0
Infrastructure	5.0	0.0	10.0
U.S. Bonds	<u>20.5</u>	15.5	25.5
	<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:

<u>Asset Category</u>	<u>% Indexed</u>
U.S. Equity	56.9%
Non U.S. Equity	37.5%
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 32.5% Willshire 5000 Stock Index, 16.0% MSCI All Country World Ex-US Index, 25.5% BarCap Aggregate Index, 7% Cambridge All Private Equity Index, 10% HFRX Hedged Equity Index, and 9.0% NCREIF ODCE Index 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, 2015- 2013; Six months ended						Ended December 31, 2015		
	December 31, 2012; Years ended June 30, 2012-2011						3 Years	5 Years	10 Years
	12/31/15	12/31/14	12/31/13	12/31/12	6/30/12	6/30/11			
Total Fund	1.9%	6.9%	16.9%	6.2%	1.4%	21.0%	8.8%	7.9%	5.8%
Benchmark Portfolio	1.4	6.7	13.8	5.4	1.2	19.3	7.4	6.6	5.4
Public Funds Median Return	-0.4	5.5	14.9	6.3	1.0	20.9	6.8	6.4	5.4
Actuarial Assumed Rate of Return	7.5	7.5	7.5	7.5	8.0	8.0	7.5	7.5	7.5
Consumer Price Index	0.8	0.8	1.5	1.8	1.7	3.6	1.0	1.6	1.9
Fixed Income	0.9%	5.5%	-1.1%	2.2%	7.5%	4.7%	1.7%	3.5%	5.1%
BarCap Aggregate	0.6	6.0	-2.0	1.8	7.5	3.9	1.4	3.2	4.5
Universe Median	0.0	3.6	-1.3	3.4	6.2	4.9	0.9	3.1	4.8
U.S. Equities	-0.4%	11.6%	35.8%	7.1%	1.6%	36.4%	14.7%	12.0%	8.1%
Dow Jones Total US Stock Index	0.4	12.5	33.1	6.4	4.0	32.0	14.7	12.1	7.5
Universe Median	-0.1	11.0	34.1	6.6	1.6	32.9	14.1	11.4	7.0
Non U.S. Equities	-4.9%	-4.9%	17.7%	13.9%	-13.8%	32.1%	2.1%	1.9%	2.7%
MSCI ACWI Ex US	-5.3	-3.4	15.8	13.8	-14.1	30.3	1.9	1.5	3.4
Universe Median	-3.8	-3.7	16.7	13.9	-14.0	30.7	2.6	2.1	3.0
Long-Short Equities	-4.4%	4.9%	17.4%	6.4%	-3.8%	12.1%	5.6%	4.1%	N/A
HFRX Hedged Equity	-2.3	1.4	11.1	3.6	-10.7	3.4	3.2	-1.4	-0.3
Universe Median	-0.5	4.2	12.2	4.8	-1.7	10.7	4.5	3.9	3.8
Real Estate	14.3%	11.5%	12.0%	4.9%	12.0%	18.5%	12.6%	12.5%	5.4%
NCREIF-ODCE	13.9	11.5	13.0	4.7	11.3	20.5	12.8	12.6	5.6
Universe Median	13.3	12.2	11.7	4.6	10.8	19.3	12.2	11.9	5.5
Private Equity	8.9%	11.1%	13.0%	2.8%	5.2%	23.0%	13.9%	12.2%	9.3%
Cambridge All Private Equity	5.4	11.0	8.4	7.6	5.3	18.9	12.1	11.5	11.1

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

As of December 1, 2013, the Policy Benchmark consists of 32.5% Willshire 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, 2015

U.S. Stocks*

<u>Shares</u>	<u>Holdings</u>	<u>Fair Value</u>
22,600	Lazard Ltd	\$ 1,017,226
38,700	Tegna Inc.	987,624
39,100	Interpublic Group Companies Inc	910,248
7,100	J M Smucker Co	875,714
6,900	Laboratories Corp of America Holdings	853,116
34,700	Brady Corp	797,406
9,900	Charles River Laboratories Intl	795,861
11,250	American Express Co	782,438
40,000	Kennametal Inc	768,000
12,600	Anixter Intl Inc	760,914

International Stocks*

<u>Shares</u>	<u>Holdings</u>	<u>Fair Value</u>
241,271	Sainsbury Ord	\$ 920,317
67,036	Buzzi Unicem Spa	742,048
50,362	Danieli & C Di Risip	719,413
322,662	Wm Morrison Supermarkets	704,797
29,559	BHP Billiton	669,511
163,279	WorleyParsons Ltd	550,015
30,816	Oriflame Holding	497,115
19,396	Kato Sangyo Co	454,043
9,805	Royal Dutch Shell	451,422
12,195	Posco	431,215

Bonds*

<u>Holdings</u>	<u>Fair Value</u>
United States Treasury Note 2.5% due 5/15/2024	\$ 924,762
United States Treasury Note 2.25% due 11/15/2024	924,530
United States Treasury Bond 2.75% due 8/15/2042	798,110
United States Treasury Note 1.25% due 10/31/2019	790,562
United States Treasury Note 0.875% due 10/15/2018	766,463
United States Treasury Note 1.75% due 5/15/2023	652,753
United States Treasury Note 1.375% due 5/31/2020	640,656
United States Treasury Note 2.625% due 8/15/2020	623,273
United States Treasury Note 0.875% due 7/15/2018	609,451
United States Treasury Note 3.75% due 11/15/2018	588,436

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

INVESTMENT

Schedule of Investment Brokerage Commissions

<u>Broker Name</u>	<u>Shares*</u>	<u>Commission</u>
Loop Capital Markets	291,138	\$ 8,904
BNY Converge Execution Solutions	3,575,056	8,428
Drexel Hamilton LLC	108,933	4,372
KCG Americas LLC	374,881	3,285
Williams Capital Group LP	70,200	2,672
Macquarie Bank Limited	1,147,683	2,606
M Ramsey King Securities	62,695	2,471
Castleoak Securities Inc	48,780	1,951
Jones Trading Institutional Service	85,257	1,740
Cabrera Capital Markets Inc	41,300	1,652
Blayblock and Company Inc	32,700	1,274
Weeden and Co	29,478	1,023
Academy Securities Inc	21,300	852
Penserra Securities	19,240	770
Korea Investments and Securities Co	17,317	742
Merrill Lynch Pierre Fenner & Smith	14,708	560
Broker commissions under \$500	<u>182,287</u>	<u>5,685</u>
Total Broker Commissions	<u>6,122,953</u>	<u>\$48,987</u>

* Total shares traded 6,122,953 at an average cost of \$0.01 per share.



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May 31, 2016

Board of Trustees
Park Employees' Annuity and Benefit Fund of Chicago
55 East Monroe Street, Suite 2720
Chicago, Illinois 60603

Dear Board Members:

We are pleased to submit this annual Actuarial Valuation and Review as of December 31, 2015. 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, 2016, 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. 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.

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, 2015 actuarial valuation were based on an experience analysis covering the five-year period ending June 30, 2012 and were adopted by the Board, effective for the December 31, 2012 valuation. These actuarial assumptions and methods comply with the parameters for disclosure in GASB Statement No. 67. Further, in our opinion, the assumptions as approved by the Board are reasonable related to the experience of the Fund. 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.

The funding policy of the Fund is to have contributions sufficient to amortize the unfunded liability over the 30-year period ending December 31, 2042. For Fiscal 2016, employer contributions come from a property tax levied by the District equal to the total amount of contributions made by employees in the calendar year two years prior to the year of the levy, multiplied by 1.7. The 1.7 factor is known as the tax multiple.

The tax multiple increases to 2.3 for 2017 and 2018, and to 2.9 for 2019 and thereafter. Once the funded ratio reaches 90%, the employer contribution will be the lesser of 2.9 times the employee contributions for the fiscal year two years prior, or the amount needed to maintain a funded ratio of 90%. Additional employer contributions will be made in the amounts of \$12,500,000 in 2016 and \$50,000,000 in 2019.

This report includes the following schedules for the financial section of the Comprehensive Annual Financial Report:

- Schedule of Changes in Employer's Net Pension Liability
- Schedule of Employer's Net Pension Liability
- Schedule of Employer Contributions

The actuarial section of the Comprehensive Annual Financial Report includes this actuarial valuation report replicated in its entirety.

ACTUARIAL


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.

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 Fund.


We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

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

By: 

Kim Nicholl, FSA, MAAA, EA, FCA
Senior Vice President and Actuary



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

ACTUARIAL

SECTION 1: Valuation Summary for the Park Employees' Annuity and Benefit Fund of Chicago

Purpose

This report has been prepared by Segal Consulting to present a valuation of the Park Employees' Annuity and Benefit Fund of Chicago (the Fund) as of December 31, 2015. 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 administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of December 31, 2015, provided by the Fund staff;
- The assets of the Fund as of December 31, 2015, provided by the Fund staff;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

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

1. This valuation includes the benefit and funding provisions contained in Public Act 98-0622. The constitutionality of Public Act 98-0622 is currently being challenged in the court of law. If Public Act 98-0622 is ruled unconstitutional (either in whole or in part), the liability of the Fund will immediately increase, projected contributions could decrease, and the projected solvency of the Fund will be in jeopardy.
2. The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of December 31, 2015, is 43.5%, compared to 43.7% as of December 31, 2014. This ratio is a measure of funding status, its history is a measure of funding progress. Using the fair value of assets, the funded ratio as of December 31, 2015, is 43.2%, compared to 45.9% as of December 31, 2014.
3. Employer contributions to the Fund come from a tax levied upon all taxable property in the City of Chicago. The amount of tax that is levied is 1.7 times the amount of employee contributions made two years prior. The 1.7 factor is known as the tax multiple. As shown in Chart 13, for the fiscal year beginning January 1, 2016, the actuarially determined contribution amount (ADC) is \$37,130,268. Based on the 1.7 tax multiple, and using the Fund's assumption of 3% loss on collections, we have estimated the employer contribution for the fiscal year beginning January 1, 2016, to be \$17,735,701. **Compared to the ADC of \$37,130,268, the contribution deficiency is \$19,394,567 as of January 1, 2016. Reflecting the additional fiscal 2016 scheduled contribution of \$12,500,000 lowers the deficiency to \$6,894,567. Each year of a contribution deficiency leads to an increased deficiency in all future years.**
4. For the year ended December 31, 2015, Segal has determined that the asset return on a fair value basis was 2.2%. After gradual recognition of investment gains and losses under the actuarial smoothing method, the actuarial rate of return was 8.2%. This represents an experience gain when compared to the assumed rate of 7.50%. As of December 31, 2015, the actuarial value of assets (\$395.7 million) represents 100.6% of the fair value (\$393.2 million).
5. The portion of deferred investment gains and losses recognized in the calculation of the December 31, 2015, actuarial value of assets resulted in a gain of \$2,629,339. Additionally, the demographic and liability experience resulted in a \$529,175 loss.

ACTUARIAL

SECTION 1: Valuation Summary for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

Significant Issues in Valuation Year (Continued)

6. The total unrecognized investment loss as of December 31, 2015, is \$2,496,768. This investment loss 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 gains derived from future experience. This implies that earning the assumed rate of investment return of 7.50% per year (net of expenses) on a **fair value** basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual fair value return is equal to the assumed 7.50% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.
7. As mentioned above, the current method used to determine the actuarial value of assets yields an amount that is 100.6% of the fair value of assets as of December 31, 2015. 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.
8. The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaced Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 was effective with the fiscal year ended December 31, 2014, for plan reporting. Statement 68 is effective with the fiscal year ending December 31, 2015, for employer reporting. The information contained in this valuation is intended to be used (along with other information) in order to comply with both Statements 67 and 68.
9. The net pension liability (NPL) is equal to the difference between the Total Pension Liability (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, 2015, is \$517,105,022.
10. If Public Act 98-0622 is ruled unconstitutional, the TPL and NPL measures would increase substantially, primarily as a result of the lower discount rate that would be required due to the blended discount rate calculation under paragraphs 44 and 45 of Statement 67.
11. In November 2014, the Society of Actuaries Retirement Plans Experience Committee published the RP-2014 Mortality Tables Report, which includes mortality experience covering the years 2004 through 2008. The current Fund post-retirement mortality assumption was studied recently in 2012 as part of a five-year experience analysis. We considered whether the new RP-2014 mortality tables should be used in this December 31, 2015, actuarial valuation, but given that the Fund has experienced mortality gains over the past several years, we were inclined to evaluate the applicability of the RP-2014 tables relative to the Fund and in the context of all the other demographic assumptions as part of the experience study planned for 2017.
12. This actuarial report as of December 31, 2015, 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.

ACTUARIAL

SECTION 1: Valuation Summary for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

Summary of Key Valuation Results

	<u>2016</u>	<u>2015</u>
Contributions for fiscal year beginning:		
Actuarially determined contribution requirement	\$ 37,130,268	\$ 36,273,994
Estimated employer contributions (provided by the Fund, reflecting 3% loss on collections), including supplemental contribution of \$12,500,000 due in 2015 and 2016	30,235,701	29,936,105
Actual employer contribution	--	30,588,976
Funding elements for fiscal year beginning:		
Normal cost, including administrative expenses	\$ 2,066,718	\$ 2,338,848
Fair value of assets	393,155,338	413,421,716
Actuarial value of assets	395,652,106	393,762,692
Actuarial accrued liability	910,260,360	900,840,617
Unfunded actuarial accrued liability	514,608,254	507,077,925
Funded ratio	43.47%	43.71%
GASB Information:		
Discount rate	7.50%	7.50%
Total pension liability	\$910,260,360	\$900,840,617
Plan fiduciary net position	393,155,338	413,421,716
Net pension liability	517,105,022	487,418,901
Plan fiduciary net position as a percentage of total pension liability	43.19%	45.89%
Demographic data for plan year beginning:		
Number of retired participants and beneficiaries	2,876	2,891
Number of vested former participants	145	147
Number of active participants	3,063	2,973
Total salary supplied by the Fund	\$126,294,812	\$120,376,477
Average salary	41,232	40,490

ACTUARIAL

SECTION 1: Valuation Summary for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

Important Information About Actuarial Valuations

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

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 Fund is based on data provided to the actuary by 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 Fund staff, and 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 members 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 member 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 Fund’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 Fund’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 Fund 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.

ACTUARIAL

SECTION 1: Valuation Summary for the Park Employees' Annuity and Benefit Fund of Chicago (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 (such as the end of an amortization period); 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.

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago

A. MEMBER 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 participant 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.

CHART 1

Member Population: 2007 – 2015

Census Date	Active Members	Vested Terminated Members*	Retirees and Beneficiaries	Ratio of Actives to Retirees and Beneficiaries
June 30, 2007	3,040	162	3,056	0.99
June 30, 2008	3,031	161	3,013	1.01
June 30, 2009	2,865	159	3,013	0.95
June 30, 2010	2,816	160	2,956	0.95
June 30, 2011	2,795	141	2,913	0.96
June 30, 2012	2,977	153	2,921	1.02
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

**Excludes terminated members due a refund of employee contributions*

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (Continued)

A. MEMBER 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 3,063 active members with an average age of 41.8, average years of service of 11.1 years and average salary of \$41,232. The 2,973 active participants in the prior valuation had an average age of 41.7, average years of service of 10.9 years and average salary of \$40,490.

Inactive Participants

In this year's valuation, there were 145 members with a vested right to a deferred or immediate vested benefit.

In addition, there were 3,976 members entitled to a return of their employee contributions.

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

CHART 2

Distribution of Active Members by Age as of December 31, 2015

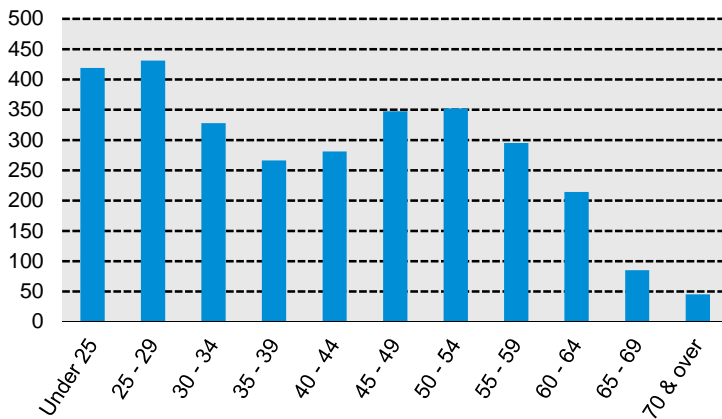
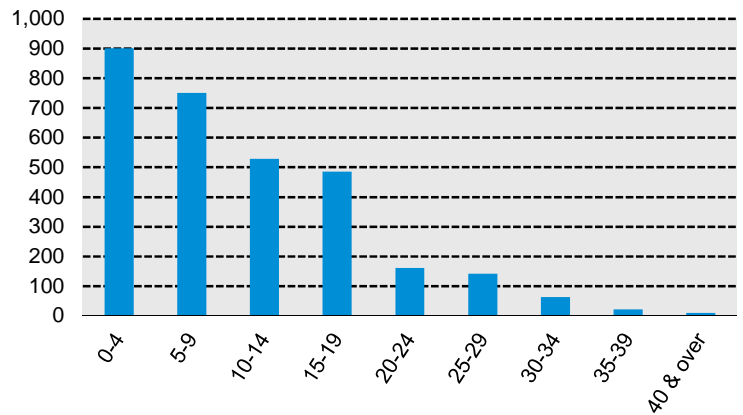


CHART 3

Distribution of Active Members by Years of Service as of December 31, 2015



ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (Continued)

A. MEMBER DATA (Continued)

Retirees and Beneficiaries

As of December 31, 2015, 2,097 retirees, 767 beneficiaries, and 12 dependent children were receiving total monthly benefits of \$5,673,167. For comparison, in the previous valuation there were 2,101 retirees, 773 beneficiaries, and 17 dependent children receiving total monthly benefits of \$5,689,318.

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

CHART 4

Distribution of Retirees by Monthly Amount as of December 31, 2015

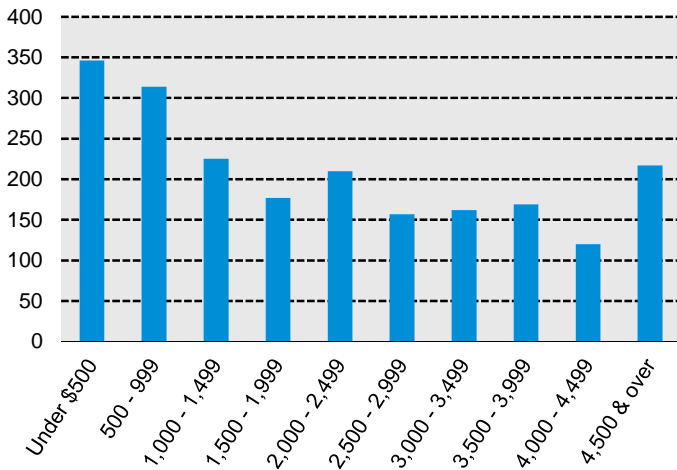
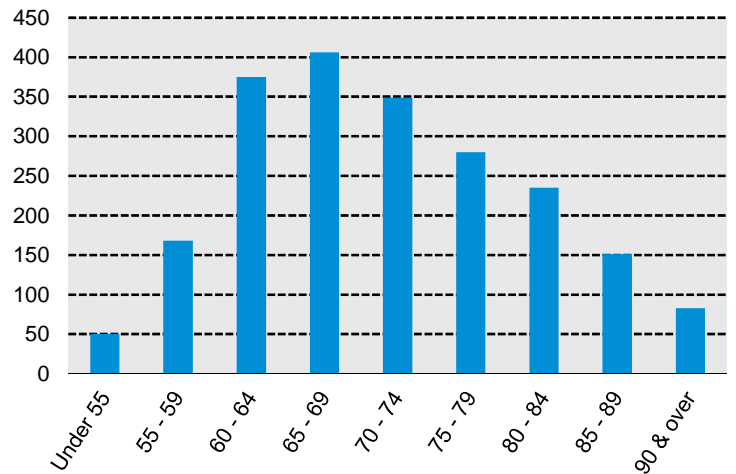


CHART 5

Distribution of Retirees by Age as of December 31, 2015



ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (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.

CHART 6

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

			<u>2015</u>		<u>2014</u>
1.	Actuarial value of assets as of prior valuation date		\$393,762,662		\$404,292,435
2.	Employer and employee contributions and other income		42,957,762		22,085,614
3.	Benefits and expenses		72,135,716		71,994,873
4.	Expected investment income		28,438,026		28,450,335
5.	Total investment income, including income for securities lending		8,911,576		27,562,296
6.	Investment gain/(loss): (5) – (4)		-19,526,450		-888,039
7.	Expected actuarial value of assets: (1) + (2) - (3) + (4)		393,022,734		382,833,511
8.	Calculation of unrecognized return	%		%	
		<u>Original Amount*</u>	<u>Recognized</u>	<u>Recognized</u>	
(a)	Year ended December 31, 2015	-\$ 19,526,450	20%	-\$ 3,905,290	--
(b)	Year ended December 31, 2014	-888,039	20%	-177,608	20%
(c)	Year ended December 31, 2013	36,656,285	20%	7,331,257	20%
(d)	6-month period ended December 31, 2012	7,796,423	20%	1,559,285	20%
(e)	Year ended June 30, 2012	-33,453,504	20%	-6,690,701	20%
(f)	Year ended June 30, 2011	45,124,290	10%**	<u>4,512,429</u>	20%
(g)	Year ended June 30, 2010	-1,179,100			10%**
(h)	Total recognized return			<u>2,629,372</u>	<u>10,929,181</u>
9.	Actuarial value of assets as of current valuation date: (7) + (8h)			<u>\$395,652,106</u>	<u>\$393,762,692</u>

* Total return minus expected return on actuarial value

** 10% was recognized, instead of 20%, due to the short fiscal year ended December 31, 2012 in order to maintain a 5-year smoothing period.

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (Continued)

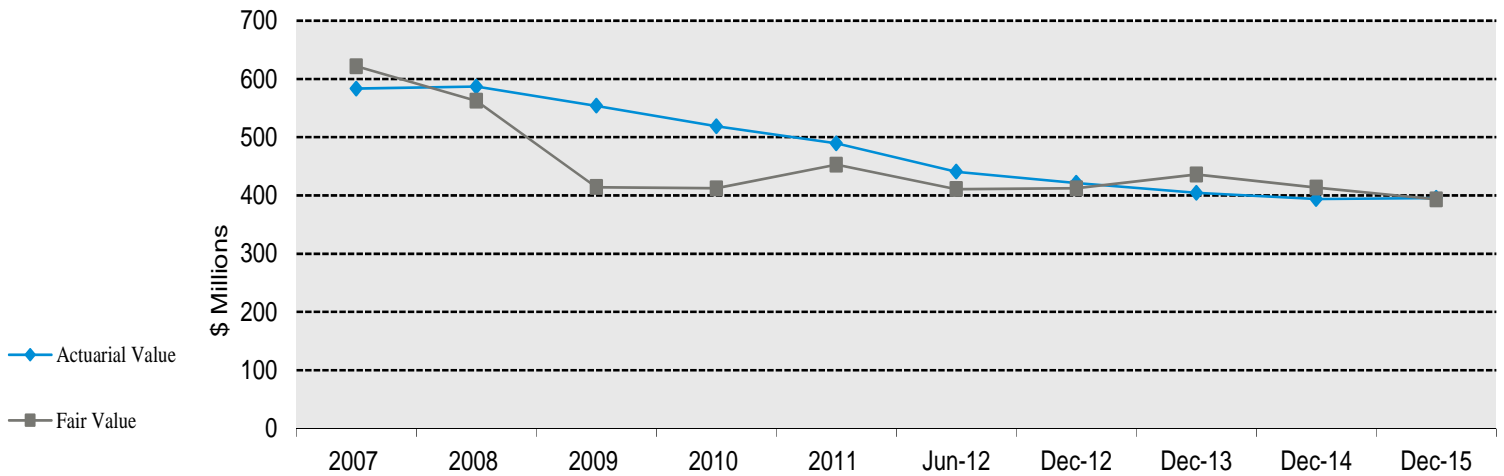
B. FINANCIAL INFORMATION (Continued)

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.

CHART 7

Actuarial Value of Assets vs. Fair Value of Assets as of June 30, 2007 – December 31, 2015



ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (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 \$2,156,301: \$2,629,339 from investment gains and \$473,038 in losses from all other sources. The net experience variation from individual sources other than investments was 0.1% 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.

CHART 8

Actuarial Experience for Year Ended December 31, 2015

1. Net gain from investments*	\$2,629,339
2. Net gain from administrative expenses	56,137
3. Net loss from other experience**	<u>-529,175</u>
4. Net experience gain: (1) + (2) + (3)	\$2,156,301

* Details in Chart 9

** Details in Chart 12

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (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 is 7.50%. The actual rate of return on an actuarial basis for the year ended December 31, 2015, was 8.19%.

Since the actual return for the year was greater than the assumed return, the Fund experienced an actuarial gain during the fiscal year ended December 31, 2015, with regard to its investments.

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

CHART 9

Actuarial Value Investment Experience for Year Ended December 31, 2015

1. Actual return	\$ 31,067,368
2. Average value of assets	379,173,715
3. Actual rate of return: (1) ÷ (2)	8.19%
4. Assumed rate of return	7.50%
5. Expected return: (2) x (4)	\$ 28,438,029
6. Actuarial gain: (1) – (5)	<u>\$ 2,629,339</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.

CHART 10

Investment Return

<u>Fiscal Year Ended</u>	<u>Fair Value</u>	<u>Actuarial Value</u>
June 30, 2007	16.2%	9.3%
June 30, 2008	-3.0%	8.1%
June 30, 2009	-18.6%	2.0%
June 30, 2010	11.3%	1.5%
June 30, 2011	21.0%	3.1%
June 30, 2012	0.9%*	-0.6%*
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%*
Average Returns		
Last 5 valuation years:	7.2%	5.6%
Last 10 valuation years:	5.7%	5.1%

* As determined by Segal

** As determined by Investment Consultant

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (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.

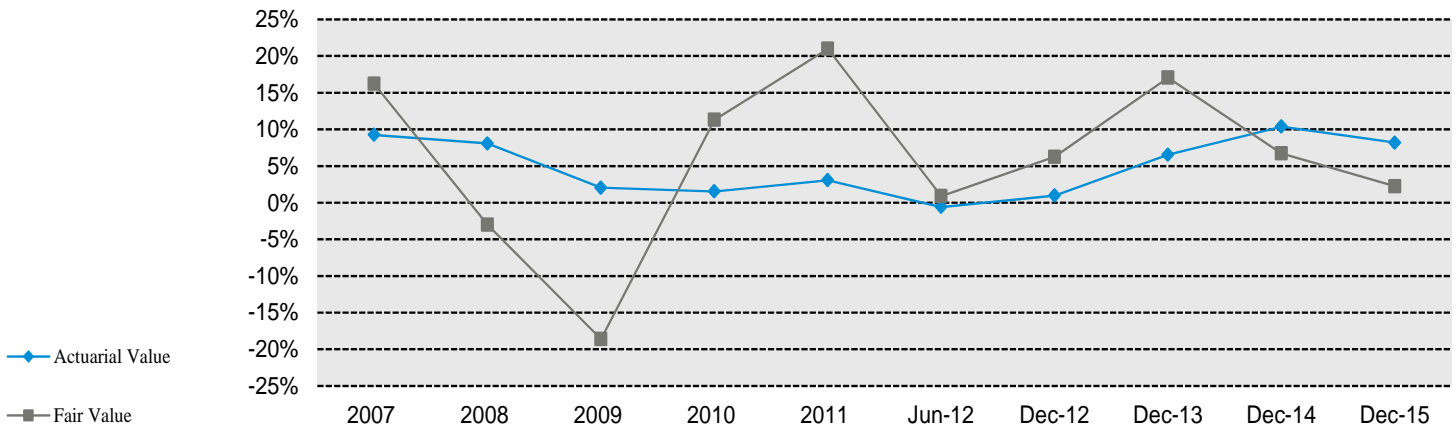
Administrative Expenses

Administrative expenses for the year ended December 31, 2015 totaled \$1,533,700 compared to the assumption of \$1,531,773. This resulted in a gain of \$56,137 for the year when adjusted for timing.

This chart illustrates how this leveling effect has actually worked over the years 2007 - 2015.

CHART 11

Fair and Actuarial Rates of Return for Years Ended June 30, 2007 - December 31, 2015



ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (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 the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements, and
- salary increases different than assumed.

The net loss from this other experience for the year ended December 31, 2015, amounted to \$529,175, which is 0.1% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the Fund for the year ended December 31, 2015 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 12

Experience Due to Changes in Demographics for Year Ended December 31, 2015

1. Turnover	-\$813,251
2. Retirement	-1,214,810
3. Experience among retired members and beneficiaries related to mortality and benefit amount	1,782,699
4. Salary/service increase for continuing actives	-765,745
5. Other	<u>481,932</u>
6. Total	<u><u>-\$529,175</u></u>

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (Continued)

D. DEVELOPMENT OF EMPLOYER COSTS

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 28.29% of payroll.

The actuarially determined contribution had been based on a 30-year, level percentage of pay amortization of the unfunded actuarial accrued liability. In April 2013, the Board of Trustees elected to close the 30-year amortization period, which ends on December 31, 2042. As of January 1, 2016, there are 27 years remaining on the amortization period.

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

CHART 13

Actuarially Determined Contribution

	Year Beginning January 1			
	2016		2015	
	Amount	% of Payroll	Amount	% of Payroll
1. Total normal cost	\$ 13,763,768	10.49%	\$ 13,417,795	10.75%
2. Administrative expenses	1,558,218	1.19%	1,531,772	1.22%
3. Expected employee contributions	<u>-13,255,268</u>	<u>-10.10%</u>	<u>-12,610,719</u>	<u>-10.10%</u>
4. Employer normal cost: (1) + (2) + (3)	\$ 2,066,718	1.57%	\$ 2,338,848	1.87%
5. Employer normal cost, adjusted for timing*	2,142,355	1.63%	2,424,445	1.94%
6. Actuarial accrued liability	910,260,360		900,840,617	
7. Actuarial value of assets	<u>395,652,106</u>		<u>393,762,692</u>	
8. Unfunded actuarial accrued liability: (6) – (7)	\$514,608,254		\$507,077,925	
9. Payment on unfunded actuarial accrued liability	34,987,913	26.66%	33,849,549	27.12%
10. Actuarially determined contribution, adjusted for timing*: (5) + (9)	<u>\$ 37,130,268</u>	<u>28.29%</u>	<u>\$ 36,273,994</u>	<u>29.06%</u>
11. Projected payroll	\$131,229,459		\$124,822,858	

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

ACTUARIAL

SECTION 2: Valuation Results for the Park Employees' Annuity and Benefit of Chicago (Continued)

D. DEVELOPMENT OF EMPLOYER COSTS (Continued)

The actuarially determined contribution as of January 1, 2016, 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.

CHART 14

Reconciliation of Actuarially Determined Contribution from January 1, 2015 to January 1, 2016

Actuarially Determined Contribution as of January 1, 2015	\$36,273,994
Effect of expected change in amortization payment due to payment growth	930,863
Effect of change in administrative expense assumption	27,413
Effect of change in other actuarial assumptions	0
Effect of contributions less than recommended contribution	439,257
Effect of investment gain	-170,868
Effect of other gains and losses on accrued liability	30,740
Effect of net other changes	<u>-401,131</u>
Total change	<u>\$ 856,274</u>
Actuarially Determined Contribution as of January 1, 2016	\$37,130,268

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago

EXHIBIT A

Table of Fund Coverage

<u>Category</u>	<u>December 31</u>		<u>Change From Prior Year</u>
	<u>2015</u>	<u>2014</u>	
Active members in valuation:			
Number	3,063	2,973	3.0%
Average age	41.8	41.9	N/A
Average years of service	11.1	10.9	N/A
Total salary supplied by the Fund	\$126,294,812	\$120,376,477	4.9%
Average salary	\$ 41,232	\$ 40,490	1.8%
Total active vested members with at least 10 years of service	1,334	1,280	4.2%
Vested terminated members	145	147	-1.4%
Non-vested terminated members eligible for a return of contributions	3,976	3,876	2.6%
Service retirees:			
Number in pay status	2,097	2,101	-0.2%
Average age	71.8	71.1	N/A
Average monthly benefit	\$ 2,224	\$ 2,238	-0.6%
Beneficiaries (including children) in pay status:			
Number in pay status	779	790	-1.4%
Average age	77.6	76.9	N/A
Average monthly benefit	\$ 1,271	\$ 1,230	3.3%
Total number of members	10,060	9,887	1.7%

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT B

**Participants in Active Service as of December 31, 2015
By Age, Years of Service, and Average Payroll**

Age	Years of Service									
	Total	0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	419	255	164	--	--	--	--	--	--	--
	\$19,870	\$18,848	\$21,459	--	--	--	--	--	--	--
25 - 29	431	185	198	48	--	--	--	--	--	--
	26,627	26,521	26,431	\$27,844	--	--	--	--	--	--
30 - 34	328	112	98	109	9	--	--	--	--	--
	38,995	36,389	39,439	41,091	\$41,201	--	--	--	--	--
35 - 39	266	91	56	58	60	1	--	--	--	--
	48,434	48,338	46,695	48,495	50,089	\$51,809	--	--	--	--
40 - 44	281	84	54	57	65	21	--	--	--	--
	50,088	47,271	49,437	48,337	52,647	59,863	--	--	--	--
45 - 49	347	45	56	93	83	44	25	1	--	--
	48,773	43,632	38,802	48,020	50,570	58,663	\$59,662	\$51,931	--	--
50 - 54	352	51	59	63	97	27	38	17	--	--
	50,791	37,549	37,008	43,277	57,633	66,908	63,335	73,512	--	--
55 - 59	295	40	33	45	75	28	33	29	12	--
	49,660	33,566	35,803	42,624	51,506	44,099	72,413	69,171	\$59,517	--
60 - 64	214	25	25	32	68	21	26	6	7	4
	52,008	27,890	48,804	45,374	53,172	59,779	70,202	61,692	65,599	\$58,660
65 - 69	85	10	6	17	18	13	9	6	3	3
	46,377	23,990	50,359	37,498	47,008	52,027	63,487	52,806	64,484	52,781
70 & over	45	3	2	6	10	6	11	4	--	3
	49,341	50,106	24,605	56,101	43,946	25,349	63,401	66,513	--	43,067
Total	3,063	901	751	528	485	161	142	63	22	10
	\$41,232	\$31,594	\$33,305	\$43,409	\$52,268	\$55,995	\$66,070	\$67,629	\$62,129	\$52,218

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT C

Reconciliation of Member Data

	<u>Active Members</u>	<u>Inactive Members</u>	<u>Retirees</u>	<u>Beneficiaries</u>	<u>Total</u>
Number as of December 31, 2014	2,973	4,023	2,101	790	9,887
New participants	407	N/A	N/A	N/A	407
Terminations	(145)	145	0	0	0
Retirements	(59)	(25)	84	N/A	0
New disabilities	0	0	N/A	N/A	0
Died with beneficiary	(4)	0	(40)	40	(4)
Died without beneficiary	(1)	(3)	(48)	(46)	(98)
Refunds	(119)	(24)	0	0	(143)
Rehire	10	(10)	0	N/A	0
Certain period expired	N/A	N/A	0	(5)	(5)
Data adjustments	<u>1</u>	<u>15</u>	<u>0</u>	<u>0</u>	<u>16</u>
Number as of December 31, 2015	3,063	4,121	2,097	779	10,060

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT D

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>		
2006	117	\$3,304,140	184	\$2,631,780	3,092	\$56,086,841	3.4	\$18,139
2007	112	3,487,985	159	1,927,814	3,045	56,974,652	3.2	18,711
2008	127	3,714,283	177	2,321,096	2,995	58,367,839	4.2	19,488
2009	137	4,920,931	136	2,637,590	2,996	60,651,180	3.9	20,244
2010	113	3,442,389	167	2,903,979	2,942	61,189,590	2.7	20,799
2011	124	3,735,377	167	2,828,495	2,899	62,096,472	3.0	21,420
6/2012	167	4,681,195	158	2,797,326	2,908	63,980,341	2.7	22,001
12/2012	71	2,470,960	91**	1,290,060	2,888	65,161,241	2.6	22,563
12/2013	147	4,594,883	147	2,788,285	2,888	66,967,839	2.8	23,188
12/2014	126	4,085,581	138	2,781,597	2,876	68,271,823	2.4	23,738
12/2015	94	1,823,238	106	2,271,591	2,864	67,823,470	-0.7	23,681

* Does not include child beneficiaries receiving a pension.

** Includes removal of 17 QDROs for participant count purposes.

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT E

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

	<u>2015</u>	<u>2014</u>
Net position at fair value at the beginning of the year	\$413,421,716	\$435,768,679
Contribution income:		
Employer contributions	\$30,588,976	\$11,225,438
Employee contributions	12,368,636	10,831,434
Less administrative expenses	<u>-1,533,700</u>	<u>-1,458,831</u>
Net contribution income	41,423,912	20,598,041
Securities lending income	87,963	71,776
Other income	150	28,742
Investment income:		
Interest, dividends and other income	\$5,571,724	\$5,203,367
Asset appreciation	5,476,079	24,707,166
Less investment and administrative fees	<u>-2,224,190</u>	<u>-2,420,013</u>
Net investment income	<u>8,823,613</u>	<u>27,490,520</u>
Total income available for benefits	\$50,335,638	\$48,189,079
Less benefit payments:		
Annuity payments	-\$67,935,347	-\$67,206,100
Disability & death	-618,494	-600,551
Refund of contributions	<u>-2,048,175</u>	<u>-2,729,391</u>
Net benefit payments	-\$70,602,016	-\$70,536,042
Change in reserve for future benefits	-\$20,266,378	\$22,346,963
Net position at fair value at the end of the year	\$393,155,338	\$413,421,716

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT F

Summary Statement of Fund Assets at Fiscal Year Ended December 31

	<u>2015</u>	<u>2014</u>
Accounts receivable	\$ 20,420,057	\$ 12,297,043
Investments, at fair value:		
Collective investment funds	\$93,042,804	\$100,312,592
Bonds	62,725,711	69,958,140
Common and preferred stocks	53,062,089	60,342,493
Real estate	41,728,500	46,031,161
Private equity partnerships	39,901,128	50,163,093
Hedged equity	23,565,871	35,663,184
Infrastructure	20,826,213	0
Mutual funds	16,017,830	12,613,552
Foreign common stocks	13,620,861	0
Short-term investments	<u>4,818,526</u>	<u>22,968,749</u>
Total investments at fair value	369,309,533	398,052,964
Invested securities lending collateral	45,712,100	45,579,952
Prepaid annuity benefits	4,308,029	4,190,601
Furniture and fixtures, net	65,251	40,335
Prepaid expenses	<u>65,046</u>	<u>60,721</u>
Total assets	\$439,880,016	\$460,221,616
Less accounts payable:		
Accounts payable	-\$ 410,862	-\$ 334,969
Accrued benefits payable	-405,881	-725,214
Securities lending collateral	-45,712,100	-45,579,952
Due to broker	-116,784	-72,743
Deferred rent	<u>-79,051</u>	<u>-87,022</u>
Total accounts payable	-\$ 46,724,678	-\$ 46,799,900
Net position at fair value	<u>\$393,155,338</u>	<u>\$413,421,716</u>
Net position at actuarial value	<u>\$395,652,106</u>	<u>\$393,762,692</u>

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT G

Development of the Fund Through December 31, 2015

Fiscal Year Ended	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
June 30, 2007	\$9,594,593	\$9,719,082	\$51,140,015	\$1,237,899	\$58,578,971	\$583,295,949
June 30, 2008	8,998,687	10,264,805	45,344,625	1,289,579	59,938,455	586,676,032
June 30, 2009	9,667,765	10,141,146	11,549,827	1,335,180	62,945,073	553,754,517
June 30, 2010	10,829,339	9,829,998	8,194,551	1,465,562	62,560,242	518,582,601
June 30, 2011	10,981,419	9,791,650	15,218,630	1,498,905	63,704,890	489,370,505
June 30, 2012	10,868,361	10,404,827	-2,804,426	1,644,603	65,502,658	440,692,006
December 31, 2012	5,268,363	5,371,084	4,121,362	723,802	33,281,012	421,448,001
December 31, 2013	15,707,814	10,732,730	26,107,300	1,367,443	68,335,967	404,292,435
December 31, 2014	11,225,438	10,831,434	39,408,258	1,458,831	70,536,042	393,762,692
December 31, 2015	30,588,976	12,368,636	31,067,518	1,533,700	70,602,016	395,652,106

* On an actuarial basis, net of investment fees

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT H

Development of Unfunded Actuarial Accrued Liability

	<u>Plan Year Ended December 31</u>	
	<u>2015</u>	<u>2014</u>
1. Unfunded actuarial accrued liability at beginning of year	\$507,077,925	\$483,730,929
2. Normal cost (including administrative expenses) at beginning of year	14,949,567	14,411,589
3. Total contributions	42,957,612	22,056,872
4. Interest		
(a) Unfunded actuarial accrued liability and normal cost	\$39,152,063	\$37,360,689
(b) Total contributions	<u>1,457,388</u>	<u>748,304</u>
(c) Total interest: (4a) – (4b)	<u>37,694,675</u>	<u>36,612,385</u>
5. Expected unfunded actuarial accrued liability: (1) + (2) – (3) + (4c)	\$516,764,555	\$512,698,031
6. Changes due to (gain)/loss from:		
(a) Investments	-\$2,629,339	-\$10,929,182
(b) Demographics and other	<u>473,038</u>	<u>5,309,076</u>
(c) Total changes due to (gain)/loss: (6a) + (6b)	-\$ 2,156,301	-\$ 5,620,106
7. Change to due plan amendments	<u>0</u>	<u>0</u>
8. Unfunded accrued liability at end of year: (5) + (6c) + (7)	<u>\$514,608,254</u>	<u>\$507,077,925</u>

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT I

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 account of 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 Actuarial 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.

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT I

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:

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.

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT I

Definitions of Pension Terms (Continued)

Assumptions or Actuarial

Assumptions:

The estimates on 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 employers. 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.

ACTUARIAL

SECTION 3: Supplemental Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT I

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 for the Park Employees' Annuity and Benefit Fund of Chicago

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 767 beneficiaries and 12 dependent children)		2,876
2. Members inactive as of the valuation date with vested rights		145
3. Members active as of the valuation date		3,063
Fully vested	1,334	
Not vested	1,729	
4. Other non-vested inactive members as of the valuation date		3,674

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

1. Employer normal cost, including administrative expenses		\$ 2,066,718
2. Actuarial accrued liability		910,260,360
Retirees and beneficiaries	\$625,396,307	
Inactive members with vested rights	21,817,615	
Active members	263,046,438	
3. Actuarial value of assets (\$393,155,338 at fair value)		395,652,106
4. Unfunded actuarial accrued liability		<u>\$514,608,254</u>
5. Funded ratio: (3) ÷ (2)		43.5%

The determination of the actuarially determined contribution is as follows:

1. Total normal cost		\$ 13,763,768
2. Administrative expenses		1,558,218
3. Expected employee contributions		<u>-13,255,268</u>
4. Employer normal cost: (1) + (2) + (3)		\$ 2,066,718
5. Employer normal cost projected, adjusted for timing		2,142,355
6. Payment on projected unfunded/(overfunded) actuarial accrued liability		34,987,913
7. Total actuarially determined contributions: (5) + (6), adjusted for timing		<u>\$ 37,130,268</u>
8. Estimated employer contributions provided by the Fund, reflecting 3% loss on collections and supplemental contributions of \$12,500,000 due in 2016		30,235,701
9. Projected payroll		\$131,229,459
10. Total actuarially determined contribution as a percentage of projected payroll: (7) ÷ (9)		28.29%

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT II

Comparison of Employer Contribution to Actuarially Determined Contribution

Fiscal Year Ended	Actuarially Determined Contribution (ADC)*	Actual Contributions	Percentage Contributed
June 30, 2007	\$14,571,540	\$9,594,593	65.8%
June 30, 2008	16,073,257	8,998,687	56.0%
June 30, 2009	18,285,474	9,667,765	52.9%
June 30, 2010	22,399,740	10,829,339	48.3%
June 30, 2011	25,319,145	10,981,419	43.4%
June 30, 2012	28,051,528	10,868,361	38.7%
December 31, 2012	16,786,671	5,268,636	31.4%
December 31, 2013	41,834,857	15,707,814	37.5%
December 31, 2014	35,307,186	11,225,438	31.8%
December 31, 2015	36,273,994	30,588,976	84.3%
December 31, 2016	37,130,268	--	--

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

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT III

Schedule of Funding Progress

Actuarial Valuation Date	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)
06/30/2007	\$583,295,949	\$767,930,632	\$184,634,683	75.96%	\$106,601,982	173.20%
06/30/2008	586,676,032	795,379,129	208,703,097	73.76%	111,698,366	186.85%
06/30/2009	553,754,517	823,896,936	270,142,419	67.21%	108,882,742	248.10%
06/30/2010	518,582,601	833,025,948	314,443,347	62.25%	107,361,021	292.88%
06/30/2011	489,370,505	843,943,240	354,572,735	57.99%	107,686,693	329.26%
06/30/2012	440,692,006	866,370,565	425,678,559	50.87%	114,223,909	372.67%
12/31/2012	421,448,001	971,807,222	550,359,221	43.37%	58,231,511	472.56%**
12/31/2013	404,292,435	888,023,364	483,730,929	45.53%	117,781,596	410.70%
12/31/2014	393,762,692	900,840,617	507,077,925	43.71%	118,987,507	426.16%
12/31/2015	395,652,106	910,260,360	514,608,254	43.47%	122,382,584	420.49%

* Not less than zero

** Adjusted for annualized covered payroll

EXHIBIT IV

Solvency Test at December 31

	12/31/2015	12/31/2014	12/31/2013	12/31/2012	06/30/2012	06/30/2011
1. Actuarial accrued liability (AAL)						
a. Active member contributions	\$173,241,768	\$169,952,178	\$171,065,449	\$166,554,660	\$158,144,793	\$151,828,106
b. Retirees and beneficiaries	625,396,307	625,641,580	621,827,982	662,153,615	599,353,146	583,999,785
c. Active and inactive members (employer financed)	<u>111,622,285</u>	<u>105,246,859</u>	<u>95,129,933</u>	<u>143,098,947</u>	<u>108,872,626</u>	<u>108,115,349</u>
d. Total	\$910,260,360	\$900,840,617	\$888,023,364	\$971,807,222	\$866,370,565	\$843,943,240
2. Actuarial value of assets	395,652,106	393,762,692	404,292,435	421,448,001	440,692,006	489,370,505
3. Cumulative portion of AAL covered						
a. Active member contribution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
b. Retirees and beneficiaries	35.6%	35.8%	37.5%	38.5%	47.1%	57.8%
c. Active and inactive members (employer financed)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT V

Projection of Contributions, Liabilities, and Assets

Based on the results of the December 31, 2015, actuarial valuation, we have projected valuation results for a 40-year period commencing with Fiscal Year 2016.

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 40-year period from 2016 through 2054 by projecting the membership of the Fund over the 40-year period, taking into account the impact of new entrants into the Fund over the 40-year 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 40-year projection period. The results of our projections are shown on the following pages.

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (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
2015								910,260.4	395,652.1	514,608.3	43.5%
2016	13,255.3	17,735.7	12,500.0	131,229.5	13,763.8	72,910.3	1,610.4	917,681.5	394,558.6	523,122.9	43.0%
2017	14,274.8	27,619.3	0.0	128,567.8	13,609.5	73,373.1	1,690.9	925,013.2	393,665.6	531,347.6	42.6%
2018	14,056.2	29,599.1	0.0	126,580.5	13,529.7	73,303.0	1,775.4	932,881.9	386,281.9	546,600.0	41.4%
2019	15,130.3	40,191.1	50,000.0	124,983.2	13,437.3	73,762.8	1,864.2	940,764.1	441,861.4	498,902.8	47.0%
2020	14,993.7	39,575.6	0.0	123,844.6	13,402.9	73,772.0	1,957.4	949,191.2	452,740.8	496,450.3	47.7%
2021	14,882.8	42,599.9	0.0	122,920.4	13,358.0	74,183.6	2,055.3	957,774.9	466,959.1	490,815.8	48.8%
2022	14,810.8	42,215.2	0.0	122,320.2	13,338.2	74,507.0	2,158.1	966,645.6	481,384.5	485,261.1	49.8%
2023	14,758.8	41,902.9	0.0	121,887.6	13,321.2	74,902.0	2,266.0	975,753.5	496,115.1	479,638.3	50.8%
2024	14,712.6	41,700.2	0.0	121,502.3	13,275.4	75,333.4	2,379.3	985,047.6	511,196.4	473,851.2	51.9%
2025	14,676.4	41,554.0	0.0	121,201.1	13,233.6	75,799.6	2,498.2	994,510.3	526,624.3	468,886.0	53.0%
2026	14,641.9	41,423.8	0.0	120,913.5	13,163.1	76,315.6	2,623.1	1,004,071.9	542,381.9	461,689.6	54.0%
2027	14,605.4	41,322.0	0.0	120,608.7	13,072.7	76,761.2	2,754.3	1,013,790.3	558,584.3	455,206.0	55.1%
2028	14,601.1	41,224.9	0.0	120,573.5	13,026.1	77,118.3	2,892.0	1,023,817.4	575,385.4	448,432.1	56.2%
2029	14,616.8	41,121.9	0.0	120,703.9	12,987.2	77,913.6	3,036.6	1,033,729.7	592,381.5	441,348.1	57.3%
2030	14,638.3	41,110.0	0.0	120,882.9	12,954.8	78,688.8	3,188.5	1,043,546.2	609,701.0	433,845.2	58.4%
2031	14,666.9	41,154.1	0.0	121,121.8	12,930.6	79,523.9	3,347.9	1,053,206.5	627,363.3	425,843.3	59.6%
2032	14,700.6	41,214.5	0.0	121,402.1	12,900.2	80,274.6	3,515.3	1,062,779.8	645,495.3	417,284.5	60.7%
2033	14,750.0	41,295.2	0.0	121,814.3	12,879.0	80,866.9	3,691.0	1,072,433.8	664,325.5	408,108.3	61.9%
2034	14,818.1	41,390.0	0.0	122,381.6	12,873.8	81,431.9	3,875.6	1,082,220.1	683,959.3	398,260.8	63.2%
2035	14,891.1	41,529.2	0.0	122,990.1	12,860.8	82,024.9	4,069.4	1,092,111.2	704,469.6	387,641.6	64.5%
2036	14,973.1	41,720.9	0.0	123,673.2	12,856.2	80,508.2	4,272.8	1,104,312.6	728,164.5	376,148.1	65.9%
2037	15,055.1	41,926.5	0.0	124,356.7	12,847.0	81,042.3	4,486.5	1,116,865.2	753,159.2	363,706.0	67.4%
2038	15,149.1	42,157.3	0.0	125,140.0	12,846.1	81,358.1	4,710.8	1,130,030.6	779,805.1	350,225.5	69.0%
2039	15,271.1	42,388.2	0.0	126,156.4	12,877.2	81,779.9	4,946.3	1,143,779.3	808,133.5	335,645.8	70.7%
2040	15,396.6	42,652.9	0.0	127,202.0	12,905.1	82,057.6	5,193.7	1,158,300.9	838,446.6	319,854.3	72.4%
2041	15,532.8	42,996.3	0.0	128,337.0	12,940.1	82,359.8	5,453.3	1,173,635.8	870,947.9	302,687.9	74.2%
2042	15,692.5	43,349.5	0.0	129,668.4	12,991.6	82,553.7	5,726.0	1,189,975.0	905,934.9	284,040.0	76.1%
2043	15,867.5	43,733.0	0.0	131,126.8	13,060.1	82,346.5	6,012.3	1,207,828.2	944,043.4	263,784.8	78.2%
2044	16,068.1	44,182.9	0.0	132,797.9	13,146.5	82,165.9	6,312.9	1,227,300.6	985,560.2	241,740.4	80.3%
2045	16,286.7	44,675.6	0.0	134,619.7	13,249.1	81,838.8	6,628.6	1,248,683.2	1,030,940.7	217,742.5	82.6%
2046	16,518.6	45,240.2	0.0	136,552.4	13,354.9	81,388.3	6,960.0	1,272,250.7	1,080,674.7	191,576.0	84.9%
2047	16,778.0	45,855.7	0.0	138,714.4	13,492.2	80,848.1	7,308.0	1,298,293.8	1,135,245.9	163,047.8	87.4%
2048	17,051.9	46,508.7	0.0	140,996.1	13,644.2	80,149.5	7,673.4	1,327,178.2	1,195,217.2	131,960.0	90.1%
2049	15,196.9	13,107.1	0.0	143,472.2	13,812.8	79,479.7	8,057.1	1,359,105.1	1,223,404.6	135,700.5	90.0%
2050	15,472.6	13,687.5	0.0	146,097.8	13,987.7	78,737.7	8,459.9	1,394,384.4	1,254,946.0	139,438.4	90.0%
2051	15,770.0	14,141.2	0.0	148,930.6	14,184.8	78,005.5	8,882.9	1,433,281.1	1,289,953.0	143,328.1	90.0%
2052	16,085.7	14,413.0	0.0	151,936.9	14,398.1	77,449.7	9,327.1	1,475,901.1	1,328,311.0	147,590.1	90.0%
2053	16,416.6	14,691.3	0.0	155,088.2	14,627.0	76,743.4	9,793.4	1,522,696.4	1,370,426.8	152,269.6	90.0%
2054	16,772.3	15,002.4	0.0	158,476.1	14,886.1	76,098.9	10,283.1	1,573,948.6	1,416,553.7	157,394.9	90.0%

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VI

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

The RP-2000 Combined Healthy Mortality Table, set forward 1 year for female participants with generational projection from 2003 using Scale AA (adopted December 31, 2012).

The mortality table specified above was determined to contain provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

Termination:

Select and ultimate termination rates are based on recent experience of the Fund (adopted December 31, 2012). 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	15.0
1 - 1.99	13.5
2 - 2.99	12.0
3 - 3.99	11.0
4 - 4.99	10.0
5 - 5.99	9.0
6 - 6.99	8.5
7 - 7.99	8.0

Ultimate rates:

Age	Rate (%)
20	7.0
25	7.0
30	6.0
35	5.0
40	3.5
45	3.3
50	3.0
55	3.0

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VI
Actuarial Assumptions and Actuarial Cost Method (Continued)

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 (adopted December 31, 2012). Sample rates are shown below.

Age	Rate (%)	
	<30 Years of Service	30+ Years of Service
50	5.0	40.0
55	5.0	20.0
60	6.0	6.0
65	12.0	12.0
70	14.0	14.0
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 (adopted June 30, 2011; revised December 31, 2013). Sample rates are shown below.

Age	Rate (%)
60	20.0
62	50.0
65	20.0
67	50.0
70	20.0
75	100.0

Salary Increases:

Assumed salary increases are based on the recent experience of the Fund were used (adopted December 31, 2012). Rates are shown below.

Years of Service	Rate (%)
0 - 0.99	15.00
1 - 1.99	7.50
2 - 2.99	3.75
3 - 3.99	3.25
4+	2.75

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VI

Actuarial Assumptions and Actuarial Cost Method (Continued)

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.

Spouses:

75% of participants were assumed to be married and females are assumed to be 2 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.

Net Investment Return:

7.50% per year (adopted December 31, 2012)

Inflation:

2.75% per year (adopted December 31, 2012)

Payroll Growth:

2.75% per year (adopted December 31, 2012)

Administrative Expenses:

Equal to actual expenses for the prior year, increased by 5%.

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 (adopted December 31, 2012). 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.

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VII

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Fund 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 the Fund are required to contribute 10% of salary to the Fund as follows: 8% 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.

This 8% towards the retirement pension will increase to 9% in 2017 and 10% in 2019. This will decrease to 8.5% only if the funded ratio reached 90%, but it will revert back to 10% if the funding ratio subsequently falls below 90%.

Retirement Pension: a. Eligibility – An employee may retire at age 50 (age 58 for members younger than age 45 as of January 1, 2015) 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.

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.

The maximum pension payable is 80% of the highest annual salary.

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.

An employee who first becomes a participant on or after January 1, 2011 is subject to the following provisions:

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 2016, the annual salary is limited to \$111,571.63. 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.

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (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. Effective January 1, 2015, the age 62 and 67 requirements become 60 and 65, respectively.

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 payable starting at age 65 effective January 1, 2015.

Automatic annual increases in the retirement annuity 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. No AAI is payable in 2017 or 2019.

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.

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.

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VII

Summary of Plan Provisions (Continued)

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 tenth 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:	<p>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.</p>
Occupational Disability Benefit:	<p>Upon disability resulting from an injury incurred while on duty, an employee is entitled to a disability benefit of 74% of salary from the first day of absence without pay. The occupational disability benefit is decreased to 73% of salary in 2017 and 72% in 2019. 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.</p>
Occupational Death Benefit:	<p>Upon the death of an employee resulting from an accident 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.</p>
Refunds:	<p>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.</p>
Plan Year:	<p>January 1 through December 31. Prior to December 31, 2012, the plan year was July 1 through June 30.</p>

ACTUARIAL

SECTION 4: Reporting Information for the Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT VII

Summary of Plan Provisions (Continued)

Employer Contributions:

The tax multiple is 1.7 for 2016, and increases to 2.3 for 2017 and 2018, and 2.9 for 2019 and thereafter. Once the funding ratio reaches 90%, the employer contribution will be the lesser of 2.9 times the employee contributions during the fiscal year two years prior, or the amount needed to maintain a funding ratio of 90%. Additional employer contributions will be made in the amounts of \$12,500,000 in 2016 and \$50,000,000 in 2019.

ACTUARIAL

SECTION 5: GASB Information for Park Employees' Annuity and Benefit Fund of Chicago

EXHIBIT 1

Net Pension Liability

The components of the net pension liability of the Fund at December 31, 2015 were as follows:

Total pension liability	\$910,260,360
Plan fiduciary net position	393,155,338
Net pension liability	517,105,022
Plan fiduciary net position as a percentage of the total pension liability	43.19%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of December 31, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	Service-based ranging from 15% to 2.75%
Investment rate of return	7.50%, net of pension plan investment expense, including inflation+
Cost of living adjustments	All retiree COLAs are the lesser of 3% and 1/2 of CPI of the original benefit. Beneficiary COLAs are 3% compounded. COLAs will not be granted during 2017 and 2019. (This does not affect COLAs for beneficiaries.)

For healthy members, mortality rates were based on the RP-2000 Combined Healthy Table, set forward 1 year for female participants, with generational projection from 2003 using Scale AA.

The actuarial assumptions used in the December 31, 2015, valuation were based on the results of an experience study for the period July 1, 2007 to June 30, 2012.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that member and employer contributions will be made as specified by Public Act 98-0622. 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. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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 7.50%, 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 (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net pension liability as of December 31, 2015	\$614,722,758	\$517,105,022	\$435,018,062

ACTUARIAL

SECTION 5: GASB Information for Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT 2

Schedule of Changes in Net Pension Liability

	<u>2015</u>	<u>2014</u>
Total pension liability		
Service cost	\$13,417,795	\$12,975,774
Interest	65,921,805	64,929,834
Change of benefit term	0	0
Differences between expected and actual experience	682,159	5,447,687
Changes of assumptions	0	0
Benefit payments, including refunds of employee contributions	<u>-70,602,016</u>	<u>-70,536,042</u>
Net change in total pension liability	9,419,743	12,817,253
Total pension liability – beginning	<u>900,840,617</u>	<u>888,023,364</u>
Total pension liability – ending (a)	<u>910,260,360</u>	<u>900,840,617</u>
Plan fiduciary net position		
Contributions – employer	30,588,976	11,225,438
Contributions – employee	12,368,636	10,831,434
Net investment income	8,823,613	27,490,520
Benefit payments, including refunds of employee contributions	-70,602,016	-70,536,042
Administrative expense	-1,533,700	-1,458,831
Other	<u>88,113</u>	<u>100,518</u>
Net change in plan fiduciary net position	-20,266,378	-22,346,963
Plan fiduciary net position – beginning	<u>413,421,716</u>	<u>435,768,679</u>
Plan fiduciary net position – ending (b)	393,155,338	413,421,716
Fund's net pension liability – ending (a) – (b)	<u>517,105,022</u>	<u>487,418,901</u>
Plan fiduciary net position as a percentage of the total pension liability	43.19%	45.89%
Covered employee payroll	122,382,584	118,987,507
Fund's net pension liability as percentage of covered employee payroll	422.53%	409.64%

ACTUARIAL

SECTION 5: GASB Information for Park Employees' Annuity and Benefit Fund of Chicago (Continued)

EXHIBIT 3

Schedule of Employer Contribution – Last Ten Fiscal Years

Fiscal Year Ended	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
June 30, 2007	\$14,571,540	\$9,594,593	\$4,976,947	\$106,601,982	9.00%
June 30, 2008	16,073,257	8,998,687	7,074,570	111,698,366	8.06%
June 30, 2009	18,285,474	9,667,765	8,617,709	108,882,742	8.88%
June 30, 2010	22,399,740	10,829,339	11,570,401	107,361,021	10.09%
June 30, 2011	25,319,145	10,981,419	14,337,726	107,686,693	10.20%
June 30, 2012	28,051,528	10,868,361	17,183,167	114,223,909	9.51%
December 31, 2012	16,786,671	5,268,363	11,518,308	58,231,511	9.05%
December 31, 2013	41,834,857	15,707,814	26,127,043	117,781,596	13.34%
December 31, 2014	35,307,186	11,225,438	24,081,748	118,987,507	9.43%
December 31, 2015	36,273,994	30,588,976	5,685,018	122,382,584	24.99%

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" rates:

Actuarial cost method	Entry Age Actuarial cost method
Amortization method	27-year closed, level percentage of payroll amortization
Asset valuation method	5-year smoothed market

Actuarial assumptions:

Investment rate of return	7.50%, net of investment expense
Projected salary increases	Service-based ranging from 15% to 2.75%
Mortality	Post-retirement mortality rates were based on the RP-2000 Combined Healthy Mortality Tables set forward 1 year for females with generational projection from 2003 using scale AA for mortality improvements. Pre-retirement mortality rates are the same as post-retirement rates.
Cost of living adjustments	All retiree COLAs are the lesser of 3% and 1/2 of CPI of the original benefit. Beneficiary COLAs are 3% compounded. COLAs will not be granted during 2017 and 2019. (This does not affect COLAs for beneficiaries.)

Other assumptions:

Same as those used in the December 31, 2015, actuarial funding valuations.

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 Comprehensive Annual 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. 88-101

Other Financial Data

These schedules provide additional information regarding members as well as data regarding refunds and disability. 102-103

GASB No. 44

Additional schedules to address the requirements defined by GASB No. 44. 104-106

STATISTICAL

MEMBERSHIP STATISTICS

	<u>December 31, 2015</u>	<u>December 31, 2014</u>
Active participants	3,063	2,973
Retired employees' - annuities	2,097	2,101
Surviving spouses – annuities	767	773
Children - annuities	12	17
Retirements granted during the year	84	90
Retirement deductions due to deaths and pension terminations	139	91
New members	407	250
Withdrawals with refund	119	188

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, 2015**

Table I

<u>Age at 12/31/15</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>
17	1	\$ 7,945	-	\$ -	1	\$ 7,945
19	7	57,019	7	35,659	14	92,678
20	18	197,279	19	186,868	37	384,147
21	20	249,708	24	298,202	44	547,910
22	44	774,547	32	490,159	76	1,264,706
23	38	702,676	42	671,370	80	1,374,046
24	60	1,256,545	56	976,226	116	2,232,771
25	49	968,766	51	937,814	100	1,906,580
26	39	815,929	42	961,677	81	1,777,606
27	52	1,239,907	47	1,037,707	99	2,277,614
28	44	1,078,219	43	1,046,033	87	2,124,252
29	41	1,293,335	27	717,809	68	2,011,144
30	51	1,550,690	42	1,222,629	93	2,773,319
31	39	1,449,827	22	640,562	61	2,090,389
32	26	1,155,953	35	1,198,916	61	2,354,869
33	52	1,785,720	26	851,670	78	2,637,390
34	36	1,605,255	20	769,044	56	2,374,299
35	30	1,299,442	21	822,578	51	2,122,020
36	38	1,435,594	21	776,126	59	2,211,720
37	39	1,857,198	18	814,259	57	2,671,457
38	23	1,107,069	21	1,001,359	44	2,108,428
39	31	1,509,120	20	818,220	51	2,327,340
40	36	1,362,217	22	1,041,441	58	2,403,658
41	30	1,222,680	26	1,214,116	56	2,436,796
42	30	1,277,284	27	1,215,978	57	2,493,262
43	36	1,805,995	23	723,194	59	2,529,189
44	30	1,708,325	23	1,081,871	53	2,790,196
45	30	1,297,673	33	1,393,629	63	2,691,302
46	52	2,372,140	22	1,153,263	74	3,525,403
47	43	1,921,372	25	1,123,361	68	3,044,733
48	51	2,316,206	26	1,097,883	77	3,414,089
49	39	1,821,089	32	1,372,605	71	3,193,694
50	32	1,637,378	25	1,102,601	57	2,739,979
51	41	2,128,745	43	1,890,357	84	4,019,102
52	36	2,041,092	29	1,238,352	65	3,279,444

STATISTICAL

**Active Members and Total Annual Salaries by Age
for the year ended December 31, 2015**

Table I
(continued)

Age at 12/31/15	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
53	36	\$ 1,640,755	22	\$ 1,006,819	58	\$ 2,647,574
54	42	2,485,522	34	1,259,623	76	3,745,145
55	38	1,935,750	35	1,588,412	73	3,524,162
56	41	1,976,899	25	1,048,243	66	3,025,142
57	48	2,244,691	22	1,111,007	70	3,355,698
58	39	1,566,627	18	761,174	57	2,327,801
59	28	1,585,485	15	534,174	43	2,119,659
60	33	1,729,732	15	727,265	48	2,456,997
61	34	1,593,568	13	622,782	47	2,216,350
62	28	1,369,173	17	730,213	45	2,099,386
63	24	1,305,699	16	611,989	40	1,917,688
64	24	1,158,259	9	415,325	33	1,573,584
65	26	1,529,078	9	455,769	35	1,984,847
66	24	1,134,570	7	253,898	31	1,388,468
67	9	460,014	4	206,520	13	666,534
68	16	528,428	3	95,855	19	624,283
69	4	128,245	1	40,498	5	168,743
70	10	391,187	-	-	10	391,187
71	8	339,492	3	64,537	11	404,029
72	4	201,897	1	41,194	5	243,091
73	4	266,664	1	94,032	5	360,696
74	3	142,341	1	41,077	4	183,418
75	1	40,216	2	117,264	3	157,480
76	1	98,496	-	-	1	98,496
77	1	42,333	1	50,479	2	92,812
78	3	143,092	-	-	3	143,092
79	2	129,137	-	-	2	129,137
82	-	-	1	9,161	1	9,161
84	<u>1</u>	<u>10,738</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>10,738</u>
	<u>1,796</u>	<u>\$ 72,488,027</u>	<u>1,267</u>	<u>\$ 43,810,848</u>	<u>3,063</u>	<u>\$116,298,875</u>

	<u>Male</u>	<u>Female</u>	<u>Both</u>
Average Age:	43.0	40.0	41.8
Average Salary:	\$ 40,361	\$ 34,578	\$ 37,969

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, 2015**

Table II

Years of Service	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
< 1	206	\$ 2,336,130	165	\$ 1,261,876	371	\$ 3,598,006
1	148	4,065,420	107	2,584,509	255	6,649,929
2	141	4,735,655	107	2,647,391	248	7,383,046
3	123	3,527,692	84	2,440,994	207	5,968,686
4	114	4,522,448	95	2,787,288	209	7,309,736
5	48	1,700,564	38	947,576	86	2,648,140
6	31	1,134,382	29	1,029,272	60	2,163,654
7	62	2,453,344	25	795,063	87	3,248,407
8	67	2,507,527	52	1,870,861	119	4,378,388
9	63	2,615,520	63	2,241,875	126	4,857,395
10	86	3,736,855	55	2,073,221	141	5,810,076
11	58	3,359,085	26	1,347,284	84	4,706,369
12	39	1,461,761	18	782,080	57	2,243,841
13	30	1,506,082	10	600,705	40	2,106,787
14	42	1,948,062	38	1,599,380	80	3,547,442
15	52	2,580,823	38	1,743,653	90	4,324,476
16	64	3,544,792	42	2,041,168	106	5,585,960
17	60	3,078,933	29	1,440,640	89	4,519,573
18	40	2,120,692	37	1,801,096	77	3,921,788
19	37	1,977,372	38	1,965,416	75	3,942,788
20	29	1,232,905	28	1,531,800	57	2,764,705
21	15	934,895	16	943,368	31	1,878,263
22	8	419,765	8	489,532	16	909,297
23	20	1,097,803	11	697,178	31	1,794,981
24	36	2,061,984	17	958,395	53	3,020,379
25	23	1,502,978	9	434,473	32	1,937,451
26	19	1,431,509	19	1,148,230	38	2,579,739
27	9	660,186	10	527,968	19	1,188,154
28	12	756,273	5	335,922	17	1,092,195
29	23	1,481,237	9	497,174	32	1,978,411
30	26	1,741,788	14	767,237	40	2,509,025
31	9	576,988	4	261,967	13	838,955
32	8	460,615	3	181,021	11	641,636
33	10	655,133	5	301,967	15	957,100
34	9	678,326	1	71,822	10	750,148

STATISTICAL

**Active Members and Total Annual Salaries by Length of Service
for the year ended December 31, 2015**

Table II
(continued)

Years of Service	Male		Female		Total	
	Number	Annual Salaries	Number	Annual Salaries	Number	Annual Salaries
35	9	\$ 652,443	4	\$ 239,758	13	\$ 892,201
36	4	247,349	2	126,345	6	373,694
37	5	327,618	2	125,241	7	452,859
38	1	53,607	-	-	1	53,607
39	1	71,830	1	52,107	2	123,937
41	3	150,594	-	-	3	150,594
42	3	209,898	1	68,739	4	278,637
43	1	72,501	-	-	1	72,501
44	-	-	1	8,483	1	8,483
46	1	41,249	1	40,773	2	82,022
49	<u>1</u>	<u>55,414</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>55,414</u>
	<u>1,796</u>	<u>\$ 72,488,027</u>	<u>1,267</u>	<u>\$ 43,810,848</u>	<u>3,063</u>	<u>\$ 116,298,875</u>

	Male	Female	Both
Average Service:	10.5 years	9.6 years	10.1 years
Average Salary:	\$ 40,361	\$ 34,578	\$ 37,969

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.

**Retirement Pensions by Age and Annual Payments
for the year ended December 31, 2015**

Table III

<u>Age at 12/31/15</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	1	\$ 4,518	3	\$ 57,259	4	\$ 61,777
51	4	119,191	1	17,935	5	137,126
52	10	331,860	1	52,796	11	384,656
53	9	219,659	3	51,744	12	271,403
54	12	381,816	6	154,654	18	536,470
55	13	364,062	4	89,272	17	453,334
56	24	811,394	11	243,435	35	1,054,829
57	33	1,130,740	4	167,161	37	1,297,901
58	23	862,420	9	219,411	32	1,081,831
59	36	1,028,015	11	409,774	47	1,437,789
60	45	1,556,663	20	563,725	65	2,120,388
61	55	1,823,199	17	461,164	72	2,284,363
62	54	1,640,518	20	498,173	74	2,138,691
63	51	1,372,399	28	543,157	79	1,915,556
64	61	1,952,757	24	582,457	85	2,535,214
65	65	1,736,503	25	673,763	90	2,410,266
66	59	1,971,326	17	424,313	76	2,395,639
67	55	1,472,713	18	443,074	73	1,915,787
68	79	2,168,831	19	465,317	98	2,634,148
69	49	1,208,460	19	339,847	68	1,548,307
70	53	1,164,346	12	267,945	65	1,432,291
71	37	1,218,439	24	468,263	61	1,686,702
72	63	1,875,056	19	428,700	82	2,303,756
73	64	1,643,850	26	404,239	90	2,048,089
74	38	1,075,673	14	294,875	52	1,370,548
75	42	1,312,817	19	248,478	61	1,561,295
76	36	987,684	16	262,577	52	1,250,261
77	58	1,512,039	9	140,130	67	1,652,169
78	41	1,061,946	10	106,800	51	1,168,746
79	33	812,757	16	393,264	49	1,206,021
80	41	1,093,878	8	154,200	49	1,248,078
81	38	1,237,386	16	160,403	54	1,397,789
82	32	932,164	8	220,626	40	1,152,790
83	36	842,575	17	205,377	53	1,047,952
84	34	739,511	5	90,930	39	830,441
85	24	696,501	7	151,010	31	847,511

STATISTICAL

**Retirement Pensions by Age and Annual Payments
for the year ended December 31, 2015**

Table III
(continued)

<u>Age at 12/31/15</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>
86	27	\$ 833,215	6	\$ 110,391	33	\$ 943,606
87	33	953,655	5	53,053	38	1,006,708
88	24	657,847	9	113,002	33	770,849
89	10	320,152	6	103,289	16	423,441
90	12	363,819	5	65,760	17	429,579
91	5	237,922	6	113,268	11	351,190
92	10	290,076	5	56,088	15	346,164
93	6	101,383	3	23,174	9	124,557
94	8	267,503	6	125,392	14	392,895
95	1	27,056	2	55,997	3	83,053
96	2	19,541	1	2,539	3	22,080
97	2	117,258	1	24,570	3	141,828
98	2	33,888	-	-	2	33,888
99	1	27,454	1	3,905	2	31,359
100	2	29,313	2	3,726	4	33,039
	<u>1,553</u>	<u>\$ 44,643,748</u>	<u>544</u>	<u>\$ 11,310,402</u>	<u>2,097</u>	<u>\$ 55,954,150</u>
			<u>Male</u>	<u>Female</u>	<u>Both</u>	
		Average Age:	71.3	71.3	71.3	
		Average Annual Payments:	\$ 28,747	\$ 20,791	\$ 26,683	

STATISTICAL

**Retirement Pensions by Age at Time of Retirement
for the year ended December 31, 2015**

Table IV

<u>Age at 12/31/15</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	151	\$ 4,224,326	38	\$ 927,261	189	\$ 5,151,587
51	102	3,793,204	26	938,884	128	4,732,088
52	88	3,079,602	27	697,232	115	3,776,834
53	81	2,797,559	21	610,278	102	3,407,837
54	82	2,813,081	31	1,022,600	113	3,835,681
55	108	2,978,759	47	956,727	155	3,935,486
56	102	2,664,313	27	468,714	129	3,133,027
57	74	2,258,976	24	627,220	98	2,886,196
58	80	2,130,113	24	434,315	104	2,564,428
59	57	1,774,752	28	550,004	85	2,324,756
60	96	2,526,312	47	686,188	143	3,212,500
61	71	1,972,304	29	405,878	100	2,378,182
62	98	2,357,890	39	702,630	137	3,060,520
63	52	1,314,885	14	277,418	66	1,592,303
64	46	1,184,138	17	240,245	63	1,424,383
65	71	1,750,625	30	417,139	101	2,167,764
66	43	965,706	14	287,354	57	1,253,060
67	44	1,241,646	17	286,004	61	1,527,650
68	22	659,209	15	230,265	37	889,474
69	17	576,457	5	57,271	22	633,728
70	23	403,429	9	170,537	32	573,966
71	8	250,886	2	39,744	10	290,630
72	5	125,845	2	98,189	7	224,034
73	5	102,038	2	48,012	7	150,050
74	5	114,680	2	21,157	7	135,837
75	8	239,696	1	23,709	9	263,405
76	6	118,852	2	7,938	8	126,790
77	2	33,623	2	42,096	4	75,719
78	2	98,049	-	-	2	98,049
79	1	7,199	1	10,823	2	18,022
80	1	60,985	-	-	1	60,985
81	1	20,903	-	-	1	20,903

STATISTICAL

**Retirement Pensions by Age at Time of Retirement
for the year ended December 31, 2015**

Table IV
(continued)

<u>Age at 12/31/15</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	\$ 3,706	-	\$ -	1	\$ 3,706
93	-	-	1	24,570	1	24,570
	<u>1,553</u>	<u>\$ 44,643,748</u>	<u>544</u>	<u>\$ 11,310,402</u>	<u>2,097</u>	<u>\$ 55,954,150</u>
				<u>Male</u>	<u>Female</u>	<u>Both</u>
		Average Age:		58.2	58.9	58.4
		Average Annual Payments:		\$ 28,747	\$ 20,791	\$ 26,683

STATISTICAL

**Surviving Spouses' Pension by Age and Annual Payments
for the year ended December 31, 2015**

Table V

<u>Age at 12/31/15</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age at 12/31/15</u>	<u>Number</u>	<u>Annual Payments</u>
37	1	\$ 3,414	73	22	\$ 397,485
42	1	18,262	74	14	212,008
44	2	5,747	75	21	336,216
46	1	31,624	76	23	342,430
47	1	1,611	77	36	558,482
48	1	19,548	78	18	308,257
49	1	29,782	79	27	365,318
51	2	23,208	80	29	506,015
52	4	32,576	81	29	442,071
53	2	9,158	82	25	329,682
54	4	58,910	83	30	504,133
55	2	25,008	84	27	445,152
56	7	122,133	85	27	475,024
57	4	100,428	86	25	420,793
58	4	76,746	87	34	499,538
59	6	123,369	88	27	357,019
60	10	256,026	89	19	239,056
61	11	168,836	90	25	316,035
62	12	261,098	91	15	196,066
63	7	142,991	92	23	285,903
64	15	236,084	93	10	143,219
65	15	263,294	94	12	148,786
66	9	125,937	95	12	114,248
67	11	198,433	96	4	53,501
68	20	344,921	97	3	17,664
69	21	339,655	98	7	55,930
70	10	174,563	99	2	12,279
71	15	265,142	100	1	812
72	20	348,489	101	<u>1</u>	<u>17,394</u>
				<u>767</u>	<u>\$11,907,509</u>

Average Age: 78.2
Average Annual Payments: \$ 15,525

STATISTICAL

**Surviving Spouses' Pension by Age at Commencement
for the year ended December 31, 2015**

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>
21	1	\$ 1,106	60	15	\$ 302,418
27	1	3,838	61	18	242,561
28	2	11,332	62	19	306,453
29	2	5,331	63	17	310,829
30	1	14,312	64	24	306,009
31	2	11,058	65	18	276,585
32	1	792	66	22	362,470
33	2	22,749	67	31	458,192
34	1	7,379	68	27	454,681
35	2	4,597	69	30	485,489
36	6	42,668	70	28	474,441
37	3	24,162	71	20	329,435
38	4	20,155	72	22	306,754
39	6	93,743	73	15	203,691
40	2	41,064	74	19	248,944
41	5	73,942	75	19	261,599
42	8	118,142	76	24	407,049
43	6	90,913	77	14	278,156
44	9	93,408	78	20	275,111
45	9	119,279	79	17	224,939
46	6	93,070	80	15	203,049
47	4	74,432	81	11	185,711
48	12	205,803	82	9	153,781
49	12	254,635	83	7	96,329
50	17	253,408	84	10	119,926
51	11	187,329	85	7	71,689
52	8	121,020	86	3	38,189
53	15	258,574	87	4	57,550
54	13	304,291	88	7	102,429
55	21	356,419	89	3	23,436
56	14	207,486	90	2	14,499
57	20	441,735	91	1	635
58	20	395,696	92	4	35,360
59	18	321,993	93	<u>1</u>	<u>13,259</u>
				<u>767</u>	<u>\$11,907,509</u>

Average Age: 64.2
Average Annual Payments: \$ 15,525

STATISTICAL

Annuities and Refunds by Type
Last Ten Years

Table VII

<u>Year Ended</u>	<u>Retirement</u>	<u>Surviving</u>		<u>Refunds</u>	
		<u>Spouse</u>	<u>Children</u>	<u>Employees'</u>	<u>Pensioners'</u>
June 30, 2007	\$ 47,002,222	\$ 9,265,244	\$ 24,900	\$ 1,619,162	\$ 149,752
June 30, 2008	47,935,949	9,440,330	22,299	1,743,368	221,470
June 30, 2009	49,910,083	9,819,764	24,250	2,200,749	479,610
June 30, 2010	50,528,497	10,083,124	17,400	1,368,903	-
June 30, 2011	50,950,848	10,374,674	18,519	1,524,460	137,898
June 30, 2012	52,051,852	10,801,985	14,719	1,786,275	201,878
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

Death and Disability Benefits
Last Ten Years

Table VIII

<u>Year Ended</u>	<u>Death Benefit</u>	<u>Ordinary Disability</u>	<u>Duty Disability</u>	<u>Total</u>
June 30, 2007	\$ 271,000	\$ 227,448	\$ 19,243	\$ 517,691
June 30, 2008	295,900	286,764	(7,626)	(a) 575,038
June 30, 2009	252,500	245,383	12,733	510,616
June 30, 2010	249,500	290,747	22,071	562,318
June 30, 2011	307,000	339,197	52,294	698,491
June 30, 2012	371,225	366,541	(91,817)	(a) 645,949
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

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

STATISTICAL

Number of Active Participants
Last Ten Years

Table IX

<u>Year Ended</u>	<u>Male</u> <u>Participants</u>	<u>Female</u> <u>Participants</u>	<u>Total</u>
June 30, 2007	1,855	1,185	3,040
June 30, 2008	1,846	1,185	3,031
June 30, 2009	1,750	1,115	2,865
June 30, 2010	1,714	1,102	2,816
June 30, 2011	1,674	1,121	2,795
June 30, 2012	1,804	1,173	2,977
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

Active Participants Statistical Averages
Last Ten Years

Table X

<u>Year Ended</u>	<u>Male</u>			<u>Female</u>			<u>Combined</u>		
	<u>Annual</u> <u>Salary</u>	<u>Age</u>	<u>Service</u>	<u>Annual</u> <u>Salary</u>	<u>Age</u>	<u>Service</u>	<u>Annual</u> <u>Salary</u>	<u>Age</u>	<u>Service</u>
June 30, 2007	\$33,054	41.6	9.4	\$29,108	37.9	7.6	\$32,736	40.2	8.7
June 30, 2008	36,721	41.9	9.5	31,108	38.4	7.9	34,526	40.5	8.9
June 30, 2009	38,208	42.5	10.0	32,598	38.9	8.4	36,024	41.1	9.4
June 30, 2010	38,131	43.2	10.5	32,393	39.5	9.0	35,886	41.8	9.9
June 30, 2011	38,680	43.5	10.9	32,873	39.9	9.3	36,351	42.1	10.3
June 30, 2012	36,623	42.9	10.2	32,585	39.7	9.1	35,032	41.6	9.8
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

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>
June 30, 2007	2,169	869	18	3,056
June 30, 2008	2,152	843	18	3,013
June 30, 2009	2,167	829	17	3,013
June 30, 2010	2,125	817	14	2,956
June 30, 2011	2,096	803	14	2,913
June 30, 2012	2,104	804	13	2,921
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

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>
June 30, 2007	\$21,999	\$10,654
June 30, 2008	22,688	11,321
June 30, 2009	23,440	11,835
June 30, 2010	23,997	12,481
June 30, 2011	24,668	12,941
June 30, 2012	25,367	13,544
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

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>(1) + (2)</u>	<u>(1) / (3)</u>
June 30, 2007	\$583,295,949	\$184,634,683	\$767,930,632	76.0%
June 30, 2008	586,676,032	208,703,097	795,379,129	73.8
June 30, 2009	553,754,517	270,142,419	823,896,936	67.2
June 30, 2010	518,582,601	314,443,347	833,025,948	62.3
June 30, 2011	489,370,505	354,572,735	843,943,240	58.0
June 30, 2012	440,692,006	425,678,559	866,370,565	50.9
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

Ratio of Unfunded Liability to Payroll
 Last Ten Years
Table II

<u>Year Ended</u>	<u>Covered Payroll</u>	<u>Unfunded Liability</u>	<u>Liability % of Payroll</u>
June 30, 2007	\$106,601,982	\$184,634,683	173.2%
June 30, 2008	111,698,366	208,703,097	186.8
June 30, 2009	108,882,742	270,142,419	248.1
June 30, 2010	107,361,021	314,443,347	292.9
June 30, 2011	107,686,693	354,572,735	329.3
June 30, 2012	114,223,909	425,678,559	372.6
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

Revenue by Sources
 Last Ten Years
Table III

<u>Year Ended</u>	<u>Employer Contributions</u>	<u>Employee Contributions</u>	<u>Investment Income (a)</u>	<u>Total</u>
June 30, 2007	\$ 9,594,593	\$ 9,719,082	\$ 88,741,395	\$108,055,070
June 30, 2008	8,998,687	10,264,805	(17,391,594)	1,871,898
June 30, 2009	9,677,765	10,141,146	(103,488,375)	(83,669,464)
June 30, 2010	10,829,339	9,829,998	41,419,975	62,079,312
June 30, 2011	10,981,419	9,791,650	84,890,838	105,663,907
June 30, 2012	10,868,361	10,404,827	3,861,173	25,134,361
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

(a) includes income from securities lending

STATISTICAL

Required Schedules (GASB No. 44)

Average Benefit Payments
Last Ten Years
(Dollars in Thousands)

Table I

	<u>Years of Credited Service</u>						
	<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 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 1/1/14 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 1/1/13 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 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 7/1/11 to 6/30/12							
Average monthly benefit	\$ 572	\$ 871	\$ 995	\$ 1,419	\$ 1,999	\$ 3,222	\$ 3,909
Average final average salary	\$ 7,210	\$ 4,957	\$ 3,198	\$ 4,088	\$ 4,339	\$ 5,175	\$ 4,633
Number of retired members	21	14	7	9	14	13	22
Period 7/1/10 to 6/30/11							
Average monthly benefit	\$ 475	\$ 1,001	\$ 665	\$ 1,244	\$ 1,893	\$ 2,800	\$ 4,406
Average final average salary	\$ 7,516	\$ 5,633	\$ 2,288	\$ 3,216	\$ 3,728	\$ 4,484	\$ 5,911
Number of retired members	19	7	12	5	11	8	16
Period 7/1/09 to 6/30/10							
Average monthly benefit	\$ 389	\$ 970	\$ 1,287	\$ 1,046	\$ 3,302	\$ 3,552	\$ 4,039
Average final average salary	\$ 5,923	\$ 6,512	\$ 4,078	\$ 2,892	\$ 6,083	\$ 5,668	\$ 5,222
Number of retired members	13	6	8	12	5	9	8
Period 7/1/08 to 6/30/09							
Average monthly benefit	\$ 440	\$ 821	\$ 1,374	\$ 1,189	\$ 1,939	\$ 2,089	\$ 3,785
Average final average salary	\$ 5,734	\$ 5,152	\$ 4,714	\$ 3,449	\$ 3,882	\$ 3,516	\$ 4,858
Number of retired members	15	13	15	6	12	11	30
Period 7/1/07 to 6/30/08							
Average monthly benefit	\$ 363	\$ 678	\$ 698	\$ 1,535	\$ 2,145	\$ 2,428	\$ 3,269
Average final average salary	\$ 5,962	\$ 4,837	\$ 2,806	\$ 4,166	\$ 4,280	\$ 3,763	\$ 4,684
Number of retired members	15	4	11	6	8	9	27
Period 7/1/06 to 6/30/07							
Average monthly benefit	\$ 408	\$ 441	\$ 864	\$ 952	\$ 1,713	\$ 2,463	\$ 3,461
Average final average salary	\$ 6,201	\$ 2,851	\$ 3,115	\$ 3,117	\$ 3,725	\$ 4,234	\$ 4,472
Number of retired members	16	9	6	13	5	10	16

STATISTICAL

Required Schedules (GASB No. 44)

Principal Participating Employers
Current Year and Nine Years Ago

Table II

<u>Participating Government</u>	<u>December 31, 2015</u>			<u>June 30, 2007</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	3,051	1	99.61%	3,027	1	99.57%
City of Chicago	12	2	0.39	12	2	0.40
	-	3	0.00	1	3	0.03
Total (3 Governments)	<u>3,063</u>		<u>100.00%</u>	<u>3,040</u>		<u>100.00%</u>

Changes in Fiduciary Net Position

Table III

Last Ten Years
(Dollars in Thousands)

	Years ended			Six Months Ended	Fiscal years ended June 30					
	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>12/31/12</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
ADDITIONS										
Employer Contributions	\$30,589	\$11,226	\$15,804	\$ 5,268	\$10,868	\$10,981	\$ 10,829	\$ 9,678	\$ 8,999	\$ 9,595
Employee Contributions	12,369	10,831	10,733	5,371	10,405	9,792	9,830	10,141	10,265	9,719
Investment Income	<u>8,912</u>	<u>27,591</u>	<u>66,643</u>	<u>24,957</u>	<u>3,861</u>	<u>84,891</u>	<u>41,420</u>	<u>(103,488)</u>	<u>(17,392)</u>	<u>88,741</u>
Total Additions	51,870	49,648	93,180	35,596	25,134	105,664	62,079	(83,669)	1,872	108,055
DEDUCTIONS (see Table IV)										
Benefit Payments	68,554	67,807	66,220	32,303	63,514	62,043	61,191	60,265	57,974	56,810
Refunds	2,048	2,729	2,116	978	1,988	1,662	1,369	2,680	1,965	1,769
Administrative Expenses	<u>1,534</u>	<u>1,459</u>	<u>1,464</u>	<u>724</u>	<u>1,645</u>	<u>1,522</u>	<u>1,466</u>	<u>1,335</u>	<u>1,289</u>	<u>1,238</u>
Total Deductions	72,136	71,995	69,800	34,005	67,147	65,227	64,026	64,280	61,228	59,817
Changes in Fiduciary Net Position	<u>\$(20,266)</u>	<u>\$(22,347)</u>	<u>\$23,380</u>	<u>\$ 1,591</u>	<u>\$(42,013)</u>	<u>\$40,437</u>	<u>\$(1,947)</u>	<u>\$(147,949)</u>	<u>\$(59,356)</u>	<u>\$48,238</u>

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	Years ended			Six Months Ended	Fiscal years ended June 30					
	2015	2014	2013	12/31/12	2012	2011	2010	2009	2008	2007
TYPE OF BENEFIT										
Age and Service Benefits										
Retirees	\$56,095	\$55,520	\$54,256	\$26,429	\$52,052	\$50,951	\$50,528	\$49,910	\$47,936	\$47,002
Spousal	11,823	11,666	11,320	5,529	10,802	10,375	10,083	9,820	9,440	9,265
Children	17	21	22	11	15	19	17	24	22	25
Death Benefits	317	280	266	137	371	307	250	253	296	271
Disability Benefits										
Member-Duty	94	39	54	9	(92)	52	22	13	(8)	19
Member-Non-Duty	208	281	302	188	366	339	291	245	288	228
Total Benefits	\$68,554	\$67,807	\$66,220	\$32,303	\$63,514	\$62,043	\$61,191	\$60,265	\$57,974	\$56,810
TYPE OF REFUND										
Separation	\$ 1,493	\$ 2,427	\$ 2,033	\$ 789	\$ 1,786	\$ 1,524	\$ 1,369	\$ 2,200	\$ 1,743	\$ 1,619
Death	555	302	83	189	202	138	-	480	222	150
Total Refunds	\$ 2,048	\$ 2,729	\$ 2,116	\$ 978	\$ 1,988	\$ 1,662	\$ 1,369	\$ 2,680	\$ 1,965	\$ 1,769

Retired Members by Type of Benefit

Table V

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement		
		1	2	3
\$ 1 - \$ 250	228	135	81	12
251 - 500	312	213	99	-
501 - 750	257	171	86	-
751 - 1,000	212	143	69	-
1,001 - 1,250	208	130	78	-
1,251 - 1,500	162	93	69	-
1,501 - 1,750	165	84	81	-
1,751 - 2,000	160	94	66	-
Over 2,000	<u>1,172</u>	<u>1,034</u>	<u>138</u>	-
Total	<u>2,876</u>	<u>2,097</u>	<u>767</u>	<u>12</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)