Municipal Employees' Annuity and Benefit Fund of Chicago

A Pension Trust Fund of the City of Chicago
Chicago, Illinois

2016

Comprehensive Annual Financial Report
For the Fiscal Years Ended December 31, 2016 and 2015

MEABF

Municipal Employees'
Annuity and Benefit Fund of Chicago

A Pension Trust Fund of the City of Chicago
Chicago, Illinois

2016

Comprehensive Annual Financial Report

For the Fiscal Years Ended December 31, 2016 and 2015

Prepared by Administrative Staff of the
Municipal Employees' Annuity and Benefit Fund of Chicago
321 North Clark Street, Suite 700
Chicago, Illinois 60654

Table of Contents

Table of Contents (continued)

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Municipal Employees' Annuity and Benefit Fund of Chicago Illinois

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2015

Executive Director/CEO

RETIREMENT BOARD As of June 1, 2017

A five-member Retirement Board is the governing body of the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF). By statute, the Retirement Board shall consist of two ex-officio members, the City Comptroller and the City Treasurer, and three members who are eligible employees and elected by the contributing members.

The Retirement Board is ultimately responsible for the operation, administration and management of all the activities of MEABF. Having oversight of the investment activities, the Retirement Board sets investment policies and objectives, hires investment managers and investment consultants and reviews investment performance. The Retirement Board also approves the MEABF operating budget and approves or denies benefit claims.

The Retirement Board appoints the Executive Director, and retains consultants for investment, actuarial, audit, medical, legal and other provisional services necessary for the transaction of business.

The Retirement Board meets monthly and holds special meetings as needed. As members of the Retirement Board, they receive no compensation.

Municipal Employees' Annuity and
Benefit Fund of Chicago
A Pension Trust Fund of the City of Chicago
321 North Clark Street, Suite 700,
Chicago, Illinois 60654
Telephone: 312-236-4700 Fax: 312-527-0192
www.meabf.org
Jim Mohler, Executive Director

LETTER OF TRANSMITTAL

June 30, 2016

To the Retirement Board of the Municipal Employees' Annuity & Benefit Fund of Chicago

It is with great pleasure that we submit the Comprehensive Annual Financial Report (CAFR) for the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF or the Plan), a pension trust fund of the City of Chicago, for the fiscal years ended December 31, 2016 and 2015.

The CAFR provides an overview of the Plan, comprehensive accounting of Plan activities and operations, detailed financial and actuarial information, investment performance, statistical information and Plan stewardship. A full version of the report is available on the web at http://www.meabf.org/publications.php.

Bansley and Kiener, LLP, Certified Public Accountants, have issued an unqualified ("clean") opinion on the Plan's financial statements as of December 31, 2016 and 2015. The independent auditor's report is located at the front of the Financial Section of this report.

Financial Reporting

Management Responsibility - Responsibility for the preparation, accuracy, completeness and fairness of the presentation, including all disclosures, made in this report rests with management. To the best of our knowledge and belief, the information contained in this report is complete; all disclosures necessary to enable the reader to gain an understanding of MEABF activities have been included.

Plan management is responsible for establishing and maintaining a system of internal controls. The system provides management with reasonable, but not absolute, assurance regarding the safeguarding of assets against loss, theft, or unauthorized disposition and the reliability of the financial records from which the financial reports are prepared. The concept of reasonable assurance recognizes that the cost of a control should not exceed anticipated benefits.

Accounting System – The Plan's financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis, in accordance with the standards and requirements of the Governmental Accounting Standards Board (GASB). The financial statements are prepared on the accrual basis of accounting.

Management's Discussion and Analysis – Management's discussion and analysis (MD&A), which immediately follows the Independent Auditor's Report in the Financial Section, provides an additional narrative introduction, and an overview and analysis of the basic financial statements. This transmittal is designed to complement the MD&A and should be read in conjunction with it.

Plan Profile

MEABF is a pension trust fund of the City of Chicago and is administered under Chapter 40, Act 5, Article 8 of the Illinois Compiled Statutes. It is a defined benefit single employer plan that was established in 1921 by the Illinois State legislature, which is the governing body that sets benefit levels, as well as employee and employer contribution levels for financing the Plan.

MEABF provides age and service retirement benefits, survivor benefits, post-retirement increases and duty and ordinary disability benefits to eligible members. MEABF also provided, by law, a fixed amount of post-employment healthcare subsidy for its annuitants participating in health care plans sponsored by the City of Chicago or the Board of Education. 2016 represents the final year for the healthcare subsidy. Public Act 98-0043 discontinued the healthcare subsidy on December 31, 2016. As of December 31, 2016, MEABF served a total of 30,296 active members (20,252 Tier 1 members and 10,044 Tier 2 members); 25,236 retirees and beneficiaries; and 16,876 inactive members. For a more detailed description of the Plan, its membership, eligibility and the benefit provisions, please read Note 7 of the Notes to Financial Statements in the Financial Section.

Plan Administration

MEABF is administered under the direction of a Retirement Board responsible for the oversight, management and administration of the Plan. The Retirement Board is comprised of three elected members and two ex-officio members (the City Treasurer and the City Comptroller). The Retirement Board has a fiduciary duty to act solely in the best interests of the Plan members.

To help carry out governance responsibilities, the Retirement Board appoints an Executive Director and retains consultants for investment, actuarial, audit, legal and other provisional services necessary for the transaction of business. The Executive Director oversees all investments, actuarial, audit and administrative functions.

Actuarial Funding Status

An actuarial valuation of the Plan is conducted annually and an experience review is performed and approved by the Retirement Board every five years. In the actuarial valuation as of December 31, 2016, performed by the Plan's independent actuary, Segal Consulting, actuarial accrued liability, actuarial value of assets and unfunded actuarial accrued liability of MEABF amounted to $15,055.3 million, $4,590.4 million and $10,465.0 million, respectively. MEABF has a funding ratio of 30.5% (actuarial value of assets divided by actuarial liabilities for pension and post-employment healthcare benefits).

Beginning in 2014, the Plan incorporated GASB 67, which required certain disclosure requirements and the calculation of the actuarial discount rate based on funding mechanism in place to properly fund a plan going forward. Since the Plan does not have a proper funding mechanism that ensures the long-term solvency of the Plan, the total pension liability and the net pension liability differ from the calculation done without the requirements of GASB 67. For 2016, utilizing the requirements of GASB 67, the total pension liability was $23,291.3 million, leaving a net pension liability of $18,855.0 million. In 2016, based on the requirements of GASB 68, the Plan Sponsor (City of Chicago) must reflect this liability on their financial statements. The 2016 net pension liability was an increase of 1.3% compared to 2015.

MEABF is funded by employer and member contributions in accordance with the funding policy specified under the Illinois Pension Code (40 ILCS 5/8). As of December 31 2016 as mandated by state statute, member contributions are set at 8.5% of pensionable salary and employer contributions are equal to employee contributions from two years prior times 1.25 the contribution multiple. Based on the most recent actuarial valuation, the actuarially determined tax multiple of 7.68 is needed to adequately finance the Plan.

In the opinion of Segal Consulting, the Plan's Consulting Actuary, the funding method mandated by the Illinois Pension Code as of the date of this letter, is insufficient to avoid insolvency, and without a change, the Plan is projected to become insolvent within the next 9 years (2016 Actuarial Valuation).

For more than a decade, the Plan has been facing a long-term funding shortfall. The current statutory contributions have been less than the actuarially determined contribution requirement for the past fourteen years. The current funding method is insufficient to avoid insolvency therefore; the Plan is in need of a funding structure that ensures the long-term solvency of the Plan. A detailed discussion of funding is provided in the Actuarial Section of this report. Additional discussion relating to funding is provided in the MD&A in the Financial Section and in Note 7 of the Notes to Financial Statements in the Financial Section.

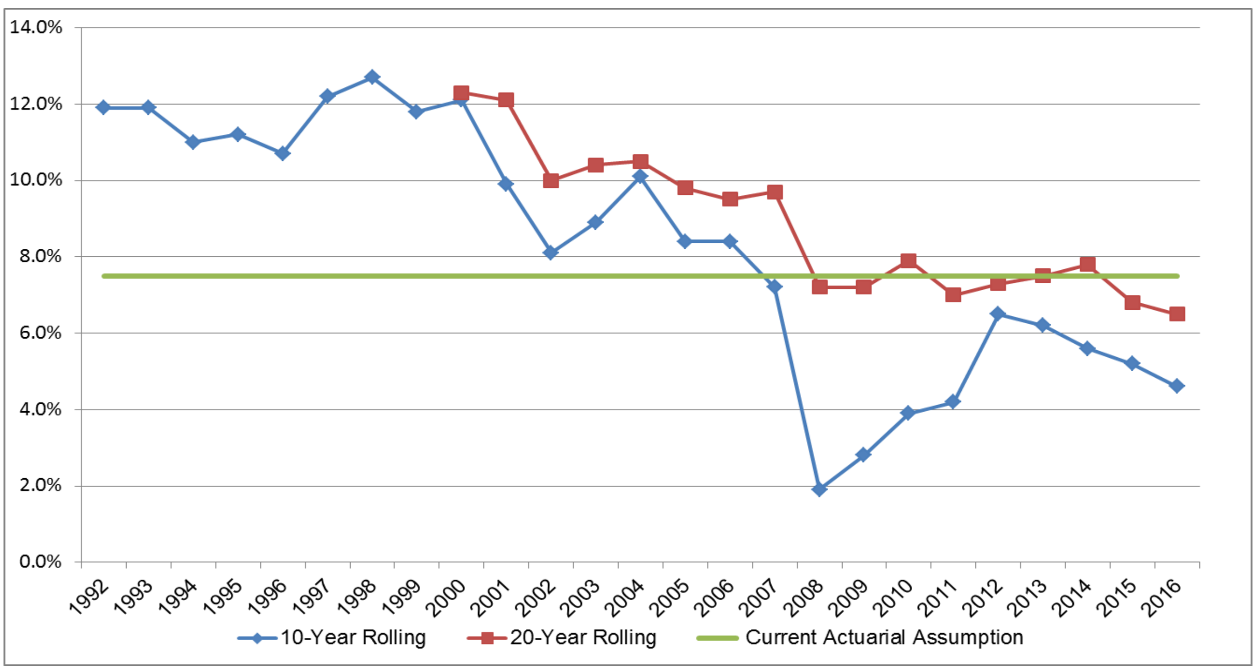
Investments

Plan assets are invested in accordance with the “Prudent Person Rule” for the sole purpose of providing benefits to Plan members. The Plan’s portfolio is diversified globally amongst various asset classes, investment styles, and economic sectors in an effort to achieve optimal long-term return, at a pre-determined level of risk. The Plan’s Actuary assumes a long-term investment return of 7.5%. In 2016, the Plan’s investment portfolio returned, net-of-fees, 6.3% coinciding with the policy benchmark. Going forward, the Plan’s ability to meet its return objective over the long term will continue to be challenged as invested assets are liquidated to pay monthly benefits. During fiscal year 2016, approximately $586.6 million was liquidated to assist in meeting benefit payment obligations.

Economic Condition and Outlook

During 2016, the U.S. economy experienced GDP growth of 2.1%, with other developed economies under 2%, and emerging economies at roughly 4%. The U.S. unemployment rate continued to decrease, ending the year at a post-recession low of 4.7%. Following the U.S. presidential election, the new administration’s planned economic and regulatory policies generated economic optimism and benefitted capital markets. Continued economic growth and strength in the capital markets are essential for the Plan to meet its future obligations.

The chart below compares ten and twenty-year rolling returns to the actuarially assumed rate of return. Over the long-term, MEABF has historically outperformed the assumed rate of return. The effects of the “Tech Bubble” (2000-2002) and the “Great Recession” (2008-2009) pulled down the rolling returns considerably. Even though they have not returned to their pre-crises levels, we are pleased that returns have been strong over the last seven years averaging 8.0% annually, net of fees. The Retirement Board will continue to structure the portfolio in accordance with the target allocation mix, which should reduce downside risk and best position the portfolio to achieve long-term performance goals and objectives.



The Investment Section contains a summary of the Retirement Board’s investment policy, including goals and objectives, and a comprehensive analysis of the Plan’s portfolio performance for the fiscal year 2016.

Plan Initiatives

Investments:

The Retirement Board took the following actions in 2016:

- Domestic Equity: Large cap growth manager with roughly $65 million has been terminated. The proceeds were awarded to a large cap core Index manager.
- Fixed income: The Board approved to award $50 million to a high yield/bank loan manager in a commingled fund vehicle for our non-core exposure in the fixed income asset class.
- International Equity: $30 million was rebalanced away from an international small cap index manager. Combined with cash allocation, MEABF awarded $50 million to an actively managed international small cap manager in the fourth quarter of the year.
- Hedged Equity: Conducted asset liability study and the Board approved a total of $200 million to a Defensive Equity mandate. Funding of the new managers will come from the existing long/short hedge fund of funds.
- Real Estate: Board approved a full redemption from an open-end real estate manager and reallocated the proceeds to other remaining open-end real estate managers.

Operations:

The following quantifies some of the projects accomplished and program services provided during fiscal year 2016:

Benefit Payment Services

- 301,070 annuity benefit payments to retirees and beneficiaries totaling $813.1 million. Of these, 93% were paid via electronic funds transfer with the remaining 7% by check.
- 25,236 annuitants at year-end 2016, 21,827 or 86% remained Illinois residents and 3,409 or 14% were out-of-state residents. About 15,757 annuitants residing in the City of Chicago received benefit payments totaling $522.8 million annually.
- 27,349 annual benefit statements showing new benefit amounts and deductions for 2016 were mailed to annuity benefit recipients.
- 1,368 new retirees, spouse/reversionary/child annuitants added to annuity payroll. 1,054 retirees, spouse/reversionary/child annuitants removed from payroll due to death or termination.
- 8,872 City and Board of Education retirees and beneficiaries participating in the employers' health insurance plans received health subsidies totaling $7.7 million.
- 5,522 disability benefit payments to disabled participants totaling $12.0 million. At year-end, there were 178 disabled participants receiving ordinary disability benefits and 216 disabled participants were receiving duty disability benefits.
- 29,030 1099Rs issued for tax reporting purposes.
- 24,118 pension verification forms sent to benefit recipients to confirm that the intended recipients were still alive and therefore eligible to receive benefits.

Member Services

- 27,349 printed statements of contributions to active participants.
- 2,666 individualized benefit counseling sessions conducted.
- 2,655 benefit estimates mailed.
- 134,872 phone calls received.
- Quarterly pre-retirement seminars held.

Withdrawals of Contributions

- 1,048 lump sum payments to members not eligible for retirement.
- 632 lump sum payments of spousal contributions.
- 41 lump sum payments in lieu of annuity.
- 159 lump sum payments to beneficiaries.

Document management

- 69,984 documents (149,583 pages) indexed and scanned during 2016

Certificate of Achievement for Excellence in Financial Reporting

The Plan was awarded a Certificate of Achievement for Excellence in Financial Reporting for its CAFR for the year ended December 31, 2015 by the Government Finance Officers Association of the United States and Canada (GFOA). The Plan has received this prestigious award in each of the last 27 years.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR that satisfies both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one-year only. We believe this report conforms to the program requirements and we are submitting it to the GFOA to determine its eligibility for award.

Acknowledgments

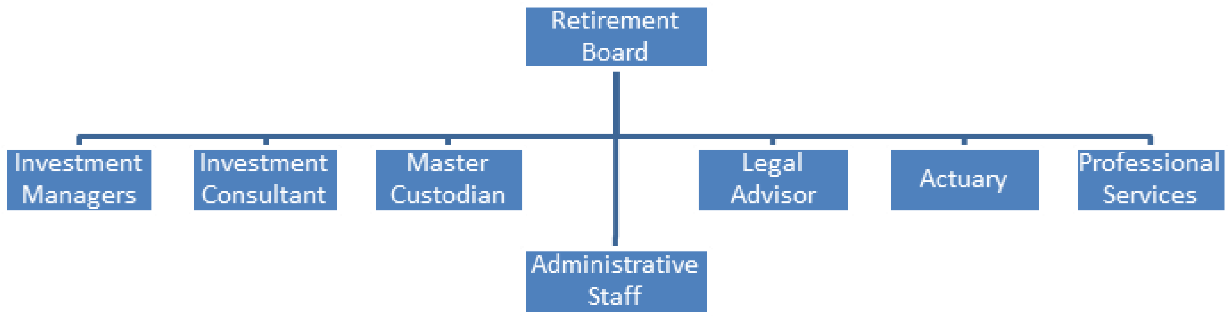
We extend our profound gratitude to the entire Retirement Board for their commitment, leadership and continued support and to the advisors and consultants. We thank the dedicated MEABF staff for their tireless efforts in serving the needs of members. We are grateful to all those who contributed to this project.

Respectively submitted,

Jim Mohler
Executive Director

Sandra Shelby
Comptroller

ORGANIZATION CHART



CONSULTANTS AND ADVISORS

Investment Consultant
Brian Wrubel
James R. Wesner
Marquette Associates
Chicago, IL

Auditor
Gerard J. Pater, C.P.A.
Bansley & Kiener, L.L.P.
Chicago, IL

Master Custodian
Kimberly Miller
The Northern Trust Company
Chicago, IL

Actuary
Kim M. Nichol, FSA, MAAA, EA, FSA
Matthew A. Strom, FSA, MAAA, EA, FSA
Jacob Libauskas, ASA,MAAA, EA
Segal Consulting
Chicago, IL

Custodian
Kurt A. Summers, Jr.
City Treasurer
Chicago, IL

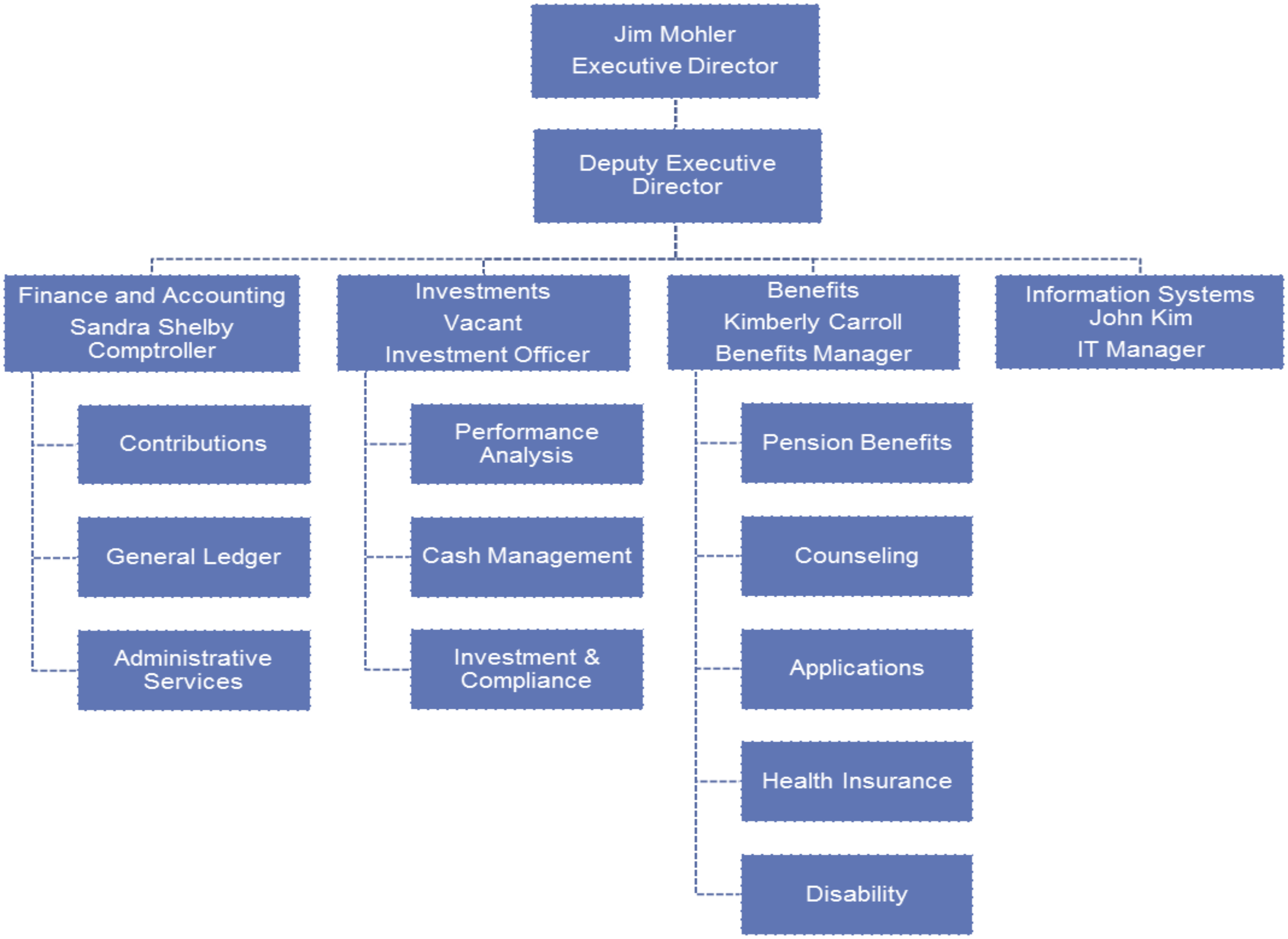
Legal Advisor
Mary Pat Burns
Burke, Burns & Pinelli, Ltd
Chicago, IL

Medical Advisor
Terence Sullivan, M.D.
Chicago, IL

Investment Managers and Investment Fees - are listed on pages 64-65 and 56-57

Brokers used by Investment Managers - are listed on pages 76-77

Administrative Staff (as of June 1, 2017)



Appointed by the Retirement Board, the Executive Director and his staff are responsible for the day-to-day administration and operation of the Plan under the Retirement Board's direction. The administrative staff also implements the investment policies and decisions of the Retirement Board and the benefit provisions of the Plan. The administrative staff of forty-nine (49) employees serves 30,296 actively contributing members; 25,234 retirees and surviving beneficiaries; and 16,876 inactive members.

FINANCIAL

BANSLEY AND KIENER, L.L.P.
CERTIFIED PUBLIC ACCOUNTANTS

O'HARE PLAZA
8745 WEST HIGGINS ROAD
SUITE 200
CHICAGO, ILLINOIS 60631

TEL: (312) 263-2700
FAX: (312) 263-6935
WWW.BK-CPA.COM

INDEPENDENT AUDITOR'S REPORT

The Retirement Board
Municipal Employees' Annuity & Benefit Fund
of Chicago
Chicago, Illinois

We have audited the statements of fiduciary net position of Municipal Employees' Annuity & Benefit Fund of Chicago (the Plan), a Component Unit of the City of Chicago, as of December 31, 2016 and 2015, 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 statement 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 Plan'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 Plan'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 Municipal Employees' Annuity & Benefit Fund of Chicago as of December 31, 2016 and 2015, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other supplementary information on pages 13 through 19 and pages 55 through 58 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 administrative and OPEB expenses, investment management compensation, and professional and consulting costs are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedules of administrative and OPEB expenses, investment management compensation, and professional and consulting costs 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 16, 2017

Management's Discussion and Analysis

This Management Discussion and Analysis (MD&A) of the Municipal Employees' Annuity and Benefit Fund of Chicago ("MEABF" or the "Plan") provides a narrative overview and analysis of the financial activities of MEABF for the years ended December 31, 2016 and 2015. Readers are encouraged to read the MD&A in conjunction with the financial statements to better understand the financial condition and performance of MEABF during the year ended December 31, 2016. Information for fiscal years 2015 and 2014 is presented for comparative purposes.

Financial Highlights

- The Plan's fiduciary net position decreased by $305.2 million to $4,436.2 million as of December 31, 2016, compared to a decrease of $438.1 million, from $5,179.5 million to $4,741.4 as of December 31, 2015.

- The Plan has continued to liquidate portfolio assets at a growing rate to supplement the disbursement of benefit payments. During fiscal year 2016, approximately $586.6 million in portfolio assets were liquidated compared to $552.1 million in fiscal year 2015 and $525.5 million in fiscal year 2014.

- MEABF's total investment portfolio generated a return of 6.3 percent in 2016 on a net-of-fees basis. The net returns in 2015 and 2014 were 1.8 percent and 5.0 percent, respectively. The total portfolio return in 2016 fell below the 7.5 percent actuarial investment return assumption.

- On a fair value basis, this year's money weighted investment rate of return net of investment expense, was 6.1 percent, compared with the last year's return of 2.1 percent.

- Total additions as reported in the statements of changes in fiduciary net position increased by $166.1 million or 41.2 percent to $569.2 million in 2016 from $403.1 million in 2015.

- Total deductions as reported in the statements of changes in fiduciary net position increased by $33.2 million or 3.9 percent to $874.4 million in 2016 from $841.2 million in 2015.

- Annuity benefits paid to retirees and beneficiaries increased by $31.0 million or 4.0 percent to $813.1 million for fiscal year 2016, compared to an increase of $27.7 million or 3.7 percent from $754.4 million in fiscal year 2014 to $782.1 million in fiscal year 2015.

- The December 31, 2016 financial actuarial valuation calculated a total pension liability at December 31, 2016, of $23,291.2 million and the net pension liability at December 31, 2016, of $18,855.0 million.

- As of the December 31, 2016, the most recent funding actuarial valuation, the Plan's unfunded actuarial accrued liability increased to $10,464.9 million from $9,840.1 million from the prior year. As of the December 31, 2016, the most recent funding actuarial valuation, the Plan's funded ratio was 30.5 percent compared with a funded ratio of 32.9 percent for the prior year.

Overview of the Financial Statements

This discussion and analysis is an introduction to the Plan's basic financial statements prepared on an accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) pronouncements and reflect all financial activities. The Plan's basic financial statements include (1) Statements of fiduciary net position (2) Statements of changes in fiduciary net position (3) Notes to the financial statements. In addition to the basic financial statements, this financial report also contains required supplementary information and other supplementary schedules.

Basic Financial Statements

The *statements of fiduciary net position* restricted for pension benefits report Plan assets at fair value, liabilities and the resulting fiduciary net position (assets - liabilities = fiduciary net position) at year-end. The *statements of changes in fiduciary net position* report the results of financial activities that occurred during the fiscal year, disclosing the additions to fiduciary net position, such as contributions and net investment income, and deductions from fiduciary net position such as benefit payments and administrative expenses. The resulting net increase (decrease) in fiduciary position (additions - deductions = net increase (decrease) in fiduciary position) reflects the change in net fiduciary position reported in the *statements of fiduciary net position.*

Notes to the Basic Financial Statements

The *notes to the financial statements* are an integral part of the financial statements and include additional information not readily evident in the statements themselves. The notes also include schedules to provide a better understanding of the data provided in the financial statements.

Required Supplementary Information

The required supplementary information following the notes to the financial statements is required by GASB. It provides historical information and additional details considered useful in evaluating the financial condition of the Plan. It includes schedules related to the net pension liability, contributions from employer, and the annual money weighted rate of return on pension plan investments. It also includes schedules of funding progress for the post-employment healthcare, schedule of employer contributions and related disclosures.

Other Supplementary Schedules

Additional supplemental schedules include detailed information regarding administrative expenses, consulting costs and investment management fees.

Fiduciary Net Position Restricted for Pension Benefits (in millions)

(As of December 31, 2016, 2015 and 2014)

	2016	2015	2014
Assets			
Cash, receivables and other current assets	$ 238.6	$ 212.7	$ 224.2
Investments, at fair value	4,285.7	4,619.4	5,067.5
Invested securities lending collateral	304.8	396.8	391.4
Total assets	4,829.1	5,228.9	5,683.1
Liabilities			
Accrued expenses and other liabilities	88.1	90.6	112.2
Securities lending collateral	304.8	396.9	391.4
Total liabilities	392.9	487.5	503.6
Fiduciary Net Position restricted for pension benefits	**$ 4,436.2**	**$ 4,741.4**	**$ 5,179.5**

Fiduciary net position restricted for pension benefits decreased by $305.2 million during fiscal year 2016 to $4,436.2 million from $4,741.4 million in 2015. Invested assets at fair value decreased by $333.7 million in 2016 to $4,285.7 from $4,619.4 million in 2015. The growth in assets would have been significantly higher if portfolio assets were not liquidated to supplement the disbursement of benefit payments during the year. During 2016 approximately $586.6 million in portfolio assets were liquidated compared to $552.1 million during 2015 and $525.5 million during 2014.

Summary of Investments (in millions)

(As of December 31, 2016, 2015 and 2014)

	2016	2015	2014
Fixed Income	$ 1,007.4	$ 1,147.8	$ 1,284.8
Domestic equity	1,058.2	1,094.9	1,248.7
International equity	868.4	938.9	1,022.8
Hedged equity	463.8	469.0	547.9
Real estate	458.2	520.7	494.0
Private equity	237.6	243.5	255.3
Short-term investments	192.1	204.6	214.0
	$ 4,285.7	**$ 4,619.4**	**$ 5,067.5**

The asset values reflected above fluctuate from year-to-year, both in aggregate and by asset class, based on the combination of factors such as investment performance, liquidations within certain asset classes, and rebalancing of assets within the overall portfolio.

Investment performance. For fiscal year 2016, the Plan's total investment portfolio generated a 6.3 percent return net-of fees, coinciding with the policy benchmark. 2016 returns were above the 1.8 percent return net-of-fees generated in 2015. Fixed income performance was above its benchmark, while domestic equity, international equity, hedge fund, and real estate all fell short of its respective benchmarks. Per asset class, fixed income generated a 6.5 percent return net-of-fees outperforming the Barclays Aggregate Bond Index by 2.6 percent. Domestic equity generated a 11.3 percent return net-of-fees compared to 13.4 percent for the Wilshire 5000 Total Market Index. International equity generated a 2.6 percent return net-of-fees compared to 4.5 percent for the MSCI ACWI ex USA Index. Hedged equity generated a negative 1.1 percent return net-of-fees compared to 0.1 percent for the HFRX Equity Hedge Index. Lastly, real estate generated a 6.7 percent return net-of-fees compared to 8.0 percent for the NCREIF Property Index.

Liquidations within certain asset classes. Liquidations are due to the large operating cash flow deficits that the Plan faces as a result of the shortfall between inflows, in the form of contributions, and outflows, primarily comprised of retirement benefits and refunds**.** In total, MEABF had to liquidate approximately $586.6 million of investments to meet the Plan's cash flow needs for 2016. Liquidity came from domestic equity, international equity, fixed income and real estate.

Rebalancing of assets within the overall portfolio. MEABF's target asset allocation remained unchanged in 2016. The regular sale of assets to meet the Plan's cash flow needs was done in accordance with aligning the Plan's investment portfolio with its target allocation.

Additions and Deductions to Fiduciary Net Position (in millions)

(Years ended December 31, 2016, 2015 and 2014)

	2016	2015	2014
Additions:			
Employer contributions	$ 157.4	$ 157.7	$ 158.8
Member contributions	130.4	131.4	130.0
Total contributions	287.8	289.1	288.8
Net investment income (loss)	279.5	112.3	281.8
Net security lending income (loss)	1.9	1.7	1.5
Total additions	**569.2**	**403.1**	**572.1**
Deductions:			
Annuity benefits	813.1	782.1	754.4
Disability benefits	12.0	12.2	11.9
Healthcare subsidy	7.7	8.5	9.1
Refunds of contributions	34.6	31.7	32.3
Administrative expense	7.0	6.7	6.6
Total deductions	**874.4**	**841.2**	**814.3**
Net increase (decrease)	**(305.2)**	**(438.1)**	**(242.2)**
Fiduciary net position restricted for pensions beginning of year	**4,741.4**	**5,179.5**	**5,421.7**
Fiduciary net position restricted for pensions end of year	**$ 4,436.2**	**$ 4,741.4**	**$ 5,179.5**

Additions

Total additions as reported in the Statements of Changes in Fiduciary Net Position increased by $166.1 million or 41.2 percent in 2016 to $569.2 million from $403.1 million in 2015.

Additions from employer contributions remained constant at $157.4 million in 2016 from $157.7 million in 2015. Employer contributions are statutorily set at 1.25 times the employee contribution level in the second prior fiscal year. Additions from member contributions decreased by $1.0 million to $130.4 million in 2016, from $131.4 million in 2015. The net decrease is the result of a $1.7 million increase in contributions from the City of Chicago members and a $2.7 million decrease of contributions from the Board of Education members. In 2016, active members were required to contribute 8.5 percent of their salary.

Additions from investment income increased by $167.2 million in 2016 to $279.5 million in 2016 from $112.3 million in 2015. The increase was mainly due to the investment portfolio generating higher returns of 6.3 percent in 2016 compared to 1.8 percent in 2015. Other contributing factors were:

- Increase in net appreciation on investments by $166.5 million to $178.7 million in 2016 compared to $12.2 million in 2015.
- Decrease in income from real estate investments by $1.7 million to $21.2 million in 2016 compared to $22.9 million in 2015.
- Decrease in direct investment fees by $3.1 million to $20.4 million in 2016 from $23.5 million in 2015.

MEABF can earn additional investment income by allowing a third party provider to lend a portion of its securities to borrowers on its behalf. The borrower provides collateral on borrowed securities, which is invested in order to earn interest. Securities lending activities generated net income of $1.9 million in 2016 compared to $1.7 million in 2015.

Deductions

MEABF's assets are primarily used to pay annuity benefits, post-employment healthcare subsidies, disability benefits, refunds of contributions and the costs of administering the Plan. Deductions from fiduciary net position increased by $33.2 million or 3.9 percent to $874.4 million in 2016 from $841.2 million in 2015. Benefits paid out exceed member and employer contributions by $579.6 million, $545.4 million, and $518.9 million in fiscal years 2016, 2015 and 2014 respectively. In order to supplement benefit payments, the Plan liquidated portfolio assets by approximately $586.6 million, $552.1 million, and $525.5 million in fiscal years 2016, 2015 and 2014, respectively.

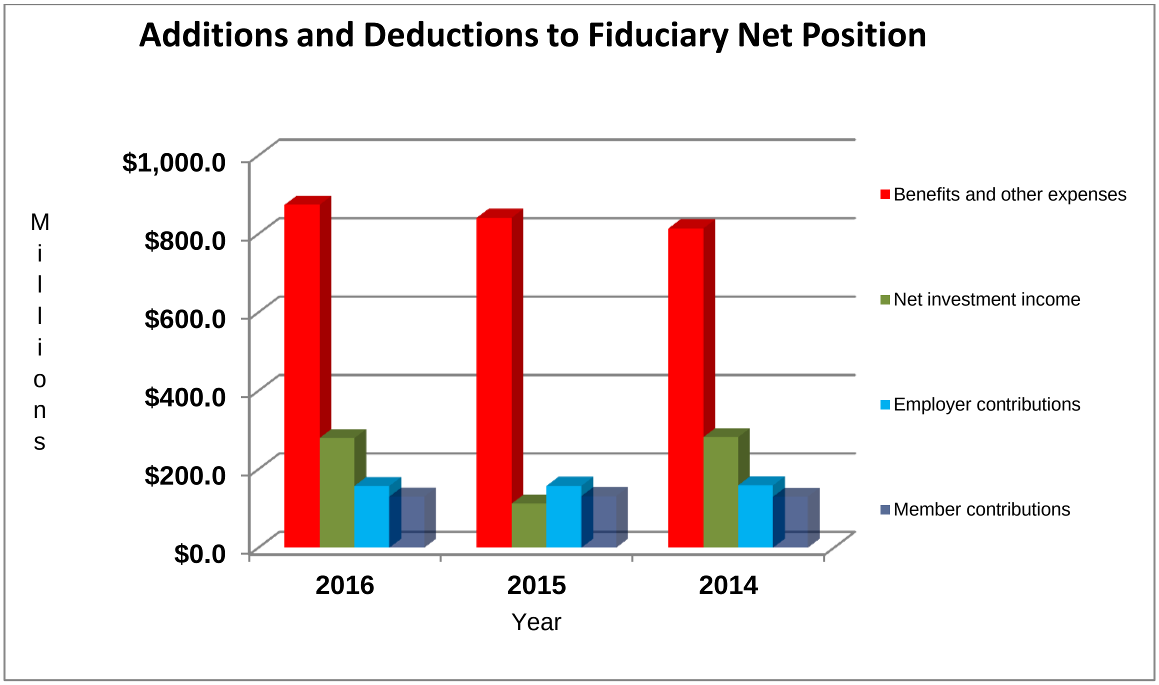
Annuity benefits paid increased by $31.0 million or 4.0 percent to $813.1 million in 2016 from $782.1 million in 2015. The increase is primarily due to the compounded annual 3.0 percent adjustment for eligible annuitants and an increase in the number of retirees and beneficiaries receiving benefits. The average annual employee annuity benefit increased to $37,248 in 2016 from $36,300 in 2015. The number of new employee annuities increased in 2016 to 1,368 from 1,260 in 2015. There were 25,236 retirees and beneficiaries at year-end December 31, 2016 compared to 24,964 at the beginning of the year.

Disability benefits paid decreased by $0.2 million or 1.6 percent to $12.0 million in 2016 from $12.2 million paid in 2015. This slight decrease is attributable to a decrease in the number of participants receiving disability and a decrease in the number of days paid for disability benefits. There were 394 participants on disability at year-end December 31, 2016 compared to 400 at the beginning of the year.

Refunds of contributions increased by $2.9 million to $34.6 million in 2016 from $31.7 million in 2015. The increase is mainly due to:

- Increase in the number of new annuitants eligible for a refund of spousal contributions. Refund of spousal contributions totaling $8.2 million were refunded in 2016 compared to $6.7 million refunded in 2015, an increase of $1.5 million.
- All other refunds of contributions distributed to employees not eligible for annuity increased by $1.4 million to $26.4 million in 2016 from $25.0 million in 2015.

Administrative expenses and other post-employment benefit expense slightly increased by $0.3 million to $7.0 million in 2016 from $6.7 million in 2015. Detail relating to administrative expenses can be found in the Schedule of Administrative and OPEB Expenses located under Supporting Schedules.



Total Pension Liability (TPL) and Net Pension Liability (NPL)

During 2014, the Plan implemented GASB No. 67 "Financial Reporting for Pension Plans". GASB 67 requires enhancements to financial statement disclosures. The notes to the financial statements include information regarding components of the NPL and the year-over-year change in NPL. The changes related to GASB 67 are also reflected in the required supplementary information and schedules. It also requires a different methodology to measure the liability of the Plan's pension benefits. GASB 67 established the definition of Total Pension Liability and Net Pension Liability. The Plan is now required to report Total Pension Liability (TPL), Fiduciary Net Position (FNP), and Net Pension Liability (NPL).

The total pension liability (TPL) determines the total obligation for the Plan's pension benefits related to costs incurred as a result of years of service, changes in benefit terms, changes in actuarial assumptions, and any differences between the actuarial assumptions and actual experience. The Plan's fiduciary net position (FNP) determines the assets available for future pension payment stream. Analogous to the unfunded actuarial accrued liability, Net Pension Liability (NPL) is the Total Pension Liability (TPL), net of the Plan's Fiduciary Net Position (FNP).

At December 31, 2016, the components of the net pension liability of the employer were as follows (in millions):

Total pension liability	$23,291.2
Plan fiduciary net position	4,436.2
Employer's net pension liability	$ 18,855.0
Plan fiduciary net position as a percentage of the total pension liability	19.1%

Funding Status

The Municipal Employees' Annuity and Benefit Fund of Chicago ("Plan") has informed the City of Chicago, the State of Illinois, and the bargaining units that represent the majority of the employees covered by the Plan that the Plan faces the risk of insolvency unless it receives proper funding. Public Act 98-0641, which in part included a schedule to move the Plan to actuarially based funding, was ruled unconstitutional by the Circuit Court of Cook County because certain provisions of Public Act 98-0641 were held to improperly diminish or impair existing pension benefits. The ruling was affirmed by the Illinois Supreme Court in March of 2016. As a result, the Plan returns to a funding formula based on a multiplier of employee contributions, which guarantees the insolvency of the Plan and will convert the Plan to a pay-as-you-go system for the City of Chicago in the near future. It is projected at that time that annual benefit payments will exceed $1 billion.

Request for Information

Additional information is available on our website www.meabf.org or by request. Please direct your request to Mr. Jim Mohler, Executive Director, Municipal Employees' Annuity and Benefit Fund of Chicago, 321 N. Clark Street, Suite 700, Chicago, IL 60654.

Statements of Fiduciary Net Position

December 31, 2016 and 2015

	2016	2015
ASSETS		
Cash and cash equivalents	$ 489,437	$ 489,229
Receivables		
Contributions from the City of Chicago, net of allowance for loss of $13,885,879 in 2016 and $15,901,450 in 2015	156,051,122	159,417,035
Member contributions	10,642,911	8,605,457
Interest and dividends	11,846,833	13,414,492
Due from broker	59,113,273	30,352,577
Miscellaneous	421,566	404,244
Total receivables	238,075,705	212,193,805
Investments, at fair value		
Fixed income	1,007,435,747	1,147,787,800
Hedged equity	463,825,386	469,026,045
Domestic and international equity	1,926,589,121	2,033,831,955
Real estate	458,150,837	520,696,873
Private equity	237,648,563	243,481,833
Short-term investments	192,097,254	204,541,471
Total investments	4,285,746,908	4,619,365,977
Invested securities lending collateral	304,808,240	396,836,061
Property and equipment, net of accumulated depreciation and amortization of $14,229 in 2016 and $82,274 in 2015	14,818	12,309
Total assets	4,829,135,108	5,228,897,381
LIABILITIES		
Due to broker	75,948,987	78,958,135
Accounts payable and accrued expenses	6,756,704	6,871,813
Securities lending collateral	304,808,240	396,836,061
Securities lending earnings shortfall	-	62,742
OPEB liability	5,393,581	4,741,073
Total liabilities	392,907,512	487,469,824
Net position restricted for pension benefits	$ 4,436,227,596	$ 4,741,427,557

The accompanying notes are integral part of the financial statements.

Statements of Changes in Fiduciary Net Position

December 31, 2016 and 2015

	2016	2015
Additions		
Contributions from the City of Chicago	$ 157,444,029	$ 157,716,475
Member contributions	130,390,848	131,428,104
Total contributions	287,834,877	289,144,579
Investment income		
Net appreciation in fair value of investments	178,672,757	12,249,736
Interest	49,249,373	46,926,760
Dividends	50,922,223	53,778,719
Income from real estate investments	21,154,776	22,872,708
	299,999,129	135,827,923
Less investment expenses	20,477,574	23,505,672
Net income from investing activities	279,521,555	112,322,251
Security lending activities		
Securities lending income	2,013,113	1,329,145
Borrower rebates	49,475	521,989
Bank fees	(164,997)	(148,095)
Net income from securities lending activities	1,897,591	1,703,039
Total additions	569,254,023	403,169,869
Deductions		
Benefits		
Annuity payments	813,092,340	782,083,805
Disability benefits	12,004,051	12,266,647
Post-employment healthcare subsidies	7,725,538	8,491,284
Total benefits	832,821,929	802,841,736
Refund of member contributions	34,575,271	31,685,872
Administrative and OPEB expenses	7,056,784	6,701,000
Total deductions	874,453,984	841,228,608
Net decrease	(305,199,961)	(438,058,739)
Net position restricted for pension benefits		
Beginning of year	4,741,427,557	5,179,486,296
End of year	$ 4,436,227,596	$ 4,741,427,557

The accompanying notes are integral part of the financial statements.

Note 1 – 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 elected 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 Plan has no component units. The Plan is considered a component unit fund of the City of Chicago and, as such, is included in the City of Chicago's financial statements as a pension trust fund. Accordingly, these financial statements present only Municipal Employees' Annuity & Benefit Fund of Chicago ("MEABF") and are not intended to present fairly the financial position of the City of Chicago 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 in the period 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 Plan.

Use of Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts and fiduciary net position at the date of the financial statements and the actuarial information included in the required supplementary information as of the valuation date, the changes in fiduciary net position during the reporting period and, when applicable, disclosures of the contingent assets and liabilities at the date of the financial statements. Actual results may differ from those estimates.

Risks and Uncertainties

The Plan 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.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand and on deposit with the Treasurer of the City of Chicago as well as investments held by the City Treasurer on behalf of the Plan with original maturities of less than 90 days.

Note 1 – Summary of Significant Accounting Policies (continued)

Investments

The Plan 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; and other investment vehicles 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. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair values of marketable securities are based primarily on quotations from national security exchanges. Investments in short-term obligations are carried at cost which approximates fair value. Certain short-term obligations, such as United States Treasury Bills and discount paper, are carried at fair value. Fair values for bonds, stocks, forward contracts, future contracts, rights and warrants are determined by quoted market prices. Fair values of hedged equity investments are determined using quoted market prices of underlying funds, when available. If quoted market prices are not available, then fair value is determined by underlying fund managers. Fair values of real estate and commingled real estate are based upon independent appraisals. Fair values of private equity investments are primarily based on the general partner determined fair value.

Administrative Expenses

Administrative expenses are budgeted and approved by MEABF's Board of Trustees. Funding for these expenses is included in the employer contributions as mandated in the Illinois State Statutes Chapter 40, Pension Article 5/8-190.

Income Taxes

The Plan is exempt from federal and state income taxes and has received a favorable determination letter under Code section 401(a).

Recently Issued Accounting Pronouncements

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 the Plan's December 31, 2016 financial statements. The Statement is to be retroactively applied.

GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans,* was established to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. MEABF is currently evaluating the financial statement impact of GASB Statement No. 74. If applicable, this statement will be implemented for the year ended December 31, 2017.

Note 1 – Summary of Significant Accounting Policies (continued)

Recently Issued Accounting Pronouncements (continued)

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* was established to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB) and improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. MEABF is currently evaluating the financial statement impact of GASB Statement No. 75. If applicable, this statement will be implemented for the year ended December 31, 2018.

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 Plan adopted this statement 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. MEABF 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.

GASB Statement No. 84, *Fiduciary Activities,* was established to enhance the consistency and comparability of fiduciary activity reporting by state and local governments. This Statement also is intended to improve the usefulness of fiduciary activity information primarily for assessing the accountability of governments in their roles as fiduciaries. MEABF is currently evaluating the financial statement impact of GASB Statement No. 84. If applicable, this statement will be implemented for the year ended December 31, 2019.

GASB Statement No. 85, *Omnibus 2017,* was established to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPED]). MEABF is currently evaluating the financial statement impact of GASB Statement No. 85. If applicable, this statement will be implemented for the year ended December 31, 2018.

Note 2 – Investment Policies, Asset Allocation and Money-Weighted Rate of Return

Investment Policy

The Plan'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 Plan'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.

Note 2 – Investment Policies, Asset Allocation and Money-Weighted Rate of Return (Continued)

The following table represents the Board's adopted asset allocation policy for both years 2016 and 2015:

Asset Class	Target
Fixed income	27%
Domestic equity	26%
International equity	22%
Hedge Funds	10%
Private equity	5%
Real Estate	10%
	100%

Money-Weighted Rate of Return

For the year ended December 31, 2016 and 2015, the annual money-weighted rate of return on Plan investments, net of investment expense, was 6.1 percent and 2.1 percent respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 3 – Deposits and Investments

Deposits that are held locally in the Plan's name are held by the Treasurer of the City of Chicago, ex-officio Treasurer of the Plan. At December 31, 2016 and 2015, the Plan's book balances of cash are $489,437 and $489,229, respectively. The actual bank balances at December 31, 2016 and 2015 are $489,037 and $488,829, respectively. All non-investment related bank balances at year end are insured or collateralized at 102% of the principal amount.

Custodial credit risk is the risk that, in the event of a financial institution failure, the Plan will not be able to recover deposits or collateral securities that are in possession of an outside party. Deposits are exposed to custodial credit risk if they are not covered by deposit insurance and are (a) uncollateralized, (b) collateralized with securities held by the pledging financial institution or (c) collateralized with securities held by the pledging financial institution's trust department or agent but not in the Plan's name. The Plan does not have a formal policy relating to custodial risk. As of December 31, 2016 and 2015, $5,740,847 and $7,791,328, respectively, of the Plan's deposits with its custodian Northern Trust were exposed to custodial credit risk.

Certain Plan investments are held by a bank administered trust fund. There were no individual investments representing 5% or more of the Plan's net assets as of December 31, 2016 or 2015.

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

Generally accepted accounting principles provides the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

Note 3 – Deposits and Investments (continued)

The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair market value measurement.

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

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2016 and 2015.

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

Equity and equity derivative securities classified in Level 1 are valued using prices quoted in active markets for those securities.

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

Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

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

Note 3 – Deposits and Investments (continued)

The following table summarizes the valuation of MEABF investments by the fair value hierarchy levels as of December 31, 2016.

Investments Measured at Fair Value

		Fair Value Measurements Using		
Investment Measured at Fair Value	December 31, 2016	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity securities				
Common Stock	$1,910,088,134	$1,903,667,525	$ 6,221,695	$198,914
Preferred Stock	11,930,377	11,930,377	-	-
Stapled Securities	4,295,171	4,295,171	-	-
Rights/Warrants	31,964	24,386	7,578	-
Funds-Equities ETF	243,475	243,475	-	-
Total equity securities	1,926,589,121	1,920,160,934	6,229,273	198,914
Debt securities				
Government Bonds	127,495,868	-	127,495,868	-
Government Agencies	32,244,077	-	32,244,077	-
Municipal/Provincial Bonds	11,541,194	-	11,541,194	-
Corporate Bonds	418,195,272	-	418,195,272	-
Corporate Convertible Bonds	5,518,165	-	5,518,165	-
Bank Loans	197,581,008	-	197,581,008	-
Government Mortgage-Backed Securities	141,961,670	-	141,961,670	-
Commercial Mortgage-Backed	5,134,973	-	5,134,973	-
Asset Backed Securities	10,708,519	-	10,708,519	-
Non-Government Backed CMO's	57,017	-	57,017	-
Index Linked Government Bonds	3,866,010	-	3,866,010	-
Total debt securities	954,303,773	-	954,303,773	-
Short-term investment securities				
Short-term Bills & Notes	8,996,832	-	8,996,832	-
Funds-short-term investment	183,100,422	-	183,100,422	-
Total short-term investments securities	192,097,254	-	192,097,254	-
Total investments measured by fair value level	3,072,990,148	$1,920,160,934	$1,152,630,300	$198,914
Investments measured at Net Asset Value (NAV)				
Commingled Fixed Income Funds	53,131,974			
Hedge Funds	463,825,386			
Private Equity Partnerships	237,648,563			
Real Estate	458,150,837			
Total investments measured at NAV	1,212,756,760			
Total investments measured at fair value	$4,285,746,908			
Collateral from securities lending	$ 304,808,240		$ 304,808,240	

Note 3 – Deposits and Investments (continued)

The following table summarizes the valuation of MEABF investments by the fair value hierarchy levels as of December 31, 2015.

Investments Measured at Fair Value

Investment Measured at Fair Value	December 31, 2015	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Equity securities				
Common Stock	$2,023,026,085	$2,013,553,067	$ 5,751,650	$3,721,368
Preferred Stock	5,301,723	5,301,723	-	-
Stapled Securities	4,623,322	4,623,322	-	-
Rights/Warrants	39,299	32,958	1,662	4,679
Funds-Equities ETF	841,526	841,526	-	-
Total equity securities	2,033,831,955	2,024,352,596	5,753,312	3,726,047
Debt securities				
Government Bonds	192,479,956	-	192,479,956	-
Government Agencies	42,717,667	-	42,717,667	-
Municipal/Provincial Bonds	12,010,407	-	12,010,407	-
Corporate Bonds	477,041,710	-	477,041,710	-
Corporate Convertible Bonds	2,607,517	-	2,549,636	57,881
Bank Loans	179,330,537	-	179,330,537	-
Government Mortgage-Backed Securities	205,707,864	-	205,707,864	-
Commercial Mortgage-Backed	11,805,003	-	11,805,003	-
Asset Backed Securities	15,680,741	-	15,680,741	-
Non-Government Backed CMO's	260,960	-	260,960	-
Index Linked Government Bonds	8,145,438	-	8,145,438	-
Total debt securities	1,147,787,800	-	1,147,729,919	57,881
Short-term investment securities				
Commercial Paper	3,487,300	-	3,487,300	-
Short-term Bills & Notes	10,886,734	-	10,886,734	-
Funds-short-term investment	190,167,437	-	190,167,437	-
Total short-term investments securities	204,541,471	-	204,541,471	-
Total investments measured by fair value level	3,386,161,226	$2,024,352,596	$1,358,024,702	$3,783,928
Investments measured at Net Asset Value (NAV)				
Hedge Funds	469,026,045			
Private Equity Partnerships	243,481,833			
Real Estate	520,696,873			
Total investments measured at NAV	1,233,204,751			
Total investments measured at fair value	$4,619,365,977			
Collateral from securities lending	$ 396,836,061		$ 396,836,061	

Note 3 – Deposits and Investments (continued)

Investments measured at NAV for fair value are not subject to level classification. The valuation methods for investments measured at the NAV per share (or its equivalent) is presented on the following table.

Investments Measured at Net Asset Value (NAV)

	Fair Value December 31, 2016	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled Fixed Income Funds	$ 53,131,974	$ -	Quarterly	60 days
Hedge Funds	$463,825,386	$ -	Quarterly	90 days
Private Equity Funds	$237,648,563	$43,086,416	Not Eligible	N/A
Real Estate Funds	$458,150,837	$ 2,703,774	Quarterly - Open-end, Not Eligible - Closed-end	90 days - Open-end

Investments Measured at Net Asset Value (NAV)

	Fair Value December 31, 2015	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Hedge Funds	$469,026,045	$ -	Quarterly	90 days
Private Equity Funds	$243,481,833	$65,008,082	Not Eligible	N/A
Real Estate Funds	$520,696,873	$ 5,041,978	Quarterly - Open-end, Not Eligible - Closed-end	90 days - Open-end

Commingled Fixed Income Funds

This type of investment consists of fixed income securities diversified in high yield, bank loans, and private debt securities. The fair values of these types of investments have been determined using the NAV per unit.

Hedge Funds

This type of investment consists of long/short equity hedge fund-of-funds. The fair values of these types of investments have been determined using the NAV per unit.

Private Equity Partnerships

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

Real Estate Funds

This type includes investments in open and closed-end real estate funds. Investments in open-end funds have limited redemption availability as redemption opportunities are based on available liquidity. Closed-end funds do not offer redemptions. Distributions from closed-end funds will be received as the underlying investments are liquidated. The Plan has no plans to liquidate the total portfolio.

Note 3 – Deposits and Investments (continued)

Foreign Currency Risk

Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value of an investment or a deposit. Forward currency contracts may be used to manage exposure to foreign currencies. The Plan has not adopted a formal policy related to foreign currency risk. The Plan's exposure to foreign currency risk at December 31, 2016 was as follows:

Currency	*Equities**	*Fixed Income*	*Short term Investments*	*Total*	*Percentage*
Australian Dollar	$ 40,429,703	$ -	$ 307,015	$ 40,736,718	4.6%
Brazilian Real	19,759,864	-	48,719	19,808,583	2.2%
British Pound Sterling	118,886,257	-	1,260,278	120,146,535	13.5%
Canadian Dollar	36,175,426	-	534,017	36,709,443	4.1%
Chilean Peso	1,362,562	-	74,916	1,437,478	0.2%
Colombian Peso	221,226	-	69,253	290,479	0.0%
Czech Koruna	94,857	-	14,043	108,900	0.0%
Danish Krone	13,149,451	-	66,754	13,216,205	1.5%
Egyptian Pound	67,395	-	22,791	90,186	0.0%
Euro	172,968,216	-	1,334,621	174,302,837	19.5%
HK offshore Chinese Yuan Renminbi	-	-	1,203	1,203	0.0%
Hong Kong Dollar	49,259,118	-	857,395	50,116,513	5.6%
Hungarian Forint	1,769,975	-	31,111	1,801,086	0.2%
Indian Rupee	28,331,859	-	262,098	28,593,957	3.2%
Indonesian Rupiah	8,565,450	-	179,712	8,745,162	1.0%
Japanese Yen	166,666,227	-	2,189,102	168,855,329	18.9%
Malaysian Ringgit	2,887,319	-	62,851	2,950,170	0.3%
Mexican Peso	5,003,239	-	62,648	5,065,887	0.6%
New Israeli Shekel	3,747,887	-	68,946	3,816,833	0.4%
New Taiwan Dollar	14,118,604	-	166,998	14,285,602	1.6%
New Zealand Dollar	2,093,131	-	139,507	2,232,638	0.3%
Norwegian Krone	6,483,770	-	70,107	6,553,877	0.7%
Philippine Peso	4,709,231	-	27,621	4,736,852	0.5%
Polish Zloty	540,737	-	55,883	596,620	0.1%
Qatari Rial	420,335	-	49,741	470,076	0.1%
Russian Ruble	1,614,481	-	-	1,614,481	0.2%
Singapore Dollar	7,397,465	-	142,214	7,539,679	0.8%
South African Rand	12,882,892	-	127,982	13,010,874	1.5%
South Korean Won	21,381,928	-	99,447	21,481,375	2.4%
Swedish Krona	22,023,853	-	86,000	22,109,853	2.5%
Swiss Franc	44,972,853	-	244,154	45,217,007	5.1%
Thai Baht	7,904,235	-	17,565	7,921,800	0.9%
Turkish Lira	1,398,911	-	25,667	1,424,578	0.2%
United Arab Emirates Dirham	2,908,990	-	63,467	2,972,457	0.3%
Held in Foreign Currency	820,197,447	-	8,763,826	828,961,273	93.0%
Held in U.S Dollars	62,176,486	-	-	62,176,486	7.0%
Total	$882,373,933	$ -	$8,763,826	$891,137,759	100.0%

*Includes Forward contracts, rights and warrants.

Note 3 – Deposits and Investments (continued)

For comparative purposes, the Plan's exposure to foreign currency risk at December 31, 2015 was as follows:

Currency	*Equities**	*Fixed Income*	*Short term investments*	*Total*	*Percentage*
Australian Dollar	$ 35,877,436	$ -	$ 449,086	$ 36,326,522	3.8%
Brazilian Real	10,551,149	-	212,477	10,763,626	1.1%
British Pound Sterling	143,704,072	-	1,315,360	145,019,432	15.3%
Canadian Dollar	36,296,794	-	426,857	36,723,651	3.9%
Chilean Peso	1,306,456	-	58,941	1,365,397	0.1%
Columbian Peso	213,130	-	60,654	273,784	0.0%
Czech Koruna	529,815	-	19,094	548,909	0.1%
Danish Krone	14,911,067	-	78,412	14,989,479	1.6%
Egyptian Pound	106,053	-	17,549	123,602	0.0%
Euro	190,117,003	-	2,376,995	192,493,998	20.3%
HK Chinese Yuan Renminbi	-	-	1,003	1,003	0.0%
Hong Kong Dollar	64,074,010	-	167,337	64,241,347	6.8%
Hungarian Forint	140,688	-	13,580	154,268	0.0%
Indian Rupee	26,243,416	-	99,024	26,342,440	2.8%
Indonesian Rupiah	6,332,480	-	26,971	6,359,451	0.7%
Japanese Yen	174,028,682	-	1,698,923	175,727,605	18.5%
Malaysian Ringgit	2,051,086	-	142,554	2,193,640	0.2%
Mexican Peso	9,677,774	-	60,926	9,738,700	1.0%
New Israeli Shekel	5,131,815	-	95,823	5,227,638	0.6%
New Taiwan Dollar	15,759,006	-	175,357	15,934,363	1.7%
New Zealand Dollar	3,042,636	-	175,874	3,218,510	0.3%
Norwegian Krone	8,271,393	-	66,720	8,338,113	0.9%
Philippine Peso	3,437,808	-	20,694	3,458,502	0.4%
Polish Zloty	667,479	-	41,612	709,091	0.1%
Qatari Rial	531,287	-	23,432	554,719	0.1%
Singapore Dollar	9,597,814	-	109,093	9,706,907	1.0%
South African Rand	11,403,515	-	69,543	11,473,058	1.2%
South Korean Won	21,806,884	-	12,133	21,819,017	2.3%
Swedish Krona	27,885,831	-	154,122	28,039,953	3.0%
Swiss Franc	54,398,017	-	33,258	54,431,275	5.7%
Thai Baht	6,334,913	-	135,645	6,470,558	0.7%
Turkish Lira	3,764,926	-	28,838	3,793,764	0.4%
United Arab Emirates Dirham	4,253,992	-	58,910	4,312,902	0.5%
Held in Foreign Currency	892,448,427		8,426,797	900,875,224	95.1%
Held in U.S. Dollars	46,495,943	-	-	46,495,943	4.9%
Total	$938,944,370	$ -	$8,426,797	$947,371,167	100.0%

*Includes Forward contracts, rights and warrants.

Note 3– Deposits and Investments (continued)

Interest Rate Risk

As of December 31, 2016, the Plan had the following investments and maturities:

Investment Type	Total Fair Value	1 year or Less	1-6 yrs	6-10 Years	10 or more years	Maturity not Determined
Asset backed	$ 10,708,519	$ -	$ 10,302,930	$ 397,440	$ 8,149	$ -
Bank Loans	197,581,008	6,886,951	128,249,836	62,444,221	-	-
Commercial mortgage backed	5,134,973	-	-	-	5,134,973	-
Corporate bonds	418,195,272	4,926,694	244,392,367	139,384,785	29,491,426	-
Corporate convertible bonds	5,518,165	1,409,960	2,135,682	1,609,573	362,950	-
Government agencies	32,244,077	-	24,945,461	6,503,529	795,087	-
Government bonds	127,495,868		65,010,820	51,933,525	10,551,523	-
Government mortgage backed	141,961,670	15,153	2,619,131	4,208,075	115,372,659	19,746,652
Index linked government bonds	3,866,010	-	769,257	2,978,944	117,809	-
Municipal / provincial bonds	11,541,194	482,347	10,515,839	105,877	437,131	-
Non-government backed CMO's	57,017	-	49,132	-	7,885	-
Other fixed Income	53,131,974	-	-	-	-	53,131,974
Total	$1,007,435,747	$13,721,105	$488,990,455	$269,565,969	$162,279,592	$72,878,626

For comparative purposes as of December 31, 2015, the Plan had the following investments and maturities:

Security Type	Total Fair Value	1 year or less	1-6 years	6-10 years	10 or more years	Maturity Not Determined
Asset backed	$ 15,680,741	$ -	$ 15,672,347	$ -	$ 8,394	$ -
Bank loans	179,330,537	6,420,474	126,456,842	46,453,221	-	-
Commercial mortgage backed	11,805,003	-	-	-	11,805,003	-
Corporate bonds	477,041,710	4,357,159	249,719,676	174,686,957	48,277,918	-
Corporate convertible bonds	2,607,517	-	1,566,562	1,040,955	-	-
Government agencies	42,717,667	-	27,907,611	13,368,711	1,441,345	-
Government bonds	192,479,956	-	102,370,500	72,744,078	17,365,378	-
Government mortgage backed	205,707,864	-	2,404,445	13,605,959	149,101,027	40,596,433
Index linked government bonds	8,145,438	3,564,476	2,757,380	1,823,582	-	-
Municipal / provincial bonds	12,010,407	-	10,830,106	200,084	980,217	-
Non-government backed CMO's	260,960	-	184,028	-	76,932	-
Total	$1,147,787,800	$14,342,109	$539,869,497	$323,923,547	$229,056,214	$40,596,433

The Plan does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rate risk.

Note 3 - Deposits and Investments (Continued)

Credit Risk

The following table reflects credit ratings of fixed income securities held by the Plan as of December 31, 2016:

S&P Credit Rating	*Fair Value*	*Asset Backed Securities*	*Bank Loans*	*Comm'l Mortgage Backed*	*Corporate Bonds*	*Corporate Convertible Bonds*	*Gov't Agencies*	*Gov't Bonds*	*Gov't Mortgage Backed*	*Linked Gov't Bonds*	*Municipal/ Provincial Bonds*	*Gov't Backed CMO's*	*Other Fixed Income*
US Govt	$ 268,896,469	$ -	$ -	$ -	$ -	$ -	$ 454,300	$ 124,175,513	$ 140,400,646	$3,866,010	$ -	$ -	$ -
AAA	15,280,677	7,703,082	-	-	2,135,091	-	263,309	-	-	-	5,179,195	-	-
AA	56,889,299	453,092	-	-	21,004,333	-	29,784,138	129,200	1,639	-	5,509,012	7,885	-
A	101,692,207	304,672	-	17,768	101,263,890	-	-	-	-	-	105,877	-	-
BBB	142,235,200	1,109,970	20,049,519	194,128	117,674,243	-	1,742,330	717,900	-	-	747,110	-	-
BB	155,505,411	-	73,247,303	-	82,258,108	-	-	-	-	-	-	-	-
B	129,360,815	2,472	57,190,723	-	71,410,767	756,853	-	-	-	-	-	-	-
CCC	29,926,653	-	13,624,334	-	15,206,637	1,095,682	-	-	-	-	-	-	-
D	1,048,688	-	-	-	1,048,688	-	-	-	-	-	-	-	-
NR	106,600,328	1,135,231	33,469,129	4,923,077	6,193,515	3,665,630	-	2,473,255	1,559,385	-	-	49,132	53,131,974
Total	$1,007,435,747	$10,708,519	$197,581,008	$ 5,134,973	$418,195,272	$5,518,165	$32,244,077	$127,495,868	$141,961,670	$3,866,010	$11,541,194	$ 57,017	$53,131,974

The following table reflects credit ratings of fixed income securities held by the Plan as of December 31, 2015:

S&P Credit Rating	*Fair Value*	*Asset Backed Securities*	*Bank Loans*	*Comm'l Mortgage Backed*	*Corporate Bonds*	*Corporate Convertible Bonds*	*Gov't Agencies*	*Gov't Bonds*	*Gov't Mortgage Backed*	*Linked Gov't Bonds*	*Municipal/ Provincial Bonds*	*Gov't Backed CMO's*
US Govt	$ 396,999,111	$ -	$ -	$ -	$ -	$ -	$ 443,868	$186,451,409	$201,958,396	$8,145,438	$ -	$ -
AAA	21,316,225	9,939,323	-	99,098	4,456,686	-	550,202	-	-	-	6,270,916	-
AA	75,133,029	2,321,932	-	3,211,216	26,346,750	-	38,259,876	232,988	9,226	-	4,742,264	8,777
A	106,960,012	1,095,224	-	2,328,425	102,444,892	-	-	94,244	-	-	997,227	-
BBB	188,042,146	-	16,185,336	748,169	165,896,971	-	3,463,721	1,747,949	-	-	-	-
BB	166,418,066	-	82,943,207	-	83,474,859	-	-	-	-	-	-	-
B	136,666,984	2,794	62,023,117	-	74,190,435	450,638	-	-	-	-	-	-
CCC	19,884,654	-	6,741,376	-	13,075,122	-	-	-	-	-	-	68,156
CC	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-	-	-	-	-	-	-	-	-	-
NR	36,367,573	2,321,468	11,437,501	5,418,095	7,155,995	2,156,879	-	3,953,366	3,740,242	-	-	184,027
Total	$1,147,787,800	$15,680,741	$179,330,537	$11,805,003	$477,041,710	$2,607,517	$42,717,667	$192,479,956	$205,707,864	$8,145,438	$12,010,407	$260,960

US Govt = Guaranteed by US Government
NR = Not Rated

The Plan does not have a formal policy in regard to aggregate credit quality of fixed income holdings. The Plan utilizes external investment management firms to invest in fixed income securities and credit quality is addressed within the guidelines of the mandate. Unless allowed by the mutually agreed upon guidelines of the mandate, all securities invested in are investment grade. If a holding falls below investment grade, the manager will either sell the security or will inform the Plan of the lower rating and why they believe that it is prudent to continue to hold the security as they believe that the security will return to investment grade.

Note 4 – Derivatives

The derivative instruments were recorded at fair value as of December 31, 2016 and 2015. Derivative instruments include forward foreign exchange contracts, futures contracts, rights and warrants. Derivative transactions involve, to varying degrees, credit risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. Market risk is the possibility that a change in market prices or currency rates will cause the value of a financial instrument to decrease or become more costly to settle. The Plan's investment managers may invest in derivatives if permitted by the guidelines of their mandate.

Foreign Currency Forward Contracts

Foreign currency forward contracts are used by certain investment managers to protect against the currency risk in the Plan's international equity portfolios. A foreign currency forward contract is an agreement to buy or sell a specific amount of a foreign currency at a specified delivery or maturity date for an agreed-upon price. Foreign currency forward contracts are marked-to-market on a daily basis. The gains or losses resulting from changes in contract values are included in investment income in the Statement of Changes in Fiduciary Net Position. The Plan experienced a realized gain (loss) of $112,214 and ($15,257) on foreign currency forward contracts in 2016 and 2015, respectively. As of December 31, 2016, the Plan's outstanding foreign currency forward contracts were as follows:

	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Unrealized Gain(Loss)	Change in Unrealized Gain(Loss)
Australian Dollar	$ 130,803	$ (176,372)	$ 1,463	$ 2,296
British Pound Sterling	466,387	-	(1,521)	(11,292)
Canadian Dollar	74,633	-	(179)	647
Euro	248,182	-	2,442	8,841
Hong Kong Dollar	-	-	-	15
Indonesian Rupiah	-	-	-	(12)
Japanese Yen	429,128	(130,468)	9	197
New Taiwan Dollar	-	(18,954)	23	23
South Korean Won	-	(38,020)	(44)	(82)
Swiss Franc	-	-	-	(404)
United States Dollar	233,592	(1,216,718)	-	-
	$1,582,725	$(1,580,532)	$ 2,193	$ 229

Note 4 – Derivatives (continued)

For comparative purpose, as of December 31, 2015 the Plan's outstanding foreign currency forward contracts were as follows:

	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Unrealized Gain(Loss)	Change in Unrealized Gain(Loss)
Australian Dollar	$ -	$ (176,882)	$ (833)	$(1,403)
British Pound Sterling	-	(470,897)	9,771	9,869
Canadian Dollar	72,002	-	(826)	(826)
Danish Krone	-	-	-	-
Euro	496,269	(148,179)	(6,399)	(823)
Hong Kong Dollar	12,487	(180,395)	(15)	(34)
Indonesian Rupiah	-	-	12	12
Japanese Yen	262,851	(110,634)	(187)	1,759
New Zealand Dollar	139,129	-	-	-
Norwegian Krone	-	-	-	-
South Korean Won	58,832	-	38	38
Swiss Franc	-	(19,486)	404	633
Thai Baht	-	-	-	-
United Arab Emirates	-	-	-	-
US Dollar	1,104,500	(1,037,632)	-	-
	$2,146,070	$(2,144,105)	$ 1,965	$ 9,225

Futures Contracts

Certain international investment managers utilize equity futures contracts to replicate underlying securities they wish to gain exposure to in the portfolio. A financial futures contract is an agreement to buy or sell a specific amount of an asset at a specified delivery or maturity date for an agreed-upon price. Futures contracts are traded on organized exchanges, thereby minimizing credit risk. The net change in the futures contract value is settled daily in cash with the exchanges which results in the contract having a fair value of zero at the end of each trading day. The cash or securities to fulfill these obligations are held in the investment portfolio. As the fair value of the futures contract varies from the original contract price, a gain or loss is paid to or received from the clearinghouse and recognized in the Statement of Changes in Fiduciary Net Position. The realized gain on equity futures contracts as of December 31, 2016 and 2015 was $975,594 and $248,022, respectively.

As of December 31, 2016 and 2015, open futures contracts had the following values:

	2016 National Value	2015 National Value
Total Futures	$7,608,467	$7,672,861

Note 4 – Derivatives (continued)

Rights and Warrants

Rights and warrants provide investment managers the right, but not the obligation, to purchase or sell a company's stock at a fixed price until a specified expiration date. Rights are normally issued with common stock and expire after two to four weeks. Warrants typically are issued together with a bond or preferred stock and may not expire for several years. The fair value of rights and warrants is reported in the investments in the Statement of Fiduciary Net Position. The gain or loss from rights and warrants is included in the investment income in the Statement of Changes in Fiduciary Net Position. As of December 31, 2016 The Plan's investments in rights and warrants were as follows:

	Notional Value	Fair Value	Change in Fair Value
Total Rights and Warrants	$766,814	$31,964	$(7,334)

For comparative purposes, as of December 31, 2015, The Plan's investments in rights and warrants were as follows:

	Notional Value	Fair Value	Change in Fair Value
Total Rights and Warrants	$406,871	$39,299	$7,831

Note 5 – Securities Lending

Under the provisions of state statutes, the Plan utilizes a securities lending agent to lend securities (both equity and fixed income) to qualified third parties in exchange for collateral that will be returned for the same securities in the future. Citibank NA manages the securities lending program and receives cash, securities or irrevocable letters of credit as collateral. The collateral received cannot be pledged or sold by the Plan unless the borrower defaults. All loans can be terminated on demand by either the Plan or the borrower. At December 31, 2016 the average term of the loans was 54 days (63 days in 2015). Marking to market is performed every business day and the borrower is required to deliver additional collateral when necessary so that the collateral held for all loans to the borrower will at least equal the fair value of all borrowed securities. U.S. security loan agreements are initially collateralized at 102% of the fair value of loaned securities. International securities are initially collateralized at 105% of the fair value of loaned securities. Cash collateral is invested in tri-party repurchase agreements and bank deposits, which at December 31, 2016 had a weighted average maturity of 28 days (22 days in 2015). As of December 31, 2016 and 2015 the Plan had loaned to borrowers securities with a fair value of $296,437,445 and $383,902,511, respectively. As of December 31, 2016 and 2015, the Plan received from borrowers' cash collateral of $304,808,240 and $396,836,061, respectively. As of December 31, 2016 and 2015, the Plan received non-cash collateral from borrowers of $532,025, and $164,776 respectively.

Securities lending net income for the years ended December 31, 2016 and 2015 was $1,897,591 and $1,703,039, respectively.

Note 5 – Securities Lending (continued)

Due to market events in 2008 and the beginning of 2009, one of the collateral pools utilized to invest collateral dropped below par value, causing the Plan to incur a liability. The custodian agreed to carry forward the losses and reduce them with future securities lending earnings. In 2010 the collateral pool was fully liquidated. In 2016 the remaining balance of the liability was paid off. The liability balance for the losses incurred was $0 and $62,742 as of December 31, 2016 and 2015, respectively. At year end, the Plan has no credit risk exposure to borrowers because the amounts the Plan owes the borrowers exceed the amounts the borrowers owe the Plan.

A summary of securities loaned at fair value as of December 31:

	2016	2015
Securities loaned – cash collateral		
Fixed income		
Domestic corporate fixed income	$ 35,964,732	$ 43,960,664
US Government agencies	10,766,827	8,633,045
US Government bonds	16,254,182	45,262,323
Equity		
Domestic equities	216,465,578	257,173,585
International equities	16,528,171	28,872,894
Total securities loaned – cash collateral	295,979,490	383,902,511
Securities loaned – non-cash collateral		
Equity		
Domestic equities	225,000	-
International equities	232,955	-
Total securities loaned – non-cash collateral	457,955	-
Total	$296,437,445	$383,902,511

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 5-8 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 if equal to or greater than $4,000. Maintenance and repairs are charged to expense. A summary of property and equipment at December 31, 2016 and 2015 is as follows:

	2016	2015
Computers	$22,115	$85,293
Office equipment	6,932	-
Furniture	-	4,980
Leasehold improvements	-	4,310
	29,047	94,583
Less accumulated depreciation and amortization	14,229	82,274
Net property and equipment	$14,818	$12,309

Depreciation and amortization expense was $4,423 and $11,647 for 2016 and 2015, respectively.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures

A. Pension Plan Description

General

Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF, or the Plan) is the administrator of a single employer defined benefit plan that was established in 1921 to provide retirement annuities and disability benefits for covered employees and for survivors and other beneficiaries of such employees. The Plan is administered under Chapter 40, Act 5, Article 8 of the Illinois Compiled Statutes. Benefit and contribution provisions are established by the Statutes and may be amended only by the Illinois state legislature. The Retirement Board, comprised of two ex-officio members (the City Comptroller and the City Treasurer) and three elected members, is authorized to carry out the provisions of Chapter 40, Act 5, Article 8 of the Illinois Compiled Statutes. The Retirement Board appoints the executive director, an actuary, an auditor, consultants and employees necessary for the transaction of business. The Retirement Board meets monthly and receives no compensation, but is reimbursed for necessary expenses. The Plan is included in the City of Chicago's financial reports as a component unit.

Membership

Any employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance except for policemen, firemen, teachers, and those classified by the municipal personnel ordinance as labor service or any person employed by the Municipal Employees' Annuity and Benefit Fund of Chicago (Plan) who is not participating in any other pension fund or retirement system is also covered by the Plan. The payroll for employees covered by the Plan for the years ended December 31, 2016 and 2015 were $1,646,939,238 and $1,643,480,973, respectively.

Plan membership at December 31 is as follows:

	2016	2015
Active employees (includes members currently receiving disability benefits):		
Vested	15,741	16,156
Non-vested	14,555	14,527
	30,296	30,683
Retirees and beneficiaries currently receiving benefits	25,234	24,962
Retirees not currently receiving benefits	2	2
Terminated employees entitled to benefits but not yet receiving them	1,956	1,900
Terminated employees entitled to a refund of contributions	14,920	14,368
Total	72,408	71,915

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 Plan 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.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

Pension legislation (Public Act 98-0641) approved June 9, 2014 amended the Plan. This legislation affected the automatic annual increase for all employee annuitants and eligibility requirements for benefits under Tier 2. During fiscal year 2015 the Circuit Court of Cook County declared (Public Act 98-0641) unconstitutional in it its entirety. On March 24, 2016 the Illinois Supreme Court affirmed the decision of the Circuit Court of Cook County. This plan description reflects the reversal of Public Act 98-0641.

Refunds of Employee Contributions

If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest at 3% per annum, subject to certain exceptions. Certain disability pension credits are not refundable.

Employee Pension

Tier 1 employees age 55 or more with at least 10 years of service are entitled to receive a money purchase annuity with partial City contributions if under age 60 with less than 20 years of service. Employees age 60 or more with at least 10 years of service or age 55 or more with at least 20 years of service or age 50 or more with at least 30 years of service are entitled to receive a minimum formula annuity of 2.4% per year of service times the final average salary (highest average annual salary for any 4 consecutive years within the last 10 years of service immediately preceding the date of retirement). If the employee retires prior to age 60, the annuity shall be reduced by ¼ of 1% for each month the employee is under age 60 if the employee has less than 25 years of service. The annuity is not discounted if the employee is age 50 with at least 30 years of service. An employee with at least 10, 20, or 30 years of service can withdraw and receive a minimum annuity formula at 60, 55, or 50, respectively. The original annuity is limited to 80% of the highest average annual salary, adjusted for annual Internal Revenue Code (IRC) §401(a) (17) and §415 limitations. Employees withdrawing from service at age 60 or older with at least 10 years of service are entitled to a minimum annuity of $850 per month.

Tier 2 employees age 67 or more with at least 10 years of service are entitled to receive an unreduced annuity benefit or a reduced annuity benefit at age 62 with 10 years of service. The annuity is discounted 1/2 percent for each full month the employee is under age 67. Final average salary is calculated using salary from the eight highest consecutive years within the last 10 years of service prior to retirement.

Pensionable salary is limited to $106,800 beginning in 2011, increased by the lesser of 3 percent and 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 November 1, which is the date that the new amount will be calculated and made available to the pension funds by the Illinois Department of Insurance.

Automatic Increase in Employee Annuity

Tier 1: An employee annuitant under Tier 1 who is eligible to receive an increase of 3.0 percent of the currently payable annuity (compound). This increase begins in January of the year of the first payment date following the earlier of:

1) the later of the third anniversary of retirement or age 53, or
2) the later of the first anniversary of retirement or age 60

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

Tier 2: An employee annuitant under Tier 2 who is eligible to receive an increase in annuity benefit, shall receive an annual increase equal to the lesser of 3.0 percent and 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 in January of the year of the first payment date following the later of:

1) the attainment of age 67, or
2) the first anniversary of the annuity start date.

Surviving Spouse Pension

Tier 1: Upon the death of an employee under Tier 1, the surviving spouse meeting certain eligibility requirements, is entitled to a spouse annuity. There are three basic methods ("money purchase method", "minimum formula annuity method" and the "minimum annuity method") used to determine the amount of spouse's annuity for an ordinary death (not duty-related death). The surviving spouse is entitled to the largest benefit but the annuity cannot exceed an amount equal to 50% of the highest salary earned by the employee.

Tier 2: The annuity payable to the surviving spouse of an employee under Tier 2 is equal to 66 2/3%of the participant's earned retirement annuity at the date of death without a reduction due to age.

Automatic Increase in Spouse Annuity

The surviving spouse of an employee under Tier 2 shall receive an annual increase equal to the lesser of 3.0 percent and 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 date of the increase. This increase is based on the amount of the originally granted survivor's benefit (simple). This annual increase begins on January 1 following the commencement of the surviving spouse's annuity if the deceased member died while receiving an annuity benefit and on January 1 following the first anniversary of the commencement of the annuity otherwise.

Child Annuity

Under Tier 1 and Tier 2, an annuity is provided for any unmarried child of a deceased employee who is under the age of 18, if the child was conceived or born before withdrawal from service. The employee's death must occur while the employee is in service or in receipt of an annuity. The child's annuity is an amount equal to $220 a month when there is a surviving spouse and $250 when there is no surviving spouse, subject to maximum limitations.

Ordinary Disability

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 50% 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 service credits up to a maximum of 5 years.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

Duty Disability

Under Tier 1 and Tier 2, an employee who becomes disabled as the result of an accidental 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.

Funding Policy

The funding objective is to meet all expected future obligations to Plan participants through its Plan assets and contributions from employee and employer. Member and employer contribution rates are established by state law and may be amended only by the Illinois State Legislature.

Member Contributions

Active members under Tier 1 and Tier 2 are required to contribute to MEABF 8.5% of their salary (6.5% to provide employee annuity, 1.5% to provide a surviving spouse annuity and .5% to provide post-retirement increases in annuity) in accordance with the statutes. The employer deducts or picks up the employee's contributions before federal income tax is withheld and remits the contributions collected to the Plan. Member contributions earn interest at the rate of 3% per annum and are refundable. Employees receiving ordinary or duty disability benefits are credited with 8.5% of salary for pension purposes just as though the employee were working but these credits are not refundable.

While the amount of pensionable salary upon which member contributions are made under Tier 1 has no limitation, pensionable salary of active employees under Tier 2 is limited to $106,800 beginning in 2011, increased by the lesser of 3 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 November 1, which is the date the new amount will be calculated and made available to the pension funds.

Employer Contributions

The City of Chicago is required by state statutes to contribute the remaining amounts necessary to finance the requirements of MEABF. It is required to levy a tax at a rate not more than an amount equal to 1.25 times (current multiple) the total amount of member contributions to the Plan made in the calendar year two years prior to the year for which the annual applicable tax is levied. Annual required contributions (ARC) rates are determined using the entry age normal actuarial funding method. MEABF uses the level dollar open method to amortize the unfunded liability over a thirty year period. The actuarial valuation of the Plan shows that a multiple of 7.68 and 7.51 was needed to adequately finance MEABF in fiscal years 2016 and 2015. The statutory employer contributions have been less than the ARC for the past fourteen years. Contribution rates may be increased only by an amendment by the State Legislature to the Illinois Pension Code.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

Net Pension Liability of Participating Employer

The components of the net pension liability as of December 31, 2016 and 2015, were as follows:

	2016	2015
Total pension liability	$23,291,271,396	$23,358,869,625
Plan fiduciary net position	4,436,227,596	4,741,427,557
Employer's net pension liability	18,855,043,800	18,617,442,068
Plan fiduciary net position as a percentage of total pension liability	19.1%	20.3%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2016 and 2015, using actuarial assumptions applied to all periods included in the measurement.

	2016	2015
Inflation	3.00%	3.00%
Salary increase	4.5% - 8.25%, varying by years of service	4.5% - 8.25%, varying by years of service
Investment rate of return	7.5%, net of investment expense	7.5%, net of investment expense
Municipal bond rate	3.78% based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2016	3.6% based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2015
Cost of living adjustments	Tier 1: 3.0% compound Tier 2: the lesser of 3.0% or one-half the change in CPI, simple	Tier 1: 3.0% compound Tier 2: the lesser of 3.0% or one-half the change in CPI, simple

Post-retirement mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table with mortality improvements projected to 2010 based on scale AA. Pre-retirement mortality rates were based on the post-retirement mortality assumption, multiplied by 85% for males and 70% for females.

The actuarial assumptions used in the December 31, 2016 and 2015, valuations were based on the results of actuarial experience study for the period January 1, 2005 through December 31, 2009.

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, 2016 and 2015 are summarized in the following table:

	2016		2015	
	Target allocation	Long-term expected real rate of return	Target allocation	Long-term expected real rate of return
Fixed income	27%	0.5%	27%	0.2%
Domestic equity	26%	4.8%	26%	4.9%
International equity	22%	5.0%	22%	5.0%
Hedge Funds	10%	2.8%	10%	3.0%
Private equity	5%	8.6%	5%	8.6%
Real Estate	10%	5.2%	10%	6.0%

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

Discount rate

The discount rate used to measure the total pension liability was 3.9% and 3.7% for December 31,2016 and 2015, respectively. 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 the 1.25 multiple of member contributions from two years prior. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Based on those assumptions, the pension plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. The projected benefit payments through 2023 were discounted at the expected long term rate return. Starting in 2024 the projected benefit payments were discounted at the municipal bond rate. Therefore, a single equivalent, blended discount rate of 3.9% and 3.7% for December 2016 and 2015, respectively was calculated using the long-term expected rate of return and the municipal bond index.

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

The following presents the net pension liability as of December 31, 2016, calculated using the discount rate of 3.9%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.9%) or 1 percentage point higher (4.9%) than the current rate:

Net pension liability	1% Decrease (2.9%)	Current Discount Rate (3.9%)	1% Increase (4.9%)
December 31, 2016	$22,351,267,299	$18,855,043,800	$15,983,850,967

For comparative purposes, the net pension liability as of December 31, 2015, calculated using the discount rate of 3.7%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.7%) or 1 percentage point higher (4.7%) than the current rate:

Net pension liability	1% Decrease (2.7%)	Current Discount Rate (3.7%)	1% Increase (4.7%)
December 31, 2015	$22,207,242,150	$18,617,442,068	$15,675,668,794

B. Post-employment Healthcare Subsidy – City of Chicago and Board of Education Retirees

By Illinois Pension Code, MEABF was required to supplement a portion of the cost of the City of Chicago or Board of Education Health Care Plans for eligible annuitants who chose to utilize the health care plan through June 30, 2013. Public Act 98-0043 was approved in 2013 and changed the duration of health insurance supplement payments to eligible employee annuitants. In accordance with the provisions of Illinois Compiled Statutes (ILCS) Chapter 40, Act 5, Article 8, Section 164.1 and Section 164.2, the Pension Plan is required to subsidize the healthcare costs of its annuitants participating in health care plans sponsored by the City of Chicago or the Board of Education. The supplemental benefit payments are remitted monthly to the City of Chicago or the insurance carrier designated by the Board of Education in the following amounts:

> Beginning July 1, 2008 and until such time as the City no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first, $95 per month for each such annuitant who is not eligible to receive Medicare benefits and $65 per month for each such annuitants who is eligible to receive Medicare benefits. Based on Public Act 98-0043, December 31, 2016 was the last payment for the healthcare subsidy.

The payments described above were funded on a pay-as-you-go basis by the tax levy authorized under Section 8-173.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

As of December 31, 2016, there are 7,930 (8,170 as of December 31, 2015) City annuitants enrolled in the City's health care plan and 942 (1,039 as of December 31, 2015) Board of Education annuitants enrolled in the Board of Education retiree health care plan that were receiving this subsidy benefit.

The annual required contribution represented a level of funding that if paid on an ongoing basis, was projected to cover normal cost each year and amortize any unfunded actuarial liabilities over thirty years. The estimated City contribution represented the expected benefit payments for the health insurance supplement. In 2016 and 2015, the Pension Plan received contributions of $7,725,538 and $8,491,284 and remitted contributions of $7,725,538 and $8,491,284, respectively.

Funding Status and Funding Progress – Post-employment Healthcare Subsidy for City of Chicago and Board of Education Retirees

Based on Public Act 98-0043 the Post-employment Healthcare subsidy was discontinued as of December 31, 2016. Therefore, no actuarial accrued liability or unfunded actuarial accrued liability is required to be computed.The following table shows the funded status and funding progress as of December 31, 2016, the most recent actuarial valuation:

Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) – Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
N/A	N/A	N/A	0%	$1,646,939,238	N/A

For comparative purposes, the following table shows the funded status and funding progress as of December 31, 2015:

Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) – Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
N/A	$8,146,746	$8,146,746	0%	$1,643,480,973	0.50%

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits. Additional information as of the latest actuarial valuation follows:

Valuation Date	December 31, 2016
Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	No Assets (Pay-as-you-go)
Amortization Method	Level dollar, closed (30 years open prior to January 1, 2014)
Remaining Amortization Period	0 years closed as of December 31, 2016
Asset Valuation Method	N/A (pay-as-you-go)
Actuarial Assumptions:	
OPEB Investment Rate of Return	4.5 percent per year
Includes inflation at	3.0 percent per year
Payroll growth	4.0 percent per year
Healthcare Cost Trend Rate	N/A (Trend not applicable – Fixed dollar subsidy)

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

C. Post-employment Healthcare Benefits – MEABF as Employer

Staff members or employees of the Municipal Employees' Annuity and Benefit Fund of Chicago are contributing members of the Plan. When the staff members of the Plan eventually retire, if eligible, pension benefits are provided under the provisions of the Illinois Compiled Statutes (ILCS) Chapter 5, Article 8. Retired staff members of the Plan are not eligible to participate in the City of Chicago group health plan nor the Board of Education group health plan; hence were not eligible to receive a health insurance subsidy, a post-employment benefit other than pension (OPEB) under the ILCS Chapter 5, Art. 8.

MEABF, as an employer, reviews annually the ability to offer subsidized health insurance coverage for its retired employees, or survivors of former employees and eligible dependents receiving an annuity under the MEABF Staff Retiree Healthcare Plan ("MEABF Retiree Healthcare"). At December 31, 2016 14 retirees and beneficiaries were enrolled in the Healthcare plan.

Funding

Post-employment healthcare benefits are funded on a pay-as-you-go basis. No assets are accumulated to pre-fund the healthcare benefits. MEABF and the annuitant share the total cost of the Staff Retiree Healthcare. For 2016 and 2015, MEABF, as employer contributed $135,371 and $186,411 respectively.

Retirees may elect dental and vision coverage on a self-paid basis.

Annual OPEB Cost and Net OPEB Obligation – MEABF Staff Retiree Healthcare

The OPEB cost for the staff retiree healthcare benefits is calculated based on the annual required contribution of the Plan as employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years.

The components of MEABF's annual OPEB cost for the staff retiree healthcare benefits are shown in the following table:

	2016	2015	2014
Annual OPEB Cost			
Annual Required Contribution (ARC)	$ 853,059	$ 742,131	$ 704,214
Interest on Net OPEB Obligation	213,348	190,966	169,764
Adjustment to ARC	(278,528)	(249,308)	(221,628)
Annual OPEB Cost	787,879	683,789	652,350
Employer Contributions	135,371	186,411	181,745
Increase in NOO	652,508	497,378	470,605
Net OPEB Obligations (NOO)			
Net OPEB Obligation at Beginning of Year	4,741,073	4,243,695	3,773,090
Increase in NOO	652,508	497,378	470,605
Net OPEB Obligation at End of Year	$5,393,581	$4,741,073	$4,243,695

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

The Net OPEB Obligation is the amount recorded in the MEABF's Statement of Fiduciary Net Position as of year-end as the net liability for MEABF Staff Retiree Healthcare OPEB Liability. The employer contributions for 2016 and 2015 consist of $83,045 and $98,490, respectively, explicit subsidy along with $52,326 and $87,921, respectively, implicit subsidy. Implicit subsidy is treated as administrative expense of the defined benefit plan. In 2016 and 2015, MEABF contributed 15.9% and 25.1%, respectively, of the annual required OPEB contribution to the plan. The Annual *OPEB Cost* recorded in the Statement of Changes in Fiduciary Net Position for 2016 and 2015 as the MEABF Staff Retiree OPEB expense is net of employer implicit and explicit subsidies.

The following table is a summary of the OPEB Cost

Year	Annual OPEB Cost	% of Annual OPEB Obligation Contributed	Net OPEB Obligation
2016	$787,879	17.2%	$5,393,581
2015	683,789	27.3%	4,741,073
2014	652,350	27.9%	4,243,695

Funding Status and Funding Progress – Post-employment Benefit for MEABF Staff Retiree Healthcare

The following table shows funded status and funding progress as of December 31, 2015, per the latest actuarial valuation available.

Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) – Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
N/A	$7,642,615	$7,642,615	0.0%	$3,168,250	241.2%

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Note 7 – Pension and Other Postemployment Benefit-Related Note Disclosures (continued)

For a plan the size of the MEABF Staff Retiree Healthcare plan, GASB allows a valuation report to be used for up to 3 years if there are no significant changes in plan design, premiums/claims, or demographics that would materially change the results. The latest actuarial valuation included projections through the year ended December 31, 2016. Additional information as of the latest actuarial valuation follows:

Valuation Date	December 31, 2015
Actuarial Cost Method	Entry-Age Normal; level percentage of payroll
Actuarial Value of Assets	No Asset (pay-as-you-go)
Amortization Method	Level dollar open
Remaining Amortization Period	30 years
Actuarial assumptions:	
Discount rate	4.50%
Inflation rate	3.00%
Projected payroll growth	4.00%
Salary increases	Varies based on years of service from 8.25% to 4.5%
Health cost trend rates;	
Non-Medicare Medical & Prescription Drugs	7.25% graded to 5.0% over 9 years
Medicare Medical & Prescription Drugs	8.00% graded to 5.0% over 9 years

Discontinuance of Subsidized MEABF Staff Retiree Healthcare

The actuarial studies used in the preparation of the financial statements were prepared under the assumption that MEABF would continue to offer subsidized health insurance coverage. During 2016, the Board of Trustees voted to discontinue the health subsidy effective January 1, 2017. Consequently, the OPEB liability should have been eliminated at December 31, 2016 and revisions made to the actuarial studies. Since the amount of the OPEB liability is not material to the financial statements, MEABF elected not to revise the actuarial studies or eliminate the liability at December 31, 2016. The net OPEB obligation will be eliminated in 2017.

Disclosure of Information about Actuarial Methods and Assumptions

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future.

Actuarial calculations reflect a long-term perspective. Actuarial methods and assumptions used include techniques designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Note 8 – Net Position Held in Trust for Pension Benefits

Reserves represent the components of the Plan's net position. Reserves are established from member and employer contributions and the accumulation of investment income after satisfying investment and administrative expenses. At least once a year, before any transfer is made from these reserves, interest at 3% is credited to these reserves. The reserves do not represent the present value of assets needed, as determined by actuarial valuation, to satisfy retirement and other benefits as they become due. The Plan's major classes of reserves are as follows:

	2016	2015
City contribution Reserves	$ 1,830,853,535	$ 1,789,317,571
Salary Deduction Reserves	1,830,459,297	1,788,925,611
Prior Services Reserves	9,175,409,547	8,941,649,806
Annuity Payment Reserves	2,217,643,974	2,134,398,568
Optional Reserve Account	982,343	970,161
	15,055,348,696	14,655,261,717
Unreserved Net Deficit	(10,619,121,100)	(9,913,834,160)
	$ 4,436,227,596	$ 4,741,427,557

City Contribution Reserves

Amounts contributed by the City for age and service annuity, surviving spouse annuity and supplemental annuity shall be credited to this reserve. When the employee annuity or surviving spouse annuity is granted the amount in this reserve for such annuity will be transferred to the annuity payment fund reserves.

Salary Deduction Reserves

Amounts contributed by the employee or amounts credited for the employee for age and service annuity and surviving spouse annuity shall be credited to this reserve. When the employee annuity or surviving spouse annuity is granted the amount in this reserve for such annuity will be transferred to the annuity payment fund reserves.

Annuity Payment Reserves

Amounts transferred from the City contribution reserves and the salary deduction reserves for annuities which have been granted will be credited to this reserve.

Prior Service Reserves

Amounts contributed by the City for minimum annuities shall be credited to this reserve.

Optional Reserves

Amounts contributed by the aldermen for the alternative plan.

Note 9 – Operating Leases

Office Lease

MEABF moved to a new office location on March 1, 2011 under a fifteen-year, non-cancelable lease agreement with Hines REIT 321 North Clark Street LLC. The lease currently requires monthly payments of $52,028 The Plan received rent abatements for the initial six full months of the term of the lease, and the initial three calendar months of the third, the fourth, the fifth and sixth lease year and the initial two calendar months of the seventh lease year. Monthly lease payments are subject to an escalation clause for increases in real estate taxes and maintenance expenses which have been estimated to be 3% annually.

Disaster Recovery (DR) site

MEABF was a party to an agreement participated by four other pension funds (Laborer's, Police, Fire and Cook County) to lease an offsite office and storage facilities under an extended non-cancelable lease agreement that ended August 31, 2016. Subsequently, MEABF has agreed to a one year service contract for cloud retention with unlimited storage.

Following is a summary of estimated future lease payments under the Plan's operating leases as of December 31, 2016:

Year Ending December 31,	Amount
2017	$ 544,518
2018	664,682
2019	683,026
2020	701,676
2021	720,639
2022-2026	3,212,678
Total	$6,527,219

Total rent expense was $571,702 and $553,714 for 2016 and 2015, respectively.

Note 10 – Risk Management

MEABF carries liability insurance coverage provided by private insurance carriers. In order to limit the risk of asset loss from theft, fraud, robbery or burglary, the Plan carries a government crime policy. The Plan also carries fiduciary liability insurance that limits the risk of loss arising from court challenges to fiduciary decisions.

Note 11 – Commitments and Contingencies

Investment Commitments

As of December 31, 2016 and 2015 approximately $47.5 million and $74.1 million of capital committed to investments in real estate and private equity funds were undrawn. The Plan believes that the capital may take up to four years to be fully requested.

Litigation

The Plan is subject to claims arising in the ordinary course of its operations. Although the outcome of these lawsuits are not presently determinable, in the opinion of the Plan's management and legal counsel, the resolution of these matters will not have a material adverse effect on the Plan's financial statements.

Note 12 – 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 $239,964 and $260,423 for 2016 and 2015, respectively. Employer contributions are not allowed.

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer's Net Pension Liability (Pension)

	2016	2015	2014
Total pension liability			
Service cost	*$ 619,743,849*	*$ 226,816,035*	*$ 247,243,416*
Interest	*878,369,406*	*909,066,895*	*1,025,763,903*
Change of benefit terms	*-*	*2,140,009,339*	*(1,990,706,362)*
Differences between expected and actual experience	*(127,119,398)*	*(109,835,037)*	*(5,504,116)*
Changes of assumptions	*(578,920,424)*	*8,711,754,654*	*-*
Benefit payments, including refunds of employee contributions	*(859,671,662)*	*(826,036,323)*	*(798,622,811)*
Net change in total pension liability	*$ (67,598,229)*	*$11,051,775,563*	*$ (1,521,825,970)*
Total pension liability – beginning	23,358,869,625	12,307,094,062	13,828,920,032
Total pension liability – ending (a)	$23,291,271,396	$23,358,869,625	$12,307,094,062
Plan fiduciary net position			
Contributions – employer	$ 149,718,491	$ 149,225,191	$ 149,746,748
Contributions - employee	130,390,848	131,428,103	129,971,981
Net investment income	281,419,146	114,025,290	283,281,925
Benefit payments, including refunds of employee contributions	(859,671,662)	(826,036,323)	(798,622,811)
Administrative expenses	(7,056,784)	(6,701,000)	(6,567,842)
Net change in plan fiduciary net position	$ (305,199,961)	$ (438,058,739)	$ (242,189,999)
Plan fiduciary net position-beginning	4,741,427,557	5,179,486,296	5,421,676,295
Plan fiduciary net position–ending (b)	4,436,227,596	4,741,427,557	5,179,486,296
Employer's net pension liability ending (a)-(b)	$18,855,043,800	$18,617,442,068	$ 7,127,607,766

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 (Pension)

	2016	2015	2014
Total pension liability	$23,291,271,396	$23,358,869,625	$12,307,094,062
Plan fiduciary net position	4,436,227,596	4,741,427,557	5,179,486,296
Employer's net pension liability	18,855,043,800	18,617,442,068	7,127,607,766
Plan fiduciary net position as a percentage of total pension liability	19.1%	20.3%	42.1%
Covered-employee payroll	$ 1,646,939,238	$ 1,643,480,973	$ 1,602,977,593
Employer's net pension liability as a percentage of covered-employee payroll	1,144.8%	1,132.8%	444.7%

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 Contributions (Pension)

Year Ended December 31,	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency	Covered Employee Payroll	Contributions as a percentage of Covered Employee Payroll
2016	$961,769,955	$149,718,491	$812,051,464	$1,646,939,238	9.1%
2015	$677,200,246	$149,225,191	$527,975,055	$1,643,480,973	9.1%
2014	$839,038,303	$149,746,748	$689,291,555	$1,602,977,593	9.3%
2013	$820,022,689	$148,196,884	$671,825,505	$1,580,288,709	9.4%
2012	$690,822,553	$148,858,655	$541,963,898	$1,590,793,702	9.4%
2011	$611,755,567	$147,009,321	$464,746,246	$1,605,993,339	9.2%
2010	$483,948,339	$154,752,320	$329,196,019	$1,541,388,065	10.0%
2009	$413,508,622	$148,046,490	$265,462,132	$1,551,973,348	9.5%
2008	$360,387,176	$146,803,250	$213,584,926	$1,543,976,553	9.5%
2007	$343,123,106	$139,606,140	$203,516,966	$1,564,458,835	8.9%

Prior to 2014, the Actuarially Determined Contribution is the same as the Annual Required Contribution as determined under GASB 25

Beginning in 2006, the Annual Required Contribution does not include contributions for health insurance supplement.

Schedule of Investment Returns

Year ended December 31	Annual Money-Weighted Rate of Return, net of investment expense
2016	6.1%
2015	2.1%
2014	4.8 %

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 (Pension)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	December 31, 2016
Actuarial cost method	Entry age normal
Amortization method	Level dollar
Remaining amortization period	30 years
Asset valuation method	5 year smoothed market
Actuarial assumptions:	
Investment rate of return	7.5%, net of investment expense
Projected salary increases	4.5%-8.25%, varying by years of service
Inflation rate	3.0%
Cost of living adjustments	Tier1: 3.0% compound Tier2: The lesser of 3% or one-half of the change in CPI, simple.

Schedule of Funding Progress (Post-employment Healthcare)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) – Entry Age (b)	Unfunded AAL (UAAL) (b–a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b–a)/c)
12/31/16	$ -	$ -	$ -	00.0%	$1,646,939,238	N/A
12/31/15	$ -	$ 8,146,746	$ 8,146,746	00.0%	$1,643,480,973	0.5%
12/31/14	$ -	$ 17,494,941	$ 17,494,941	00.0%	$1,602,977,593	1.1%
12/31/13[a]	$ -	$ 27,573,334	$ 27,573,334	00.0%	$1,580,288,709	1.7%
12/31/12	$ -	$162,083,083	$162,083,083	00.0%	$1,590,793,702	10.2%
12/31/11	$ -	$163,241,898	$163,241,898	00.0%	$1,605,993,339	10.2%
12/31/10	$ -	$223,564,218	$223,564,218	00.0%	$1,541,388,065	14.5%
12/31/09	$ -	$224,173,231	$224,173,231	00.0%	$1,551,973,348	14.4%
12/31/08	$ -	$222,691,036	$222,691,036	00.0%	$1,543,976,553	14.4%
12/31/07	$ -	$217,868,343	$217,868,343	00.0%	$1,564,458,835	13.9%

[a] Entry age actuarial accrued liability for fiscal year 2013 was determined based on the provisions of P.A. 98-0043.

Based on Public Act 98-0043 the Post-employment Healthcare was discontinued as of December 31, 2016, therefore no actuarial accrued liability or unfunded actuarial accrued liability is required.

Schedule of Employer Contributions (Post-employment Healthcare)

		Employer Contributions	
Year Ended December 31,	Annual Required Contribution	Amount Contributed	Percentage Contributed
2016	$ 8,342,459	$7,725,538	92.6%
2015	$ 9,174,103	$8,491,284	92.5%
2014	$ 9,826,193	$9,050,883	92.1%
2013	$14,375,793	$9,508,087	66.1%
2012	$14,631,863	$9,522,054	65.1%
2011	$22,803,577	$9,516,053	41.7%
2010	$22,954,501	$9,549,685	41.6%
2009	$22,966,965	$9,651,118	42.0%
2008	$23,782,660	$9,029,362	38.0%
2007	$23,287,106	$8,530,910	36.6%

Note to Schedules of Funding Progress and Employer Contributions (Post-employment Healthcare)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	December 31, 2016
Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed (30-year open prior to January 1, 2014)
Remaining amortization period	0 years as of December 31, 2016
Asset valuation method	No Assets (Pay-as-you-go)
Actuarial assumptions:	
OPEB investment rate of return	4.5%
Projected salary increases	4.0% per year
Includes inflation at	3.0%
Healthcare Cost Trend Rate	0.0%
Healthcare cost trend not applicable-fixed dollar subsidy	

Schedule of Funding Progress (Post-employment Healthcare - Staff Retiree Healthcare)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) – Entry Age (b)	Unfunded AAL (UAAL) (b–a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b–a)/c)
12/31/15	$ -	$7,642,615	$7,642,615	00.0%	$3,168,520	241.2%
12/31/12	$ -	$6,276,765	$6,276,765	00.0%	$2,966,755	211.6%
12/31/09	$ -	$7,101,870	$7,101,870	00.0%	$2,649,696	268.0%
12/31/06	$ -	$4,435,400	$4,435,400	00.0%	$2,497,700	177.6%

Note: The first Staff Retiree Healthcare OPEB actuarial valuation was performed as of December 31, 2006 and the most recent OPEB actuarial valuation was conducted as of December 31, 2015. The actuarial valuation as of December 31, 2015 included projections through the year ended December 31, 2017.

Schedule of Employer Contributions
(Post-Employment Healthcare - Staff Retiree Healthcare)

Year Ended December 31,	Annual Required Contribution	Employer Contributions: Amount Contributed	Employer Contributions: Percentage Contributed
2016	$853,059[1]	$135,371	15.9%
2015	$742,131	$186,411	25.1%
2014	$704,214	$181,745	25.8%
2013	$667,546	$162,985	24.4%
2012	$864,676	$173,544	20.1%
2011	$816,278	$174,439	21.4%
2010	$770,673	$146,434	19.0%
2009	$611,526	$111,840	18.3%
2008	$573,808	$ 96,670	16.8%

[1] Projected for plan year ended December 31, 2016 based on most recent actuarial valuation as of December 31, 2015.

Note to Schedules of Funding Progress and Employer Contributions
(Post-employment Healthcare - Staff Retiree Healthcare)

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	December 31, 2015
Actuarial cost method	Entry age normal
Asset valuation method	No Assets (Pay-as-you-go)
Amortization method	Level dollar open
Amortization period	30 years
Actuarial assumptions:	
Investment Rate and Discount Rate	4.5%
Projected Salary Increases	Varies based on years of service from 8.25% to 4.5%
Wage inflation	4.0%
Healthcare trend	
Non-Medicare Medical & Prescription Drugs	7.25% graded to 5.0% over 9 years
Medicare Medical & Prescription Drugs	8.00% graded to 5.0% over 9 years

Schedule of Administrative and OPEB expenses

Years Ended December 31, 2016 and 2015

	2016	2015
Personnel		
Administrative salaries	$ 3,239,477	$ 3,111,097
Payroll taxes	77,076	82,443
Employee benefits	1,130,344	1,077,561
OPEB expense	652,508	497,378
	5,099,405	4,768,479
Professional Services		
Actuarial valuation	92,285	70,150
Staff actuary	52,745	76,277
Legal services	263,187	246,768
Medical	52,786	52,786
Audit	38,000	37,000
Legislative liaison services	17,717	17,201
Payroll services	384,557	411,855
IT consulting	16,732	26,113
Other consulting	8,820	8,820
	926,829	946,970
Communication		
Printing & publications	20,287	18,305
Postage	72,646	58,232
Telephone and communications	36,442	42,668
	129,375	119,205
Occupancy and utilities		
Office rent	571,702	553,714
Utilities	11,561	13,212
Office maintenance	2,141	3,063
	585,404	569,989
Other operating expense		
Fiduciary and insurance	207,003	206,692
Office supplies and equipment	35,863	32,672
Depreciation	4,423	11,647
Equipment rental and maintenance	18,889	13,439
Training and travel	7,652	7,085
Contractual services	20,893	21,027
Dues and subscriptions	14,615	18,237
Miscellaneous	6,433	(14,442)
	315,771	296,357
Total Administrative and OPEB expense	$ 7,056,784	$ 6,701,000

Schedule of Investment Management Compensation

Years Ended December 31, 2016 and 2015

	2016	2015
Fixed Income Managers		
LM Capital Group	$ 316,800	$ 359,192
MacKay Shields	866,676	922,558
Neuberger Berman	101,554	165,615
Segall Bryant & Hamill	193,832	228,115
Symphony Asset Management	780,099	680,940
UBS Global Asset Management	91,430	120,027
Total Fixed Income	2,350,391	2,476,447
Domestic Equity Managers		
Ariel Investments	470,118	470,846
Earnest Partners	-	90,047
Geneva Capital Management	348,721	348,690
Great Lakes Advisors	334,232	311,759
Herndon Capital Management	30,118	338,864
Holland Capital Management	321,632	432,074
Keeley Asset Management	601,104	601,822
Rhumbline Advisers	63,486	71,197
Total Domestic Equity	2,169,411	2,665,299
International Equity Managers		
Cornerstone Capital Management	542,533	532,936
LSV Asset Management	601,011	623,066
Northern Trust Company	230,157	386,273
Segall Bryant & Hamill	84,038	-
Walter Scott & Partners	735,096	716,495
William Blair	1,082,949	1,105,683
Total International Equity	3,275,784	3,364,453
Global Equity		
FIS Group	1,146,310	1,255,322
Hedged Equity		
K2 Advisors	1,270,615	2,021,886
The Rock Creek Group	1,869,377	1,899,118
Total Hedged Equity	$ 3,139,992	$ 3,921,004

Schedule of Investment Management Compensation (continued)

Years Ended December 31, 2016 and 2015

	2016	2015
Real Estate Managers		
AFL-CIO Building Trust	$ 835,511	$ 845,393
American Realty	684,864	660,403
Capri Capital	-	30,150
DV Urban	55,804	71,092
J P Morgan	1,017,228	1,100,998
John Buck Company	28,645	71,120
Mesirow Real Estate	945,335	852,591
Prudential Asset Management	1,041,560	1,125,637
Tishman Speyer	55,447	54,201
UBS Realty Advisors	57,327	59,784
Walton Street Partners	133,294	148,317
Total Real Estate	4,855,015	5,019,686
Private Equity Managers		
Adams Street Partners	434,232	491,925
Carpenter Bancorp Fund	86,778	112,858
First Analysis	4,243	59,085
GoldPoint Partners	169,537	219,383
Hispania Partners	36,942	45,860
Hopewell Ventures	64,564	68,370
Levine Leichtman	139,999	889,598
MK Capital	78,464	150,558
Mesirow Financial	407,816	519,028
Midwest Mezzanine Fund	352,123	310,481
Morgan Stanley Secondary	40,576	65,144
Muller & Monroe	77,238	132,546
Nogales Investors	40,304	40,304
Prudential Capital Partners	517,548	621,442
RCP Advisors	149,490	149,490
Stepstone	84,779	86,499
TRG Management (formerly Citigroup International PE Fund)	56,851	65,554
Total Private Equity	2,741,484	4,028,125
Total Investment Management Fees	19,678,387	22,730,336
Other Investment Expenses		
Investment Consultant	290,000	290,000
Master Custodian	476,783	472,208
Investment Legal Services	32,404	13,128
Total Other Investment Expenses	799,187	775,336
Total Investment Expenses	$ 20,477,574	$ 23,505,672

Schedule of Professional and Consulting Costs

Years Ended December 31, 2016 and 2015

	2016	2015
Legal Advisors	$ 263,187	$ 246,768
Medical Advisors	52,786	52,786
Consulting Actuary	145,030	146,427
Other Consulting	43,269	52,134
Auditor	38,000	37,000
Payroll Services	384,557	411,855
Total	$ 926,829	$ 946,970

Investment

This report includes the certification letter from the Plan's custodian for 2016; a summary of the Plan's investment goals, objectives, and guidelines; and informative investment schedules for your review. Data provided to the Plan by its custodian and its investment consultant form the basis for the information that is presented throughout the Investment Section. All portfolio rates of return are presented using a time-weighted rate of return methodology based on fair values. The figures in the Investment Section of the Comprehensive Annual Financial Report may differ from those found in the Financial Section. This is due to a lag in reporting associated with certain classes of investments. The figures found in the Investment Section represent final figures for 2016.

MarquetteAssociates

June 15, 2017

The Board of Trustees
Municipal Employees' Annuity & Benefit Fund of Chicago
321 N. Clark Street, Suite 700
Chicago, IL 60654-4767

Dear Trustees:

Marquette Associates would like to provide a summary of the investment results for the Municipal Employees' Annuity & Benefit Fund of Chicago for the year ended December 31, 2016.

Interest rates increased over the year providing mixed returns for investment grade fixed income. High Yield bonds and Senior Secured Loans outperformed significantly as credit spreads tightened. U.S. Equities showed strong returns for the year, with the S&P 500 up 12.0% and the Russell 2000 up 21.3%. Broad International equity markets (MSCI All Country World ex-U.S.) gained 4.5% for the year. Emerging markets (MSCI Emerging Markets Index) significantly outperformed developed markets, up 11.2% for the year. Private Real Estate continued strong performance in 2016, up 8.0%.

The Municipal Employees' Annuity & Benefit Fund of Chicago's investment assets totaled $4.30 billion at December 31, 2016. This represented a decrease of $303.6 million from December 31, 2015, of which +$284.4 million was due to investment gains, and -$588.0 million due to withdrawals for benefits and expenses.

The Total Fund returned 6.6% for calendar 2016, gross of fees, outperforming the Policy Benchmark's return of 6.3%. The Fund ranked in the 74th percentile in the InvestorForce Public Defined Benefit Fund peer universe. The 3-year annualized return for the Fund was 4.6% versus 4.2% for the benchmark, ranking the Fund in the 29th percentile. The 5-year annualized return for the Fund was 8.4% versus 7.6% for the benchmark, ranking the Fund in the 30th percentile.

Factors contributing to 2016 performance include:

- Fixed Income – Positive returns from the asset class, outperforming the broad U.S. fixed income market, due to significant outperformance of High Yield and Senior Secured Loans.
- U.S. Equity – Strong returns in 2016, with small cap stocks significantly outperforming large cap stocks, and value significantly outperforming growth for the year. MEABF's U.S. Equity Composite underperformed its benchmark, due to manager underperformance, despite the Plan's exposure to small cap equities.
- International Equity – The asset class underperformed for the year, with mixed active manager performance. Emerging markets outperformed developed markets for the year, with value significantly outperforming growth.
- Hedged Equity – The asset class provided slightly negative returns for the year, as hedged equity underperformed other hedge fund strategies in 2016.
- Real Estate – Both open-end and closed-end managers experienced strong, steady income returns for the year.
- Private Equity – The asset class was a strong contributor to MEABF's performance for the year, returning nearly 13%.

MEABF continues to invest in a well-diversified portfolio of assets to provide growth opportunities for Plan assets in the years to come. The Plan implements this diversified portfolio by using a combination of active and passive management. The Plan continues to have a strong focus on reducing investment management fees.

Sincerely,

Brian Wrubel
President & CEO

James R. Wesner, CFA
Managing Partner

NORTHERN TRUST

To the Board of Trustees and the Executive Director:

The Northern Trust Company as custodian ("Master Custodian") of assets of the Municipal Employees' Annuity and Benefit Fund of Chicago ("Fund") held by it in a custodial account (the "Account") has provided annual Statements of Account for the Account to the Fund which to the best of its knowledge provide a complete and accurate reflection of The Northern Trust Company's record of the investments, receipts, disbursements, purchases and sales of securities and other transactions pertinent to the Account for the period January 1, 2016 through December 31, 2016.

In addition to the custody of assets in the Account, pursuant to and in accordance with the terms of the amended and restated Master Custody Agreement among the Board of Trustees of the Fund and The Northern Trust Company dated September 1, 2013 as amended (the "Custody Agreement"). The Northern Trust Company provided and continues to provide the following services as Master Custodian:

1. Receive and hold all amounts paid to the Account by the Board of Trustees.
2. Accept and deliver securities in connection with investment transaction in the Account in accordance with the instructions of appointed Investment Managers.
3. Collect dividends and registered interest payments.
4. Collect matured and called securities and coupons to the extent provided in the operating guidelines of The Northern Trust Company in effect from time to time.
5. Invest cash balances held from time to time in the individual investment management accounts of the Account in short term-cash equivalent securities.
6. Facilitate the exercising of rights of ownership, including but not limited to, proxy voting, stock subscriptions and conversion rights as directed by the Fund or its appointed investment managers.
7. Hold securities in the Account in the name of the Fund or nominee form or other means as provided in the Custody Agreement.
8. Use the Federal Book Entry Account System for deposit of Treasury securities and clearing corporations as defined in Article 8 of the Illinois Uniform Commercial Code for the deposit of securities.
9. Employ agents to the extent provided in the Custody Agreement.
10. Provide disbursement services.
11. Provide security fail float income to the extent provided in the operating guidelines of The Northern Trust Company in effect from time to time.

THE NORTHERN TRUST COMPANY

By:
Kimberly A. Miller
Senior Vice President

The Northern Trust Company
50 South La Salle Street
Chicago, Illinois 60603
312-630-6000

Investment Authority and Responsibility

The authority granted to the Board of the Municipal Employees' Annuity and Benefit Fund of Chicago (the "Board") related to investment decisions can be found in the Illinois Compiled Statutes, Chapter 40, Act 5, Section 8-201 and 8-201.1. Section 1-113 also defines investments deemed to be prudent. Any fiduciary with investment authority is required to discharge his or her duties with respect to the Plan with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims.

In order to clarify the roles and responsibilities of the Board and the various investment professionals engaged by the Board, the following responsibilities have been designated:

The Board assumes the responsibility for establishing goals, objectives and guidelines to direct the investment activity of the Plan.

The Board engages various managers to make investments in accordance with agreed-upon guidelines and applicable statutes. These managers apply their professional judgment in making investment decisions. Managers are given full discretion within their assigned mandate to select, acquire, maintain and dispose of individual investments as authorized by contract.

Plan-level Investment Goals and Objectives

The Board sets the goals and objectives of the investment portfolio solely in the interest of the Plan, its participants and their beneficiaries. The performance objectives of the Fund are threefold:

- The Plan is to meet or exceed its actuarial return assumption of 7.5% on a net-of-fees basis over time with a level of risk deemed appropriate by the Board while maintaining liquidity sufficient to cover benefit payments and other obligations.

- The Plan is to outperform the risk-adjusted return, net-of-fees, of the Plan's policy benchmark.

- The Plan is to rank in at least the top half of the universe of comparable institutional investors with similar risk/return parameters consistently over time.

Investment Manager Goals, Objectives and Guidelines

The guidelines for a particular investment mandate are set at the time of hiring and are included in the contractual agreement between the Plan and the investment manager. The guidelines specify the types of the investments that can be made and contain certain constrains in order to limit risk. Given the investment guidelines, certain goals and objectives are set. Generally, they are as follows:

- Each investment manager is expected to outperform the agreed-upon benchmark on a risk-adjusted-basis over a market cycle (typically a three- to five-year period).

- The total net-of-fees return for the mandate should rank above the median within the respective peer universe.

- The investment manager shall attempt to achieve its return objectives while maintaining an appropriate level of risk as determined by the Board and/or as specified in the investment contract.

Risk Management

Risk management is essential to the Plan's mission and to the success of the Plan's investment program. Most investment decisions have a risk component that must be considered. When making investment decisions, the Board shall make a reasonable effort to consider all risks—liquidity risk, market risk, business risk, credit risk, currency risk, interest rate risk, inflationary risk, etc.— within the context of the Plan's overall portfolio. The Board, with assistance from staff and its investment consultant, shall, taking into account the Plan's ability and the Board's willingness to assume risk, determine an appropriate risk tolerance level for the Plan. Determining the risk tolerance level shall serve as the first step in crafting an appropriate target asset allocation, setting investment goals and objectives, and making other investment-related decisions.

Asset Allocation

The Plan's assets are diversified to minimize risk and to maximize risk adjusted returns. Diversification is accomplished by utilizing appropriate asset allocation targets. Upon advice from staff and the Plan's investment consultant, the Board shall adopt appropriate asset allocation targets. The target allocation mix includes the traditional domestic & international equity and fixed income investments as well as alternative investments such as hedged equity, private equity, and real estate. Proper diversification within each asset class is based on establishing complementary investment objectives and management styles. The Board, staff and investment consultant will review the asset allocation at least annually and consider changes as deemed prudent.

Cash Flow Needs & Portfolio Rebalancing

The extensive operating cash flow needs of the Plan require the liquidation of investment assets on a monthly basis. Liquidity will be primarily drawn from asset classes that exceed their respective allocation targets in an effort to move the Plan's overall asset allocation closer to target allocations.

Should the regular monthly liquidity events associated with benefit payments not be sufficient to keep the portfolio in line with the target allocations, the Plan's portfolio may need to be rebalanced by shifting assets from one asset class to another. In these instances, the investment consultant and staff will bring a rebalancing plan to the Board for its approval. Upon approval by the Board, the staff will work to transition the assets.

Investment Management Fee

The Plan has made conscious efforts to reduce overall investment management expenses to coincide with our liquidity risks and on-going battle with our funding status. Since 2011, assets have been reduced by 14% while fee reduction was 21%. Over the years, the Fund's investment management fees have reduced significantly while maintaining asset allocation targets and return/risk profiles.

Following factors have attributed to the Fund's success in reducing investment management fees:

- Consolidate over-diversification of managers while moving to passive management in more efficient markets.
- Partnership with existing managers with long relationship in an effort to reduce fees.
- Negotiate with potential investment manager candidates for a highly competitive fee structure.

The Board, staff and investment consultant understand the importance of fee reduction within the Plan and are having discussions with managers on a continuous bases.

Investment Managers

As of December 31, 2016

Adams Street Partners
Chicago, Illinois
Private Equity Direct Partnerships
Private Equity Fund of Funds

American Realty Advisors
Glendale, California
Real Estate Core Fund

Ariel Investments
Chicago, Illinois
Domestic Equity Small/Mid Cap Value

Capri Capital Partners
Chicago, Illinois
Real Estate Partnerships
Real Estate Mezzanine Fund

Carpenter & Company
Irvine, California
Private Equity Direct Partnership

Cornerstone Capital Management
New York, New York
International Equity Growth

Crescent Capital Group
Los Angeles, California
High Yield Fixed Income

First Analysis
Chicago, Illinois
Private Equity Direct Partnerships

FIS Group, Inc.
Philadelphia, Pennsylvania
Manager of Managers
Global Equity

Geneva Capital Management
Milwaukee, Wisconsin
Domestic Equity Mid Cap Growth

GoldPoint Partners
New York, New York
Private Equity Mezzanine Fund

Great Lakes Advisors
Chicago, Illinois
Domestic Equity Large Cap Value

Herndon Capital Management
Terminated February 2016
Atlanta, Georgia
Domestic Equity Large Cap Value

Hispania Capital Partners
Chicago, Illinois
Private Equity Direct Partnerships

Holland Capital Management
Chicago, Illinois
Domestic Equity Large Cap Growth

Invesco Private Capital
New York, New York
Private Equity Fund of Funds

John Buck Company
Chicago, Illinois
Real Estate Partnerships

JP Morgan Asset Management
New York, New York
Real Estate Core Fund

K2 Advisors
Stamford, Connecticut
Hedged Equity Fund of Funds

Keeley Asset Management
Chicago, Illinois
Domestic Equity Small Cap Value

Levine Leichtman
Beverly Hills, California
Private Equity Mezzanine Funds

LM Capital
San Diego, California
Fixed Income Core

LSV Asset Management
Chicago, Illinois
International Equity Large Cap Value

MacKay Shields
New York, New York
Fixed Income High Yield

Mesirow Financial
Chicago, Illinois
Private Equity Direct Partnerships
Private Equity Funds of Funds
Real Estate Direct Partnership

Midwest Mezzanine Funds
Chicago, Illinois
Private Equity Mezzanine Funds

MK Capital
Chicago, Illinois
Private Equity Direct Partnership

Morgan Stanley
West Conshohocken, Pennsylvania
Private Equity Secondary Fund of Funds

Muller & Monroe Asset Management
Chicago, Illinois
Private Equity Fund of Funds

Neuberger Berman
Chicago, Illinois
Fixed Income Enhanced Index

Newport Capital Partners
Chicago, Illinois
Real Estate Partnership

Nogales Investors Management
Los Angeles, California
Private Equity Direct Partnerships

Northern Trust Asset Management
Chicago, Illinois
International Equity All-World Ex-US Index
International Equity Small Cap Index

PNC Bank
Washington, D.C.
Real Estate Core Fund

Prudential Capital Partners
Chicago, Illinois
Private Equity Mezzanine Fund

Prudential Real Estate Investors
Parsippany, New Jersey
Real Estate Funds

RCP Advisors
Chicago, IL
Private Equity Secondary Fund of Funds

RhumbLine Advisors
Boston, Massachusetts
Domestic Equity Large Cap Core Index

The Rock Creek Group
Washington, D.C.
Hedged Equity Fund of Funds

Segall Bryant & Hamill
Chicago, Illinois
Fixed Income Intermediate
International Equity Small Cap

StepStone Group
San Diego, California
Private Equity Fund of Funds

Symphony Asset Management
San Francisco, California
Fixed Income Senior Secured Loans

Tishman Speyer
New York, New York
Real Estate Partnership

TRG Management
New York, New York
International Private Equity Direct Partnership

UBS Global Asset Management (Americas)
Chicago, IL
Fixed Income Core

UBS Realty Investors
Hartford, Connecticut
Real Estate Partnership

Walter Scott & Partners
Edinburgh, Scotland
International Equity Large Cap Growth

Walton Street Capital
Chicago, Illinois
Real Estate Partnerships

William Blair & Company
Chicago, Illinois
Emerging Markets Equity

Woodland Venture Management
Chicago, Illinois
Private Equity Direct Partnership

Portfolio Performance

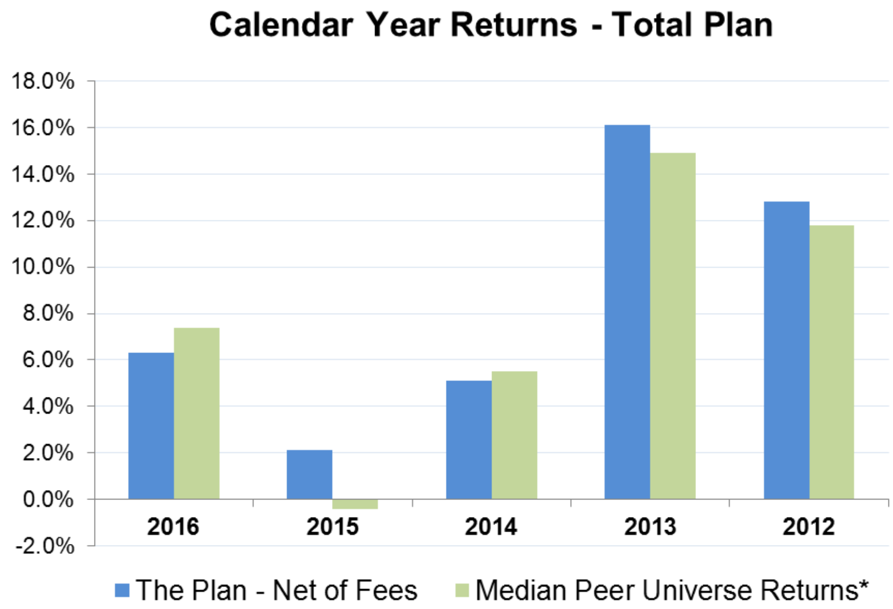
As of December 31, 2016

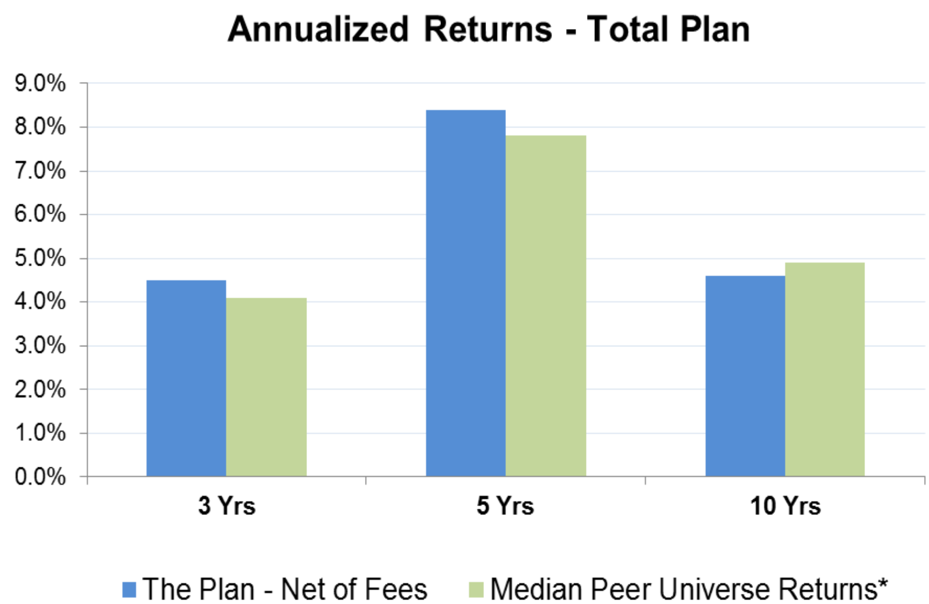
	Calendar Year Returns					Annualized Returns		
	2016	**2015**	**2014**	**2013**	**2012**	**3 Yrs**	**5 Yrs**	**10 Yrs**
Total Plan								
The Plan - Gross of Fees	6.6%	2.4%	5.4%	16.5%	13.2%	4.8%	8.7%	4.9%
The Plan - Net of Fees	6.3%	2.1%	5.1%	16.1%	12.8%	4.5%	8.4%	4.6%
Policy Benchmark	6.3%	0.6%	5.8%	14.3%	11.4%	4.2%	7.6%	3.8%
Median Peer Universe Returns*	7.4%	-0.4%	5.5%	14.9%	11.8%	4.1%	7.8%	4.9%
Fixed Income								
The Plan	6.5%	0.6%	4.3%	0.4%	7.0%	3.8%	3.7%	4.4%
Barclays Cap Aggregate Bond Index	2.6%	0.6%	6.0%	-2.0%	4.2%	3.0%	2.2%	4.3%
Domestic Equity								
The Plan	11.3%	-0.7%	8.6%	33.6%	16.2%	6.2%	13.2%	6.9%
S&P 500 Index	12.0%	1.4%	13.7%	32.4%	16.0%	8.9%	14.7%	6.9%
Russell 2000 Index	21.3%	-4.4%	4.9%	38.8%	16.3%	6.7%	14.5%	7.1%
International Equity								
The Plan	2.6%	-1.1%	-2.9%	17.6%	18.3%	-0.5%	6.5%	3.4%
MSCI ACWI ex U.S. Index	4.5%	-5.7%	-3.9%	15.3%	16.8%	-1.8%	5.0%	1.0%
Real Estate								
The Plan	6.7%	14.2%	11.7%	12.4%	9.3%	10.8%	10.8%	3.9%
NCREIF Property Index	8.0%	13.3%	11.8%	11.0%	10.5%	11.0%	10.9%	6.9%
Private Equity								
The Plan	12.8%	9.2%	13.9%	10.9%	14.9%	11.9%	12.3%	11.6%
Cambridge Associates Private Equity Index	9.7%	7.3%	11.2%	21.0%	12.7%	9.4%	12.3%	9.6%
Hedged Equity								
The Plan	-1.1%	3.4%	5.4%	17.6%	9.3%	2.6%	6.8%	N/A
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-0.3%	2.9%	-1.2%

** Comprised of defined benefit public pension plans with over $1 billion in assets.*
Investment returns were supplied by the Plan's investment consultant and calculated using the time-weighted rate of return method.

Returns are presented net-of-fees unless otherwise noted.

Portfolio Performance (Continued)



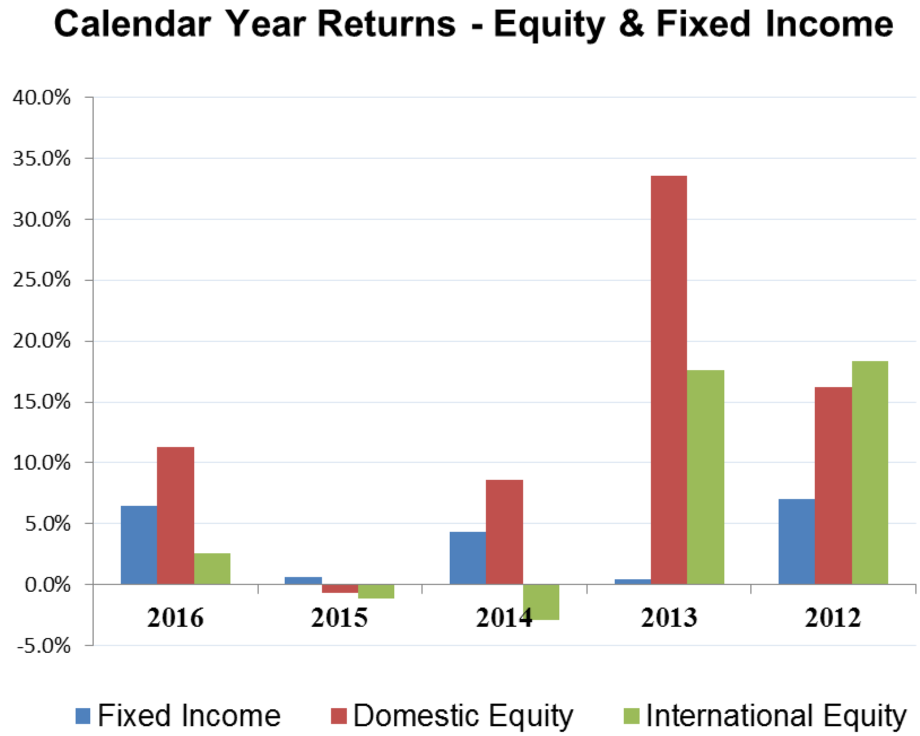


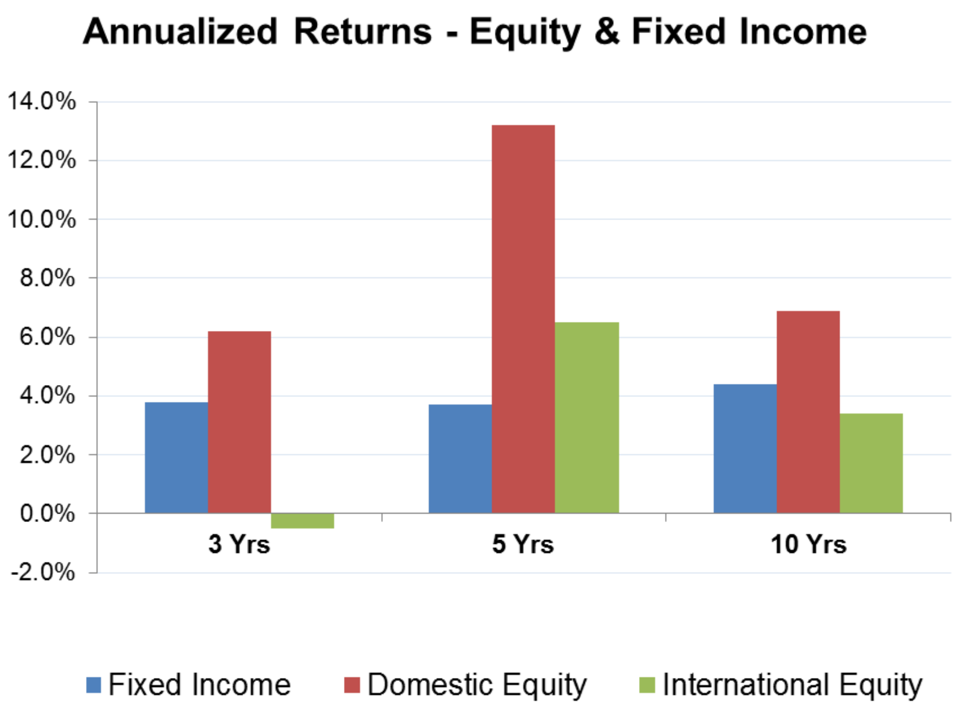
** Comprised of defined benefit public pension plans with over $1 billion in assets.*

Investment returns were supplied by the Plan's investment consultant and calculated using the time-weighted rate of return method.

Returns are presented net-of-fees unless otherwise noted.

Portfolio Performance (Continued)





Investment returns were supplied by the Plan's investment consultant and calculated using the time-weighted rate of return method.

Returns are presented net-of-fees unless otherwise note.

Portfolio Summary
As of December 31, 2016 and December 31, 2015

	As of December 31, 2016			As of December 31, 2015		
Asset Category	**Fair Value**	**Percent of Total**	**Target**	**Fair Value**	**Percent of Total**	**Target**
Fixed Income	$ 1,007,435,747	24%	27%	$ 1,147,787,800	25%	27%
Domestic Equity	1,058,176,957	25%	26%	1,094,887,585	24%	26%
International Equity	868,412,164	20%	22%	938,944,370	21%	22%
Hedged Equity	463,825,386	11%	10%	469,026,045	10%	10%
Real Estate	458,150,837	11%	10%	520,696,873	11%	10%
Private Equity	237,648,563	5%	5%	243,481,833	5%	5%
Short-term	192,097,254	4%	0%	204,541,471	4%	0%
Total Investments	**$ 4,285,746,908**	**100%**	**100%**	**$ 4,619,365,977**	**100%**	**100%**

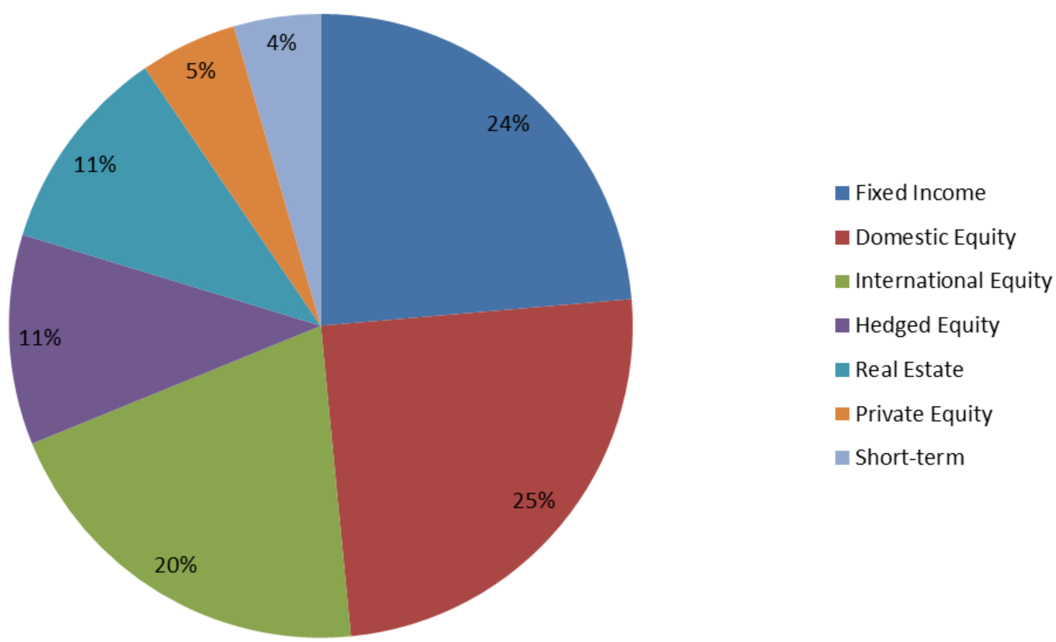
Components may not sum to totals due to rounding.

Portfolio Asset Allocation

As of December 31, 2016

Asset Class	Target Allocation	Actual Allocation
Fixed Income	27%	24%
Domestic Equity	26%	25%
International Equity	22%	20%
Hedged Equity	10%	11%
Real Estate	10%	11%
Private Equity	5%	5%
Short-term	0%	4%
Total	**100%**	**100%**

Actual Allocation as of December 31, 2016

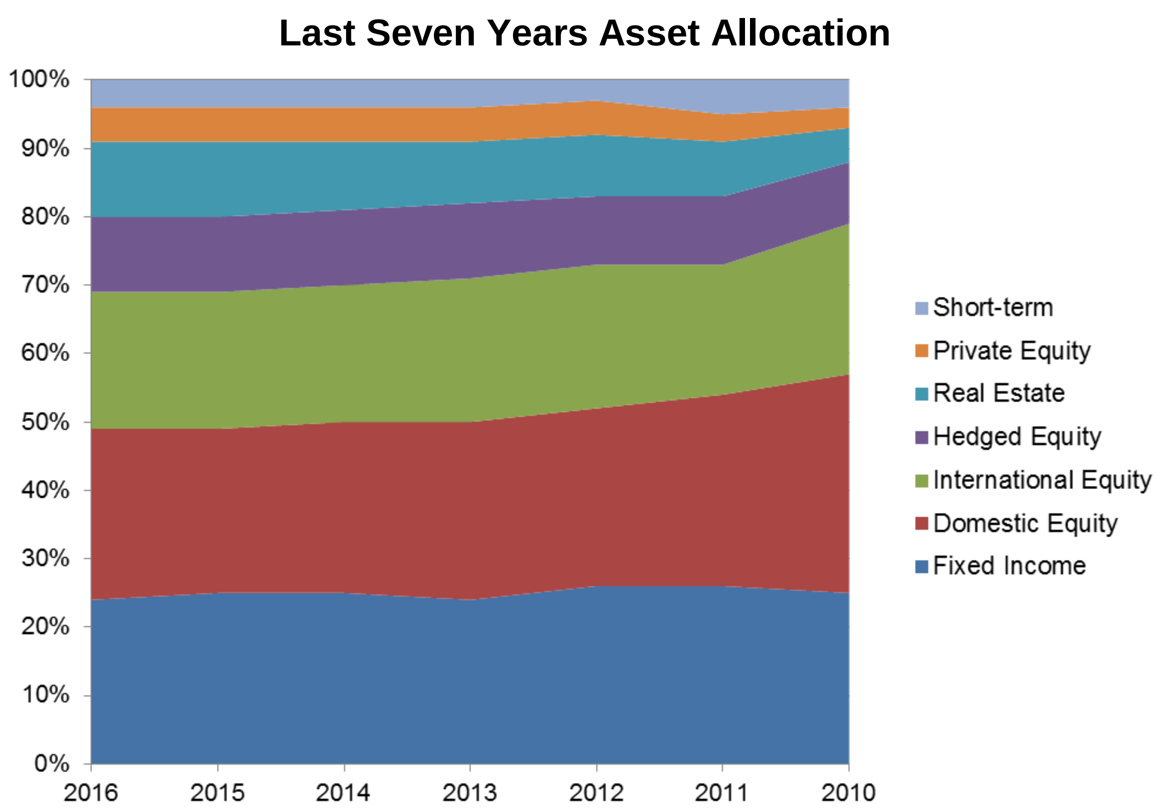


Components may not sum to totals due to rounding.

Portfolio Asset Allocation

Last Seven Years

Asset Class	2016	2015	2014	2013	2012	2011	2010
Fixed Income	24%	25%	25%	24%	26%	26%	25%
Domestic Equity	25%	24%	25%	26%	26%	28%	32%
International Equity	20%	20%	20%	21%	21%	19%	22%
Hedged Equity	11%	11%	11%	11%	10%	10%	9%
Real Estate	11%	11%	10%	9%	9%	8%	5%
Private Equity	5%	5%	5%	5%	5%	4%	3%
Short-term	4%	4%	4%	4%	3%	5%	4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**



Components may not sum to totals due to rounding.

Domestic Equity Portfolio Summary

As of December 31, 2016

Sector Allocation

Sector	Fair Value	% of Total	Dow Jones
Information Technology	$ 206,416,048	19.51%	20.70%
Consumer Discretionary	171,302,439	16.19%	12.60%
Financials	157,962,958	14.93%	10.40%
Industrials	145,770,559	13.78%	13.40%
Health Care	133,372,215	12.60%	14.20%
Consumer Staples	69,195,705	6.54%	4.30%
Energy	58,536,716	5.53%	8.70%
Real Estate	45,135,828	4.27%	6.70%
Materials	32,313,526	3.05%	3.30%
Utilities	26,740,712	2.53%	3.30%
Telecommunication Services	11,036,376	1.04%	2.40%
Miscellaneous/Unclassified	393,875	0.04%	0.00%
Total	**$ 1,058,176,957**	**100.00%**	**100.00%**

Top 10 Holdings

Name of Security	Sector	Shares	Fair Value	% of U.S. Equity
APPLE INC COM STK	Information Technology	145,990	$ 16,908,562	1.6%
MICROSOFT CORP COM	Information Technology	219,108	13,615,371	1.3%
EXXON MOBIL CORP COM	Energy	112,529	10,156,868	1.0%
BERKSHIRE HATHAWAY INC-CL B	Financials	54,244	8,840,687	0.8%
GENERAL ELECTRIC CO	Industrials	277,684	8,774,814	0.8%
WELLS FARGO & CO NEW COM STK	Financials	145,188	8,001,311	0.8%
AMAZON COM INC COM	Consumer Discretionary	10,005	7,502,449	0.7%
CHEVRON CORP COM	Energy	63,608	7,486,662	0.7%
MERCK & CO INC NEW COM	Health Care	115,975	6,827,448	0.6%
ALPHABET INC CAP STK	Information Technology	8,468	6,535,772	0.6%
Total		**1,152,799**	**$ 94,649,944**	**8.9%**

Note: A complete listing of the portfolio holdings is available for review at the Fund office.

Components may not sum to totals due to rounding.

International Equity Portfolio Summary

As of December 31, 2016

Country Allocation

Country	Fair Value	% of Total	MSCI ACWI ex US
Japan	$ 166,666,227	19.19%	16.96%
United Kingdom	118,134,173	13.60%	12.87%
Germany	53,152,778	6.12%	6.53%
France	46,937,096	5.40%	7.16%
Switzerland	45,306,188	5.22%	6.09%
China	43,523,080	5.01%	6.02%
Australia	40,522,384	4.67%	5.20%
Canada	38,223,514	4.40%	7.05%
India	28,331,859	3.26%	1.89%
Hong Kong	23,488,649	2.70%	2.28%
Sweden	21,915,937	2.52%	2.00%
Korea, Republic Of	21,381,928	2.46%	3.27%
Taiwan	20,825,893	2.40%	2.77%
Brazil	20,318,947	2.34%	1.74%
Spain	17,495,246	2.01%	2.21%
Netherlands	15,584,377	1.79%	2.33%
Italy	14,432,977	1.66%	1.46%
Denmark	13,131,714	1.51%	1.16%
South Africa	12,882,892	1.48%	1.61%
Israel	10,960,986	1.26%	0.48%
Belgium	9,759,434	1.12%	0.83%
Ireland	9,070,996	1.04%	0.33%
Thailand	8,579,080	0.99%	0.53%
Indonesia	8,565,450	0.99%	0.60%
Finland	8,212,834	0.95%	0.68%
Singapore	6,797,933	0.78%	0.87%
Mexico	6,514,597	0.75%	0.80%
Norway	6,483,770	0.75%	0.47%
Philippines	4,709,231	0.54%	0.27%
Russian Federation	4,423,884	0.51%	1.02%
Austria	3,454,288	0.40%	0.14%
United Arab Emirates	2,947,740	0.34%	0.20%
Malaysia	2,887,319	0.33%	0.57%
Chile	2,467,850	0.28%	0.27%
New Zealand	2,104,539	0.24%	0.13%
Peru	1,910,230	0.22%	0.09%
Hungary	1,769,975	0.20%	0.07%
Turkey	1,398,911	0.16%	0.24%
Portugal	899,422	0.10%	0.11%
Poland	540,737	0.06%	0.26%
Remaining Countries	1,697,099	0.20%	0.44%
Total	**$ 868,412,164**	**100.00%**	**100%**

Components may not sum to totals due to rounding.

International Equity Portfolio Summary (Continued)

As of December 31, 2016

Top 10 Holdings

Name of Security	Country	Sector	Shares	Fair Value	% of Int'l Equity
TENCENT HLDGS LIMITED COMMON STOCK	China	Information Technology	332,380	$ 8,132,499	0.94%
SAMSUNG ELECTRONIC KRW5000	Korea, Republic Of	Information Technology	4,964	7,406,133	0.85%
TAIWAN SEMICONDUCTOR MFG CO LTD SPONSORED ADR	Taiwan	Information Technology	233,297	6,707,289	0.77%
ADR ALIBABA GROUP HOLDING LTD SPONSORED ADS	China	Information Technology	69,312	6,086,287	0.70%
CHECK PT SOFTWARE TECHNOLOGIES ORDILS.01	Israel	Information Technology	69,621	5,880,190	0.68%
PETROL BRASILEIROS PRF NPV	Brazil	Energy	1,247,748	5,700,683	0.66%
EXPERIAN ORD USD0.10	United Kingdom	Industrials	283,982	5,523,203	0.64%
FRESENIUS MEDICAL CARE NPV	Germany	Health Care	61,228	5,195,480	0.60%
START TODAY CO LTD NPV	Japan	Consumer Discretionary	298,281	5,163,367	0.59%
WHITBREAD ORD GBP0.76797385	United Kingdom	Consumer Discretionary	103,925	4,848,947	0.56%
Total			**2,704,738**	**$ 60,644,078**	**6.98%**

A complete list of holdings is available upon request.

Components may not sum to totals due to rounding.

Fixed Income Portfolio Summary

As of December 31, 2016

Sector Allocation

Sector	Fair Value	% of Total	Barclay Agg
Corporate Bonds	$ 418,195,271	41.51%	25.30%
Bank Loans	197,581,008	19.61%	0.00%
Government Mortgage Backed Securities	141,961,670	14.09%	28.21%
Government Bonds	127,495,868	12.66%	36.85%
Other Fixed Income	53,131,974	5.27%	0.00%
Government Agencies	32,244,076	3.20%	3.62%
Municipal/Provincial Bonds	11,541,194	1.15%	3.79%
Asset Backed Securities	10,708,519	1.06%	0.49%
Corporate Convertible Bonds	5,518,166	0.55%	0.00%
Commercial Mortgage-Backed	5,134,973	0.51%	1.74%
Index Linked Government Bonds	3,866,010	0.38%	0.00%
Non-Government Backed C.M.O.s	57,017	0.01%	0.00%
Total	**$ 1,007,435,747**	**100.00%**	**100.00%**

Top 10 Holdings

Name of Security	Sub Asset Class	Fair Value	% of Fixed Income
UNITED STATES TREAS DTD 02/15/2015 2% DUE 02-15-2025 REG	Government Bonds	$ 10,881,282	1.08%
UTD STATES TREAS 1.25% DUE 10-31-2019	Government Bonds	8,364,233	0.83%
UTD STATES TREAS 1.75% DUE 05-15-2022	Government Bonds	7,838,157	0.78%
UNITED STATES TREAS NTS DTD 02/15/2013 2% DUE 02-15-2023 REG	Government Bonds	7,790,259	0.77%
US TREAS NTS DTD 00363 2.125 DUE 08-15-2021 REG	Government Bonds	7,672,139	0.76%
UNITED STATES TREAS NTS 3.50 DUE 05-15-2020 REG	Government Bonds	7,440,510	0.74%
UNITED STATES TREAS NTS DTD 00231 3.125%DUE 05-15-2019 REG	Government Bonds	6,709,240	0.67%
MORGAN STANLEY 4.875% DUE 11-01-2022	Corporate Bonds	6,676,934	0.66%
FHLMC PREASSIGN 00074 2.375 01-13-2022	Government Agencies	6,022,211	0.60%
HUMANA INC 3.15 DUE 12-01-2022	Corporate Bonds	5,995,458	0.60%
Total		**$ 75,390,423**	**7.48%**

A complete list of holdings is available upon request.

Components may not sum to totals due to rounding.

Domestic Equity Brokerage Commissions

As of December 31, 2016

Broker Name	Commissions	Shares
Loop Capital*	$ 90,353	3,666,818
Cabrera Capital*	33,674	2,626,512
RBC Dain Rauscher	25,532	952,081
Drexel Hamilton	24,546	665,352
Williams Capital*	24,213	959,745
Stifel Nicolaus & Co	19,149	472,818
CL King & Associates	17,035	431,577
Cheevers & Company Inc.*	16,342	505,481
Instinet	8,814	361,951
Raymond James	8,226	325,466
Penserra Securities*	7,708	211,907
CastleOak Securities Inc.*	7,060	207,798
Goldman Sachs	6,897	273,628
Citation Group	6,796	135,915
Credit Suisse	6,765	203,191
Robert W. Baird & Company Inc.	6,100	164,906
Morgan Stanley	6,037	149,237
Investment Technology Group Inc.	5,650	1,513,820
William Blair & Co	4,865	127,344
William O'Neil	4,493	179,700
North South Capital	4,446	183,449
Academy Securities Inc.	4,043	109,648
J.P. Morgan	4,016	241,715
Keybanc Capital Markets Inc.	3,679	92,506
Cap Institutional Services Inc.	3,533	74,982
Weeden & Company	3,106	287,405
Keefe Bruyette & Woods Inc.	2,983	72,707
Baypoint Trading	2,976	144,000
Jefferies & Company	2,816	138,991
Jonestrading Inst Serv	2,771	122,210
Merrill Lynch	2,572	229,035
Blaylock & Company Inc.*	2,571	75,080
Sturdivant & Co. Inc.*	2,441	63,140
Cantor Fitzgerald & Co.	2,377	108,886
National Financial Securities Corp	2,321	64,669
Guzman & Company	1,980	198,028
Sanford C. Bernstein & Co.	1,445	43,369
Topeka Capital*	1,430	39,779
Mischler Financial Group*	1,351	63,700
Johnson Rice & Co.	1,349	34,537
Sidoti & Company	1,338	26,766
Percival Financial Partners	1,099	31,400
Stephens Inc.	1,082	25,625
Harris Nesbitt Corp	972	24,300
M. Ramsey King Securities*	849	39,934
Other Brokers	19,741	675,288
Total	**$ 409,544**	**17,346,396**

** Women, minority, or disabled-owned brokerage firm.*

Components may not sum to totals due to rounding.

International Equity Brokerage Commissions

As of December 31, 2016

Broker Name	Commissions	Shares
Bank of New York	$ 82,731	12,661,626
UBS	48,718	14,111,193
Merrill Lynch	32,894	11,145,628
J.P. Morgan	31,996	17,450,875
Citi Group	30,149	11,466,249
CLSA	28,991	12,466,319
Credit Suisse	27,738	13,165,720
Morgan Stanley	26,529	6,060,469
Deutsche Bank	24,524	6,987,032
Goldman Sachs	23,693	3,745,986
BNP Paribas	23,020	4,720,453
Barclay's Bank	14,791	2,733,755
Macquarie Bank Limited	10,668	3,314,497
Loop Capital*	9,738	298,153
Sanford C. Bernstein & Co.	8,894	6,074,063
HSBC	8,333	1,463,736
Instinet	7,946	5,229,170
Jefferies & Company	7,635	867,663
Pershing Square	6,481	593,319
Williams Capital*	5,212	44,496
Itg Australia Limited	4,789	730,532
Liquidnet Inc.	4,365	283,681
M. Ramsey King Securities*	4,309	150,033
Daiwa Capital Markets	3,748	1,882,831
Mischler Financial Group	3,630	121,010
Icap Do Brasil Dtvm Ltda	3,236	171,900
Credit Lyonnais	2,659	1,099,073
Cheevers & Company Inc.*	2,639	87,968
Itau Unibanco	2,569	204,940
Nomura	2,455	160,606
Investment Technology Group Inc.	2,437	508,810
Edelweiss Securities Pvt Ltd	2,307	60,192
Woori Investments & Secs Co Ltd	2,282	4,180
Kotak Securities Ltd	2,082	74,467
Societe Generale London Branch	1,860	766,045
Cabrera Capital*	1,554	112,172
Banco Santander S.A. New York	1,552	205,452
India Infoline Limited	1,400	54,968
IDFC Securities Limited	1,369	102,211
Axis Capital Limited	1,343	45,163
Weeden & Company	1,334	568,700
Bank Of America	1,244	34,646
Mizuho Securites Fixed	1,160	1,168,000
Bradesco	1,159	81,900
Kim Eng Securities	1,082	397,230
Samsung Securities Co.,Ltd.	1,035	755
Wedbush Morgan Securities	1,023	34,140
Motilal Oswal Securities Limited	776	25,718
Penserra Securities*	756	30,647
Other Brokers	17,590	29,025,875
Total	**$ 540,425**	**172,794,247**

** Women, minority, or disabled-owned brokerage firm.*

Components may not sum to totals due to rounding.

Investment Fees

As of December 31, 2016 (in thousands)

	2016	2015
Investment Management Fees	**Fees**	**Fees**
Fixed Income	$ 2,350	$ 2,476
Domestic Equity	2,169	2,665
International Equity	3,276	3,364
Global Equity	1,146	1,255
Hedged Equity	3,140	3,921
Real Estate	4,855	5,021
Private Equity	2,744	4,029
	$ 19,680	$ 22,731
Other Investment Fees		
Custodial Services - Domestic	$ 375	$ 375
Global Custodial Services - Bank Loans	99	82
Global Custodial Services	2	10
TNT Global Custodial Services	-	5
Investment Advisory Services	290	290
Dues & Subscription	-	4
Legal Services - Investments	32	9
	$ 798	$ 775
Total Investment Fees	**$ 20,478** (1)a	**$ 23,506** (2)

(1)Total investment fees for 2016 represent approximately 48 bps of total investments.

(2)Total investment fees for 2015 represent approximately 51 bps of total investments.

For a schedule of investment fees by category, please refer to the schedule "Investment Management Compensation" in the financial section on pages 56 - 57.

Components may not sum to totals due to rounding.

Actuarial

Segal Consulting

Segal Consulting
101 North Wacker Drive, Suite 500 Chicago, IL 60606
T 312.984.8500 F 312.984.8590 www.segalco.com

May 16, 2017

The Retirement Board of the
Municipal Employees' Annuity and Benefit Fund of Chicago
321 North Clark Street, Suite 700
Chicago Illinois 60654-4767

Dear Board Members:

We are pleased to submit this annual Actuarial Valuation and Review as of December 31, 2016. It summarizes the actuarial data used in the valuation, establishes the net pension liability under Governmental Accounting Standards Board (GASB) Statement No. 67 as of December 31, 2016, the pension expense for the fiscal year ending December 31, 2016, under GASB Statement No. 68, the actuarially determined contribution for the year ending December 31, 2017, the net OPEB obligation as of December 31, 2016, under GASB Statements No. 43 and 45, 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 Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF). 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, 2016, actuarial valuation were based on an experience analysis covering the five-year period ending December 31, 2009, and were adopted by the Board, effective for the December 31, 2010 valuation. These actuarial assumptions and methods comply with the parameters set by the Actuarial Standards of Practice and the parameters for disclosure of GASB 43, 45, 67, and 68. Further, in our opinion, the assumptions as approved by the Board appear to be reasonably 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.

MEABF is funded by employer and member contributions in accordance with the funding policy specified under the Illinois Pension Code (40 ILCS 5/8). Employer contributions are equal to employee contributions from two years prior times 1.25, the contribution multiple. **The funding method mandated by the Illinois Pension Code is insufficient to avoid insolvency, and without a change, the Fund is in imminent danger of insolvency and the assets are projected to be depleted within the next 9 years (during 2025).**

The Fund's assets are projected to be less than accumulated member contributions within the next 6 years (during 2022). At a minimum, the funding method should provide the Fund with sufficient assets to be able to pay all future benefit payments. However, we strongly recommend an actuarial funding method that targets 100% funding where payments at least cover interest on the unfunded actuarial liability and a portion of the principal balance. The actuarially determined contribution multiple (the basis of which is found in the "Development of Employer Costs") for 2017 is 7.68. In other words, the recommended contribution for 2017 is 7.68 times the employee contributions from two years prior, rather than 1.25. **When the Fund becomes insolvent, the employer will be required to make contributions on a "pay as you go" basis, which means the employer would have to pay all benefits as they become due.**

For purposes of determining the insolvency date, we have assumed that all available assets, including accumulated contributions made by existing active members, will be used to pay benefits until insolvency; at that point, requests for refund of contributions from terminating active members will be treated as benefit payments that must be funded by employer contributions. However, the legality of this situation is questionable, and if it is determined that the reserve for accumulated active member contributions cannot be paid to existing annuitants, the Fund would become insolvent earlier than 2025.

As the insolvency date approaches, invested assets will likely be rebalanced into more liquid, lower return assets in order pay the benefits that are due. To the extent that actual returns are less than the 7.50% assumption as a result of this rebalancing, the Fund would become insolvent earlier than 2025.

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

- Active Member Valuation Data
- Retirees and Beneficiaries Added to and Removed from Rolls
- Solvency Test
- Analysis of Financial Experience

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

- Schedule of Funding Progress
- Schedule of Employer Contributions

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.

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

Sincerely,

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

By:

Kim Nicholl, FSA, MAAA, EA, FCA	*Matthew A. Strom, FSA, MAAA, EA*	*Barbara Zaveduk, MAAA, EA*
Senior Vice President and Actuary	*Vice President and Actuary*	*Vice President and Actuary*

Valuation Summary

Purpose

This report has been prepared by Segal Consulting to present a valuation of the Municipal Employees' Annuity and Benefit Fund of Chicago (MEABF or Fund or Plan) as of December 31, 2016. 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 Retirement Board;
- The characteristics of covered active members, inactive vested members, and retirees and beneficiaries as of December 31, 2016, provided by the MEABF staff;
- The assets of the Plan as of December 31, 2016, provided by the MEABF 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. **The Fund is in imminent danger of insolvency. Without increased funding, the Fund is projected to become insolvent within the next 9 years (during 2025).**
2. Per Public Act 98-0043, the health insurance supplement is no longer provided, effective December 31, 2016.
3. An experience review will be performed later this year. Any recommended assumption changes adopted by the Board will be reflected in the December 31, 2017 valuation.
4. The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of December 31, 2016, is 30.5%, compared to 32.9% as of December 31, 2015. Using the market value of assets, the funded ratio as of December 31, 2016, is 29.5%, compared to 32.4% as of December 31, 2015.
5. Employer contributions are determined as a multiple of the applicable employee contributions from two years prior. For 2017, the employer contributions are 1.25 times the applicable employee contributions from 2015 ($130,851,422). Therefore, 2017 employer contributions are estimated to be $163,564,278 ($130,851,422 times 1.25).
6. For the fiscal year beginning January 1, 2017, the actuarially determined contribution (ADC) for pension benefits is $1,005,456,621. The estimated employer contribution for 2017 was determined to be $163,564,278. **Compared to the actuarially determined contribution of $1,005,456,621, the contribution deficiency is $841,892,343. Each year there is a contribution deficiency leads to an increased deficiency in all future years.**
7. The total employer contributions for 2016 were estimated to be $161,460,824. Actual employer contributions for 2016 totaled $157,444,029.
8. For the year ended December 31, 2016, Segal has determined that the asset return on a market basis was 6.3%. After gradual recognition of investment gains and losses under the actuarial smoothing method, the actuarial rate of return was 8.0%. This represents an experience gain when compared to the assumed rate of 7.5%. As of December 31, 2016, the actuarial value of assets ($4.59 billion) represents 103% of the market value ($4.44 billion).

Significant Issues in Valuation Year (continued)

9. When measuring pension liability for GASB purposes, the same actuarial cost method (Entry Age method) as is used for funding purposes. However, as of December 31, 2016, the GASB blended discount rate calculation results in a lower discount rate (3.91%) than is used for funding purposes (7.50%). This means that the total pension liability (TPL) measure for financial reporting shown in this report will differ from the actuarial accrued liability (AAL) measure for funding. We note that the same is true for the normal cost component of the annual plan cost for funding and financial reporting.
10. The net pension liability (NPL) is equal to the difference between the TPL and the Plan's fiduciary net position. The Plan's fiduciary net position is equal to the market value of assets. The NPL increased from $18,617,442,068 as of December 31, 2015, to $18,855,043,800 as of December 31, 2016.
11. As indicated in this report, the total unrecognized investment loss as of December 31, 2016, is $154,138,645. 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 7.5% per year (net of expenses) on a market value basis will result in investment losses on the actuarial value of assets in the next few years.
12. As mentioned above, the current method used to determine the actuarial value of assets yields an amount that is 103% of the market value of assets as of December 31, 2016. Guidelines in Actuarial Standards 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 market value. We believe the actuarial asset method currently complies with these guidelines.
13. This actuarial valuation report as of December 31, 2016, is based on financial data as of that date. Changes in the value of assets subsequent to that date are not reflected.

Summary of Key Valuation Results

		2016	2015
Funding ratios as of December 31:			
Actuarial accrued liability*		$15,055,348,696	$14,655,261,717
Fair value of assets		4,436,227,596	4,741,427,557
Unfunded actuarial accrued liability on a fair value basis		10,619,121,100	9,913,834,160
Funded ratio on a fair value basis		29.47%	32.35%
Actuarial value of assets		$4,590,366,241	$4,815,126,844
Unfunded actuarial accrued liability on an actuarial value basis		10,464,982,455	9,840,134,873
Funded ratio on an actuarial value basis		30.49%	32.86%
Book value of assets		$3,816,295,756	$4,175,111,568
Unfunded actuarial accrued liability on a book value basis		11,239,052,940	10,480,150,149
Funded ratio on a book value basis		25.35%	28.49%
Demographic data as of December 31:			
Number of retireers and beneficiaries		25,236	24,964
Number of inactive members		16,876	16,268
Number of active members		30,296	30,683
Total pensionable salary supplied by the Fund		$1,646,939,238	$1,643,480,973
Average pensionable salary		$54,362	$53,563
Contribution requirement for Fiscal Year:	**2018**	**2017**	**2016**
Applicable members' contribution, two years prior	$129,548,602	$130,851,422	$129,168,659
Statutory contribution multiple	1.25	1.25	1.25
Statutory City contribution	$161,935,753	$163,564,278	$161,460,824
Actuarially determined contribution requirement	N/A	1,005,456,621	970,112,414

**Includes pension and OPEB. As a result of Public Act 98-0043, the liability attributable to OPEB no longer exists as of December 31, 2016.*

Summary of Key Valuation Results: Pension

	2017	2016
Contributions for plan year beginning January 1:		
Actuarially determined contribution requirement	$1,005,456,621	$961,769,955
Expected employer contributions	163,564,278	153,125,589
Actual employer contributions	-	149,718,491
Funding elements for plan year beginning January 1:		
Employer normal cost, including administrative expenses, adjusted for timing	$119,373,624	$129,283,370
Fair value of assets	4,436,227,596	4,741,427,557
Actuarial value assets	4,590,366,241	4,815,126,844
Actual accrued liability	15,055,348,696	14,647,114,971
Unfunded actuarial accrued liability on an actuarial value basis	10,464,982,455	9,831,988,127
Funded ratio on actuarial value basis	30.49%	32.87%
GASB information information as of December 31 of the prior year:		
Long-term expected rate of return	7.50%	7.50%
Municipal bond rate	3.78%	3.57%
Single equivalent discount rate	3.91%	3.73%
Total pension liability	$23,291,271,396	$23,358,869,625
Plan fiduciary net position	4,436,227,596	4,741,427,557
Net pension liability	18,855,043,800	18,617,442,068
Plan fiduciary net position as a perentage of total pension liability	19.05%	20.30%

Summary of Key Valuation Results: OPEB

	2017*	2016
Contribution for the plan year beginning January 1:		
Actuarially determined contribution requirement	-	$8,342,459
Expected employer contributions	-	8,335,235
Actual employer contributions	-	7,725,538
Funding elements for plan year beginning January 1:		
Actuarial accrued libility	-	$8,146,746
Actuarial value of assets	-	0
Unfunded actuarial accrued liability on a fair value basis	-	8,146,746
Funded ratio on a fair value basis	-	0%
GASB information as of December 31 of the prior year:		
Discount rate	-	4.50%
Total OPEB liability	-	$8,146,746

**As a result of Public Act 98-0043, the liability attributable to OPEB no longer exists as of December 31, 2016.*

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 4,315 beneficiaries and 2 deferred retirees)		25,236
2.	Members inactive during year ended December 31,2016 with vested rights		1,956
3.	Members active during the year ended December 31, 2016		30,296
	Fully vested	15,741	
	Not vested	14,555	
4.	Other non-vested inactive members as of the valuation date		14,920

Determination of Actuarial Accrued Liability:

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
1. Active members			
a. Retirement benefits	$7,201,407,205	$1,462,791,603	$5,738,615,602
b. Death benefits	107,077,983	36,988,151	70,089,832
c. Withdrawal benefits	550,500,511	463,647,699	86,852,812
d. Total	7,858,985,699	1,963,427,453	5,895,558,246
2. Inactive vested members	311,566,148	-	311,566,148
3. Inactive non-vested members	123,191,370	-	123,191,370
4. Retireees and beneficiaries	8,725,032,932	-	8,725,032,932
5. Total	$17,018,776,149	$1,963,427,453	$15,055,348,696

Determination of Unfunded Actuarial Accrued Liability:

1. Actuarial accrued liability	$15,055,348,696
2. Actuarial value of assets ($4,436,227,596 at fair value)	4,590,366,241
3. Unfunded actuarial accrued liability	$10,464,982,455

Summary of Actuarial Valuation Results

Components of normal cost:	Tier 1		Tier 2		Total	
	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Amount
1. Retirement	11.13%	$142,114,269	5.73%	$26,672,975	9.68%	$168,787,244
2. Turnover	3.44%	43,909,459	2.12%	9,883,636	3.09%	53,793,095
3. Mortality	0.23%	2,948,458	0.29%	1,357,374	0.25%	4,305,832
4. Disability	0.75%	9,575,090	0.75%	3,494,309	0.75%	13,069,399
5. Total normal cost: (1) + (2) + (3) + (4)	15.55%	$198,547,276	8.89%	$41,408,294	13.77%	$239,955,570
6. Total normal cost, adjusted for timing*					14.28%	248,791,230
7. Administrative expenses					0.41%	7,056,784
8. Total normal cost, including administrative expenses: (6) + (7)					14.69%	$255,848,014
9. Expected employee contributions**					-8.08%	-140,713,867
10. Employer normal cost: (8) + (9)					6.61%	$115,134,147
11. Employer normal cost, adjusted for timing***					6.85%	$119,373,624

** Reflects timing adjustment to the middle of the year*

*** Based on payroll, adjusted to the middle of the year*

**** Reflects timing adjustment to the end of the year*

Actuarially Determined Contribution

	Year Beginning January 1, 2017	
	Amount	% of Payroll
1. Total normal cost*	$248,791,230	14.28%
2. Administrative expenses	7,056,784	0.41%
3. Expected employee contributions**	-140,713,867	-8.08%
4. Employer normal cost: (1) + (2) + (3)	$115,134,147	6.61%
5. Employer normal cost, adjusted for timing***	119,373,624	6.85%
6. Actuarial accrued liability	15,055,348,696	
7. Actuarial value of assets	4,590,366,241	
8. Unfunded/(overfunded) actuarial accrued liability: (6) - (7)	$10,464,982,455	
9. Payment on unfunded actuarial accrued liability, adjusted for timing***	886,082,997	50.85%
10. Actuarially determined contribution: (5) + (9)	$1,005,456,621	57.70%
11. Projected payroll	$1,742,586,584	
12. Member contributions from two years prior	130,851,422	
13. Actuarially determined contribution multiple: (10) ÷ (12)	7.68	

** Reflects timing adjustment to the middle of the year*

*** Based on payroll, adjusted to the middle of the year*

**** Employer contributions are assumed to be paid at the end of the year*

Plan Membership

	December 31, 2016	December 31, 2015
Active Members		
Number*	30,296	30,683
Tier 1	20,252	21,711
Tier 2	10,044	8,972
Vested	15,741	16,156
Non-vested	14,555	14,527
Average age	46.6	46.5
Average years of service	11.8	11.7
Average annual salary	$54,362	$53,563
Inactive Members		
Number	16,876	16,268
Average age	46.5	46.4
Average years of service	3.8	3.8
Retirees		
Number	20,919	20,584
Average age	72.9	72.8
Average annual benefit	$37,248	$36,300
Deferred	2	2
Surviving		
Number	4,085	4,126
Average age	78.5	78.2
Average annual benefit	$14,484	$14,016
Reversionary annuitants		
Number	128	134
Average age	79.8	79.9
Average annual benefit	$4,932	$4,800
Children	102	118
Total members	72,408	71,915

**Includes 400 and 394 members receiving disability benefits for 2015 and 2016, respectively*

Actuarial Experience

To calculate the actuarially determined contribution, 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. Overall favorable experience relative to the assumptions (an actuarial gain) causes a decrease in the contribution requirement. On the other hand, overall less favorable experince relative to the assumptions (an actuarial loss) causes an increase in the contribution requirement.

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 $95,385,288; $22,722,207 from investment gains and $72,663,081 in gains from all other sources. The net experience variation from individual sources other than investments was approximately 0.5% of the actuarial accrued liability.

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

Actuarial Experience for Year Ended December 31, 2016

1.	Net gain/(loss) from investments*	$22,722,207
2.	Net gain/(loss) from administrative expenses	-355,784
3.	Net gain/(loss) from other experience**	73,018,865
4.	Net experience gain/(loss): (1) + (2) + (3)	$95,385,288

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 MEABF'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 2016 plan year was 8.00%.

Since the actual return for the year was greater than the assumed return, the Fund experienced an actuarial gain during the year ended December 31, 2016 with regard to its investments.

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

Actuarial Value Investment Experience for Year Ended December 31, 2016

1.	Actual return	$361,858,504
2.	Average value of assets	4,521,817,291
3.	Actual rate of return: (1) ÷ (2)	8.00%
4.	Assumed rate of return	7.50%
5.	Expected return: (2) x (4)	$339,136,297
6.	Actuarial gain/(loss): (1) – (5)	$22,722,207

Administrative Expenses

Administrative expenses for the year ended December 31, 2016 totaled $7,056,784 compared to the assumption of $6,701,000. This resulted in a loss of $355,784 for the year.

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 gain from this other. experience for the year ended December 31, 2016 amounted to $73,018,865, which is approximately 0.5% of the actuarial accrued liability

A brief summary of the demographic gain/(loss) experience of the Fund for the year ended December 31, 2016 is shown in the chart below.

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

Experience Due to Changes in Demographics for Year Ended December 31, 2016

1	Turnover	$14,522,713
2	Retirement	-33,145,653
3	Deaths among retirees and beneficiaries	-5,358,088
4	Salary/service increase for continuing actives	104,522,242
5	New entrants	-7,629,349
6	Miscellaneous	107,000
7	Total	$73,018,865

Development of Unfunded Actuarial Accrued Liability

	Year Ending December 31				
	2016	2015	2014	2013	2012
1. Unfunded actuarial accrued liability at beginning of year*	$9,840,134,873	$7,285,291,571	$8,742,285,563	$8,564,139,771	$6,903,880,605
2. Normal cost at beginning of year*	255,682,691	233,177,207	253,748,078	265,457,853	-
3. Total contributions	-287,834,877	-289,144,578	-288,769,612	-289,237,144	-
4. Interest					
(a) Unfunded actuarial accrued liability and normal cost	$757,186,317	$563,885,158	$674,702,523	$662,219,822	-
(b) Total contributions	-4,801,261	-4,839,455	-10,633,094	-10,650,310	-
(c) Total interest: (4a) + (4b)	752,385,056	559,045,703	664,069,429	651,569,512	520,449,450**
5. Expected unfunded actuarial accrued liability: (1) + (2) + (3) + (4c)	$10,560,367,743	$7,788,369,903	$9,371,333,458	$9,191,929,992	$7,424,330,055
6. Changes due to (gain)/loss from:					
(a) Investments	-$22,722,207	$29,330,715	-$86,701,165	-$174,927,836	$445,339,476
(b) Demographics and other	-72,663,081	-117,575,084	-8,634,360	-144,376,875	-36,949,696
(c) Total changes due to (gain)/loss: (6a) + (6b)	-95,385,288	-88,244,369	-95,335,525	-319,304,711	408,389,780
7. Change due to plan provisions	0	2,140,009,339	-1,990,706,362	-130,339,718	0
8. Change in actuarial assumptions	0	0	0	0	731,419,936
9. Unfunded actuarial accrued liability at end of year*: (5) + (6c) + (7) + (8)	$10,464,982,455	$9,840,134,873	$7,285,291,571	$8,742,285,563	$8,564,139,771

** Includes pension and OPEB liabilities*

*** Losses during the year attributable to contributions less than normal cost plus interest*

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 57.70% of payroll. The actuarially determined contribution is based on a 30-year, level dollar amortization of the unfunded actuarial accrued liability.

This chart shows the calculation of the actuarially determined contribution for the upcoming year:

Actuarially Determined Contribution

	Year Beginning January 1, 2017	
	Amount	**% of Payroll**
1. Total normal cost*	$248,791,230	14.28%
2. Administrative expenses	7,056,784	0.41%
3. Expected employee contributions**	-140,713,867	-8.08%
4. Employer normal cost: (1) + (2) + (3)	$115,134,147	6.61%
5. Employer normal cost, adjusted for timing***	119,373,624	6.85%
6. Actuarial accrued liability	15,055,348,696	
7. Actuarial value of assets	4,590,366,241	
8. Unfunded/(overfunded) actuarial accrued liability: (6) - (7)	$10,464,982,455	
9. Payment on unfunded actuarial accrued liability, adjusted for timing***	886,082,997	50.85%
10. Actuarially determined contribution: (5) + (9)	$1,005,456,621	57.70%
11. Projected payroll	$1,742,586,584	
12. Member contributions from two years prior	130,851,422	
13. Actuarially determined contribution multiple: (10) ÷ (12)	7.68	

** Reflects timing adjustment to the middle of the year*

*** Based on payroll, adjusted to the middle of the year*

**** Employer contributions are assumed to be paid at the end of the year*

The contribution requirements as of December 31, 2016, are based on all of the data described in the previous sections, the actuarial assumptions, 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.

Development of Employer Costs (continued)

Reconciliation of Actuarially Determined Contribution

The chart below details the changes in the actuarially determined contribution from the prior valuation to the current year's valuation.

Reconciliation of Actuarially Determined Contribution from December 31, 2015 to December 31, 2016

Actuarially Determined Contribution as of December 31, 2015	$961,769,955
Effect of plan amendment	$0
Effect of change in asset method	0
Effect of expected change in amortization payment due to payroll growth	0
Effect of rolling amortization period	-8,653,205
Effect of change in administrative expense assumption	368,885
Effect of change in other actuarial assumptions	0
Effect of contributions (more)/less than actuarially determined contribution	69,435,639
Effect of investment (gain)/loss	-1,923,917
Effect of other gains and losses on accrued liability	-5,410,288
Effect of net other changes*	-10,130,448
Total change	$43,686,666
Actuarially Determined Contribution as of December 31, 2016	$1,005,456,621

**Primarily due to lower normal cost caused by lower salaries than expected and additional Tier 2 members*

Comparison of Employer Contribution to Actuarially Determined Contribution

Plan Year Ended December 31	Actuarially Determined Contributions (ADC)*	Actual Contributions**	Percentage Contributed
2007	$366,410,212	$148,137,050	40.4%
2008	384,169,836	155,832,612	40.6%
2009	436,475,587	157,697,608	36.1%
2010	506,902,840	164,302,004	32.4%
2011	634,559,144	156,525,374	24.7%
2012	705,454,416	158,380,709	22.5%
2013	834,398,482	157,704,971	18.9%
2014	848,864,496	158,797,631	18.7%
2015	686,373,727	157,716,475	23.0%
2016	970,112,414	157,444,029	16.2%
2017	1,005,456,621	--	--

** Prior to 2015, this amount was the Annual Required Contribution (ARC). Includes pension and OPEB.*
***Receivable amount to be paid the following year.*

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)
12/31/2007	$6,890,462,918	$9,968,746,844	$3,078,283,926	69.12%	$1,564,458,835	196.76%
12/31/2008	6,669,501,770	10,383,157,695	3,713,655,925	64.23%	1,543,976,553	240.53%
12/31/2009	6,295,788,191	10,830,119,369	4,534,331,178	58.13%	1,551,973,348	292.17%
12/31/2010	6,003,389,605	11,828,665,658	5,825,276,053	50.75%	1,541,388,065	377.92%
12/31/2011	5,552,291,417	12,292,930,124	6,740,638,707	45.17%	1,605,993,339	419.72%
12/31/2012	5,073,320,275	13,475,376,963	8,402,056,688	37.65%	1,590,793,702	528.17%
12/31/2013	5,114,207,803	13,828,920,032	8,714,712,229	36.98%	1,580,288,709	551.46%
12/31/2014	5,039,297,432	12,307,094,062	7,267,796,630	40.94%	1,602,977,593	453.39%
12/31/2015	4,815,126,844	14,647,114,971	9,831,988,127	32.87%	1,643,480,973	598.24%
12/31/2016	4,590,366,241	15,055,348,696	10,464,982,455	30.49%	1,646,939,238	635.42%

** Not less than zero*

Solvency Test

Actuarial Valuation Date	(1) Active and Inactive Member Contribution	(2) Retirees and Beneficiaries	(3) Active and Inactive Members (ER Financed Portion)	Actuarial Value of Assets	Portion (%) of Present Value Covered By Assets		
					(1)	(2)	(3)
12/31/2007	$1,437,604,071	$5,572,797,922	$3,176,213,194	$6,890,462,918	100.00%	97.85%	0.00%
12/31/2008	1,536,221,953	5,701,015,809	3,368,610,969	6,669,501,770	100.00%	90.04%	0.00%
12/31/2009	1,610,503,053	5,874,606,230	3,569,183,317	6,295,788,191	100.00%	79.75%	0.00%
12/31/2010	1,682,418,161	6,438,552,003	3,931,259,712	6,003,389,605	100.00%	67.11%	0.00%
12/31/2011	1,724,683,910	6,803,140,300	3,928,347,812	5,552,291,417	100.00%	56.26%	0.00%
12/31/2012	1,724,021,890	7,633,045,219	4,280,392,937	5,073,320,275	100.00%	43.88%	0.00%
12/31/2013	1,763,193,047	7,938,850,949	4,154,449,370	5,114,207,803	100.00%	42.21%	0.00%
12/31/2014	1,816,477,893	7,029,523,772	3,478,587,338	5,039,297,432	100.00%	45.85%	0.00%
12/31/2015	1,874,982,804	8,427,968,220	4,352,310,693	4,815,126,844	100.00%	34.89%	0.00%
12/31/2016	1,918,150,355	8,725,032,932	4,412,165,409	4,590,366,241	100.00%	30.63%	0.00%

Reconciliation of Member Data

	Active Members*	Inactive Members	Deferred Retirees	Retirees	Beneficiaries	Total
Number as of December 31, 2015	30,683	16,268	2	20,584	4,378	71,915
New members	2,881	N/A	N/A	N/A	N/A	2,881
Terminations	-1,709	1,709	0	0	0	0
Retirements	-892	-201	0	1,093	N/A	0
Died with beneficiary	-21	-3	0	-192	216	0
Died without beneficiary	-46	-15	0	-575	-281	-917
Refunds	-847	-732	0	0	0	-1,579
Rehire	263	-198	0	0	N/A	65
Net transfers	-16	48	0	0	0	32
Temporary annuity expired	N/A	N/A	NA	-4	-24	-28
Data adjustment	0	0	0	13	26	39
Number as of December 31, 2016	30,296	16,876	2	20,919	4,315	72,408

** Includes members receiving disability benefits*

History of Active Member Valuation Data

Actuarial Valuation Date	Active Members	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase	Payroll Growth Assumption	CPI Chicago*
12/31/2007	34,885	4.36%	$1,564,458,835	6.00%	$44,846	1.58%	4.50%	4.73%
12/31/2008	32,563	(6.66)%	1,543,976,553	(1.31)%	47,415	5.73%	4.50%	(0.58)%
12/31/2009	31,586	(3.00)%	1,551,973,348	0.52%	49,135	3.63%	4.50%	2.54%
12/31/2010	30,726	(2.72)%	1,541,388,065	(0.68)%	50,166	2.10%	4.50%	1.23%
12/31/2011	31,976	4.07%	1,605,993,339	4.19%	50,225	0.12%	4.00%	2.06%
12/31/2012	31,326	(2.03)%	1,590,793,702	(0.95)%	50,782	1.11%	4.00%	1.68%
12/31/2013	30,647	(2.17)%	1,580,288,709	(0.66)%	51,564	1.54%	4.00%	0.51%
12/31/2014	30,160	(1.59)%	1,602,977,593	1.44%	53,149	3.07%	4.00%	1.48%
12/31/2015	30,683	1.73%	1,643,480,973	2.53%	53,563	0.78%	4.00%	0.00%
12/31/2016	30,296	(1.26)%	1,646,939,238	0.21%	54,362	1.49%	4.00%	1.86%
Average Increase/ (Decrease) Last 5 years		(1.07)%		0.50%		1.60%		1.11%

** CPI-Chicago as of the valuation date*

Retirees and Beneficiaries Added To and Removed From Payroll

Valuation Date	Added to Payroll Number	Added to Payroll Annual Benefits*	Removed from Payroll Number	Removed from Payroll Annual Benefits	Payroll End of Year Number	Payroll End of Year Annual Benefits	Average Annual Benefit	Increase in Average Benefit
Employee Annuitants (Male and Female)								
12/31/2007	769	$34,450,704	754	$17,087,448	18,198	$508,815,996	$27,960	3.45%
12/31/2008	743	34,658,424	768	17,767,068	18,173	525,707,352	28,928	3.46%
12/31/2009	840	39,821,463	768	18,900,720	18,245	546,628,095	29,960	3.57%
12/31/2010	1,008	46,836,109	815	21,038,211	18,438	572,425,992	31,406	3.62%
12/31/2011	1,149	55,405,692	774	20,754,048	18,813	607,077,636	32,269	3.94%
12/31/2012	1,559	68,828,940	758	20,349,840	19,614	655,556,736	33,423	3.58%
12/31/2013	1,242	57,147,576	743	21,682,632	20,113	691,021,680	34,357	2.79%
12/31/2014	1,054	37,110,852	756	23,299,656	20,411	704,832,876	34,532	0.51%
12/31/2015	990	65,756,124	817	23,871,948	20,584	746,717,052	36,277	5.05%
12/31/2016	1,107	58,094,440	772	25,721,880	20,919	779,089,612	37,243	2.66%
Surviving Spouse and Reversionary Annuitants (Not Including Compensation)								
12/31/2007	247	$3,464,400	288	$3,029,244	4,410	$51,107,748	$11,589	1.79%
12/31/2008	260	3,989,592	260	3,142,752	4,378	51,954,588	11,867	2.40%
12/31/2009	266	3,869,064	280	2,939,460	4,364	52,884,192	12,118	2.12%
12/31/2010	269	4,329,156	287	3,292,596	4,346	53,920,752	12,407	2.38%
12/31/2011**	362	4,152,804	241	3,479,496	4,403	54,594,060	12,399	(0.06)%
12/31/2012	237	4,168,092	286	3,217,812	4,354	55,544,340	12,757	2.89%
12/31/2013	270	4,593,708	279	3,096,132	4,345	57,041,916	13,128	2.91%
12/31/2014	265	4,648,596	310	3,713,844	4,300	57,976,668	13,483	2.70%
12/31/2015	251	4,185,900	291	3,681,516	4,260	58,481,052	13,728	1.82%
12/31/2016	235	4,8624,474	282	3,544,440	4,213	59,799,086	14,194	3.39%

* *Annual benefits added to payroll include post-retirement increase amounts.*

** *Number added in 2011 includes 121 reversionary annuitants that are also surviving spouses.*

Actuarial Reserve Liabilities
As of December 31, 2016

Accrued Liability for Active and Inactive Participants*	$6,330,315,764
Reserves for:	
Service Retirement Pension	$7,756,558,336
Future Spouses of Current Retirees	559,423,903
Surviving Spouse Pension	408,038,420
Child Annuitants	1,012,273
Total Accrued Liability	$15,055,348,696
Actuarial Net Assets	4,590,366,241
Unfunded Actuarial Liabilities	$10,464,982,455

**Accrued liability for active participants includes retirement liability for members in ordinary or duty disability status. Liability for disability benefits is recognized as a one-year term cost of 0.75 percent of pay added to the normal cost.*

Statutory Reserves
As of December 31, 2016

	Annuity Payment Fund	Prior Service Fund	Total
Statutory Reserves*			
Retirees	$ 1,647,119,992	$ 5,966,725,763	$ 7,613,845,755
Future Surviving Spouses	375,163,350	463,588,526	838,751,876
Spouses**	195,360,632	174,094,689	369,455,321
Annual Benefits			
Retirees	$ 199,033,594	$ 580,056,018	$ 779,089,612
Future Surviving Spouses	N/A	N/A	N/A
Spouses**	$ 30,056,617	$ 29,742,469	$ 59,799,086

**As required by State statutes, Statutory Reserves are calculated using the Combined Annuity Mortality Table with interest at 3.00 percent per annum, except for employees and spouses of employees who were participants on or before January 1, 1952, for whom the American Experience Table of Mortality with interest at 4.00 percent per annum is used.*

***Surviving spouses also include reversionary annuitants.*

Summary of Actuarial Methods and Assumptions
As of December 31, 2016

Mortality Rates:

Post-retirement: The RP-2000 Combined Healthy Mortality Table, with mortality improvements projected statically to 2010 using Scale AA (adopted December 31, 2010).

Pre-retirement: Post-retirement mortality multiplied by 85% for males and 70% for females (adopted December 31, 2010).

The mortality table specified above was determined to contain provision appropriate to reasonably reflect future mortality improvement (actual-to-expected ratios of 111% for male retirees and 107% for female retirees, per the experience study report dated January 17, 2011), based on a review of mortality experience as of the measurement date .

Termination Rates: These service-based rates are based on recent experience of the Fund (adopted December 31, 2010).

Service	Rate (%)	Service	Rate (%)	Service	Rate (%)
0 - 0.99	15.00	11 - 11.99	4.00	21 - 21.99	1.80
1 - 1.99	15.00	12 - 12.99	4.00	22 - 22.99	1.70
2 - 2.99	12.00	13 - 13.99	3.60	23 - 23.99	1.60
3 - 3.99	9.00	14 - 14.99	3.30	24 - 24.99	1.50
4 - 4.99	8.00	15 - 15.99	3.00	25 - 25.99	1.40
5 - 5.99	7.00	16 - 16.99	2.80	26 - 26.99	1.30
6 - 6.99	6.50	17 - 17.99	2.50	27 - 27.99	1.20
7 - 7.99	5.25	18 - 18.99	2.30	28 - 28.99	1.10
8 - 8.99	5.00	19 - 19.99	2.10	29 - 29.99	1.00
9 - 9.99	4.75	20 -20.99	1.90	30 +	0.90
10-10.99	4.25				

Retirement Rates: For employees first hired prior to January 1, 2011, rates of retirement are based on the recent experience of the Fund (adopted December 31, 2010).

Age and Service-Based Retirement Rates

Service	*50 - 54*	*55 - 59*	*60 - 64*	*65 - 66*	*67*	*68 - 69*	*70 - 79*	*80+*
10 - 11		*0%*	*12%*	*30%*	*30%*	*15%*	*45%*	*100%*
12 - 19		*0%*	*10%*	*15%*	*10%*	*10%*	*45%*	*100%*
20 - 24		*6%*	*10%*	*15%*	*10%*	*10%*	*45%*	*100%*
25 - 29		*12%*	*12%*	*20%*	*20%*	*20%*	*45%*	*100%*
30	*25%*	*20%*	*20%*	*20%*	*20%*	*20%*	*45%*	*100%*
31 - 32	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*	*45%*	*100%*
33 - 34	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*45%*	*100%*
35 - 39	*30%*	*30%*	*30%*	*45%*	*45%*	*45%*	*45%*	*100%*
40+	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

For employees first hired on or after January 1, 2011, rates of retirement for each age from 62 to 80 were used (adopted December 31, 2011).

Age	Rate
62	40%
63 - 69	20%
70 - 79	45%
80 +	100%

Disability Benefit Valuation: Disability benefits are valued in normal cost as 0.75% of projected payroll (adopted December 31, 2005).

Valuation of Inactive Participants: Inactive members with less than 10 years of service are assumed to take an immediate refund of his or her account balance. For inactive members with 10 or more years of service, the money purchase benefit is estimated by projecting the account balance (including employer contributions, when applicable) to the earliest retirement age. This estimated money purchase benefit is increased by 15% to account for the possibility that the minimum annuity formula is more valuable. For inactive members with 10 or more service and salary information available, the minimum annuity benefit is valued, if it is more valuable than the money purchase benefit.

Unknown Data for Participants: Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

Spouse: 85% of members are assumed to be married, female spouses are assumed to be four years younger than male spouses, and 100% of spouses are assumed to be opposite gender (adopted December 31, 1999).

Member Contributions Based on payroll, adjusted to the middle of the year

Group Health Insurance Participation: 50% of employees eligible to retire and receive postretirement welfare coverage were assumed to elect health coverage. All annuitants age 65 and older are assumed to be eligible for Medicare, and all annuitants under age 65 are assumed not to be eligible for Medicare. All current surviving spouses are assumed to be eligible for Medicare. This assumption does not apply after December 31, 2016 as a result of Public Act 98-0043, which terminated the health insurance supplement.

Net Investment Return: 7.50% per year, net of investment expense (adopted December 31, 2012)

Inflation: 3.00% per year (adopted December 31, 1999)

Salary Increases: These service-based rates are based on the recent experience of the Fund (adopted December 31, 2010).

Service	Rate (%)
0 - 1.99	8.25
2 - 2.99	7.75
3 - 3.99	7.25
4 - 5.99	6.75
6 - 6.99	6.50
7 - 7.99	6.00
8 - 8.99	5.50
9 - 9.99	5.25
10 - 25.99	5.00
26 +	4.50

Administrative Expenses: Equal to actual expenses for the prior year. For purposes of the 50-year projection, future administrative expenses are assumed to increase by 3% each year.

Actuarial Value of Assets: Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five - year period (adopted December 31, 1999).

Actuarial Cost Method: Entry Age Normal. Under this method, a normal cost is calculated for each employee that is the level annual contribution as a percent of pay required to be made from the employee's date of hire for as long as he/she remains active (not past 2016 for OPEB benefits) 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.

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 employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance or any person employed by the Municipal Employees' Annuity and Benefit Fund of Chicago who is not participating in any other pension fund or retirement system is covered by the Fund. Current and former employees of the Chicago Housing Authority and the Public Building Commission who have service in this Plan or who reinstate service in this Plan, may elect to participate in this Plan with respect to their employment with the Chicago Housing Authority or the Public Building Commission under certain circumstances.

Employee Contributions: Members of the Fund are required to contribute 8.5% of pensionable salary to the Fund as follows: 6.5% for the employee's retirement annuity, 1.5% for the spouse's annuity, and 0.5% for the automatic increases in the retirement annuity.

Tiers: Tier 1: First hired before January 1, 2011

Tier 2: First hired on or after January 1, 2011

Final Average Salary: For Tier 1 members, the final average salary is the average salary of the highest four consecutive years within the last 10 years of service prior to retirement.

For Tier 2 members, the final average salary is the average pensionable salary of the highest eight consecutive years within the last 10 years of service prior to retirement. Pensionable salary is limited to $106,800 in 2011, increased by the lesser of 3% or ½ of the change in CPI-U, not less than zero. For 2016, the salary limit was $111,572.

Employee Retirement Annuity:

Money Purchase Formula

Eligibility	Tier 1: Age 55 and 10 years of service
	Tier 2: Age 62 and 10 years of service
Amount	The annuity is based on all employee and City contributions. However, for Tier 1 members who retire before age 60 with less than 20 years of service, the annuity is based on employee contributions plus 1/10th of the City contributions for each year of service over 10.
	Maximum is 60% of highest salary.

Minimum Annuity Formula

Eligibility	Tier 1, the earlier of: • Age 60 and 10 years of service • Age 55 and 20 years of service • Age 50 and 30 years of service
	Tier 2: Age 62 and 10 years of service
Amount	The annuity is equal to 2.4% for each year of service times final average salary.
	For Tier 1 members under age 60 with less than 25 years of service, the annuity is reduced by 0.25% for each month that the member is under age 60.
	For Tier 2 members under age 67, the annuity is reduced by 0.50% for each month that the member is under age 67.
	Maximum is 80% of final average salary.

Post-Retirement Increase: Tier 1:

An employee annuitant is eligible to receive an increase of 3% of the current payable annuity (compound). This increase begins in January of the year of the first payment date following the earlier of:

1) the later of the third anniversary of retirement or age 53, or
2) the later of the first anniversary of retirement or age 60

Tier 2:

An employee annuitant or surviving spouse who is eligible to receive an increase in annuity benefit, shall receive an annual increase equal to the lesser of 3% or ½ of the annual unadjusted percentage increase in the Consumer Price Index-U. The increase is based on the amount of the originally granted benefit (simple). This increase begins in January of the year of the first payment date following the later of:

1) the attainment of age 67, or
2) the first anniversary of the annuity start date

Reversionary Annuity: An employee may elect to reduce his or her annuity by an amount less than or equal to $400 to provide a reversionary annuity for a spouse, parent, child, brother, or sister, to begin upon the employee's death. The election must be made before retirement and have been in effect one year prior to death. The one-year requirement is waived if the beneficiary is the employee's spouse. The death of the employee before retirement voids this election. The reversionary annuity for a spouse when added to the spouse's annuity cannot exceed 100% of the employee's reduced annuity. The amount of the monthly reversionary annuity is determined by multiplying the amount of the monthly reduction in the employee's annuity by a factor based on the age of the employee and the difference between the ages of the employee and the reversionary annuitant at the start date of the employee's annuity.

Elected City Officer's Optional Plan: An alternative plan for elected officials of 3% of final salary for the first eight years, 4% for the next four years, and 5% thereafter, subject to an 80% maximum, is available. The elected official must contribute an additional 3% of salary to receive these benefits. This plan also includes alternative widow and disability benefit formulas. This plan became effective upon approval from the IRS on September 17, 1991.

Spouse Annuity: The surviving spouse annuity is the greater of the annuity under the money purchase formula or the minimum annuity formula. Surviving spouses who remarry on or after September 4, 2000, will not have their annuities terminated.

Money Purchase Formula

When an employee retires, the spouse's annuity is fixed, based on employee and City contributions for the spouse's annuity and a joint life age factor.

If the employee dies in service, the spouse's annuity is based on all contributions.

For 3% annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, surviving spouse's single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity), without regard to gender.

Minimum Annuity Formula

If the employee retires or dies in service and is at least age 55 with 20 or more years of service, or is at least age 50 with 30 or more years of service, the spouse's annuity is equal to half the amount of the annuity the employee was entitled to receive at the time of retirement or death in service. This annuity must be reduced by 0.25% for each month the spouse is under age 55 (or age 50 if the employee had at least 25 years of service) at the time the employee retires or dies in service.

If the employee dies while receiving a retirement annuity, the spouse is eligible for an annuity of one half of the employee's annuity at death. This annuity is reduced by 0.25% for each month the spouse is under age 55 (or age 50 if the employee had at least 25 years of service) at the time of the employee's death.

If the employee dies in service with at least 10 years of service, the spouse is entitled to an annuity of half of the minimum formula annuity earned and accrued to the credit of the employee at the date of death. This annuity is not reduced due to the age of the employee or spouse. The spouse is eligible for this annuity only if the marriage was in effect for at least 10 years.

The spouse will receive a minimum annuity of $800 per month if the employee retires with at least 10 years of service or dies in service with at least five years of service.

For Tier 2 members, the annuity payable to the surviving spouse is equal to 66 2/3% of the participant's accrued retirement annuity without a reduction due to age.

Child Annuity: A child's annuity is provided for an unmarried child of a deceased employee who is under the age of 18, if the child was born before the withdrawal from service. The annuity is $220 per month while the spouse of the deceased employee is alive and $250 per month if the spouse is deceased.

Group Health Insurance:

Retirees receive a health insurance supplement of $95 per month if not eligible for Medicare and $65 per month if eligible for Medicare. Spouses married to retirees do not receive an additional benefit. Surviving spouses may continue to receive benefits after the retiree's death. Per Public Act 98-0043, the health insurance supplement will not be provided after December 31, 2016.

Ordinary Disability Benefit:

This benefit is granted for disabilities incurred other than in performance of an act of duty and is 50% of salary as of the last day worked. The first payment shall be made one month after the disablement occurs provided the employee is not then in receipt of salary. Length of time on disability is limited to a maximum of 25% of the employee's total service or five years, whichever occurs first.

The Fund contributes salary deductions for annuity purposes for the ordinary disability benefit. Such amounts contributed by the Fund after December 31, 2000, while the employee is receiving ordinary disability benefits, are not refundable to the employee and will be used for annuity purposes only.

Duty Disability Benefit:

Any employee who becomes disabled as the result of an injury incurred in the performance of any act of duty has a right to receive a duty disability benefit in the amount of 75% of salary at date of injury, plus $10 a month for each unmarried child less than age 18. Child's duty disability benefit is limited to 15% of the employee's salary as of the date of injury. Duty disability benefits begin one day after the later of the last day worked or the last day paid.

If the disability has resulted from any mental disorder, physical defect or disease which existed at the time such injury was sustained, the duty disability benefit shall be 50% of salary at date of injury. Disablement because of heart attacks, strokes, or any disablement due to heart disease shall not be considered the result of an accident suffered in the performance of duty. However, the employee will receive service credit and the City will contribute salary deductions for annuity purposes if the employee is receiving Workers' Compensation.

A duty disability benefit is payable to age 65 if the disability benefits begin before age 60. For an employee who begins disability on or after age 60, disability benefits will continue for five years. A duty disability benefit which continues for more than five years and which starts before the employee's age 60, will be increased by 10% on January 1st of the sixth year.

The City contributes salary deductions for annuity purposes for the duty disability benefit. Such amounts contributed by the City after December 31, 1981, while the employee is receiving duty disability benefits, are not refundable to the employee and will be used for annuity purposes only.

Refunds:	Tier 1:
	An employee who resigns before age 55, or before age 60 with less than 10 years of service, is entitled to all salary deductions accumulated with interest to date of resignation, plus the 0.50% deducted for annuity increase purposes without interest.
	Tier 2:
	An employee who resigns before age 62 without regard to length of service, or who resigns with less than 10 years of service regardless of age, is entitled to all salary deductions accumulated with interest to date of resignation, plus the 0.50% deducted for annuity increase purposes without interest.
	Amounts contributed by the employee, excluding the 0.50% deductions for annuity increase, that have not been paid out as annuity are refundable to the employee's estate with interest to the date of retirement or death, if the employee died in service.
	If the annuity of an employee or spouse is less than $800 a month, the employee or spouse may elect to receive a refund in lieu of an annuity.
	If unmarried at the time of retirement, the employee is entitled to a refund, with interest, of contributions made for the spouse's annuity.
Plan Year:	January 1 through December 31

Statistical

The Statistical Section presents additional information to provide financial users with added historical perspective, context and detail to assist in using the information in the financial statements; and additional analytical information on Plan membership data, retirement benefits and other postemployment benefits.

The schedules beginning on page 108 through page 110 show financial trends information that assist users in understanding and assessing how the Plan's financial position has changed over time. A schedule on page 111 allocates revenues or additions to fiduciary net position by source. A schedule on page 112 allocates expenses or deductions from fiduciary net position by type. The schedule on page 113 shows the refunds of contributions and the schedule on page 114 allocates the total benefits that were paid.

The schedules presented immediately following the financial trends information contain additional analytical information on the level of monthly or annual benefits by type of benefit, by number of retirees, and years of service. A schedule on page 115 provides information on the average monthly benefit payments to new retirees. Schedules on pages 116 and 117 provides information on average employee retirement benefit payable, current retirees and beneficiaries by range of pension amounts, history of retirees and beneficiaries by type of benefit, and covered employees by age and years of service. A schedule on page 118 provides information on Plan membership data.

Changes in Fiduciary Net Position

(Last ten years)

	2016	2015	2014	2013	2012
Additions:					
Employer contributions	$ 157,444,029	$ 157,716,475	$ 158,797,631	$ 157,704,971	$ 158,380,709
Member contributions	130,390,848	131,428,104	129,971,981	131,532,173	130,266,293
Net investment income	281,419,146	114,025,290	283,268,612	735,272,432	589,198,468
Other Income	-	-	13,313	-	-
Total Additions	$ 569,254,023	$ 403,169,869	$ 572,051,537	$1,024,509,576	$ 877,845,470
Deductions:					
Annuities	$ 813,092,340	$ 782,083,805	$ 754,391,331	$ 723,880,608	$ 681,508,540
Disabilities	12,004,051	12,266,647	11,905,700	12,158,883	13,643,816
Healthcare Subsidy	7,725,538	8,491,284	9,050,883	9,508,087	9,522,054
Refunds	34,575,271	31,685,872	32,325,780	33,456,449	36,908,784
Administrative Expenses	7,056,784	6,701,000	6,567,842	6,498,913	6,841,486
Total Deductions	$ 874,453,984	$ 841,228,608	$ 814,241,536	$ 785,502,940	$ 748,424,680
Net Increase/(Decrease)	(305,199,961)	(438,058,739)	(242,189,999)	239,006,636	129,420,790
Beginning of year	4,741,427,557	5,179,486,296	5,421,676,295	5,182,669,659	5,053,248,869
End of year	$4,436,227,596	$4,741,427,557	$5,179,486,296	$5,421,676,295	$ 5,182,669,659

Changes in Fiduciary Net Position (continued)

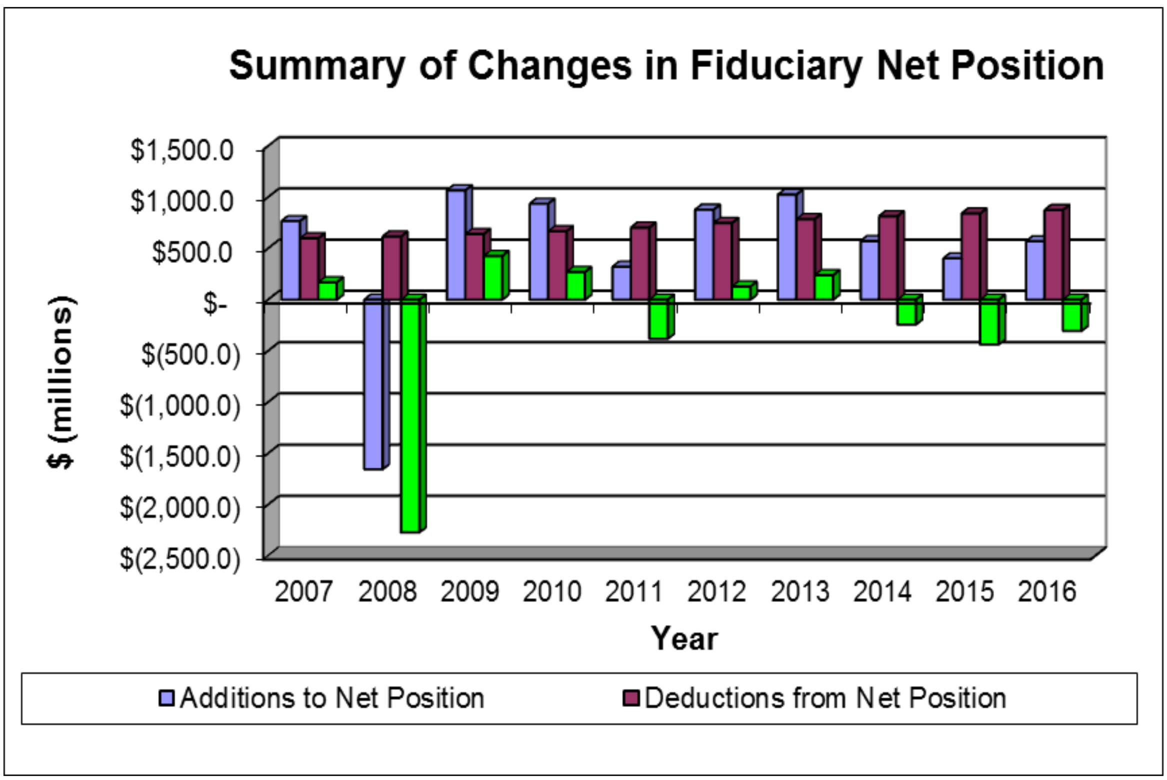
(Last ten years)

	2011	2010	2009	2008	2007
Additions:					
Employer contributions	$ 156,525,374	$ 164,302,005	$ 157,697,608	$ 155,832,612	$ 148,137,050
Member contributions	132,596,417	133,299,542	130,980,605	137,748,907	132,442,200
Net investment income	31,583,226	638,568,991	778,562,620	(1,947,575,935)	485,926,151
Other Income	-	24,435	-	-	-
Total Additions	$ 320,705,017	$ 936,194,973	$ 1,067,240,833	$(1,653,994,416)	$ 766,505,401
Deductions:					
Annuities	$ 640,090,207	$ 607,540,457	$ 583,436,041	$ 561,947,108	$ 543,411,793
Disabilities	13,963,941	13,041,253	11,682,652	11,687,603	10,624,807
Health Care Subsidy	9,516,053	9,549,685	9,651,118	9,029,362	8,530,910
Refunds	32,104,031	29,949,703	28,094,365	25,501,985	28,009,512
Administrative Expenses	7,375,338	6,744,947	7,765,918	7,749,714	7,532,301
Total Deductions	$ 703,049,570	$ 666,826,045	$ 640,630,094	$ 615,915,772	$ 598,109,323
Net Increase/(Decrease)	(382,344,553)	269,368,928	426,610,739	(2,269,910,188)	168,396,078
Beginning of year	5,435,593,422	5,166,224,494	4,739,613,755	7,009,523,943	6,841,127,865
End of year	$5,053,248,869	$ 5,435,593,422	$ 5,166,224,494	$ 4,739,613,755	$7,009,523,943

Summary of Changes in Fiduciary Net Position

(Last ten years)

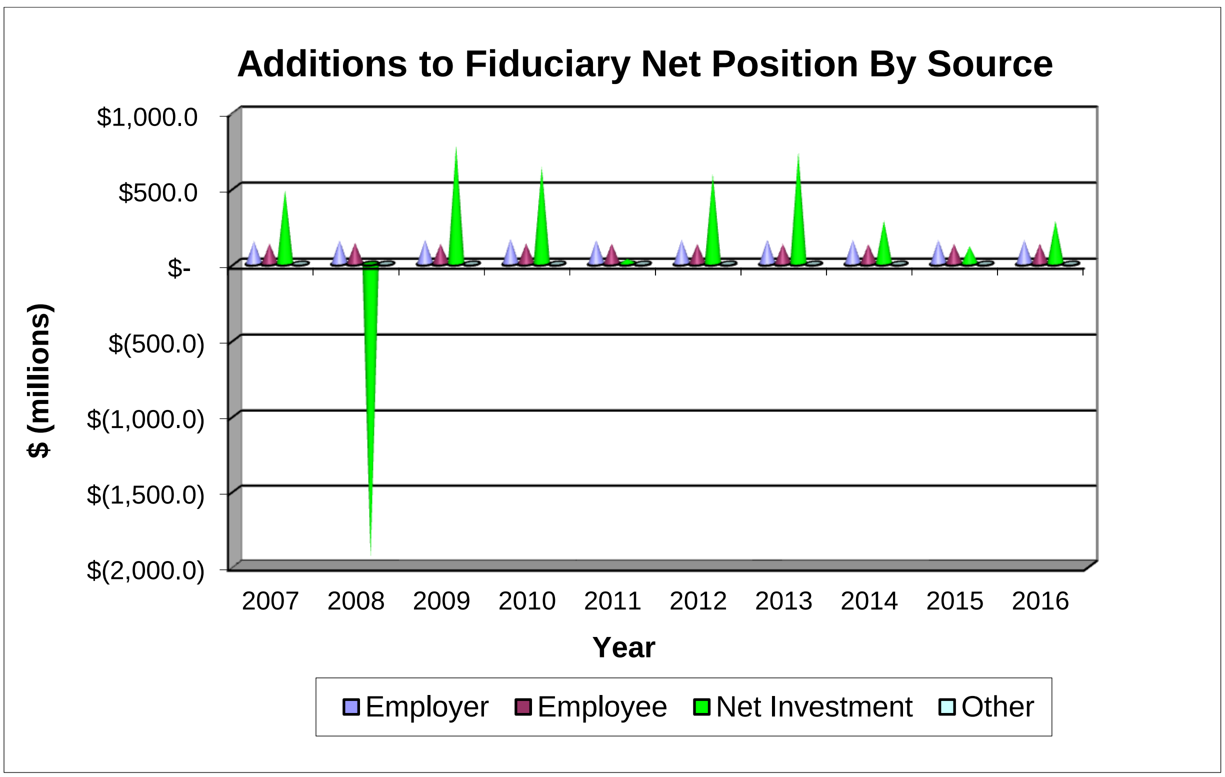
Year	Additions to Net Position	Deductions from Net Position	Increase (Decrease) in Net Position
2007	$ 766,505,401	$ 598,109,323	$ 168,396,078
2008	(1,653,994,416)	615,915,772	(2,269,910,188)
2009	1,067,240,833	640,630,094	426,610,739
2010	936,194,973	666,826,045	269,368,928
2011	320,705,017	703,049,570	(382,344,553)
2012	877,845,470	748,424,680	129,420,790
2013	1,024,509,576	785,502,940	239,006,636
2014	572,051,537	814,241,536	(242,189,999)
2015	403,169,869	841,228,608	(438,058,739)
2016	569,254,023	874,453,984	(305,199,961)



Additions to Fiduciary Net Position By Source

(Last ten years)

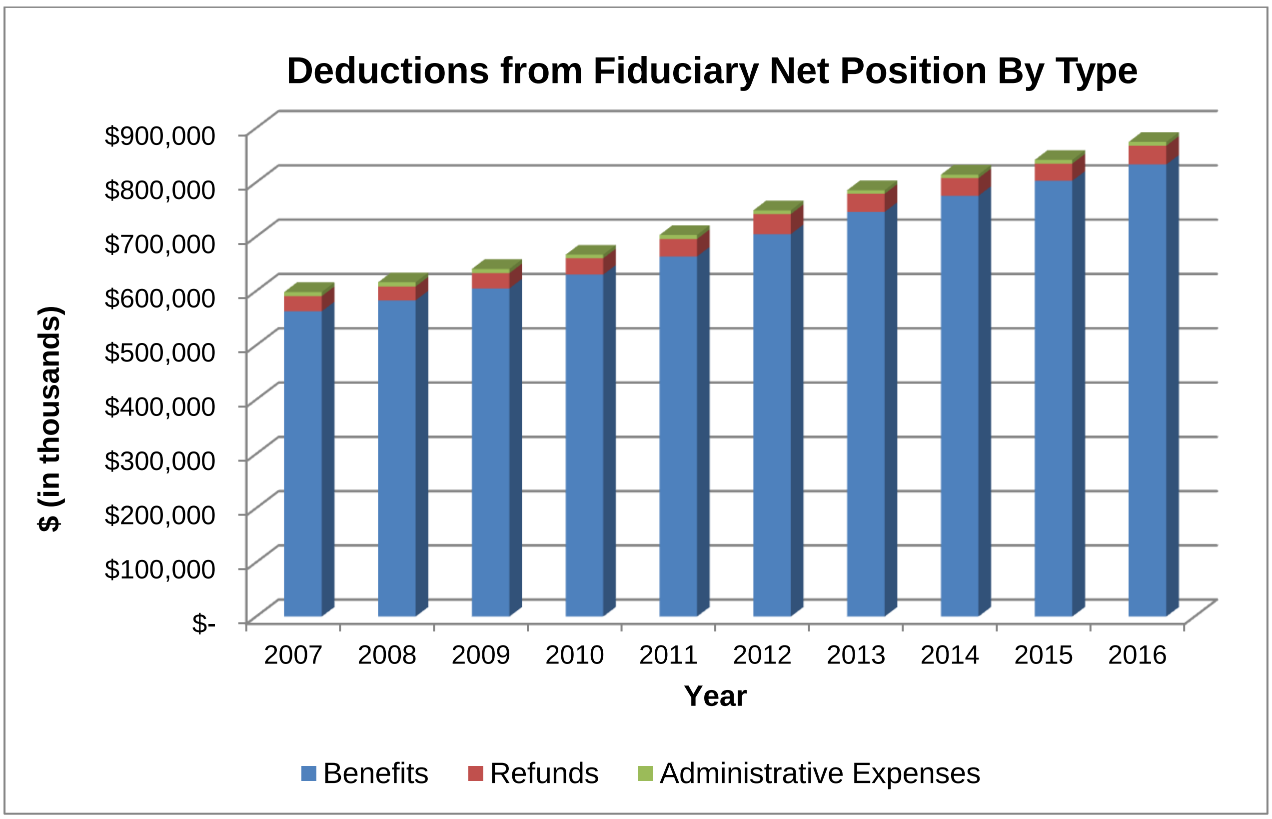
Year	Employer Contributions	Employee Contributions	Investment Income (net of expense)	Other Income	Total
2007	$ 148,137,050	$ 132,442,200	$ 485,926,151	$ -	$ 766,505,401
2008	155,832,612	137,748,907	(1,947,575,935)	-	(1,653,994,416)
2009	157,697,608	130,980,605	778,562,620	-	1,067,240,833
2010	164,302,005	133,299,542	638,568,991	24,435	936,194,973
2011	156,525,374	132,596,417	31,583,226	-	320,705,017
2012	158,380,709	130,266,293	589,198,468	-	877,845,470
2013	157,704,971	131,532,173	735,272,432	-	1,024,509,576
2014	158,797,631	129,971,981	283,268,612	13,313	572,051,537
2015	157,716,475	131,428,104	114,025,290	-	403,169,869
2016	157,444,029	130,390,848	281,419,146	-	569,254,023



Deductions from Fiduciary Net Position By Type

(Last ten years)

Year		Benefits		Refunds		Administrative Expense		Total
2007	$	562,567,510	$	28,009,512	$	7,532,301	$	598,109,323
2008		582,664,073		25,501,985		7,749,714		615,915,772
2009		604,769,811		28,094,365		7,765,918		640,630,094
2010		630,131,395		29,949,703		6,744,947		666,826,045
2011		663,570,201		32,104,031		7,375,338		703,049,570
2012		704,674,410		36,908,784		6,841,486		748,424,680
2013		745,547,578		33,456,449		6,498,913		785,502,940
2014		775,347,914		32,325,780		6,567,842		814,241,536
2015		802,841,736		31,685,872		6,701,000		841,228,608
2016		832,821,929		34,575,271		7,056,784		874,453,984



Refunds by Type

(Last ten years)

Year		Separation		Death		Others[1]		Total
2007	$	24,156,118	$	2,649,518	$	1,203,876	$	28,009,512
2008		22,271,312		2,380,730		849,943		25,501,985
2009		24,942,884		2,670,267		481,214		28,094,365
2010		26,888,718		3,269,824		(208,839)		29,949,703
2011		29,482,493		1,976,182		645,356		32,104,031
2012		34,519,018		2,389,915		(149)		36,908,784
2013		30,765,181		2,711,770		(20,502)		33,456,449
2014		29,219,994		3,211,181		(105,395)		32,325,780
2015		27,325,678		4,570,458		(210,264)		31,685,872
2016		30,676,911		3,899,766		(1,406)		34,575,271

[1] Others include transfer of contributions to other Funds and refunds due to error in deductions

Benefits by Type - Last ten years

	2016	2015	2014	2013	2012
Annuities:					
Employee	$ 753,153,639	$ 723,152,347	$ 696,095,106	$ 666,939,420	$ 624,554,190
Surviving Spouse	59,627,061	58,554,347	57,902,663	56,522,097	56,494,913
Children	311,640	377,111	393,562	419,091	459,437
Total Annuities	813,092,340	782,083,805	754,391,331	723,880,608	681,508,540
Disabilities:					
Ordinary	7,685,452	8,315,568	8,067,664	8,161,747	9,477,385
Duty	4,318,599	3,951,079	3,838,036	3,997,136	4,166,431
Total Disabilities	12,004,051	12,266,647	11,905,700	12,158,883	13,643,816
Postemployment Healthcare					
Employee	6,530,366	7,219,202	7,726,595	8,137,318	8,120,476
Surviving Spouse	1,194,032	1,270,277	1,319,793	1,363,359	1,395,783
Children	1,140	1,805	4,495	7,410	5,795
Total Healthcare Subsidy	7,725,538	8,491,284	9,050,883	9,508,087	9,522,054
Total Benefits	$ 832,821,929	$ 802,841,736	$ 775,347,914	$ 745,547,578	$ 704,674,410

	2011	2010	2009	2008	2007
Annuities:					
Employee	$ 584,973,939	$ 553,066,295	$ 530,008,332	$ 509,510,036	$ 491,780,107
Surviving Spouse	54,600,246	53,970,603	52,904,482	51,880,155	51,063,889
Children	516,022	503,559	523,227	556,917	567,797
Total Annuities	640,090,207	607,540,457	583,436,041	561,947,108	543,411,793
Disabilities:					
Ordinary	9,708,906	9,274,262	8,290,644	8,311,069	7,857,240
Duty	4,255,035	3,766,991	3,392,008	3,376,534	2,767,567
Total Disabilities	13,963,941	13,041,253	11,682,652	11,687,603	10,624,807
Postemployment Healthcare					
Employee	8,070,084	8,068,820	8,155,184	7,628,736	7,199,189
Surviving Spouse	1,439,177	1,472,885	1,487,337	1,389,751	1,318,801
Children	6,792	7,980	8,597	10,875	12,920
Total Healthcare Subsidy	9,516,053	9,549,685	9,651,118	9,029,362	8,530,910
Total Benefits	$ 663,570,201	$ 630,131,395	$ 604,769,811	$ 582,664,073	$ 562,567,510

History of Average Pension Benefit Payments to New Retirees[1]

(Last ten years)

Retirement Effective Dates		Year of Service					
		10-14	15-19	20-24	25-29	30 & Over	Total
	Average Monthly Benefit at Retirement	$1,198	$1,381	$2,029	$2,658	$ 3,919	$ 2,800
2007	Average Final Average Salary	$3,548	$3,075	$3,796	$2,811	$ 4,939	$ 4,242
	Number of Active Recipients	54	69	94	70	229	516
	Average Monthly Benefit at Retirement	$1,293	$1,630	$2,031	$2,765	$ 4,129	$ 2,847
2008	Average Final Average Salary	$3,980	$3,565	$3,981	$4,199	$ 5,285	$ 4,491
	Number of Active Recipients	60	65	106	63	206	500
	Average Monthly Benefit at Retirement	$1,407	$1,790	$2,275	$3,255	$ 4,082	$ 2,969
2009	Average Final Average Salary	$4,664	$4,148	$4,406	$5,005	$ 5,209	$ 4,794
	Number of Active Recipients	57	75	153	92	231	608
	Average Monthly Benefit at Retirement	$1,334	$1,835	$2,215	$3,208	$ 4,354	$ 3,129
2010	Average Final Average Salary	$4,418	$4,311	$4,278	$4,945	$ 5,590	$ 4,933
	Number of Active Recipients	60	77	169	132	287	725
	Average Monthly Benefit at Retirement	$1,350	$1,981	$2,432	$3,459	$ 4,696	$ 3,361
2011	Average Final Average Salary	$4,261	$4,506	$4,661	$5,265	$ 6,046	$ 5,257
	Number of Active Recipients	66	88	193	185	311	843
	Average Monthly Benefit at Retirement	$1,295	$2,014	$2,391	$3,362	$ 4,506	$ 3,230
2012	Average Final Average Salary	$4,400	$4,893	$4,533	$5,094	$ 5,737	$ 5,125
	Number of Active Recipients	93	132	274	254	418	1,171
	Average Monthly Benefit at Retirement	$1,304	$1,998	$2,348	$3,259	$ 4,446	$ 3,065
2013	Average Final Average Salary	$4,456	$4,890	$4,314	$4,953	$ 5,668	$ 5,030
	Number of Active Recipients	104	106	204	216	290	920
	Average Monthly Benefit at Retirement	$1,169	$1,760	$2,290	$3,137	$ 4,350	$ 2,891
2014	Average Final Average Salary	$4,161	$4,528	$4,597	$4,877	$ 5,644	$ 4,921
	Number of Active Recipients	93	92	185	203	223	796
	Average Monthly Benefit at Retirement	$1,275	$1,959	$2,279	$3,405	$ 4,446	$ 3,048
2015	Average Final Average Salary	$4,439	$4,685	$4,387	$5,174	$ 5,724	$ 5,031
	Number of Active Recipients	68	119	171	180	227	765
	Average Monthly Benefit at Retirement	$1,347	$1,909	$2,350	$3,383	$ 4,795	$ 3,126
2016	Average Final Average Salary	$5,096	$4,836	$4,604	$5,199	$ 6,276	$ 5,306
	Number of Active Recipients	83	113	208	199	237	840

[1]This schedule excludes reciprocal annuities, money purchase annuities and minimum annuities

Source of Data: Actuarial Valuation and Review as of December 31, 2016

Average Employee Retirement Benefits Payable
(last ten years)

Valuation Date	Average Annual Benefit	Average Current Age Of Retirees	Average Benefit At Retirement Current Year	Average Age At Retirement Current Year	Average Service Years At Retirement Current Year
12/31/2007	$27,960	72.4	$26,910	63.1	24.60
12/30/2008	$28,928	72.6	$27,750	62.4	24.30
12/31/2009	$29,960	72.8	$29,843	62.9	23.90
12/31/2010	$31,046	72.8	$31,290	62.2	24.25
12/31/2011	$32,269	72.7	$34,513	62.1	24.86
12/30/2012	$33,423	72.6	$33,508	62.7	24.81
12/31/2013	$34,357	72.6	$31,177	63.0	23.55
12/31/2014	$34,532	72.7	$29,775	62.5	23.35
12/31/2015	$36,277	72.8	$31,686	62.6	23.48
12/30/2016	$37,243	72.9	$32,000	62.0	23.50

Source of Data: Actuarial Valuation and Review as of December 31, 2016

Current Retirees & Beneficiaries by Range of Pension Amounts
As of December 31, 2016

Amount of Monthly Benefit	Number of Employee Annuitants	Number of Spouse Annuitants	Number of Reversionary Annuitants	Number of Child Annuitants	Total Number of Annuitants
Under $500	761	180	85	102	1,128
$500 - $999	1,569	2,192	38	-	3,799
$1,000 - $1,499	3,861	673	3	-	4,537
$1,500 - $1,999	1,854	480	2	-	2,336
$2,000 - $2,499	2,049	296	-	-	2,345
$2,500 - $2,999	1,871	171	-	-	2,042
$3,000 - $3,499	1,406	62	-	-	1,468
$3,500 - $3,999	1,264	26	-	-	1,290
$4,000 - $4,499	1,131	2	-	-	1,133
$4,500 - $4,999	1,089	1	-	-	1,090
$5,000 - $5,499	964	2	-	-	966
$5,500 - $5,999	813	-	-	-	813
$6,000 & Over	2,287	-	-	-	2,287
Totals	**20,919**	**4,085**	**128**	**102**	**25,234**

Source of Data: Actuarial Valuation and Review as of December 31, 2016

History of Retirees and Beneficiaries By Type of Benefit

(Last ten years)

Valuation	Annuitants				Disability		Compensation	Reciprocal	
Date	Employee	Spouse	Child	Reversionary*	Ordinary	Duty	Annuitants**	Employee	Spouse
12/31/2007	15,899	4,042	178		304	209	2	2,299	368
12/30/2008	15,804	4,018	174		266	192	2	2,369	360
12/31/2009	15,838	4,008	167		306	220	2	2,407	356
12/31/2010	15,961	3,982	173		304	246	2	2,477	364
12/31/2011	16,230	3,910	164	129	346	264	2	2,583	364
12/30/2012	16,874	3,864	149	129	280	250	2	2,740	361
12/31/2013	17,320	3,844	141	138	227	213	2	2,793	363
12/31/2014	17,553	3,798	141	139	195	225	2	2,858	363
12/31/2015	17,697	3,757	118	134	187	213	2	2,887	369
12/30/2016	17,954	3,706	102	128	178	216	2	2,965	379

* *Prior to December 31, 2011, reversionary annuitants were included with spouse annuitants.*

** *Compensation annuitants also included with spouse annuitants*

Source of Data: Actuarial Valuation and Review as of December 31, 2016

Covered Employees by Age & Years of Service

Attained	Completed Years of Service									
Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Under 20	47	30	-	-	-	-	-	-	-	77
20-24	328	721	32	-	-	-	-	-	-	1,081
25-29	391	1,651	414	39	-	-	-	-	-	2,495
30-34	343	1,454	696	345	66	1	-	-	-	2,905
35-39	276	1,185	666	583	382	65	-	-	-	3,157
40-44	246	974	615	655	751	327	40	-	-	3,608
45-49	214	849	553	666	929	624	373	22	-	4,230
50-54	128	615	512	732	1,078	768	714	208	13	4,768
55-59	81	461	365	621	919	723	643	306	64	4,183
60-64	38	216	252	381	537	469	423	186	77	2,579
65-69	13	52	81	135	178	157	141	80	41	878
70 & Over	3	16	37	37	61	61	52	29	39	335
Total	**2,108**	**8,224**	**4,223**	**4,194**	**4,901**	**3,195**	**2,386**	**831**	**234**	**30,296**

Source of Data: Actuarial Valuation and Review as of December 31, 2016

10-Year History of Plan Membership

(Last ten years)

Year	Member Active	Inactive	Retirees	Beneficiaries	Total
2007	34,885	9,105	18,201	4,588	66,779
2008	32,563	12,082	18,178	4,552	67,375
2009	31,586	12,919	18,251	4,531	67,287
2010	30,726	13,866	18,441	4,519	67,552
2011	31,976	12,762	18,815	4,567	68,120
2012	31,326	13,465	19,617	4,503	68,911
2013	30,647	14,254	20,116	4,486	69,503
2014	30,160	15,495	20,414	4,441	70,510
2015	30,683	16,268	20,586	4,378	71,915
2016	30,296	16,876	20,921	4,315	72,408

10-Year History of Covered Employees

(Last ten years)

Year	Male Participants	Female Participants	Total Participants
2007	13,568	21,317	34,885
2008	12,822	19,741	32,563
2009	12,598	18,988	31,586
2010	12,377	18,349	30,726
2011	12,828	19,148	31,976
2012	12,696	18,630	31,326
2013	12,622	18,025	30,647
2014	12,464	17,696	30,160
2015	12,618	18,065	30,683
2016	12,482	17,814	30,296

Source of Data: Actuarial Valuation and Review as of December 31, 2016

Appendix A

LEGISLATIVE CHANGES IN PLAN PROVISIONS 2007 THROUGH 2016

2007 Session

HB 49

- Approved August 17, 2007.
- Provides that, beginning on the effective date, legally adopted children shall be entitled to the same benefits as other children, and no child's or survivor's benefit shall be disallowed because the child is an adopted child.

SB 1169

- Approved August 28, 2007.
- Provides that, in order for an Illinois finance entity to be eligible for investment or deposit of retirement system or pension fund assets, the Illinois finance entity must annually certify that it complies with the requirements of the High Risk Home Loan Act and the rules adopted pursuant to that Act that are applicable to that Illinois finance entity. Requires the retirement system or pension fund to divest its assets with the Illinois finance entity if the certification is not made. Provides that these certification requirements are severable. Makes changes in the severability provisions applicable to the amendatory Act.

SB 1380

- Approved August 28, 2007.
- Amends the Illinois Municipal Retirement Fund (IMRF) and Chicago Municipal Articles of the Illinois Pension Code. Allows a sheriff's law enforcement employee under the IMRF Article to transfer service credit under the Chicago Municipal Article to the IMRF.

2008 Session

- No Changes.

2009 Session

SB 2520

- Approved February 17, 2009.
- Provides that, before any action is taken by the Board on an application for a duty disability benefit or a widow's compensation or supplemental benefit, the employee or widow shall file a claim with the employer to establish that the disability or death occurred while the employee was acting within the scope of and in the course of his or her duties. Provides an offset of disability benefits for any amounts provided to the employee or surviving spouse as temporary total disability payments, permanent disability payments, a lump sum settlement award, or other payment under the Workers' Compensation Act or the Workers' Occupational Diseases Act. Makes other changes concerning disability benefits.

2009 Session (continued)

HB 2557

- Approved August 25, 2009.
- Provides that it is the public policy of the State to encourage pension funds to promote the economy of Illinois through the use of economic opportunity investments within the bounds of financial and fiduciary prudence. Provides that the pension funds submit a report to the Governor and General Assembly by September 1 of each year identifying the economic opportunity investments made by the Fund, the primary location of the business or project, the percentage of the Fund's assets in economic opportunity investments, and the actions the Fund has taken to increase the use of economic opportunity investments.
- Requires the Fund to instruct the investment advisors to utilize investment strategies designed to ensure that all securities transactions are executed in such a manner that the total explicit and implicit costs and the total proceeds in every transaction are the most favorable under the circumstances.

SB 364

- Approved April 3, 2009.
- Requires Board members to file a verified written statement of economic interest annually with the office of the Clerk of Cook County.
- Requires the Board to adopt a policy that sets quantifiable utilization goals for the management of assets in specific asset classes for emerging investment managers. Goals shall be separated by minority ownership, female ownership, and person with a disability ownership.
- Requires that if at least one emerging firm(s) meet criteria of search process, at least one shall be invited to present to the Board for final consideration.
- Requires the Board to adopt a policy that sets forth goals for increasing the racial, ethnic and gender diversity of its fiduciaries, including its consultants and senior staff.
- Requires the Board to adopt a policy that sets forth goals for utilization of WMDBE firms for all contracts and services, based on the percentage of total dollar amount of all contracts let.
- Requires the Board to adopt a policy that sets forth goals for increasing the utilization of minority broker-dealers.
- Requires an annual report to the Governor and General Assembly on the utilization of "emerging firms" as defined by Article 1 of the Pension Code.
- Requires the Board to award all contracts for investment services using a competitive process that is substantially similar to the process required for the procurement of professional services under Article 35 of the Illinois Procurement Code. Requires the Board to adopt a procurement policy which will be posted on the Fund's website and filed with the Illinois Procurement Policy Board.
- Provides that a person may not act as a consultant or investment adviser unless that person is registered as an investment adviser or bank under the federal Investment Advisers Act of 1940.
- Requires investment contracts between the Retirement Board and investment service providers to include certain required information.
- Provides consultant contracts cannot exceed five years in duration; however, incumbent consultant may compete for new contract.
- Requires investment consultants and advisers to disclose all direct and indirect fees, commissions, penalties, and other compensation paid by or on behalf of the investment consultant or adviser in connection with the services provided.
- Requires that a description of every contract let for investment services be posted on the website, including name of entity awarded the contract, amount of contract, total fees paid, and disclosure describing the factors that contributed to the selection.

2009 Session (continued)

SB 364

- Requires the Fund to maintain a website that shall include standard investment reporting, a copy of relevant Board policies, a listing of investment consultants and managers, a notification of any requests for investment services, and the names and e-mail addresses of Board members, Fund directors, and senior staff.
- Requires Board members to attend at least eight hours of ethics training per year and requires each Board to annually certify its member's compliance and submit an annual certification to the Division of Insurance of the Department of Financial and Professional Regulation.
- Prohibits any Fund trustee or employee or their spouses or immediate family living with them to intentionally solicit or accept any gift from any prohibited source as prescribed in Article 10 of the State Officials and Employees Ethics Act, including educational materials and missions and travel expenses for discussing Fund business.
- Provides that any person who knowingly makes any false statement or falsifies or permits falsifying any record of the pension fund in an attempt to defraud is guilty of a Class 3 felony.
- Provides that no person or entity shall retain a person or entity to influence the outcome of an investment decision or the procurement of investment advice to a pension fund for compensation, contingent upon the decision of the Board.
- Requires approval for travel or education mission expense of a Trustee by a majority of the Board prior to mission.

SB 1440

- Approved August 18, 2009.
- Provides that the Fund may, and to the extent required by federal law shall, allow an employee to roll over a refund, lump-sum benefit, or other non-periodic distribution (including the non-taxable portion) directly to any entity that is designated in writing by the person, is qualified under federal law to accept the distribution, and has agreed to accept the distribution.

SB 1705

- Approved August 25, 2009.
- Provides the Municipal fund will send city contributions to the Fire fund for a fireman who was employed by the Chicago Fire Department and participated in the Municipal fund, terminated that service, and received a refund, if the employee establishes the service under the Fire fund.

2010 Session

Public Act 96-0889 (SB 1946)

- Approved April 14, 2010.
- Establishes a new tier of benefits for participants that first become members on or after the effective date of January 1, 2011.
  - Final average compensation is based on the average of the highest consecutive eight years within the last ten years of service.
  - Establishes a cap on final average salary of $106,800, as automatically increased by the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
  - Increases eligibility for a retirement annuity:
    - Age 67 with 10 years of service for an unreduced benefit.
    - Age 62 with 10 years of service for a reduced benefit. Reduction is one-half percent for each full month that retirement precedes age 67.
  - Changes provisions for automatic increases in annuity:
    - Increases begin in the year following the later of the first anniversary of the annuity start date and attainment of age 67.
    - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
    - Increases are based on the amount of the originally granted benefit (not compounded).
  - Changes benefits provided to surviving spouses:
    - Surviving spouse annuity is equal to 66 2/3 percent of the participant's earned retirement annuity at the date of death.
    - Provides an automatic increase in annuity:
      - Increases begin on January 1 in the year following the commencement of the survivor's annuity if the deceased member died while receiving a retirement annuity and January 1 following the first anniversary of commencement otherwise.
      - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months.
      - Increases are based on the amount of the originally granted benefit (not compounded).
  - Establishes that members that are receiving a retirement annuity and accept a full-time position under the same Article or another Article established under the Illinois Compiled Statutes would have their benefits suspended during employment. Their benefits would be recalculated, if applicable, upon termination of employment.

2010 Session (continued)

Public Act 96-1490 (SB 550)

- Approved December 30, 2010.
- Amends certain provisions established in SB1946 that apply to participants that first become members on or after January 1, 2011:
  - Establishes the period for calculating the annual unadjusted percentage increase in the Consumer Price Index-U as the 12-month period ending with September for purposes of capping salary and calculating the automatic increase in annuity percentage.
  - Establishes that the salary cap of $106,800 applies for all purposes under the Code, including the calculation of benefits and employee contributions.
  - Establishes that the survivor's annuity is calculated with no reduction due to age.
  - Establishes that members who withdraw before age 62, or with less than 10 years of service, regardless of age, are entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.
  - Establishes that increases in annuity for employee annuitants commence on January 1.

2011 Session

Public Act 97-0530 (SB 1672)

- Approved August 23, 2011.
- Requires all pension funds and retirement systems subject to the Code to comply with the federal Heroes Earnings Assistance and Relief Tax Act of 2008.

Public Act 97-0609 (SB 1831)

- Approved August 26, 2011.
- Applies to those members hired on or after January 1, 2012.
  - Provides that if a new hire is receiving a retirement annuity or pension and accepts a contractual position to provide services to a governmental entity from which he or she has retired, then that person's annuity or pension will be suspended during that contractual service.
  - Makes it a Class A misdemeanor for a pensioner who is seeking contractual employment to fail to notify certain persons about his or her retirement status before accepting an employment contract.

2011 Session (continued)

Public Act 97-0504 (HB 1670)

- Approved August 23, 2011.
- Amends the Open Meetings Act.
    - Requires each elected or appointed member of a public body subject to this Act who is such a member on the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
    - Requires those members to complete the training not later than one year after the effective date of the amendatory Act.
    - Requires each elected or appointed member of a public body subject to the Act who becomes such a member after the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
  - Requires those members to complete the training not later than the 90th day after the date the member either (i) takes the oath of office, if the member is required to take an oath of office to assume the person's duties as a member of the public body or (ii) otherwise assumes responsibilities as a member of the public body, if the member is not required to take an oath of office to assume the person's duties as a member of the governmental body.
  - Requires each member who successfully completes the curriculum to file a copy of the certificate of completion with the public body.
  - Provides that the failure of one or more members of a public body to complete the training required by this Section does not affect the validity of an action taken by the public body.
  - Provides that an elected or appointed member of a public body subject to this Act who has successfully completed the required training and filed a copy of the certificate of completion with the public body is not required to subsequently complete that training.

2012 Session

Public Act 97-0651 (HB 3813)

- Approved and effective January 5, 2012.
- Requires any reasonable suspicion of fraud against the Fund to be reported to the State's Attorney for investigation.
- Changes provisions for Union Leaves of Absence as follows:
  - Service credit can be accrued only for union leaves that begin before the effective date of this amendatory Act.
  - "Any pension plan established by the local labor organization" is defined as any pension plan in which the member can receive credit as a result of his membership in the local labor organization. This is a declaration of existing law.
  - Salary used for calculation of final average salary must be a salary paid by an employer, not by the union. This is a declaration of existing law.
  - Minimum annuity section 11-134 is changed to add to the final average salary the product of (1) final average salary, (2) the average percentage increase in the CPI during the leave of absence, and (3) the number of years of leave of absence. This does not seem to deal with a situation where the employee may have been on leave within the last 10 years but is last with Municipal. It also only amends paragraph (f-1) which applies to those members who go on annuity on or after the attainment of age 60.
  - Does not change that contributions are based on current salary with the union.

2012 Session (continued)

Public Act 97-0967 (HB 3969)

- Approved and effective August 16, 2012.
- Applies if the member retired after the effective date with less than 2 years of service in a participating system under the Reciprocal Act after General Assembly service.
- Requires that if the final average salary in a participating system is used to calculate the annuity, the employer must pay the General Assembly Retirement System for any increased cost of the General Assembly annuity that is attributable to the higher salary under the participating system.

2013 Session

Public Act 98-0043 (HB 1584)

- Approved and effective June 28, 2013
- Changes the duration of health insurance supplement payments to eligible employee annuitants to "Beginning July 1,2008, and until such time as the city no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first.

Public Act 98-0433 (HB 2620)

- Approved and effective August 16, 2013
- Allows for an additional exception to the RFP process for obtaining investment services for "contracts for follow-on funds with the same fund sponsor through close-end funds"

2014 Session

Public Act 98-0641 (SB 1922)

- Approved and effective June 9, 2014
- Implements a funding policy designed to achieve 90% funded ratio by 2055
- Provides for incrementally increased employer contribution multiple, which eventually converts to actuarial-based funding.
- Caps the current pension levy at the full required city contribution amount.
- Creates payment obligation to the fund; provides enforcement.
- Provides for incrementally increased employee contributions.
- Tier 1: Ties annual increase in retirement annuity to inflation, subject to 3% cap, delays initial annual increase by one year, and eliminates annual increases in 2017, 2019 and 2025 for most annuitants.
- Tier 2: Reduces minimum retirement age by 2 years, delays the initial annual increase by one year for some retirees, and eliminates the annual increases in 2025.

Public Act 98-1022 (SB 452)

- Approved and effective August 22, 2014
- Requires investment managers and consultants entering into a contract to disclose information on use of vendors owned by minorities, females, and persons with disabilities.
- Requires minority consideration to be "within the bounds of financial and fiduciary prudence."
- Defines "minority investment managers" and requires funds to adopt a policy to increase goals for utilization. Requires annual review.
- Declares it is the public policy of the State to encourage use of minority investment managers.

APPENDIX A

2015 Session

Public Act 99-0462 (SB 1334)

- Approved August 25, 2015
- Sets aspirational goals that, beginning January 1, 2016, at least 20% of the total funds under management be managed by emerging investment managers and that at least 20% of the investment advisors be minorities, females, and persons with disabilities.
- Sets the aspirational goal that, beginning January 1, 2016, at least 20% of contracts for "information technology services", "accounting services", "insurance brokers", "architectural and engineering services", and "legal services" be awarded to businesses owned by minorities, females, and person with disabilities.

Jones et al. v. Municipal Employees' Annuity and Benefit Fund of Chicago, et al.
Johnson et al. v. Municipal Employees' Annuity and Benefit Fund of Chicago, et al.

- Public Act 98-0641 was ruled unconstitutional by the circuit court on July 24, 2015. On March 24, 2016, the Illinois Supreme Court affirmed the circuit court's decision.
- Restores full automatic annual increase, the date of initial increase and eliminates increase holidays
- For Tier 2, changes retirement age for unreduced benefits back to age 67 and for reduced benefits to age 62
- Eliminates new funding policy

2016 Session

Public Act 99-0683 (HB 6030)

- Approved July 29, 2016
- Requires every pension fund or retirement system under the Code to develop and implement, by no later than June 30, 2017, a process to identify annuitants who are deceased. The process shall require the pension fund or retirement system to check for any deceased annuitants at least once per month and shall include the use of commonly accepted methods to identify persons who are deceased, which include but are not limited to, the use of a third party entity that specializes in the identification of deceased persons, the use of data provided by the Social Security Administration, the use of data provided by the Department of Public Health's Office of Vital Records, or the use of any other method that is commonly used by other states to identify deceased persons.

End of Report

Left Blank Intentionally