Municipal Employees' Annuity & Benefit Fund of Chicago

Financial Statements

December 31, 2019

CALIBRE
CPA GROUP

Municipal Employees' Annuity & Benefit Fund of Chicago (A Component Unit of the City of Chicago)

Financial Statements with Supplementary Information

Years Ended December 31, 2019 and 2018

Contents

CALIBRE
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Report of Independent Auditors

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

We have audited the statement 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, 2019, and the related statement of changes in fiduciary net position for the year 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.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit 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 auditors' 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 auditors consider 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, 2019, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Prior Period Financial Statements

The financial statements of Municipal Employees' Annuity & Benefit Fund of Chicago as of December 31, 2018 were audited by other auditors whose report dated May 22, 2019, expressed an unmodified opinion on these statements.

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 4 through 12 and pages 45 through 50 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 audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The 2019 schedules of administrative 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. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, such information is fairly stated in all material respects in relation to the basic financial statements as a whole. The 2018 schedules of administrative expenses, investment management compensation, and professional and consulting costs were subject to auditing procedures applied in the 2018 audit of the basic financial statements by other auditors whose report on such information state that it was fairly stated in all material respects in relation to the 2018 financial statements as a whole.

Calibre CPA Group, PLLC

Chicago, Illinois
June 9, 2020

Municipal Employees' Annuity & Benefit Fund of Chicago

Management's Discussion and Analysis (Unaudited)

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, 2019 and 2018. 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, 2019. Information for fiscal years 2018 and 2017 is presented for comparative purposes.

Financial Highlights

- The Plan's fiduciary net position increased by $166.4 million to $4,080.6 million as of December 31, 2019, compared to a decrease of $639.8 million, from $4,554.0 million to $3,914.2 as of December 31, 2018.

- The Plan has continued to liquidate portfolio assets at an alarming rate to supplement the disbursement of benefit payments. During fiscal year 2019, approximately $471.1 million in portfolio assets were liquidated compared to $523.5 million in fiscal year 2018 and $606.4 million in fiscal year 2017.

- MEABF's total investment portfolio generated a positive return of 16.6 percent in 2019 on a net-of-fees basis. The net returns in 2018 and 2017 were negative 5.7 percent and positive 15.1 percent, respectively. The total portfolio return in 2019 was above the 7.0 percent actuarial investment return assumptions.

- On a fair value basis, this year's money weighted investment rate of return net of investment expense, was 16.4 percent, compared with the last year's return of negative 5.2 percent.

- Total additions as reported in the statements of changes in fiduciary net position increased by $845.5 million or 298.8 percent to $1,128.5 million in 2019 from $283.0 million in 2018.

- Total deductions as reported in the statements of changes in fiduciary net position increased by $39.3 million or 4.3 percent to $962.1 million in 2019 from $922.8 million in 2018.

- Annuity benefits paid to retirees and beneficiaries increased by $36.0 million or 4.1 percent to $914.7 million for fiscal year 2019, compared to an increase of $36.1 million or 4.3 percent to $878.7 million in fiscal year 2018 from $842.6 million in fiscal year 2017.

- The December 31, 2019 financial actuarial valuation calculated a total pension liability of $17,260.3 million and the net pension liability of $13,179.7 million.

- As of the December 31, 2019, the most recent funding actuarial valuation, the Plan's unfunded actuarial accrued liability increased to $13,283.4 million from $12,612.9 million from the prior year. As of the December 31, 2019, the most recent funding actuarial valuation, the Plan's funded ratio was 23.2 percent compared with a funded ratio of 24.9 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.

1. 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.*

2. 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.

3. 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, the annual money weighted rate of return on pension plan investments and net OPEB liability.

4. 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, 2019, 2018 and 2017)

	2019	2018	2017
ASSETS			
Cash, receivables and other assets	$ 467.5	$ 380.4	$ 303.3
Investments, at fair value	3,631.0	3,559.2	4,296.1
Invested securities lending collateral	144.9	121.9	243.6
Total assets	4,243.4	4,061.5	4,843.0
LIABILITIES			
Accrued expenses and other liabilities	17.9	25.4	45.4
Securities lending collateral	144.9	121.9	243.6
Total liabilities	162.8	147.3	289.0
FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS	$ 4,080.6	$ 3,914.2	$ 4,554.0

Fiduciary net position restricted for pension benefits increased by $166.4 million during fiscal year 2019 to $4,080.6 million from $3,914.2 million in 2018. Invested assets at fair value increased by $71.8 million in 2019 to $3,631.0 from $3,559.2 million in 2018. The gain in assets would have been significantly higher if portfolio assets were not liquidated to supplement the disbursement of benefit payments during the year. During 2019, approximately $471.1 million in portfolio assets were liquidated compared to $523.5 million during 2018 and $606.4 million during 2017.

Summary of Investments (in millions)
(As of December 31, 2019, 2018 and 2017)

	2019	2018	2017
Fixed income	$ 840.7	$ 899.5	$ 986.5
Domestic equity	961.0	880.9	1,208.0
International equity	751.4	682.1	881.7
Hedged equity	404.2	394.4	418.7
Real estate	366.0	408.5	431.4
Private equity	141.2	165.2	200.8
Infrastructure	16.8	-	-
Short-term investments	149.7	128.6	169.0
	$ 3,631.0	$ 3,559.2	$ 4,296.1

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 2019, the Plan's total investment portfolio generated a positive 16.6 percent return net-of fees, compared to a positive 17.2 percent of the policy benchmark. 2019 returns were above the negative 5.7 percent return net-of-fees generated in 2018. Hedge fund and international equity performance was above its benchmark, while domestic equity and real estate all trailed its respective benchmarks for the year. Fixed income was on par with its benchmark. Per asset class, domestic equity generated 28.8 percent net-of-fees compared to 31.0 percent for Wilshire 5000 Total Market Index. International equity generated 23.4 percent return net-of-fees compared to 21.5 percent for the MSCI ACWI ex US. Hedged equity generated 13.8 percent net-of- fees compared to 10.7 percent of HFRX Equity Hedge Index. Fixed income generated 8.7 percent return net-of-fees compared to the Barclays Aggregate Bond Index of 8.7 percent. Lastly, real assets including real estate and infrastructure generated a 4.0 percent return net-of-fees compared to 6.4 percent for the LIBOR + 4 percent benchmark.

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 required to pay by law. In total, MEABF had to liquidate approximately $471.1 million of investments to meet the Plan's cash flow needs for 2019. Liquidity came mainly from liquid assets; domestic equity, international equity and fixed income.

Rebalancing of assets within the overall portfolio. In 2019, MEABF added 5% global equity asset class to the target asset allocation. The Plan reduced its international equity allocation from 22% to 17%. 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)
(As of December 31, 2019, 2018 and 2017)

	2019	2018	2017
ADDITIONS			
Employer contributions	$ 421.0	$ 349.6	$ 261.7
Member contributions	146.6	138.4	134.8
Total contributions	567.6	488.0	396.5
Net investment income (loss)	560.3	(206.1)	609.0
Net security lending income (loss)	0.6	1.1	1.5
Other additions (OBEP termination)	-	-	5.4
Total additions	1,128.5	283.0	1,012.4
DEDUCTIONS			
Annuity benefits	914.7	878.7	842.6
Disability benefits	10.3	10.4	11.7
Healthcare subsidy	2.7	-	-
Refunds of contributions	27.7	27.1	33.8
Administrative expense	6.7	6.6	6.5
Total deductions	962.1	922.8	894.6
NET CHANGE	166.4	(639.8)	117.8
FIDUCIARY NET POSITION RESTRICTED FOR PENSIONS			
Beginning of year	3,914.2	4,554.0	4,436.2
End of year	$ 4,080.6	$ 3,914.2	$ 4,554.0

Additions
Total additions as reported in the Statements of Changes in Fiduciary Net Position increased by $845.5 million or 298.8 percent in 2019 to $1,128.5 million from $283.0 million in 2018.

Additions from employer contributions increased by $71.4 million to $421.0 million in 2019 from $349.6 million in 2018. The net increase is mainly due to the amendment of Public Act 100-0023 (new funding structure) that was put into law during 2017 that requires the employer to remit $421.0 million in 2020 for 2019 contributions and $344.0 million in 2019 for 2018 contributions. For financial reporting purposes both the net contribution receivable and net employer contributions reflects the required amount and adjustments. Additions from member contributions increased by $8.2 million to $146.6 million in 2019, from $138.4 million in 2018. The increase is mainly due to a $4.1 million increase in contributions from City of Chicago members and a $3.4 million increase in contributions from Board of Education members. Detail regarding active member contribution requirement can be found in note 7 Pension and Other Postemployment Benefit.

Additions (continued)

Additions from investment income increased by $766.4 million in 2019 to $560.3 million in 2019 from negative $206.1 million in 2018. The increase was mainly due to the investment portfolio generating higher returns of 16.6 percent in 2019 compared to a negative 5.7 percent in 2018. Other contributing factors were:

- Increase in net appreciation on investments by $775.1 million to $484.2 million in 2019 compared to negative $290.9 million in 2018.

- Decrease in income from investments by $10.6 million to $91.5 million in 2019 compared to $102.1 million in 2018.

- Decrease in direct investment fees by $1.9 million to $15.4 million in 2019 from $17.3 million in 2018.

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 $0.6 million in 2019 compared to $1.1 million in 2018.

Deductions

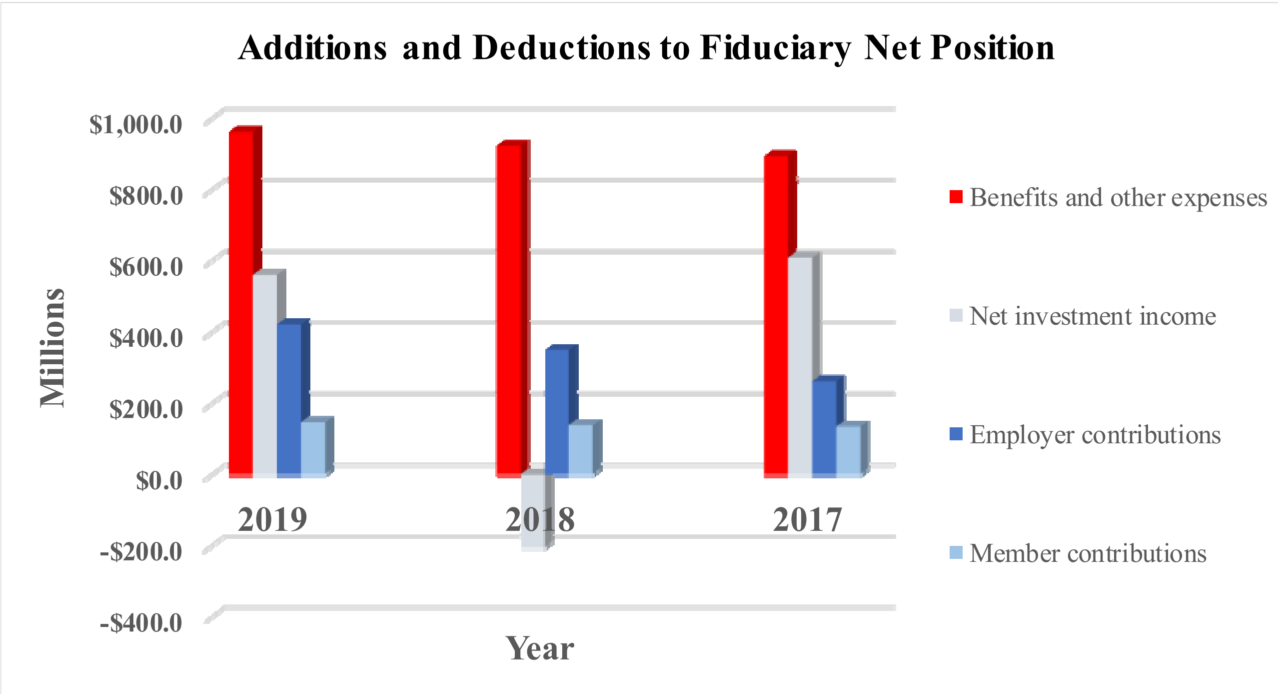
MEABF's assets are primarily used to pay annuity benefits, disability benefits, refunds of contributions and the costs of administering the Plan. Deductions from fiduciary net position increased by $39.3 million or 4.3 percent to $962.1 million in 2019 from $922.8 million in 2018. Benefits paid out exceed member and employer contributions by $468.1 million, $516.8 million, and $599.9 million in fiscal years 2019, 2018 and 2017, respectively. In order to supplement benefit payments, the Plan liquidated portfolio assets by approximately $471.1 million, $523.5 million, and $606.4 million in fiscal years 2019, 2018 and 2017, respectively.

Annuity benefits paid increased by $36.0 million or 4.1 percent to $914.7 million in 2019 from $878.7 million in 2018. The increase is primarily due to the compounded annual 3.0 percent adjustment for eligible annuitants. The average annual employee annuity benefit increased to $40,819 in 2019 from $39,564 in 2018. The number of new employee annuitants decreased in 2019 to 1,280 from 1,351 in 2018. There were 25,544 retirees and beneficiaries at year-end December 31, 2019 compared to 25,577 at the beginning of the year.

Disability benefits paid decreased by $0.1 million or 1.0 percent to $10.3 million in 2019 from $10.4 million paid in 2018. This net decrease is attributable to a decrease in the number of participants receiving disability. There were 298 participants on disability at year-end December 31, 2019 compared to 322 at the beginning of the year.

Refunds of contributions increased slightly by $0.6 million to $27.7 million in 2019 from $27.1 million in 2018. The increase is mainly due to a slight increase of other refunds of contributions distributed to employee not eligible for annuities. Refund of spousal contributions remained constant at $8.9 million for both 2019 and 2018.

Deductions (continued)
Administrative expenses expense increased slightly by $0.1 million to $6.7 million in 2019 from $6.6 million in 2018. Detail relating to administrative expenses can be found in the Schedule of Administrative located under Supporting Schedules.



Total Pension Liability (TPL) 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).

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

At December 31, 2019, the components of the net pension liability of the employer were as follows (in millions):

Total pension liability	$ 17,260.3
Plan fiduciary net position	4,080.6
Employer's net pension liability	$ 13,179.7
Plan fiduciary net position as a percentage of the total pension liability	23.64%

Total OPEB Liability and Net OPEB Liability

The total OPEB liability determines the total obligation for the Plan's postemployment healthcare 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 determines the assets available for future postemployment healthcare benefit payment stream. Analogous to the unfunded actuarial accrued liability, Net OPEB Liability is the Total OPEB Liability, net of the Plan's Fiduciary Net Position.

Total OPEB liability	$ 35.9
Plan fiduciary net position	-
Employer's net OPEB liability	$ 35.9
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%

Funding Status

The Plan, since inception, has been funded by utilizing a static multiple of employee contributions. This structure has led to significant underfunding of the Plan which continues to reduce assets as benefits paid far exceed contributions received.

Over the last few years, attempts to change the funding mechanism for the Plan to ensure the long-term solvency have been declared unconstitutional due to changes made to the existing benefit structure. On July 6, 2017, a new funding structure was included in Public Act 100-0023 to increase employer contributions from the City of Chicago.

Public Act 100-0023 requires contributions from the City of Chicago to be equal to $266 million in payment year 2018; $344 million in payment year 2019; $421 million in payment year 2020; $499 million in payment year 2021, and $576 million in payment year 2022. For payment year 2023 through 2058, the City of Chicago is required to make contributions on an actuarial calculated funding plan that is projected to bring the Fund to 90% funding by 2058.

Request for Information

Additional information is available on our website www.meabf.org or by request. Please direct your request to:

Mr. Dennis White
Executive Director
Municipal Employees' Annuity and Benefit Fund of Chicago
321 N. Clark Street, Suite 700
Chicago, IL 60654

Municipal Employees' Annuity & Benefit Fund of Chicago
(A Component Unit of the City of Chicago)

Statements of Fiduciary Net Position

December 31, 2019 and 2018

	2019	2018
Assets		
Cash and cash equivalents	$ 512,365	$ 499,871
Receivables		
Contributions from the City of Chicago, net of allowance for loss of $4,911,453 in 2019 and $5,809,000 in 2018	425,853,730	348,621,245
Member contributions	9,230,041	8,743,313
Interest and dividends	11,247,926	12,702,046
Due from broker	19,307,297	8,968,833
Miscellaneous	858,521	737,379
Total receivables	466,497,515	379,772,816
Investments, at fair value		
Fixed income	840,676,660	899,456,519
Hedged equity	404,199,085	394,406,436
Domestic and international equity	1,712,450,693	1,562,977,877
Real estate	365,980,218	408,489,873
Private equity	141,264,793	165,224,281
Infrastructure	16,763,717	-
Short-term investments	149,699,151	128,644,859
Total investments	3,631,034,317	3,559,199,845
Invested securities lending collateral	144,948,932	121,892,297
Property and equipment, net of accumulated depreciation and amortization of $25,193 in 2019 and $15,887 in 2018	420,039	150,143
Total assets	4,243,413,168	4,061,514,972
Liabilities		
Due to broker	10,820,708	19,296,299
Accounts payable and accrued expenses	7,001,038	6,145,900
Securities lending collateral	144,948,932	121,892,297
Total liabilities	162,770,678	147,334,496
Net position restricted for pension benefits	$ 4,080,642,490	$ 3,914,180,476

See accompanying notes to financial statements.

Municipal Employees' Annuity & Benefit Fund of Chicago
(A Component Unit of the City of Chicago)

Statements of Changes in Fiduciary Net Position

Years Ended December 31, 2019 and 2018

	2019	2018
Additions		
Contributions from the City of Chicago	$ 421,000,000	$ 349,574,257
Member contributions	146,645,216	138,399,727
Total contributions	567,645,216	487,973,984
Investment income		
Net appreciation (depreciation) in fair value of investments	484,172,072	(290,889,323)
Interest	35,239,302	33,821,594
Dividends	43,871,087	49,355,634
Income from real estate investments	12,381,844	18,951,056
	575,664,305	(188,761,039)
Less investment expenses	(15,362,181)	(17,307,390)
Net income (loss) from investing activities	560,302,124	(206,068,429)
Security lending activities		
Securities lending income	3,288,770	3,907,931
Borrower rebates	(2,547,201)	(2,719,103)
Bank fees	(103,691)	(95,101)
Net income from securities lending activities	637,878	1,093,727
Total additions	1,128,585,218	282,999,282
Deductions		
Benefits		
Annuity payments	914,653,034	878,738,782
Disability benefits	10,323,869	10,415,725
Post-employment healthcare subsidies	2,731,425	-
Total benefits	927,708,328	889,154,507
Refund of member contributions	27,674,608	27,043,978
Administrative expenses	6,740,268	6,638,608
Total deductions	962,123,204	922,837,093
Net change	166,462,014	(639,837,811)
Net position restricted for pension benefits		
Beginning of year	3,914,180,476	4,554,018,287
End of year	$ 4,080,642,490	$ 3,914,180,476

See accompanying notes to financial statements.

Note 1. Summary of Significant Accounting Policies

Reporting Entity - As defined by U.S. 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 U.S. 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 statements of fiduciary net position.

Note 1. Summary of Significant Accounting Policies (continued)

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.

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 infrastructure 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 (Board). 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 Internal Revenue Code (IRC) section 401(a).

Recently Issued Accounting Pronouncements - 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, 2020.

GASB Statement No. 87, *Leases* was established to improve accounting and financial reporting for leases by governments. This Statement increases the usefulness of governmental financial statements by requiring recognition of certain lease assets and liabilities for leases that were previously classified as operating leases. Statement No. 87 establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Statement No. 87 is effective for the Plan's fiscal year ending December 31, 2022.

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

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.

The following table represents the Board's adopted asset allocation policy as of December 31, 2019 and 2018:

Asset Class	2019 Target	2018 Target
Fixed income	25%	25%
Global Equity	5%	-
Domestic equity	26%	26%
International equity	17%	22%
Hedge funds	10%	10%
Private equity	5%	5%
Real estate	10%	10%
Infrastructure	2%	2%
	100%	100%

Money-Weighted Rate of Return - For the years ended December 31, 2019 and 2018, the annual money-weighted rate of return on Plan investments, net of investment expense, was positive 16.4 percent and negative 5.2 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, 2019 and 2018, the Plan's book balances of cash are $512,365 and $499,871, respectively. The actual bank balances at December 31, 2019 and 2018 are $511,965 and $499,471, 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, 2019 and 2018, $6,864,887 and $6,341,834, respectively, of the Plan's deposits with its custodian Northern Trust were exposed to custodial credit risk.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

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 position as of December 31, 2019 and 2018.

The Plan's investments are reported at fair value in the accompanying statements of fiduciary net position. The methods used to measure fair value may produce an amount that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the 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.

Accounting standards provide the framework for measuring fair value which 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 (Level 1) and the lowest priority to unobservable inputs (Level 3). 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 other significant observable inputs including:

- 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; and
- 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 term of the asset or liability.

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

The asset's 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 are descriptions of the valuation methodologies used for investments measured at fair value. There have been no changes in the methodologies used at December 31, 2019 and 2018.

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.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

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 and other assets 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, 2019.

	December 31, 2019			
Description	Total	Quoted Market Prices for Asset (Level 1	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments measured at fair value				
Equity securities				
Common stock	$ 1,705,379,787	$ 1,703,396,599	$ 1,888,080	$ 95,108
Preferred stock	3,789,101	3,788,307	-	794
Stapled securities	2,391,960	2,391,960	-	-
Rights/warrants	125,034	38,308	211	86,515
Funds - equities ETF	690,757	690,757	-	-
Convertible Equity	803	803	-	-
Unit Trust Equity	73,251	73,251	-	-
Total equity securities	1,712,450,693	1,710,379,985	1,888,291	182,417
Debt securities				
Government bonds	120,080,524	-	120,080,524	-
Government agencies	26,174,432	-	26,174,432	-
Municipal/provincial bonds	24,429,023	-	24,429,023	-
Corporate bonds	331,006,740	-	329,241,381	1,765,359
Corporate convertible bonds	171,952	-	171,952	-
Bank loans	145,554,601	-	145,554,601	-
Government mortgage-backed securities	83,354,078	375,000	82,979,078	-
Government-issued commercial mortgage-backed	8,488,765	-	8,488,765	-
Commercial mortgage-backed	7,610,102	-	7,610,102	-
Asset backed securities	21,547,018	-	21,547,018	-
Non-government backed CMO's	6,635,113	-	6,635,113	-
Index linked government bonds	4,570,761	-	4,570,761	-
Total debt securities	779,623,109	375,000	777,482,750	1,765,359
Short-term investment securities				
Funds - short-term investment securities	149,699,151	11,667	149,662,276	25,208
Total investments measured by fair value levels	2,641,772,953	$ 1,710,766,652	$ 929,033,317	$ 1,972,984
Investments measured at NAV				
Commingled fixed income funds	61,053,551			
Commingled Infrastructure	16,763,717			
Hedge funds	404,199,085			
Private equity partnerships	141,264,793			
Real estate	365,980,218			
Total investments measured at NAV	989,261,364			
Total investments measured at fair value	$ 3,631,034,317			
Collateral from securities lending	$ 144,948,932		$ 144,948,932	

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, 2018.

	December 31, 2018			
Description	Total	Quoted Market Prices for Asset (Level 1	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments measured at fair value				
Equity securities				
Common stock	$ 1,554,678,266	$ 1,554,159,318	$ 191,409	$ 327,539
Preferred stock	5,374,112	5,373,349	-	763
Stapled securities	2,547,320	2,547,320	-	-
Rights/warrants	49,533	48,497	47	989
Funds - equities ETF	328,646	328,646	-	-
Total equity securities	1,562,977,877	1,562,457,130	191,456	329,291
Debt securities				
Government bonds	112,917,707	-	112,917,707	-
Government agencies	42,706,668	-	42,706,668	-
Municipal/provincial bonds	19,155,706	-	19,155,706	-
Corporate bonds	360,767,963	-	360,767,585	378
Corporate convertible bonds	1,034,968	-	1,034,968	-
Bank loans	171,816,776	-	171,816,776	-
Government mortgage-backed securities	86,651,626	-	86,651,626	-
Government-issued commercial mortgage-backed	5,369,146	-	5,369,146	-
Commercial mortgage-backed	5,591,577	-	5,591,577	-
Asset backed securities	25,240,353	-	25,240,353	-
Non-government backed CMO's	4,703,633	-	4,703,633	-
Index linked government bonds	7,495,321	-	7,495,321	-
Total debt securities	843,451,444	-	843,451,066	378
Short-term investment securities				
Funds - short-term investment securities	128,644,859	-	128,619,598	25,261
Total investments measured by fair value levels	2,535,074,180	$ 1,562,457,130	$ 972,262,120	$ 354,930
Investments measured at NAV				
Commingled fixed income funds	56,005,075			
Hedge funds	394,406,436			
Private equity partnerships	165,224,281			
Real estate	408,489,873			
Total investments measured at NAV	1,024,125,665			
Total investments measured at fair value	$ 3,559,199,845			
Collateral from securities lending	$ 121,892,297		$ 121,892,297	

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

Investments measured at NAV for fair value are not subject to level classification. The Plan's investments in certain entities that are measured at the NAV per share (or its equivalent) is presented on the following table.

2019	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled fixed income funds	$ 61,053,551	$ -	Quarterly	60 Days
Commingled infrastructure	16,763,717	59,571,000	Quaterly	45 Days
Hedge funds	404,199,085	-	Monthly, Quaterly	5, 7, 30, 90 or 91 Days
Private equity funds	141,264,793	22,168,639	Not Eligible	N/A
Real estate funds	365,980,218	286,388	Quarterly - Open-end, Not Eligible - Closed - end	10, 30 or 365 Days - Open-end
	$ 989,261,364	$ 82,026,027		

2018	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled fixed income funds	$ 56,005,075	$ -	Monthly	60 Days
Hedge funds	394,406,436	-	Monthly, Quaterly	5, 7 or 90 Days
Private equity funds	165,224,281	20,114,957	Not Eligible	N/A
Real estate funds	408,489,873	-	Quarterly - Open-end, Not Eligible - Closed - end	30 Days - Open-end
	$ 1,024,125,665	$ 20,114,957		

Commingled Fixed Income Funds - This type of investment consists of fixed income securities diversified in high yield, bank loans, and private debt securities.

Commingle Infrastructure - This type includes investment in open-end infrastructure fund. Investment in open-end funds have limited redemption availability as redemption opportunities are based on available liquidity.

Hedge Funds - This type of investment consists of multi-strategy and long/short equity hedge fund-of-funds.

Private Equity Funds - 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.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

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.

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, 2019 was as follows:

Currency	Equities *	Fixed Income	Short-term Investments	Total	Percentage
Australian dollar	$ 32,085,734	$ -	$ 396,354	$ 32,482,088	4.3%
Brazilian real	19,137,896	-	65,116	19,203,012	2.5%
British pound sterling	107,309,447	-	1,049,405	108,358,852	14.2%
Canadian dollar	24,768,886	-	995,106	25,763,992	3.4%
Chilean peso	273,731	-	95,938	369,669	0.0%
Colombian peso	1,000,492	-	80,154	1,080,646	0.1%
Czech koruna	907,657	-	9,555	917,212	0.1%
Danish krone	16,666,798	-	367,314	17,034,112	2.2%
Egyptian pound	72,733	-	9,744	82,477	0.0%
Euro	162,043,206	-	1,929,337	163,972,543	21.6%
HK offshore Chinese yuan renminbi	-	-	1,203	1,203	0.0%
Hong Kong dollar	64,228,422	-	175,714	64,404,136	8.5%
Hungarian forint	2,106,892	-	12,018	2,118,910	0.3%
Indian Rupee	24,020,976	114	111,998	24,133,088	3.2%
Indonesian rupiah	3,942,782	-	93,390	4,036,172	0.5%
Japanese yen	149,363,849	-	1,014,700	150,378,549	19.8%
Kenyan shilling	332,950	-	-	332,950	0.0%
Malaysian ringgit	746,791	-	92,315	839,106	0.1%
Mexican peso	3,199,646	-	90,318	3,289,964	0.4%
New Israeli shekel	5,053,711	-	57,726	5,111,437	0.7%
New Taiwan dollar	23,778,786	-	170,143	23,948,929	3.1%
New Zealand dollar	1,438,307	-	93,779	1,532,086	0.2%
Norwegian krone	6,414,353	-	111,721	6,526,074	0.9%
Philippine peso	1,667,071	-	41,022	1,708,093	0.2%
Polish zloty	2,131,129	-	18,880	2,150,009	0.3%
Qatari riyal	431,748	-	22,729	454,477	0.1%
Russian ruble	1,192,093	-	-	1,192,093	0.2%
Singapore dollar	5,755,315	-	148,250	5,903,565	0.8%
South African rand	4,752,968	-	101,346	4,854,314	0.6%
South Korean won	16,908,637	-	251,817	17,160,454	2.3%
Swedish krona	21,854,399	-	733,375	22,587,774	3.0%
Swiss franc	43,097,539	-	99,240	43,196,779	5.7%
Thai baht	3,012,458	-	30,908	3,043,366	0.4%
Turkish lira	486,726	-	18,363	505,089	0.1%
United Arab Emirates dirham	1,215,095	-	81,579	1,296,674	0.2%
Total held in foreign currency	$ 751,399,223	$ 114	$ 8,570,557	$ 759,969,894	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, 2018 was as follows:

Currency	Equities *	Fixed Income	Short-term Investments	Total	Percentage
Australian dollar	$ 28,154,272	$ -	$ 300,969	$ 28,455,241	4.1%
Brazilian real	17,918,912	-	(48,906)	17,870,006	2.6%
British pound sterling	96,185,633	-	1,783,605	97,969,238	14.2%
Canadian dollar	23,878,609	-	306,570	24,185,179	3.5%
Chilean peso	581,485	-	96,607	678,092	0.1%
Colombian peso	383,831	-	73,438	457,269	0.1%
Czech koruna	459,971	-	5,970	465,941	0.1%
Danish krone	12,661,459	-	536,787	13,198,246	1.9%
Egyptian pound	37,518	-	8,727	46,245	0.0%
Euro	140,903,108	-	709,979	141,613,087	20.5%
HK offshore Chinese yuan renminbi	-	-	1,220	1,220	0.1%
Hong Kong dollar	56,455,571	-	234,026	56,689,597	8.2%
Hungarian forint	2,202,553	-	8,503	2,211,056	0.3%
Indian Rupee	30,468,514	-	97,067	30,565,581	4.4%
Indonesian rupiah	5,772,804	-	92,063	5,864,867	0.9%
Japanese yen	132,816,960	-	974,454	133,791,414	19.4%
Kenyan shilling	301,025	-	-	301,025	0.1%
Malaysian ringgit	2,668,410	-	93,095	2,761,505	0.4%
Mexican peso	4,877,106	-	48,812	4,925,918	0.7%
New Israeli shekel	4,454,817	-	131,922	4,586,739	0.7%
New Taiwan dollar	14,080,400	-	235,067	14,315,467	2.1%
New Zealand dollar	1,635,667	-	60,255	1,695,922	0.2%
Norwegian krone	6,033,198	-	54,653	6,087,851	0.9%
Philippine peso	1,720,015	-	39,443	1,759,458	0.3%
Polish zloty	1,285,961	-	24,682	1,310,643	0.2%
Qatari riyal	406,394	-	9,910	416,304	0.1%
Russian ruble	1,083,871	-	-	1,083,871	0.2%
Singapore dollar	5,582,151	-	149,578	5,731,729	0.8%
South African rand	10,385,927	-	40,562	10,426,489	1.5%
South Korean won	15,252,038	-	148,241	15,400,279	2.2%
Swedish krona	19,225,082	-	84,278	19,309,360	2.8%
Swiss franc	35,204,837	-	970,930	36,175,767	5.2%
Thai baht	7,831,598	-	(77,916)	7,753,682	1.1%
Turkish lira	920,711	-	35,116	955,827	0.1%
United Arab Emirates dirham	249,224	-	10,449	259,673	0.1%
Total held in foreign currency	$ 682,079,632	$ -	$ 7,240,156	$ 689,319,788	100.0%

* Includes forward contracts, rights and warrants.

NOTE 3. DEPOSITS AND INVESTMENTS (CONTINUED)

Interest Rate Risk

As of December 31, 2019, the Plan had the following investments and maturities:

Investment Type	Total Fair Value	1 Year or Less	1 - 6 Years	6 - 10 Years	10 or More Years	Maturity not Determined
Asset backed	$ 21,547,018	$ -	$ 13,173,659	$ 1,238,664	$ 7,134,695	$ -
Bank loans	145,554,601	1,758,981	110,407,911	33,387,709	-	-
Commercial mortgage backed	7,610,102	-	-	993,236	6,616,866	-
Corporate bonds	331,006,740	7,455,451	202,728,938	109,487,520	11,334,831	-
Corporate convertible bonds	171,952	-	-	171,952	-	-
Government agencies	26,174,432	4,474,746	11,490,015	10,209,671	-	-
Government bonds	120,080,524	8,878,541	49,150,179	44,491,160	17,560,644	-
Government mortgage backed	83,354,078	25,295	824,542	7,437,442	75,066,799	-
Government-issued commercial mortgage-backed	8,488,765	-	6,315,591	1,776,671	396,503	-
Index linked government bonds	4,570,761	-	-	4,570,761	-	-
Municipal / provincial bonds	24,429,023	5,188,902	4,993,121	7,057,430	7,189,570	-
Non-government backed CMO's	6,635,113	-	-	246,580	6,388,533	-
Other fixed incomes	61,053,551	-	-	-	-	61,053,551
Total	$ 840,676,660	$ 27,781,916	$ 399,083,956	$ 221,068,796	$ 131,688,441	$ 61,053,551

As of December 31, 2018, the Plan had the following investments and maturities:

Investment Type	Total Fair Value	1 Year or Less	1 - 6 Years	6 - 10 Years	10 or More Years	Maturity not Determined
Asset backed	$ 25,240,353	$ -	$ 18,080,909	$ 1,936,126	$ 5,223,318	$ -
Bank loans	171,816,776	1,356,942	118,616,342	51,843,492	-	-
Commercial mortgage backed	5,591,577	-	-	1,031,333	4,560,244	-
Corporate bonds	360,767,963	539,766	237,003,175	101,817,691	21,407,331	-
Corporate convertible bonds	1,034,968	-	-	1,034,968	-	-
Government agencies	42,706,668	4,054,422	25,989,984	12,662,262	-	-
Government bonds	112,917,707	5,507,215	35,786,646	43,439,884	28,183,962	-
Government mortgage backed	86,651,626	19,134	1,165,168	5,685,860	79,781,464	-
Government-issued commercial mortgage-backed	5,369,146	-	5,369,146	-	-	-
Index linked government bonds	7,495,321	-	-	7,495,321	-	-
Municipal / provincial bonds	19,155,706	4,243,329	8,531,074	1,494,366	4,886,937	-
Non-government backed CMO’s	4,703,633	-	-	-	4,703,633	-
Other fixed incomes	56,005,075	-	-	-	-	56,005,075
Total	$ 899,456,519	$ 15,720,808	$ 450,542,444	$ 228,441,303	$ 148,746,889	$ 56,005,075

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, 2019:

S & P Credit Rating	Fair Value	Asset Backed Securities	Bank Loans	Commercial Mortgage Backed	Corporate Bonds	Corporate Convertible Bonds	Government Agencies	Government Bonds	Government Mortgage Backed	Government Issued Commercial Mortgage Backed	Index Linked Government Bonds	Municipal/ Provincial Bonds	Non-Government Backed CMO's	Other Fixed Income
U.S. Government	$ 208,362,543	$ 185,810	$ -	$ -	$ -	$ -	$ 596,683	$111,359,568	$ 83,354,078	$ 8,295,643	$ 4,570,761	$ -	$ -	$ -
AAA	17,613,860	9,445,445	-	847,082	1,276,971	-	-	-	-	-	-	6,044,362	-	-
AA	57,509,944	2,383,107	-	434,581	14,823,920	-	25,577,749	-	-	-	-	12,311,940	1,978,647	-
A	101,225,347	2,786,137	-	-	93,435,723	-	-	-	-	-	-	3,943,102	1,060,385	-
BBB	114,514,923	919,812	11,669,996	-	100,719,114	-	-	-	-	-	-	-	1,206,001	-
BB	115,307,391	284,570	47,533,571	-	67,205,347	-	-	-	-	-	-	-	283,903	-
B	98,786,689	-	56,554,749	-	41,938,603	-	-	-	-	-	-	-	293,337	-
CCC	15,623,778	566,752	9,750,997	-	5,306,029	-	-	-	-	-	-	-	-	-
CC	175,912	-	175,912	-	-	-	-	-	-	-	-	-	-	-
C	217,403	-	217,403	-	-	-	-	-	-	-	-	-	-	-
D	665,646	-	361,212	-	55,737	-	-	-	-	-	-	-	248,697	-
NR	110,673,224	4,975,385	19,290,761	6,328,439	6,245,296	171,952	-	8,720,956	-	193,122	-	2,129,619	1,564,143	61,053,551
Total	$ 840,676,660	$ 21,547,018	$145,554,601	$ 7,610,102	$331,006,740	$ 171,952	$ 26,174,432	$120,080,524	$ 83,354,078	$ 8,488,765	$ 4,570,761	$ 24,429,023	$ 6,635,113	$ 61,053,551

The following table reflects credit ratings of fixed income securities held by the Plan as of December 31, 2018:

S & P Credit Rating	Fair Value	Asset Backed Securities	Bank Loans	Commercial Mortgage Backed	Corporate Bonds	Corporate Convertible Bonds	Government Agencies	Government Bonds	Government Mortgage Backed	Government Issued Commercial Mortgage Backed	Linked Government Bonds	Municipal/ Provincial Bonds	Non-Government Backed CMO's	Other Fixed Income
U.S. Government	$ 106,313,009	$ 639,181	$ -	$ -	$ -	$ -	$ 292,883	$ 92,516,478	$ 86,651,626	$ 5,369,146	$ 7,495,321	$ -	$ -	$ -
AAA	18,103,560	10,238,241	-	291,786	3,220,926	-	-	-	-	-	-	4,352,607	-	-
AA	71,778,519	2,199,362	-	-	17,155,095	-	39,923,860	-	-	-	-	11,623,272	876,930	-
A	107,395,708	3,757,922	-	591,007	99,651,398	-	-	-	-	-	-	2,420,534	974,847	-
BBB	162,906,003	888,203	23,492,735	-	135,140,914	-	2,489,925	-	-	-	-	-	894,226	-
BB	111,597,772	648,916	50,644,246	-	59,753,845	-	-	-	-	-	-	-	550,765	-
B	89,551,653	-	54,313,293	-	35,238,360	-	-	-	-	-	-	-	-	-
CCC	18,094,770	285,082	13,157,795	-	4,651,893	-	-	-	-	-	-	-	-	-
CC	605,050	-	410,800	-	194,250	-	-	-	-	-	-	-	-	-
D	294,218	-	-	-	-	-	-	-	-	-	-	-	294,218	-
NR	212,816,257	6,583,446	29,797,907	4,708,784	5,761,282	1,034,968	-	20,401,229	-	-	-	759,293	1,112,647	56,005,075
Total	$ 899,456,519	$ 25,240,353	$171,816,776	$ 5,591,577	$360,767,963	$ 1,034,968	$ 42,706,668	$112,917,707	$ 86,651,626	$ 5,369,146	$ 7,495,321	$ 19,155,706	$ 4,703,633	$ 56,005,075

U.S. Government = Guaranteed by U.S. 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, 2019 and 2018. 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 $(14,262) and $158,430 on foreign currency forward contracts in 2019 and 2018, respectively. As of December 31, 2019, the Plan's outstanding foreign currency forward contracts were as follows:

	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Unrealized Gain (Loss)	Changed in Unrealized Gain (Loss)
Australian dollar	$ 15,157	$ -	$ 290	$ 682
Brazil real	82,783	-	517	747
British pound sterling	154,088	(57,173)	997	(69)
Canadian dollar	17,579	-	291	1,736
Euro	166,103	-	1,164	276
Hong Kong dollar	-	-	-	87
Japanese yen	195,650	-	(479)	(8,998)
Malaysian ringgit	41,964	-	(6)	(6)
New Taiwan dollar	-	(78,429)	(139)	(139)
Norwegian krone	53,809	-	153	153
Philippine peso	78,677	-	27	27
Polish zloty	90,915	-	218	218
South African rand	-	-	-	(4,145)
Swiss franc	6,399	-	98	(504)
Thai baht	-	-	-	245
United States dollar	135,335	(899,726)	-	-
	$ 1,038,459	$ (1,035,328)	$ 3,131	$ (9,690)

NOTE 4. DERIVATIVES (CONTINUED)

For comparative purposes, as of December 31, 2018, the Plan's outstanding foreign currency forward contracts were as follows:

	Pending Foreign Exchange Purchases	Pending Foreign Exchange Sales	Unrealized Gain (Loss)	Changed in Unrealized Gain (Loss)
Australian dollar	$ 15,171	$ -	$ (392)	$ (725)
Brazil real	63,945	-	(230)	(230)
British pound sterling	148,385	-	1,066	753
Canadian dollar	65,196	-	(1,445)	(3,277)
Euro	169,454	(176,647)	888	(1,898)
Hong Kong dollar	-	-	(87)	(87)
Japanese yen	258,324	-	8,519	9,610
South African rand	540,206	-	4,145	(936)
Swiss franc	98,940	-	602	4,145
Thai baht	46,999	-	(245)	(418)
United States dollar	176,560	(1,393,712)	-	(1,549)
	$ 1,583,180	$ (1,570,359)	$ 12,821	$ 5,388

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 (loss) on equity futures contracts as of December 31, 2019 and 2018 was $1,026,430 and $(619,174), respectively.

As of December 31, 2019 and 2018, open futures contracts had the following values:

	2019	2018
Total futures	$ 6,110,389	$ 5,326,519

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, 2019, the Plan's investments in rights and warrants were as follows:

Derivative Type	Notional Value	Fair Value	Change in Fair Value
Total rights and warrants	$ 167,972	$ 125,034	$ 75,499

For comparative purposes, as of December 31, 2018, the Plan's investments in rights and warrants were as follows:

Derivative Type	Notional Value	Fair Value	Change in Fair Value
Total rights and warrants	$ 420,350	$ 49,534	$ 26,383

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. As of July 1, 2019, Northern Trust Co. became the Plan's securities lending agent succeeding Citibank NA. Northern Trust 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, 2019, the average term of the loans was 78 days (92 days in 2018). 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, 2019 had a weighted average maturity of 25 days (26 days in 2018). As of December 31, 2019 and 2018, the Plan had loaned to borrowers securities with a fair value of $165,754,096 and $125,768,078, respectively. As of December 31, 2019 and 2018, the Plan received from borrowers' cash collateral of $144,948,932 and $121,892,297, respectively. As of December 31, 2019 and 2018, the Plan received non-cash collateral from borrowers of $25,098,518 and $7,829,328, respectively.

NOTE 5. SECURITIES LENDING (CONTINUED)

Securities lending net income for the years ended December 31, 2019 and 2018 was $637,878 and $1,093,727, respectively.

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

	2019	2018
Securities loaned - cash collateral		
Fixed income		
Domestic corporate fixed income	$ 20,241,268	$ 19,409,613
U.S. Government agencies	1,019,266	12,046,062
U.S. Government bonds	21,661,224	17,490,182
Equity		
Domestic equities	92,458,367	61,266,109
International equities	6,096,600	8,359,929
Total securities loaned - cash collateral	141,476,725	118,571,895
Securities loaned - non cash collateral		
Fixed income		
U.S. Corporate Fixed	173,527	-
U.S. Government bonds	11,260,908	-
Equity		
Domestic equities	4,508,667	4,743,825
International equities	8,334,269	2,452,358
Total securities loaned - non cash collateral	24,277,371	7,196,183
Total	$ 165,754,096	$ 125,768,078

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, 2019 and 2018 is as follows:

	2019	2018
Pension benefit system	$ 382,043	$ 119,499
Computers	42,506	25,848
Office equipment	20,683	20,683
	445,232	166,030
Less: accumulated depreciation and amortization	25,193	15,887
Net property and equipment	$ 420,039	$ 150,143

NOTE 6. PROPERTY AND EQUIPMENT (CONTINUED)

Depreciation and amortization expense was $9,306 for both years ended December 31, 2019 and 2018.

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, 2019 and 2018 were $1,802,790,156 and $1,734,595,691, respectively.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

Plan membership at December 31 is as follows:

	2019	2018
Active employees (includes members currently receiving disability benefits)		
Vested	14,037	14,678
Non-vested	18,125	16,607
	32,162	31,285
Retirees and beneficiaries currently receiving benefits	25,544	25,577
Terminated employees entitled to benefits but not yet receiving them	2,101	2,014
Terminated employees entitled to a refund of contributions	16,633	15,561
Total	76,440	74,437

Pension legislation (Public Act 96-0889) was approved during 2010 and established two distinct classes of membership with different retirement eligibility conditions and benefit provisions levels. On July 6, 2017, Illinois Public Act 100-0023 was enacted which added a third class of membership with different retirement eligibility conditions and contribution levels. 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.
Tier 3 - Participants that first became members on or after July 6, 2017; or a Tier 2 member who irrevocably elected between October 1 and November 15, 2017 to be subject to Tier 3 eligibility conditions and contribution levels ("Elective Tier 3 Member").

A member's classification is determined based upon the date the member becomes a contributing member in a designated reciprocal system/fund codified in the Illinois Pension Code.

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, to the date of termination of services subject to certain exceptions. Certain disability pension credits are not refundable.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

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 or predominate, whichever is greater) 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 formula annuity at 60, 55, or 50, respectively. The original annuity is limited to 80% of the highest average annual salary, adjusted for annual 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.

Tier 3 employees age 65 or more with at least 10 years of service are entitled to receive an unreduced annuity benefit or a reduced annuity benefit at age 60 with 10 years of service. The annuity is discounted 1/2 percent for each full month the employee is under age 65. Final average salary is calculated using salary from the eight highest consecutive years within the last 10 years of service prior to retirement.

Under Tier 2 and Tier 3, pensionable salary was limited to $114,952 in 2019 and $113,645 in 2018, increased each year 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). These figures are provided to the Plan by the Illinois Department of Insurance.

Automatic Increase in Employee Annuity

Tier 1: An employee annuitant under Tier 1 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

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 or one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12 month period ending with the September preceding the increase. The increase is based on the amount of the originally granted benefit (simple). This increase begins 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.

Tier 3: An employee annuitant under Tier 3 who is eligible to receive an increase in annuity benefit, shall receive an annual increase equal to the lesser of 3.0 percent or one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12 month period ending with the September preceding the increase. The increase is based on the amount of the originally granted benefit (simple). This increase begins in January of the year of the first payment date following the later of:

1) the attainment of age 65, 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.

Under Tier 2 and Tier 3, the annuity payable to the surviving spouse of an employee 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

Under Tier 2 and Tier 3, the surviving spouse of an employee shall receive an annual increase equal to the lesser of 3.0 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 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 or on January 1 following the first anniversary of the commencement of the annuity otherwise.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

Child Annuity

Under Tier 1, Tier 2 and Tier 3, 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, Tier 2 and Tier 3, 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 lifetime maximum of 5 years.

Duty Disability

Under Tier 1, Tier 2 and Tier 3, 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. This benefit is limited to age 65 or 5 years from the latest injury, whichever is latest.

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 are required to contribute a percentage of their pensionable salary to MEABF. Tier 1 and Tier 2 members contribute 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. Tier 3 members contribute 11.5% of their pensionable salary (9.5% 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.

Under Tier 1,Tier 2 and Tier 3, 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 may be refundable. Employees receiving ordinary or duty disability benefits are credited with a percentage of salary for pension purposes just as though the employee were working but these credits are not refundable. Tier 1 and Tier 2 are credited with 8.5% of salary and Tier 3 is credited with 11.5% of salary.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

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 and Tier 3 was limited to $114,952 in 2019 and $113,645 in 2018, increased each year 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. Effective July 6, 2017, legislation (Public Act 100-0023) which included a new funding structure to increase employer contributions was put into law. The new structure provides for fixed dollar contributions for payment years 2018 through 2022. For payment years 2023 to 2058 the employer's required annual contribution shall be equal to the sum of the employer's portion of the projected normal cost for that fiscal year, plus an amount determined on a level percentage of employee payroll that is sufficient to bring the total actuarial assets of the Plan up to 90% of the total actuarial liabilities of the Plan by the end of 2058.

The actuarial determined contribution (ADC) is determined by 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 an actuarially determined contribution needed to adequately finance MEABF is $1,117,387,759 and $1,049,915,647 for fiscal years 2019 and 2018, respectively. The statutory employer contributions have been less than the actuarially determined contributions for the past seventeen years. Contribution rates may be increased only by an amendment by the State Legislature to the Illinois Pension Code.

Net Pension Liability of Participating Employer

The components of the net pension liability as of December 31, 2019 and 2018, were as follows:

	2019	2018
Total pension liability	$ 17,260,356,470	$ 16,808,614,316
Plan fiduciary net position	4,080,642,490	3,914,180,476
Employer's net pension liability	13,179,713,980	12,894,433,840
Plan fiduciary net position as a percentage of total pension liability	23.64%	23.29%

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2019 and 2018, using actuarial assumptions applied to all periods included in the measurement.

	2019	2018
Inflation	2.50%	2.50%
Salary increase	3.50% to 7.75% (1.50% to 6.50% for 2020-2022), varying by years of service	3.50% to 7.75% (1.50% to 6.50% for 2019-2022), varying by years of service
Investment rate of return	7.00%, net of investment expense	7.00%, net of investment expense
Municipal bond rate	2.74% based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2019	4.10% based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2018
Cost of living adjustments	Tier 1: 3.0% compound	Tier 1: 3.0% compound
	Tier 2 & 3: the lesser of 3.0% or one-half the change in CPI, simple	Tier 2 & 3: the lesser of 3.0% or one-half the change in CPI, simple

Post-retirement mortality rates for December 31, 2019 and 2018 were based on the RP-2014 Healthy Annuitant Mortality Table, set forward two years for males and one year for females, and projected generationally using scale MP-2016. Pre-retirement mortality rates were based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.

The actuarial assumptions used in the December 31, 2019 and 2018, valuation were based on the results of actuarial experience study for the period January 1, 2012 through December 31, 2016.

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, 2019 and 2018 are summarized in the table on the next page.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

	2019		2018	
	Target allocation	Long-term expected real rate of return	Target allocation	Long-term expected real rate of return
Fixed income	25%	0.1%	25%	0.8%
Global Equity	5%	5.3%	0%	0.0%
Domestic equity	26%	5.1%	26%	5.1%
International equity	17%	5.3%	22%	5.3%
Hedge funds	10%	3.3%	10%	3.4%
Private equity	5%	8.6%	5%	8.3%
Real estate	10%	3.8%	10%	4.7%
Infrastructure	2%	5.1%	2%	5.0%

Discount rate

The discount rate used to measure the total pension liability was 7.0% for December 31, 2019 and 2018. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made according to the contribution rate applicable for each member's tier and that employer contributions will be made as specified by Public Act 100-0023. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service cost of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine total pension liability.

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

The following presents the net pension liability as of December 31, 2019, calculated using the discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.0%) or 1 percentage point higher (8.0%) than the current rate:

	1% Decrease (6.0%)	Current Discount Rate (7.0%)	1% Increase (8.0%)
Net pension liability December 31, 2019	$ 15,340,000,339	$ 13,179,713,980	$ 11,386,325,948

For comparative purposes, the net pension liability as of December 31, 2018, calculated using the discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.0%) or 1 percentage point higher (8.0%) than the current rate:

	1% Decrease (6.0%)	Current Discount Rate (7.0%)	1% Increase (8.0%)
Net pension liability December 31, 2018	$ 15,018,711,709	$ 12,894,433,840	$ 11,132,767,680

B. Other Post Employment Benefit Plan (OPEB) - Healthcare Subsidy for City of Chicago Retirees

During the year ended December 31, 2019, in response to a lawsuit, the Circuit Court of Cook County ruled that all eligible City of Chicago employee annuitants (both current and future employee annuitants, but not spousal or child annuitants) of MEABF are entitled to receive a health insurance premium subsidy of $25 per month from MEABF, representing partial reimbursement for healthcare costs, for each month after December 31, 2016, in which they qualify.

City of Chicago employee annuitants hired before April 4, 2003 and retired on or after August 23, 1989 with 15 years of services and age 65 years or older are eligible for this subsidy. City of Chicago retirees must participate in the current City-sponsored or Labor-sponsored healthcare plans and have deductions taken from their annuities in order to qualify for the reimbursement, effective January 1, 2020, and going forward.

The health insurance premium subsidy payments described above are funded from the statutorily-required contributions received by the City of Chicago. In 2019, the contributions allocated for this benefit and payments for the health insurance premium subsidies totaled $2,731,425. This amount represents subsidy payments to eligible employee annuitants for each month after December 31, 2016 through December 31, 2019, in which they qualify.

At December 31, 2019, participants consisted of the following:

Active members	6,305
Annuitants currently receiving subsidiy benefits	6,826
Inactive members entitled to subsidy benefits but not yet receiving them	649
Total	13,780

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

Net OPEB Liability of Participating Employer

The components of the net OPEB liability as of December 31, 2019, were as follows:

Total OPEB liability	$	35,938,912
Plan fiduciary net position		-
Employer's net OPEB liability		35,938,912
Plan fiduciary net position as a percentage of total OPEB liability		0.00%

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of December 31, 2019, using the actuarial assumptions applied to all periods included in the measurement.

Inflation	2.50%
Investment rate of return	7.00%, net of investment expense
Municipal bond rate	2.74% based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of December 31, 2019

Post-retirement mortality rates for December 31, 2019 were based on the RP-2014 Health Annuitant Mortality Tables, set forward two years for males and one year for females, and projected generationally using scale MP-2016. Pre-retirement mortality rates were based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.

The actuarial assumptions used in the December 31, 2019 valuation were based on the results of an actuarial experience study for the period January 1, 2012 through December 31, 2016.

Discount Rate

Since there are no assets dedicated to the OPEB plan, the discount rate used to measure the total OPEB liability was 2.74% based on the municipal bond index.

NOTE 7. PENSION AND OTHER POSTEMPLOYMENT BENEFIT-RELATED NOTE DISCLOSURES (CONTINUED)

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability as of December 31, 2019, calculated using the discount rate of 2.74%, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (1.74%) or 1 percentage point higher (3.74%) than the current rate:

	1% Decrease (1.74%)	Current Discount Rate (2.74%)	1% Increase (3.74%)
Net OPEB liability December 31, 2019	$ 40,225,889	$ 35,938,912	$ 32,340,099

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:

	2019	2018
City Contribution Reserves	$ 1,948,410,853	$ 1,898,758,145
Salary Deduction Reserves	1,957,203,841	1,902,295,714
Prior Services Reserves	10,873,527,127	10,579,110,749
Annuity Payment Reserve	2,516,090,720	2,427,183,939
Optional Reserve Account	1,062,841	1,265,769
	17,296,295,382	16,808,614,316
Unreserved Net Deficit	(13,215,652,892)	(12,894,433,840)
	$ 4,080,642,490	$ 3,914,180,476

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.

Note 8. Net Position Held in Trust for Pension Benefits (continued)

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 $59,942. 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.

Following is a summary of estimated future lease payments under the Plan's operating lease as of December 31, 2019:

2020	$ 771,911
2021	792,982
2022	814,439
2023	836,294
2024	858,560
2025 - February 2026	1,030,840
Total	$ 5,105,026

Total rent expense was $488,387 and $634,395 for 2019 and 2018, respectively. Rent expense for the year ended December 31, 2019 is net of a $168,570 cash allowance received from the landlord under the terms of the lease.

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 carries fiduciary liability insurance that limits the risk of loss arising from court challenges to fiduciary decisions. The Plan also carries cyber liability insurance that limits the risk of defense costs and settlements as a result of failure to protect or the wrongful release of confidential information of participants, beneficiaries and employees of the Plan.

Note 11. Commitments and Contingencies

Investment Commitments

As of December 31, 2019, approximately $82.0 million of capital committed to investments in commingled infrastructure, private equity and real estate funds were undrawn. As of December 31, 2018, approximately $20.1 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 three 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.

In July 2013, a group of plaintiffs purporting to represent retirees in four Chicago public pension funds filed a civil action, *Underwood v. City of Chicago et. al.* (13- CH-17450; 1-17-162356), seeking class certification and an order requiring the City and the defendant pension funds to continue subsidizing retiree healthcare insurance premiums past the June 30, 2013, statutory expiration date. Following litigation filed in both the federal and state courts, the Illinois Appellate Court, on June 29, 2017, issued an order which in part affirmed the Circuit Court's dismissal order and held that the subsidies under the 1983 and 1985 amendments are protected benefits under the pension protection clause of the Illinois Constitution. As such, under the Appellate Court Mandate those employee-retirees that joined the defendant pension funds prior to April 4, 2003 are entitled to continue to receive the 1983 provided subsidies (as it relates to the police and fire funds) of $55 per month if non-Medicare-eligible and $21 per month if Medicare-eligible subsidies or $25 (as it relates to the municipal and laborer funds) if the employee-annuitant is 65 years or older with at least 25 years of service. The Appellate Court remanded the case back to the Circuit Court for the purpose of allowing the presiding judge to determine the mechanics of the payments. Thereafter, the Circuit Court issued several orders which in substance: (i) further defined the group of employee annuitants entitled to the statutory subsidies and (ii) reaffirmed prior rulings that the funds have no obligation to contract for insurance. The Circuit Court confirmed that under the 1983 and 1985 amendments, employee-retirees that are otherwise eligible to receive the subsidies must participate in a group retiree healthcare plan and facilitate the payment of the retiree's healthcare premium through a deduction of his or her monthly annuity check. The *Underwood* plaintiffs have again filed appeal in the Appellate Court in which they continue to assert a position concerning the funds' obligation to contract for insurance, in which the funds continue to defend that assertion citing to

Note 11. Commitments and Contingencies (continued)

Litigation (continued)

both the Appellate Court's decision and legislative enactments following the 1983 and 1985 legislation, as well as challenging certain rulings made by the Circuit Court in regard to those employee annuitants entitled to the statutory subsidies. The outcome of that pending appeal is uncertain and related obligations to that appeal are not reflected in the financial statements. Obligations related to the payment of the statutory subsidy to qualified annuitants under the 1985 amendment are reflected in the financial statements which represent payments made by the Fund in 2019 for amounts owed to qualified annuitants for the 2017, 2018 and 2019 subsidy payments consistent with the requirements of the Circuit Court order and Appellate Court Mandate.

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 Internal Revenue Service regulations. Total employee contributions were $291,320 and $274,557 for 2019 and 2018, respectively. Employer contributions are not allowed.

Note 13. Subsequent Events

Subsequent to year-end, U.S. and global business and financial markets have been severely impacted by the Coronavirus pandemic. The potential impacts on the Plan's financial condition and activities cannot be determined at this time. All subsequent events have been evaluated through June 9, 2020, which is the date the financial statements were available to be issued. This review and evaluation revealed no other material event or transaction which would require an adjustment to or disclosure in the accompanying financial statements.

REQUIRED SUPPLEMENTARY INFORMATION

Municipal Employees' Annuity & Benefit Fund of Chicago

Required Supplementary Information - Pension

December 31, 2019

Schedules of Changes in Employer's Net Pension Liability

	2019	2018	2017	2016	2015	2014
Total pension liability						
Service cost	$ 228,465,350	$ 223,528,365	$ 572,533,631	$ 619,743,849	$ 226,816,035	$ 247,243,416
Interest	1,159,252,774	1,123,347,772	915,710,984	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	16,675,541	95,540,469	(177,754,999)	(127,119,398)	(109,835,037)	(5,504,116)
Changes of assumptions	-	-	(7,431,191,282)	(578,920,424)	8,711,754,654	-
Benefit payments, including refunds of employee contributions	(952,651,511)	(916,198,485)	(888,173,535)	(859,671,662)	(826,036,323)	(798,622,811)
Net change in total pension liability	451,742,154	526,218,121	(7,008,875,201)	(67,598,229)	11,051,775,563	(1,521,825,970)
Total pension liability - beginning	16,808,614,316	16,282,396,195	23,291,271,396	23,358,869,625	12,307,094,062	13,828,920,032
Total pension liability - ending (a)	$ 17,260,356,470	$ 16,808,614,316	$ 16,282,396,195	$ 23,291,271,396	$ 23,358,869,625	$ 12,307,094,062
Plan fiduciary net position						
Contributions - employer	418,268,575	349,574,257	261,763,635	149,718,491	149,225,191	149,746,748
Contributions - employee	146,645,216	138,399,727	134,764,920	130,390,848	131,428,103	129,971,981
Net investment income (loss)	560,940,002	(204,974,702)	610,515,096	281,419,146	114,025,290	283,281,925
Benefit payments, including refunds of employee contributions	(952,651,511)	(916,198,485)	(888,173,535)	(859,671,662)	(826,036,323)	(798,622,811)
Administrative expenses	(6,740,268)	(6,638,608)	(6,473,006)	(7,056,784)	(6,701,000)	(6,567,842)
Other - OPEB termination		-	5,393,581	-	-	-
Net change in plan fiduciary net position	166,462,014	(639,837,811)	117,790,691	(305,199,961)	(438,058,739)	(242,189,999)
Plan fiduciary net position - beginning	3,914,180,476	4,554,018,287	4,436,227,596	4,741,427,557	5,179,486,296	5,421,676,295
Plan fiduciary net position - ending (b)	$ 4,080,642,490	$ 3,914,180,476	$ 4,554,018,287	$ 4,436,227,596	$ 4,741,427,557	$ 5,179,486,296
Employer's net pension liability ending (a)-(b)	$ 13,179,713,980	$ 12,894,433,840	$ 11,728,377,908	$ 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.

Municipal Employees' Annuity & Benefit Fund of Chicago

Required Supplementary Information - Pension

December 31, 2019

Schedules of Employer's Net Pension Liability

	2019	2018	2017	2016	2015	2014
Total pension liability	$17,260,356,470	$16,808,614,316	$16,282,396,195	$23,291,271,396	$23,358,869,625	$12,307,094,062
Plan fiduciary net position	4,080,642,490	3,914,180,476	4,554,018,287	4,436,227,596	4,741,427,557	5,179,486,296
Employer's net pension liability	13,179,713,980	12,894,433,840	11,728,377,908	18,855,043,800	18,617,442,068	7,127,607,766
Plan fiduciary net position as a percentage of total pension liability	23.64%	23.29%	27.97%	19.05%	20.30%	42.09%
Covered-employee payroll	$ 1,802,790,156	$ 1,734,595,691	$ 1,686,532,720	$ 1,646,939,238	$ 1,643,480,973	$ 1,602,977,593
Employer's net position liability as a percentage of covered-employee payroll	731.07%	743.37%	695.41%	1144.85%	1132.81%	444.65%

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.

Municipal Employees' Annuity & Benefit Fund of Chicago

Required Supplementary Information - Pension

December 31, 2019

Schedule of Employer Contributions

Year Ended December 31,	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contributions Deficiency	Covered Employee Payroll	Contributions as a Percentage of Employee Payroll
2019	$1,117,387,759	$ 418,268,575	$ 699,119,184	$ 1,802,790,156	23.2%
2018	1,049,915,647	349,574,257	700,341,390	1,734,595,691	20.2%
2017	1,005,456,621	261,763,635	743,692,986	1,686,532,720	15.5%
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	671,825,805	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%

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

Schedule of Investment Returns

Year Ended December 31,	Annual Money-Weighted Rate of Return, Net of Investment Expense
2019	16.4%
2018	(5.2%)
2017	14.9%
2016	6.4%
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.

Municipal Employees' Annuity & Benefit Fund of Chicago

Notes to Required Supplementary Information - Pension

December 31, 2019

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, 2019
Actuarial cost method	Entry-Age Normal
Amortization method	30 years open, level dollar amortization
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return	7.00%, net of investment expense
Projected salary increases	3.5% to 7.75% (1.5% to 6.5% for 2020-2022), varying by years of service
Inflation rate	2.50%
Cost of living adjustments	Tier 1: 3% compound Tier 2 & 3: The lesser of 3% or one-half of the change in CPI simple

Municipal Employees' Annuity & Benefit Fund of Chicago

Required Supplementary Information - OPEB

December 31, 2019

Schedule of Changes in Employer's NET OPEB Liability

	2019	
Total OPEB liability		
Service cost	$ 118,424	
Interest	1,295,859	
Change of benefit terms	-	
Differences between expected and actual experience	(350,163)	
Changes of assumptions	4,752,619	
Benefit payments	(2,731,425)	
Net change in total OPEB liability	3,085,314	
Total OPEB liability - beginning	32,853,598	*
Total OPEB liability - ending (a)	$ 35,938,912	
Plan fiduciary net position		
Contributions - employer	$ 2,731,425	
Contributions - employee	-	
Net investment income (loss)	-	
Benefit payments	(2,731,425)	
Administrative expenses	-	
Other	-	
Net change in plan fiduciary net position	-	
Plan fiduciary net position - beginning	-	
Plan fiduciary net position - ending (b)	$ -	
Employer's net OPEB liability ending (a)-(b)	$ 35,938,912	

** Beginning balance established to reflect Circuit Court of Cook County ruling requiring health insurance subsidy benefit retroactive for each month after December 31, 2016 for certain employee annuitants.*

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.

Municipal Employees' Annuity & Benefit Fund of Chicago

Required Supplementary Information - OPEB

December 31, 2019

Schedule of Employer's NET OPEB Liability

	2019
Total OPEB liability	$ 35,938,912
Plan fiduciary net position	-
Employer's net OPEB liability	35,938,912
Plan fiduciary net position as a percentage of total OPEB liability	0.00%
Covered-employee payroll	$ 1,802,790,156
Employer's net OPEB liability as a percentage of covered-employee payroll	1.99%

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.

SUPPLEMENTARY INFORMATION

MUNICIPAL EMPLOYEES' ANNUITY & BENEFIT FUND OF CHICAGO

SCHEDULES OF ADMINISTRATIVE EXPENSES

YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
Personnel		
Administrative salaries	$ 3,377,402	$ 3,238,970
Payroll taxes	48,160	46,528
Employee benefits	1,300,614	1,293,849
	4,726,176	4,579,347
Professional services		
Actuarial valuation	73,985	82,728
Legal services	206,805	218,156
Medical	75,000	68,820
Audit	39,000	40,000
Legislative liaison services	18,480	18,480
Benefit payment services	442,558	419,266
IT consulting	34,277	19,175
Other consulting	45,456	46,690
	935,561	913,315
Communication		
Printing and publications	28,011	25,333
Postage	90,245	110,645
Telephone and communications	35,289	33,473
	153,545	169,451
Occupancy and utilities		
Office rent	488,387	634,395
Utilities	10,494	10,339
Office maintenance	558	386
	499,439	645,120
Other operating expense		
Fiduciary and insurance	255,828	226,097
Office supplies, equipment and technical expense	73,366	34,301
Depreciation	9,306	9,306
Equipment rental and maintenance	7,533	9,369
Training and travel	22,277	10,032
Contractual services	34,543	23,043
Dues and subscriptions	17,320	16,250
Miscellaneous	5,374	2,977
	425,547	331,375
Total administrative expense	$ 6,740,268	$ 6,638,608

Municipal Employees' Annuity & Benefit Fund of Chicago

Schedules of Investment Management Compensation

Years Ended December 31, 2019 and 2018

	2019	2018
Fixed income managers		
Crescent Capital Management	$ 361,512	$ 390,638
Garcia Hamilton	135,113	44,106
LM Capital Group	221,508	297,949
MacKay Shields	499,094	599,282
Neuberger Berman	-	31,207
NIS	133,215	41,785
Segall Bryant & Hamill	190,747	223,810
Symphony Asset Management	699,345	767,014
UBS Global Asset Management	-	43,844
Total fixed income managers	2,240,534	2,439,635
Domestic equity managers		
Ariel Investments	397,793	471,862
Great Lakes Advisors	193,511	292,742
Kayne Anderson	327,639	190,252
Keeley Asset Management	-	179,248
Nuveen	291,268	179,655
Rhumbline Advisers	92,608	98,120
Total domestic equity managers	1,302,819	1,411,879
International equity managers		
Cornerstone Capital Management	418,847	452,385
LSV Asset Management	533,705	645,614
Nothern Trust Company	114,107	129,358
Segall Bryant & Hamill	536,648	594,610
Walter Scott & Partners	676,475	681,756
William Blair	879,899	1,054,111
Total international equity managers	3,159,681	3,557,834
Global equity managers		
Attucks Asset Management	905,368	214,646
FIS Group	-	685,134
Total global equity managers	905,368	899,780

Municipal Employees' Annuity & Benefit Fund of Chicago

Schedules of Investment Management Compensation (continued)

Years Ended December 31, 2019 and 2018

	2019	2018
Hedged equity managers		
K2 Advisors	$ 498,388	$ 692,350
The Rock Creek Group	1,499,712	1,528,188
Parametric Defensive Equity	247,132	182,328
Neuberger Berman US PutWrite	155,460	151,909
Total hedged equity managers	2,400,692	2,554,775
Real estate managers		
AFL-CIO Building Trust	1,154,204	1,122,569
American Realty	817,865	804,366
DV Urban	-	6,294
J P Morgan	1,228,594	1,230,510
Mesirow Real Estate	306,704	508,611
Tishman Speyer	37,420	33,025
UBS Realty Advisors	1,840	20,618
Walton Street Partners	16,944	26,048
Total real estate managers	3,563,571	3,752,041
Private equity managers		
Adams Street Partners	283,354	331,348
Carpenter Bancorp Fund	-	25,935
GoldPoint Partners	72,385	129,065
Hispania Partners	34,036	52,945
Hopewell Ventures	23,597	28,140
Levine Leichtman	195,820	237,616
MK Capital	-	44,352
Mesirow Financial	185,340	205,935
Midwest Mezzanine Fund	93,380	106,690
Muller & Monroe	60,000	60,000
Prudential Capital Partners	82,608	-
Stepstone	12,500	66,636
TRG Management	21,116	33,400
Total private equity managers	1,064,136	1,322,062
Infrastructure managers		
Ullico	184,669	-

Municipal Employees' Annuity & Benefit Fund of Chicago

Schedules of Investment Management Compensation (continued)

Years Ended December 31, 2019 and 2018

	2019	2018
Total investment management fees	$ 14,821,470	$ 15,938,006
Other investment expenses		
Investment Consultant	290,000	290,000
Master Custodian	250,711	1,079,325
Investment Legal Services	-	59
Total other investment expenses	540,711	1,369,384
Total investment expenses	$ 15,362,181	$ 17,307,390

Municipal Employees' Annuity & Benefit Fund of Chicago

Schedules of Professional and Consulting Costs

Years Ended December 31, 2019 and 2018

	2019	2018
Legal advisors	$ 206,805	$ 218,156
Medical advisors	75,000	68,820
Consulting actuary	73,985	82,728
Other consulting	98,213	84,345
Auditor	39,000	40,000
Benefit payment services	442,558	419,266
Total professional and consulting costs	$ 935,561	$ 913,315