

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO  
A COMPONENT UNIT OF THE CITY OF CHICAGO**

FINANCIAL STATEMENTS

DECEMBER 31, 2017

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

FINANCIAL STATEMENTS WITH ADDITIONAL INFORMATION

DECEMBER 31, 2017 AND 2016

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## **REPORT OF INDEPENDENT AUDITORS**

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

We have audited the accompanying financial statements of Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Plan), a component unit of the City of Chicago, which comprise the statements of fiduciary net position as of December 31, 2017 and 2016, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements.

### **Management's Responsibility**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of 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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits 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 auditor considers internal control relevant to the entity's preparation and 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 entity'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 Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago at December 31, 2017 and 2016, and the changes in fiduciary net position for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

## **Other Matters**

### ***Required Supplemental Information***

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 10, Schedules of Changes in Net Pension Liability and Related Ratios Multiyear, Schedule of the Net Pension Liability Multiyear, Schedule of Contributions Multiyear, Schedule of Investment Returns Multiyear, Schedule of Funding Progress of OPEB Liabilities, Schedules of Employer Contributions, and Notes to the Schedules on pages 46 through 56 be presented to supplement the basic financial statements. Such information, although not 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 historic 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 audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### ***Other Information***

Our audits were conducted for the purpose of forming an opinion on the financial statements that comprise the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago's basic financial statements. The supplementary information such as the Schedules of Invested Assets, Schedules of Administrative Expenses, Investment Expenses and Professional Services and Schedules of Investment Expenses on pages 57 through 59 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. Such

information has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated in relation to the basic financial statements as a whole.

*Calibre CPA Group, PLLC*

Chicago, IL  
May 10, 2018

**LABORERS' AND RETIREMENT BOARD EMPLOYEES  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)**

This discussion and analysis is prepared by the management staff of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Plan) for the purpose of providing an overview of the Plan's financial activities for the years ended December 31, 2017 and 2016. We encourage readers to consider the information presented here in conjunction with the Plan's financial statements and actuarial report.

**Financial Highlights**

- The net position for the Plan at December 31, 2017 was \$1.27 billion, a \$100 million increase from the Plan's net position at December 31, 2016. The net position for the Plan at December 31, 2016 was \$1.17 billion, a \$71 million decrease from the Plan's net position at December 31, 2015. The net position is restricted for future benefit obligations. The increase in 2017 is largely attributable to appreciation of invested assets and an increase in employer contributions as provided by Public Act (P.A.) 100-0023, passed in 2017. The prior year decrease is attributed to lower than expected investment returns and a statutorily-defined funding mechanism which provided for inadequate contributions to the Plan, therefore requiring the Plan to liquidate over \$130 million of investment assets to satisfy its financial obligations.
- The investment portfolio recorded gains of \$207.7 million and \$57.7 million for fiscal years 2017 and 2016, respectively. During 2017, the Plan's portfolio generated a preliminary rate of return, net of fees, of 18.6%, compared to 5.3% for 2016.
- Based on the actuarial valuations as of December 31, 2017 and 2016, the overall funded ratios for the Plan were 48.3% and 50.4%, respectively. For accounting purposes pursuant to GASB 67 and 68, which uses a Single Discount Rate and shorter amortization periods to measure the total pension liability, the funded ratio of the Plan was 48.2% for 2017 and 31.6% for 2016.
- Contribution revenue for 2017 totaled \$52.9 million, representing an increase of 66.8% from 2016. This increase is due to the recognition of larger employer contributions resulting from the passage of P.A. 100-0023. This legislation provides for predetermined increases in employer contributions over a five year period followed by actuarially determined employer contribution in subsequent years. The 2016 contribution revenue of \$31.7 million represents an increase of 0.9% from 2015.
- Total benefits and refunds paid in 2017 were \$157.0 million, reflecting an increase of 0.3% over 2016 benefits and refunds paid of \$156.5 million. The 2016 benefits and refunds reflect an increase of 1.2% from 2015. The variance between years is primarily due to cost of living adjustments and fluctuations in the annuity roll each year.

## **Financial Highlights (continued)**

- Administrative and OPEB expenses were \$4.0 million in 2017 compared to \$4.1 million in 2016 and \$3.8 million in 2015. Fluctuations in legal expenses, personnel costs, Other Postemployment Benefits (OPEB) expenses and fiduciary liability insurance expenses account for the variances from year to year.

## **Overview of the Financial Statements of the Plan**

This discussion and analysis is intended to serve as an introduction to the Plan's financial reporting which is comprised of the following components.

1. Basic Financial Statements: The two basic financial statements are the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position. The Statement of Fiduciary Net Position reports the balance of net assets restricted for payment of future pension benefits as of the fiscal year end, with comparative values reported as of the previous fiscal year end. The Statement of Changes in Fiduciary Net Position reports the net increase/(decrease) in net position for the fiscal year, with comparative values reported for the previous fiscal year. This increase/(decrease), when added to the previous year's net position, supports the total net position as reported in the Statement of Fiduciary Net Position.
2. Notes to the Financial Statements: Notes to the Financial Statements provide additional valuable information that assists the reader to better understand the Plan's financial position. The notes are an integral part of basic financial statements.
3. Required Supplementary Information: The required supplementary information consists of the Schedules of Changes in Net Pension Liability and Related Ratios Multiyear and Additional Notes; Schedule of the Net Pension Liability Multiyear; Schedule of Contributions Multiyear and related Notes; and Schedule of Investment Returns Multiyear. Also included are the Schedule of Funding Progress for OPEB Liabilities for City Retirees; Schedule of Employer Contributions for OPEB Liabilities for City Retirees; Schedule of Funding Progress for OPEB Liabilities for the Plan as Employer; Schedule of Employer Contributions for OPEB Liabilities for the Plan as Employer and related notes. These schedules and related notes emphasize the long-term nature of pension funds and show the Plan's progress in accumulating sufficient assets to pay benefits when due. Actuarial trend information is presented for OPEB that are associated with the Plan. The Plan participates in two different OPEB initiatives. First, the Plan provided a subsidy to annuitants who had chosen to participate in the City's postemployment group health care plan; however, this subsidy ended on December 31, 2016. Secondly, the Plan as Employer, offers its retirees and their eligible dependents a postemployment group health care plan.
4. Supplementary Information: Schedules of Invested Assets; Schedules of Administrative Expenses, Investment Expenses, and Professional Services; and Schedules of Investment Expenses comprise the supplementary information.

## **Financial Analysis**

The Plan provides retirement benefits as well as survivor and disability benefits to qualifying City of Chicago and Board of Education employees whose job titles are defined as labor service under the provisions of the municipal personnel ordinance. Persons who are employed by certain annuity and benefit funds of the City of Chicago are also covered by the Plan. The benefits are funded by member and employer contributions and proceeds from investments. The summarized comparison shown on the next page indicates that the Net Position Restricted for Pension Benefits at December 31, 2017 amounted to \$1.27 billion, which was an increase of \$100 million or 8.6% from \$1.17 billion at December 31, 2016. This growth in Net Position compares to a decrease of \$71 million, or 5.7%, in net assets that occurred between December 31, 2015 and December 31, 2016.

## **Assets**

An increase or decrease in invested assets is dependent upon both the performance of the Plan's investment portfolio as well as the need to liquidate from the portfolio to pay benefits and other operating expenses in any given year. Total assets increased in 2017 by \$103 million, or 8.4%, compared to an \$89 million, or 6.7%, decrease in assets in 2016 from the prior year level. For 2017, the increase was attributed to significant gains in invested assets as well as higher employer contributions. For 2016, the need to liquidate assets to augment inadequate statutorily-defined contributions contributed to the decline in assets.

As of December 31, 2017, receivables were 100.6% higher than 2016 mainly due to the higher statutorily required employer contributions accrued but not yet received due to the passage of P.A. 100-0023 during the year. In 2016, total receivables were up 13.6% mainly due to higher unsettled sales than purchases of investment securities at year end. After depreciating server equipment in 2017 and fully depreciating a custom developed software program in 2016, the Plan's property and equipment is nearly fully depreciated.

**CONDENSED COMPARATIVE STATEMENTS OF FIDUCIARY NET POSITION**

	December 31,			Net Change	
	2017	2016	2015	2016 to 2017	2015 to 2016
Receivables	\$ 38,675,837	\$ 19,276,276	\$ 16,972,182	\$ 19,399,561	\$ 2,304,094
Investments, at fair value	1,242,661,491	1,155,169,663	1,231,659,831	87,491,828	(76,490,168)
Invested securities lending cash collateral	51,184,334	55,358,674	69,646,634	(4,174,340)	(14,287,960)
Property and equipment	930	5,255	178,186	(4,325)	(172,931)
Total assets	<u>1,332,522,592</u>	<u>1,229,809,868</u>	<u>1,318,456,833</u>	<u>102,712,724</u>	<u>(88,646,965)</u>
Deferred outflows:					
Accumulated decrease in fair value of hedging derivatives	<u>274,037</u>	<u>-</u>	<u>-</u>	<u>274,037</u>	<u>-</u>
Liabilities	<u>65,242,068</u>	<u>60,736,411</u>	<u>79,733,409</u>	<u>4,505,657</u>	<u>(18,996,998)</u>
Deferred inflows:					
Accumulated increase in fair value of hedging derivatives	<u>-</u>	<u>1,332,733</u>	<u>66,179</u>	<u>(1,332,733)</u>	<u>1,266,554</u>
Net position - restricted for pension benefits	<u>\$ 1,267,554,561</u>	<u>\$ 1,167,740,724</u>	<u>\$ 1,238,657,245</u>	<u>\$ 99,813,837</u>	<u>\$ (70,916,521)</u>

**Liabilities**

In 2017, the Plan's liabilities consisted primarily of the securities lending cash collateral liability, unsettled trades and professional fees payable. The Plan's liabilities in 2017 were \$4.5 million higher than in 2016 due mainly to unsettled investment purchases. In 2016, the Plan's liabilities were 23.8% lower than in 2015 due to lower values of securities lending cash collateral liability. The change in liabilities over the past few years largely rests with activity in the securities lending program and unsettled trades at year end.

**Deferred Outflows and Inflows**

Derivative instruments are used by the Plan to manage specific risks and to make investments. Examples include forward and futures contracts. The net fair value of derivatives used for hedging activities are reported as either deferred outflows or deferred inflows of resources. Deferred outflows of \$274 thousand for 2017 represent the net fair value of foreign currency forward contracts outstanding at December 31, 2017. For the year ended December 31, 2016, the Plan reported \$1.3 million in net deferred inflows as compared to net inflows of \$66 thousand the prior year. The outflow or inflow fluctuates depending on the net fair value of forward contracts at year end.

**CONDENSED COMPARATIVE STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**

	December 31,			Net Change	
	2017	2016	2015	2016 to 2017	2015 to 2016
<b>ADDITIONS</b>					
Total contributions	\$ 52,867,428	\$ 31,689,408	\$ 31,410,790	\$ 21,178,020	\$ 278,618
Total investment income (loss)	<u>207,981,245</u>	<u>57,997,329</u>	<u>(22,318,476)</u>	<u>149,983,916</u>	<u>80,315,805</u>
Total additions	<u>260,848,673</u>	<u>89,686,737</u>	<u>9,092,314</u>	<u>171,161,936</u>	<u>80,594,423</u>
<b>DEDUCTIONS</b>					
Benefits and refunds	157,049,889	156,523,019	154,683,613	526,870	1,839,406
Admin & OPEB expense	<u>3,984,947</u>	<u>4,080,239</u>	<u>3,844,346</u>	<u>(95,292)</u>	<u>235,893</u>
Total deductions	<u>161,034,836</u>	<u>160,603,258</u>	<u>158,527,959</u>	<u>431,578</u>	<u>2,075,299</u>
NET INCREASE (DECREASE)	99,813,837	(70,916,521)	(149,435,645)	170,730,358	78,519,124
<b>NET POSITION - RESTRICTED FOR PENSION BENEFITS</b>					
Beginning of year	<u>1,167,740,724</u>	<u>1,238,657,245</u>	<u>1,388,092,890</u>	<u>(70,916,521)</u>	<u>(149,435,645)</u>
Ending of year	<u>\$ 1,267,554,561</u>	<u>\$ 1,167,740,724</u>	<u>\$ 1,238,657,245</u>	<u>\$ 99,813,837</u>	<u>\$ (70,916,521)</u>

**Additions**

Member contributions, employer contributions, and investment proceeds are the funding sources for benefit payments. In 2017, employer contributions were higher than previous years due to the passage of P.A. 100-0023 while employee contributions for 2017 remained consistent with prior years. In the three years shown above, investment income rose and fell based on the performance of the financial markets.

A preliminary investment return of 18.6% in 2017 equated to an investment gain of \$208 million. In 2016, a more modest return of 5.3% equated to an investment gain of \$58 million as compared to a decline of 1.3% in 2015 resulting in a loss of \$22 million. Dividend and interest income fluctuated minimally between the three years.

**Deductions**

Deductions consist primarily of annuity and disability benefit payments, contribution refunds, and administrative expenses (including office staff OPEB). Benefit and refund expense increased 0.3% in 2017 as compared to 1.2% in 2016 and 3.1% in 2015. The automatic annual increase in annuities for employee annuitants and overall fluctuations in annuity payments contribute to the variances from year to year.

Total administrative and OPEB expenses decreased \$95 thousand in 2017 as compared to 2016 which reflected an increase of \$236 thousand in expenses compared to 2015. For 2017, lower legal expenses, depreciation, and fiduciary liability insurance premiums were all factors which mitigated higher software development costs, personnel expenses, and other administrative expenses.

## Deductions (continued)

Overall, Net Position - Restricted for Pension Benefits increased by approximately \$100 million, or 8.6% in 2017 as compared to 2016 which saw a \$71 million decrease from the prior year. As shown in the table on page 8, the increased employer contributions and healthy investment gains of 2017 offset the growing levels of benefit and refund expenses which have the greatest impact on the Net Position at year end.

## Investment Performance

The Plan's investment portfolio experienced a robust return in 2017. As reported by the Plan's investment consultant, the preliminary total investment return based on fair value, net of fees, was 18.6% in 2017 compared to 5.3% in 2016. In absolute terms, there were no detractors from performance. All asset classes posted double digit returns except for fixed income, real estate and hedge funds. In relative terms, only domestic equities, private equity, real estate, and hedge funds lagged their respective benchmarks. The following table provides additional details regarding performance by asset class over the one-year and five-year periods.

Rates of Return for Fiscal Year 2017					
Asset Category	1 Yr* Return %	5 Yrs* Return %	Index	1 Yr Return %	5 Yrs Return %
Fixed income	6.9	2.7	BBgBarc Global Aggregate (Hedged)	3.0	3.1
Domestic equity	18.5	13.0	Russell 3000	21.1	15.6
International equity	39.5	8.0	MSCI ACWI ex USA	27.2	6.8
Global equity	24.9	n/a	MSCI ACWI	24.0	10.8
Global asset allocation	15.7	5.4	60% MSCI ACWI Net/ 40% BBgBarc Aggregate	15.4	7.4
Private debt ***	17.6	n/a	Credit Suisse Leveraged Loans	4.2	4.3
Private equity ***	11.0	9.8	Cambridge Assoc. US All PE	11.8	12.4
Real estate ***	3.8	8.9	NCREIF Property Index	7.0	10.2
Hedge funds ***	4.8	3.9	HFRI FOF	7.8	4.0
Total Plan ***	18.6	8.1	Allocation Index**	17.1	8.8

\* Net of fees returns.

\*\* The Allocation Index is an asset class-weighted benchmark designed to take into account the percentage of an asset class in a portfolio and the relationship to its corresponding benchmark.

\*\*\* As of December 31, 2017, the Plan awaits final fourth quarter return information for several portfolios within private debt, private equity, real estate, and hedge funds. Rates of return are subject to change.

## **Actuarial Valuation**

Each year, the Plan commissions an actuary to assess the financial strength of the Plan. The actuary compares the value of future benefits to the value of the Plan's assets. As prescribed by accounting standards, the actuary uses a valuation method different than fair value to determine the value of the Plan's assets. It differs in that the actuarial value of assets spreads investment gains and losses over a five-year period in an attempt to smooth out market volatility. For fiscal year 2017, the consulting actuary reports the Plan's actuarial liability was \$2.58 billion and the actuarial value of assets was \$1.25 billion. For 2016, the Plan's actuarial liability was \$2.51 billion and the actuarial value of assets was \$1.26 billion.

The ratio of the assets to actuarial liabilities is termed the funded ratio and represents the percentage of assets available to pay the future benefits. The funded ratio, measured using the Actuarial Value of Assets, which reflects smoothing of the investment gains and losses over a five-year period, decreased from 50.4% in 2016 to 48.3% in 2017. This drop of 2.1% in the funded ratio is mainly attributable to an increase in the Actuarial Accrued Liability due to (1) implementing updated actuarial assumptions that were recommended in the most recent experience study, (2) changes to the provisions of the Plan through P.A. 100-0023 (which provides changes to the funding policy and new benefit provisions for members hired on and after July 6, 2017), (3) unfavorable investment return on the actuarial value of assets due to the recognition of investment losses in 2014, 2015, and 2016, and (4) contributions less than Normal Cost plus interest on the Unfunded Actuarial Accrued Liability.

For accounting and financial reporting pursuant to GASB 67 and 68, which uses a Single Discount Rate and shorter amortization periods to measure the total pension liability, the funded ratio of the Plan was 48.2% for 2017 and 31.6% for 2016. The changes in the funding policy provided by P.A. 100-0023 drive the nearly 17% jump in funding ratio from 2016 to 2017.

## **Future Outlook**

The passage of P.A. 100-0023 is significant in that it has provided a funding policy that puts the Plan on a path toward long-term solvency. The Plan will receive pre-determined increasing amounts of employer contributions over the next four years after which the contribution level will be actuarially determined with the goal of reaching a 90% funded status by 2058. In addition, P.A. 100-0023 provided a new tier of benefits for participants who first become members on or after July 6, 2017 or any participant who first became a member after January 1, 2011 and irrevocably elected to be subject to the new tier's benefit structure.

The Board of Trustees (the Board) and staff of the Plan are dedicated to preserving the Plan and are doing so with honesty, dedication, and integrity. We strive to be responsible in our actions that are vital to the success of the Plan.

## **Request for Information**

Questions about any information provided in this report should be addressed to:  
Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago  
Attn: Executive Director  
321 N Clark St Ste 1300  
Chicago IL 60654-4739

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**STATEMENTS OF FIDUCIARY NET POSITION**

DECEMBER 31, 2017

	2017	2016
ASSETS AND DEFERRED OUTFLOWS		
RECEIVABLES		
Employer	\$ 35,489,913	\$ 14,539,917
Plan member	672,467	658,664
Due from broker - net	-	2,013,322
Interest and dividends	2,413,577	2,003,614
Other receivables	99,880	60,759
Total receivables	38,675,837	19,276,276
INVESTMENTS - AT FAIR VALUE		
Cash and short-term investments	40,133,923	27,042,260
Equities	696,436,254	611,831,285
Fixed income	255,736,740	223,888,913
Private markets	25,044,888	34,178,770
Real estate	65,763,113	63,490,674
Hedge funds	84,710,561	79,436,011
Global asset allocation funds	74,836,012	113,969,017
Subtotal	1,242,661,491	1,153,836,930
Forward currency contracts - net	-	1,332,733
Securities lending cash collateral	51,184,334	55,358,674
Total investments - fair value	1,293,845,825	1,210,528,337
PROPERTY AND EQUIPMENT - NET		
Total assets	930	5,255
	1,332,522,592	1,229,809,868
DEFERRED OUTFLOWS		
Accumulated decrease in fair value of hedging derivatives	274,037	-
LIABILITIES, DEFERRED INFLOWS AND NET POSITION		
LIABILITIES		
Due to broker - net	8,119,779	-
Forward currency contracts - net	274,037	-
Refunds, professional fees payable and other liabilities	2,656,046	2,702,842
OPEB liability	3,007,872	2,674,895
Securities lending cash collateral	51,184,334	55,358,674
Total liabilities	65,242,068	60,736,411
DEFERRED INFLOWS		
Accumulated increase in fair value of hedging derivatives	-	1,332,733
NET POSITION - RESTRICTED FOR PENSION BENEFITS		
	\$1,267,554,561	\$1,167,740,724

See accompanying notes to financial statements.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**

YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
<b>ADDITIONS</b>		
Contributions		
Employer	\$ 35,456,607	\$ 14,443,495
Plan member	17,410,821	17,245,913
Total contributions	52,867,428	31,689,408
Investment income		
Net appreciation in fair value of investments	196,485,683	45,918,109
Interest	7,188,153	6,223,155
Dividends	9,354,027	9,689,646
Private markets income (loss) - net	(1,066,395)	222,095
Real estate operating income - net	1,363,394	1,912,695
Hedge funds income - net	1,057,188	514,222
Global asset allocation fund income - net	1,823,299	2,121,924
	216,205,349	66,601,846
Less investment expenses	(8,462,764)	(8,864,044)
Investment income - net	207,742,585	57,737,802
Securities lending		
Income	769,069	400,188
Borrower rebates	(432,062)	(64,000)
Bank fees	(98,347)	(76,661)
Securities lending income - net	238,660	259,527
Total additions	260,848,673	89,686,737
<b>DEDUCTIONS</b>		
Benefits	154,767,434	153,762,147
Refunds	2,282,455	2,760,872
Administrative and OPEB expenses	3,984,947	4,080,239
Total deductions	161,034,836	160,603,258
<b>NET CHANGE IN NET POSITION</b>	99,813,837	(70,916,521)
<b>NET POSITION - RESTRICTED FOR PENSION BENEFITS</b>		
Beginning of year	1,167,740,724	1,238,657,245
End of year	\$ 1,267,554,561	\$ 1,167,740,724

See accompanying notes to financial statements.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**NOTES TO FINANCIAL STATEMENTS**

DECEMBER 31, 2017 AND 2016

**NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (the Plan) is administered in accordance with Chapter 40, Act 5, Articles 1 and 11 of the Illinois Compiled Statutes (the Statutes). The costs of administering the Plan are financed by employer contributions in conformance with state statutes.

**Method of Accounting** - The financial statements reflect an accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer, the City of Chicago (City), has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

**Investments** - Investments are reported at fair value which generally represents reported market value as of the last business day of the year. Quoted market prices, when available, have been used to value investments. For equities, except those reported at net asset value, fair value is determined by using the closing price listed on the national securities exchanges as of December 31. Fair value for fixed income securities, except those reported at net asset value, are determined principally by using quoted market prices provided by independent pricing services. Equity and fixed income funds are reported at net asset value per share. Cash and short-term investments are valued at cost which approximates fair value. Global asset allocation funds and alternative investments, which include real estate, private markets (private equity and private debt investments) and hedge funds, are valued using current estimates of fair value provided by the investment manager. Such valuations consider variables such as cash flow analysis, recent sales prices of investments, comparison of comparable companies' earnings multiples, withdrawal restrictions, annual audits, and other pertinent information. Because of the inherent uncertainty of the valuation for these other alternative investments, the estimated fair value may differ from the values that would have been used had a ready market existed. The reported values of real estate and private markets are current values unless that information was unavailable in which case the reported value will lag one quarter behind the date of these financial statements. The difference between the current value and the lag has been evaluated and determined not to be material.

Unsettled trades as of the end of the year are recorded net. At December 31, 2017 and 2016, \$15,726,731 and \$13,280,070, respectively, were due to broker and \$7,606,952 and \$15,293,392, respectively, were due from broker for unsettled trades.

## **NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Property and Equipment** - Property and equipment are carried at cost. Major additions are capitalized while replacements, maintenance and repairs which do not improve or extend the lives of the respective assets are expensed currently. Depreciation is computed by using the straight-line method over an estimated useful life of five years, except for the custom software package development which is depreciated over 10 years.

**Administrative Expenses** - Administrative expenses are budgeted and approved by the Plan's Board. Funding for these expenses is included in the employer contributions as mandated in Chapter 40, Act 5, Article 11 of the Statutes.

**Reclassifications** - Certain reclassifications have been made to prior year amounts to conform to the presentation for the current year. These reclassifications did not change the total net position - restricted for pension benefits or the changes in fiduciary net position from the totals previously reported.

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

**New Accounting Pronouncements** - GASB Statement No. 82, *Pension Issues*, was established to address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. Specifically, this Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contributions requirements. During the year ended December 31, 2017, the Plan adopted GASB Statement No. 82. Implementation had no impact on the reported amounts on the Statements of Fiduciary Net Position.

## **NOTE 2. PLAN DESCRIPTION**

The Plan was established in 1935 and is governed by legislation contained in the Statutes, particularly Chapter 40, Act 5, Article 11 (the Article) which specifically and exclusively refers to the Plan. The Plan can be amended only by the Illinois Legislature. The Plan is a single-employer defined benefit pension plan with a defined contribution minimum. The Plan was created to provide retirement and disability benefits for employees of the City who are employed in a title recognized by the city as labor service and for the dependents of such employees.

## **NOTE 2. PLAN DESCRIPTION (CONTINUED)**

The Statutes authorize a Board of eight members to carry out the provisions of the Article. According to the Article, two members of the Board are ex officio, two are to be elected by the employee members of the Plan, one is to be elected by the retired members of the Plan, one is to be appointed by the local labor union and two are to be appointed by the Department of Human Resources. The two ex officio members are the City Comptroller (or someone chosen from the Comptroller's office) and the City Treasurer (or someone chosen from the Treasurer's office). All members of the Board are fiduciaries with respect to the Plan and are statutorily mandated to discharge their duties, as such, solely in the interest of the Plan's participants and beneficiaries.

The Board has the powers and duties required in the Article to collect all contributions due to the Plan, to invest the Plan's reserves, to have an annual audit, to appoint employees, to authorize or suspend payment of any participant's individual benefit and to have exclusive original jurisdiction in all matters relating to or affecting the Plan. The Board approves its own budget which is prepared by the administrative staff of the Plan. The Board is required annually to submit to the City Council of the City a detailed report of the financial affairs and status of the reserves of the Plan. Provisions in other articles of Chapter 40 require the Board to submit its annual audit and actuarial valuation reports to the State of Illinois Department of Financial and Professional Regulation's (IDFPR) Division of Insurance, as well as another detailed annual report, the form and content of which is specified by the IDFPR's Division of Insurance.

Any employee of the City or the Board of Education of the City employed under the provisions of the municipal personnel ordinance as labor service or any person employed by a retirement board of any annuity and benefit fund in the City is covered by the Plan. Currently, covered employees are required to contribute a percentage of their salary to the Plan, 8.5% for Tier 1 and 2 members and 11.5% for Tier 3 members. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest. For the employer contribution for the years ended December 31, 2016 and prior, the City's total contribution is limited to an amount not more than the total amount of contributions made by the employees to the Plan in the calendar year two years prior to the current year, multiplied by 1.00. For tax levy years 2017 through 2021, the City shall contribute \$36,000,000, \$48,000,000, \$60,000,000, \$72,000,000, and \$84,000,000, respectively. For years 2023 through 2058, the amount shall be equal to the projected normal cost plus an amount determined on a level percentage of applicable employee payroll basis 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. For years after 2058, the employer portion shall be equal to the amount, if any, needed to bring the total actuarial assets of the Plan up to 90% of the total actuarial liabilities of the Plan as of the end of each year. The source of funds for the City's contribution has been designated by the Statutes and is derived from the City's annual property tax levy, or from any source legally available for this purpose, including but not limited to, the proceeds of City borrowings. The Plan is considered by the City to be a component unit of the City and is included in the City's financial statements as a pension trust fund.

**NOTE 2. PLAN DESCRIPTION (CONTINUED)**

At December 31, 2017 and 2016, plan members consisted of the following:

	<u>2017</u>	<u>2016</u>
Retirees and beneficiaries currently receiving benefits	3,703	3,769
Inactive plan members entitled to benefits (or a refund of contributions) but not yet receiving them	1,469	1,476
Active plan members (including plan members receiving disability benefits)		
Vested	1,979	2,019
Non-vested	<u>815</u>	<u>803</u>
Total plan members	<u><u>7,966</u></u>	<u><u>8,067</u></u>

The Plan provides retirement benefits as well as survivor and disability benefits. In 2010, legislation (P.A. 96-0889) was approved which in effect established two distinct classes of membership with different retirement eligibility conditions and benefit provisions. In 2017, legislation (P.A. 100-0023) was approved which added a third distinct class of membership with different retirement eligibility conditions and benefit provisions. For convenience, the Plan uses a tier concept to distinguish these groups:

- Tier 1 – Employees who first became members prior to January 1, 2011
- Tier 2 – Employees who first became members on or after January 1, 2011
- Tier 3 – Employees who first became members on or after July 6, 2017 or any Tier 2 member who irrevocably elected to be subject to the Tier 3 benefit structure

***Retirement Benefits:***

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 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, multiplied by the final average salary. Final average salary is calculated using salary from the highest four consecutive years within the last 10 years of service preceding 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, unless the employee is 50 or over with at least 30 years of service or 55 or over with at least 25 years of service.

The original annuity is limited to 80% of the highest average annual salary, adjusted for annual Internal Revenue Code (IRS) §401(a) (17) and §415 limitations. There is a 10-year deferred vested benefit payable at age 60. Employees who retire at age 60 or over with at least 10 years of service are entitled to a minimum of \$850 per month.

## **NOTE 2. PLAN DESCRIPTION (CONTINUED)**

### *Retirement Benefits (continued):*

Tier 2: Employees with at least 10 years of service are entitled to receive an unreduced annuity benefit at age 67 or a reduced annuity benefit at age 62 with at least 10 years of service. The annuity shall be reduced by  $\frac{1}{2}$  of 1% percent for each month that 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 preceding retirement. Pensionable salary is limited to \$112,408 in 2017 and \$111,572 in 2016, increased annually by the lesser of 3% or 50% of the percentage change in the Consumer Price Index-Urban (CPI-U), for the 12 months ending each preceding September, but not less than zero.

Tier 3: Employees with at least 10 years of service are entitled to receive an unreduced annuity benefit at age 65 or a reduced annuity benefit at age 60 with at least 10 years of service. The annuity shall be reduced by  $\frac{1}{2}$  of 1% for each month that 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 preceding retirement. Pensionable salary is limited to \$112,408 in 2017, increased annually by the lesser of 3% or 50% of the percentage change in the CPI-U, for the 12 months ending each preceding September, but not less than zero.

### *Post Retirement Increases:*

Tier 1: Employee annuitants are eligible to receive an increase of 3% of the current annuity beginning the January of the year of the first payment date following the earlier of 1) the later of the third anniversary of retirement and age 53 and 2) the later of the first anniversary of retirement and age 60, and each year thereafter.

Tier 2: Employee annuitants are eligible to receive an increase based on the original annuity equal to the lesser of 3% or  $\frac{1}{2}$  of the annual unadjusted percentage increase in the CPI-U (but not less than zero) beginning the January of the first payment date following the later of 1) age 67 and 2) the second anniversary of retirement.

Tier 3: Employee annuitants are eligible to receive an increase based on the original annuity equal to the lesser of 3% or  $\frac{1}{2}$  of the annual unadjusted percentage increase in the CPI-U (but not less than zero) beginning the January of the first payment date following the later of 1) age 65 and 2) the second anniversary of retirement.

### *Spousal Annuity:*

Tier 1: The eligible surviving spouse is entitled to a spousal annuity equal to 50% of the pension the member had earned at the date of death or a minimum annuity of \$800.

Tier 2 and 3: The surviving spouse is entitled to a spousal annuity equal to 66 $\frac{2}{3}$ % of the pension the member had earned at the date of death.

## **NOTE 2. PLAN DESCRIPTION (CONTINUED)**

### *Automatic Increase in Spousal Annuity:*

Tier 1: There is no increase in annuity for spousal annuities.

Tier 2 and 3: The spousal annuity increase is the lesser of 3% or 50% of the percentage change in the CPI-U for the 12 months ending each preceding September (but not less than zero) and is applied to the original spousal annuity amount. If the CPI-U decreases or is zero, no increase is paid. The annual increase in spouse annuity starts on the January 1<sup>st</sup> occurring on or after 1) the start date of the spouse annuity if the deceased member was in receipt of annuity at death or 2) the first anniversary of the spouse annuity start date.

### *Child's Annuity:*

Under Tiers 1, 2 and 3, annuities are provided for unmarried children of a deceased member who are under the age of 18, if the child was born, or *in esse*, or legally adopted. The child's annuity is \$220 a month when there is a surviving spouse or \$250 a month when there is no surviving spouse.

### *Duty Disability:*

Under Tiers 1, 2 and 3, an employee who becomes disabled as the result of an injury incurred in the performance of any act of duty, is entitled to receive a duty disability benefit in the amount equal to 75% of annual salary at the time of injury, reduced by any benefits received by the employee under the provisions of the Workers' Compensation Act.

### *Ordinary Disability:*

Under Tiers 1, 2 and 3, an employee who becomes disabled as the result of any cause other than an injury incurred in the performance of an act of duty, is entitled to receive an ordinary disability benefit in the amount equal to 50% of annual salary as of the last day worked. An employee can receive ordinary disability for a period equal to  $\frac{1}{4}$  of his service credits up to a maximum of 5 years.

### *Refunds:*

Tier 1: A member may take a refund if he withdraws from service and is under the age of 55 (with any length of service) or withdraws between the ages of 55 and 60 with less than 10 years of service.

Tier 2 and 3: A member may take a refund if he withdraws from service before the age of 62 (with any length of service) or withdraws with less than 10 years of service regardless of age.

### **NOTE 3. INVESTMENTS**

#### **Fair Value Measurements**

The Plan categorizes the fair value measurements of its investments based on the hierarchy established by U.S. generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. 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.

### NOTE 3. INVESTMENTS

The following is a summary of the inputs used as of December 31, 2017, in valuing investments carried at fair value:

Description	December 31, 2017			
	Total	Quoted Market Prices for Asset (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Equities</b>				
Common stock	\$ 577,662,798	\$ 577,058,950	\$ 603,848	\$ -
Preferred stock	677,061	663,683	-	13,378
Stapled securities	275,892	275,892	-	-
Exchange-traded fund	6,119,254	6,119,254	-	-
Rights and warrants	7,896	7,896	-	-
Other equity assets	6,851,840	6,851,840	-	-
<b>Fixed income</b>				
Government bonds	30,330,145	-	30,330,145	-
Government agencies	7,814,572	-	7,693,141	121,431
Municipal/Provincial bonds	2,108,445	-	2,108,445	-
Corporate bonds	71,466,873	-	71,399,486	67,387
Government mortgage backed securities	26,422,569	-	26,422,569	-
Government-issued commercial mortgage-backed	1,021,513	-	1,021,513	-
Commercial mortgage-backed	1,599,133	-	1,599,133	-
Asset backed securities	10,345,281	-	10,345,281	-
Non-government backed C.M.O.s	1,489,844	-	1,489,844	-
Index linked government bonds	11,923,628	-	11,923,628	-
Invested securities lending collateral	51,184,334	-	51,184,334	-
Subtotal	807,301,078	\$ 590,977,515	\$ 216,121,367	\$ 202,196
<b>Investments that calculate net asset value</b>				
Equity funds	104,841,513			
Fixed income funds	91,214,737			
Global asset allocation funds	74,836,012			
Hedge funds	84,710,561			
Private markets funds	25,044,888			
Real estate funds	65,763,113			
Subtotal	446,410,824			
Cash and short-term investments	40,133,923			
Total	\$1,293,845,825			

**NOTE 3. INVESTMENTS (CONTINUED)**

Equity and fixed income securities, and investment derivative investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors.

Equity and fixed income securities, and collateral from securities lending classified in Level 2 of the fair value hierarchy are valued using either a bid evaluation or a matrix pricing technique maintained by the various pricing vendors. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Equity and fixed income securities classified in Level 3 of the fair value hierarchy are securities whose stated market price is unobservable by the market place. Many of these securities are priced by the issuers of industry groups. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the Plan's custodian bank.

### NOTE 3. INVESTMENTS (CONTINUED)

The following is a summary of the inputs used as of December 31, 2016, in valuing investments carried at fair value:

Description	December 31, 2016			
	Total	Quoted Market Prices for Asset (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Equities</b>				
Common stock	\$ 504,580,200	\$ 501,360,100	\$ 3,207,893	\$ 12,207
Stapled securities	317,514	317,514	-	-
Exchange-traded fund	5,336,190	5,336,190	-	-
Rights and warrants	297,959	297,959	-	-
Other equity assets	5,604,304	5,604,304	-	-
<b>Fixed income</b>				
Government bonds	33,820,681	-	33,820,681	-
Government agencies	6,070,734	-	6,070,734	-
Municipal/Provincial bonds	661,346	-	661,346	-
Corporate bonds	54,396,631	-	54,294,320	102,311
Bank loans	2,276,460	-	2,276,460	-
Government mortgage backed securities	18,307,628	-	18,307,628	-
Government-issued commercial mortgage-backed	386,788	-	386,788	-
Commercial mortgage-backed	1,933,241	-	1,933,241	-
Asset backed securities	9,190,154	-	9,190,154	-
Non-government backed C.M.O.s	2,269,612	-	2,269,612	-
Index linked government bonds	11,867,224	-	11,867,224	-
Foreign currency forward contract - net	1,332,733	1,332,733	-	-
Commercial paper	339,354	-	339,354	-
Invested securities lending collateral	55,358,674	-	55,358,674	-
Subtotal	714,347,427	\$ 514,248,800	\$ 199,984,109	\$ 114,518
<b>Investments that calculate net asset value</b>				
Equity funds	95,695,118			
Fixed income funds	82,708,414			
Global asset allocation funds	113,969,017			
Hedge funds	79,436,011			
Private markets funds	34,178,770			
Real estate funds	63,490,674			
Subtotal	469,478,004			
Cash and short-term investments	26,702,906			
Total	\$1,210,528,337			

### NOTE 3. INVESTMENTS (CONTINUED)

#### Fair Value of Investments that Calculate Net Asset Value

Authoritative guidance on fair value measurements permits the Plan to measure the fair value of an investment entity that does not have a readily determinable fair value based upon the net asset value per share or its equivalent (NAV) of the investment.

The following table summarizes the Plan's investments in certain entities that calculate net asset value per share as fair value measurement as of December 31, 2017 and 2016:

2017	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity funds	\$ 104,841,513	\$ -	As needed	Daily
Fixed income funds	91,214,737	-	As needed	Daily -15 Days
Global asset allocation funds	74,836,012	-	As needed	Daily - Monthly
Hedge funds	84,710,561	450,236	As needed	90 Days
Private markets funds	25,044,888	23,524,787	N/A	Not eligible
Real estate funds	65,763,113	8,580,855	As needed / N/A	90 Days or Not eligible
	<u>\$ 446,410,824</u>	<u>\$ 32,555,878</u>		
2016	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity funds	\$ 95,695,118	\$ -	As needed	Daily
Fixed income funds	82,708,414	-	As needed	Daily - 15 Days
Global asset allocation funds	113,969,017	-	As needed	Daily - Monthly
Hedge funds	79,436,011	2,728,207	As needed	90 Days
Private markets funds	34,178,770	27,274,787	N/A	Not eligible
Real estate funds	63,490,674	12,255,498	As needed / N/A	90 Days or Not eligible
	<u>\$ 469,478,004</u>	<u>\$ 42,258,492</u>		

*Equity funds.* Three funds in both 2017 and 2016. One fund invests in equity and quasi-equity securities in developed market countries, one fund invests in Indian shares and the final fund invests in emerging market small cap equities.

*Fixed income funds.* Five funds in 2017 and six in 2016. The funds invest in a variety of fixed income markets through various investments.

*Global asset allocation funds.* Two funds in both 2017 and 2016. The two funds invest in a select group of underlying funds that implement several different investment strategies and invest in a variety of markets through a combination of sub-portfolios, commingled vehicles and direct-investments in securities.

### NOTE 3. INVESTMENTS (CONTINUED)

*Hedge funds.* Five funds in both 2017 and 2016. The funds invest in a select group of underlying managers that implement a number of different alternative investment strategies and invest in a variety of markets through limited partnerships, limited liability companies and other investment entities.

*Private markets funds.* Ten funds in both 2017 and 2016. The private markets funds comprise limited partnership interests in equity or debt securities of privately held companies. Private markets funds are not eligible for redemption.

*Real estate funds.* Nine funds in both 2017 and 2016. The real estate funds comprise core, value-add, and opportunistic real estate funds. Real estate funds that are closed-end funds, eight out of the nine real estate funds, are not eligible for redemption. The remaining fund that is an open-ended fund has a 90 days notice for redemption.

#### **Investment Policies, Asset Allocation and Money Weighted Rate of Return**

Investments are governed by Articles 5/1 and 5/11, Chapter 40, of the Statutes. The prudent person rule, which establishes a standard of care for all fiduciaries, is an important aspect of the Statutes. The prudent person rule states that fiduciaries must discharge their duties with the care, skill, prudence and diligence that a prudent person acting in a like capacity and familiar with such matters would use under conditions prevailing at the time. The Plan is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the Statutes.

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 the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Board's adopted asset allocations as of December 31, 2017.

<u>Asset Class</u>	<u>Target</u>
U.S. equity	25.0%
Non U.S. equity	20.0%
Global low volatility equity	5.0%
Fixed income	20.0%
Private debt	3.0%
Private equity	4.0%
Real estate	10.0%
Private real assets	3.0%
Hedge funds	10.0%
	<u>100.0%</u>

### NOTE 3. INVESTMENTS (CONTINUED)

For the year ended December 31, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 18.6%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

#### Investment Risk Factors

There are many factors that can affect the value of investments. Some, such as custodial credit risk, concentration of credit risk, interest rate risk, and foreign currency risk may affect both equity and fixed income securities. Equity securities respond to such factors as economic conditions, individual company earnings performance, and market liquidity, while fixed income securities are particularly sensitive to credit risk and risk associated with changes in interest rates.

#### Investment Summary

All of the Plan's financial instruments are consistent with the permissible investments outlined in the Statutes. The following table presents the composition of investments, by investment type, as of December 31, 2017 and 2016. Individual investments that represent 5% or more of the Plan's net position restricted for pension benefits are separately identified.

	<u>2017</u>	<u>2016</u>
Cash and short-term investments	\$ 40,133,923	\$ 27,042,260
Equities		
U.S. equities	294,180,872	284,807,948
Foreign equities	297,413,869	231,328,219
Equity funds	<u>104,841,513</u>	<u>95,695,118</u>
Total equities	<u>696,436,254</u>	<u>611,831,285</u>
Fixed income		
U.S. Government obligations and municipal bonds	55,413,398	48,380,574
U.S. corporate bonds	37,503,565	34,195,062
Foreign fixed income	71,605,040	58,604,863
Fixed income funds	<u>91,214,737</u>	<u>82,708,414</u>
Total fixed income	<u>255,736,740</u>	<u>223,888,913</u>
Private markets	<u>25,044,888</u>	<u>34,178,770</u>
Real estate	<u>65,763,113</u>	<u>63,490,674</u>
Hedge funds	<u>84,710,561</u>	<u>79,436,011</u>
Global asset allocation funds		
Wellington CTF Opportunistic Investment Fund	56,545,503	82,665,238
Other	<u>18,290,509</u>	<u>31,303,779</u>
Total global asset allocation funds	<u>74,836,012</u>	<u>113,969,017</u>
Subtotal	1,242,661,491	1,153,836,930
Forward currency contracts	-	1,332,733
Security lending cash collateral	<u>51,184,334</u>	<u>55,358,674</u>
Total investments at fair value	<u>\$ 1,293,845,825</u>	<u>\$ 1,210,528,337</u>

### NOTE 3. INVESTMENTS (CONTINUED)

Short-term investments include commercial paper or notes having maturity of less than 90 days or pooled short-term investment funds managed by Northern Trust. Under the terms of the investment agreement for these funds, Northern Trust may invest in a variety of short-term investment securities.

#### Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, the Plan's deposits may not be returned to it. The Plan does not have a formal deposit policy for custodial credit risk. As of December 31, 2017 and 2016, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the Plan's name.

	<u>2017</u>	<u>2016</u>
Amount exposed to custodial credit-risk		
Investment in foreign currency	<u>\$ (1,111,982)</u>	<u>\$ 1,328,749</u>

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to pay interest or principal in a timely manner, or that negative perception of the issuer's ability to make payments will cause a decline in the security's price. U.S. Government obligations or obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk and do not require disclosure of credit quality.

The investment portfolio of the Plan is managed by professional investment management firms. These firms are required to maintain diversified portfolios. The Plan does not have a formal policy on concentration of credit risk. Each investment manager complies with risk management guidelines individually assigned to them as part of their Investment Management Agreement.

A bond's credit quality is a standard used by the investment community to assess the issuer's ability to make interest payments and to ultimately make principal payments. Credit quality is evaluated by one of the independent bond-rating agencies, for example Moody's Investor Service (Moody's) or Standard and Poor's (S&P). In the rating agency's opinion, the lower the rating, the greater the chance that the bond issuer will default or fail to meet its payment obligations. The following table presents the credit risk profile, based on Moody's Investor Service for fixed income securities held by the Plan as of December 31, 2017 and 2016.

**NOTE 3. INVESTMENTS (CONTINUED)**

	<u>2017</u>	<u>2016</u>
<u>Quality Rating</u>		
Aaa	\$ 33,624,943	\$ 35,955,994
Aa	6,828,328	5,464,465
A	17,951,391	15,542,602
Baa	36,428,882	23,725,461
Ba	23,252,939	18,286,155
B	7,325,887	11,866,992
Caa	613,269	1,359,666
C	237,031	219,709
Not rated or unavailable	<u>11,495,620</u>	<u>10,259,503</u>
Total credit risk debt - securities	137,758,290	122,680,547
Guaranteed by U.S. government	26,763,713	18,499,951
Fixed income funds - not rated	<u>91,214,737</u>	<u>82,708,415</u>
Total fixed income	<u>\$ 255,736,740</u>	<u>\$ 223,888,913</u>

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The price of a debt security typically moves in the opposite direction of the change in interest rates. The Plan does not have a formal investment policy that limits investment maturities as a means of managing its exposure to interest rate risk. However, the investment managers have diversified the portfolio to reduce the impact of losses in an individual investment and typically align the portfolio's duration with that of the benchmark.

### NOTE 3. INVESTMENTS (CONTINUED)

#### Interest Rate Risk (continued)

At December 31, 2017 and 2016, the following table shows the investments by investment type and maturity.

Investment Type	December 31, 2017					
	Fair Value	1 Year or Less	1+ to 6 Years	6+ to 10+ Years	10+ Years	Variable
Asset backed securities	\$ 10,345,281	\$ -	\$ 1,320,134	\$ -	\$ 9,025,147	\$ -
Commercial mortgage backed	1,599,133	-	-	-	1,599,133	-
Corporate bonds	71,466,873	250,398	32,132,015	22,679,658	16,404,802	-
Fixed income funds	91,214,737	-	-	-	-	91,214,737
Government agencies	7,814,572	-	5,599,059	385,996	1,829,516	-
Government bonds	30,330,145	499,649	4,472,583	16,803,545	8,554,368	-
Government mortgage backed	26,422,569	1,957	27,445	255,614	16,900,105	9,237,448
Government issued commercial mortgage backed	1,021,513	-	459,499	334,702	227,311	-
Index linked government bonds	11,923,628	-	-	7,891,763	4,031,865	-
Municipal bonds	2,108,445	-	106,748	-	2,001,697	-
Non-government backed CMO's	1,489,844	-	163,069	-	1,326,775	-
<b>Total fixed income</b>	<b>\$ 255,736,740</b>	<b>\$ 752,004</b>	<b>\$ 44,280,553</b>	<b>\$ 48,351,279</b>	<b>\$ 61,900,719</b>	<b>\$ 100,452,185</b>

  

Investment Type	December 31, 2016					
	Fair Value	1 Year or Less	1+ to 6 Years	6+ to 10+ Years	10+ Years	Variable
Asset backed securities	\$ 9,190,154	\$ -	\$ 37,390	\$ 126,127	\$ 9,026,637	\$ -
Bank loans	2,276,460	-	550,532	1,725,928	-	-
Commercial mortgage backed	1,933,241	-	-	-	1,933,241	-
Corporate bonds	54,396,631	660,341	22,106,521	20,968,752	10,661,017	-
Fixed income funds	82,708,414	-	-	-	-	82,708,414
Government agencies	6,070,734	-	4,214,904	-	1,855,830	-
Government bonds	33,820,681	90,004	12,187,051	7,301,042	14,242,584	-
Government mortgage backed	18,307,628	-	134,307	239,202	9,210,524	8,723,595
Government issued commercial mortgage backed	386,788	-	386,788	-	-	-
Index linked government bonds	11,867,224	-	-	8,695,205	3,172,019	-
Municipal bonds	661,346	-	-	125,911	535,435	-
Non-government backed CMO's	2,269,612	-	277,477	-	1,992,135	-
<b>Total fixed income</b>	<b>\$ 223,888,913</b>	<b>\$ 750,345</b>	<b>\$ 39,894,970</b>	<b>\$ 39,182,167</b>	<b>\$ 52,629,422</b>	<b>\$ 91,432,009</b>

### NOTE 3. INVESTMENTS (CONTINUED)

#### Investment Results

During 2017 and 2016, net realized gains (losses) on investments sold, reflecting the difference between the proceeds received and cost value of securities sold, were \$40,562,021 and \$54,155,711, respectively. These amounts are included in the net appreciation (depreciation) in fair value of investments as reported on the Statement of Changes in Fiduciary Net Position. The calculation of realized gains and losses is independent of the calculation of net appreciation in the fair value of the Plan's investments. Investments purchased in a previous year and sold in the current year results in their realized gains and losses being reported in the current year and their net appreciation in Plan assets being reported in both the current and the previous year(s).

#### Foreign Currency Risk

The international portfolio is constructed on the principles of diversification, quality, growth and value. Risk of loss arises from changes in currency exchange rates. While not having a formal investment policy governing foreign currency risk, the Plan does manage its exposure to fair value loss by requiring the international securities managers to maintain diversified portfolios to limit foreign currency and security risk. The Plan's exposure to foreign currency risk as of December 31, 2017 and 2016, is presented in the following table.

	2017	%	2016	%
Australian dollar	\$ 5,585,306	2.3%	\$ 5,143,082	2.7%
Brazilian real	4,921,702	2.0	3,676,224	1.9
Canadian dollar	11,492,539	4.8	4,809,391	2.5
Swiss franc	8,950,105	3.7	11,276,679	5.8
Danish krone	6,304,459	2.6	5,936,061	3.1
Euro	60,284,376	25.0	43,688,326	22.7
British pound sterling	30,744,733	12.8	25,841,633	13.4
Hong Kong dollar	21,876,951	9.1	15,557,299	8.1
Indonesian rupiah	3,547,156	1.5	3,390,691	1.8
New Israeli shekel	1,189,513	0.5	993,846	0.5
Japanese yen	50,851,382	21.1	35,000,705	18.2
South Korean won	6,251,433	2.6	6,402,648	3.3
Mexican peso	3,144,025	1.3	4,296,680	2.2
Malaysian ringgit	770,966	0.3	825,199	0.4
Norwegian krone	6,749,118	2.8	3,996,791	2.1
New Zealand dollar	(4,207,228)	(1.7)	(1,468,452)	(0.8)
Philippine peso	-	0.0	1,037,995	0.5
Polish zloty	678,685	0.3	591,284	0.3
Swedish krona	12,410,721	5.1	11,110,898	5.8
Singapore dollar	2,580,001	1.1	1,316,957	0.7
Thai baht	3,497,830	1.4	3,213,780	1.7
Turkish lira	-	0.0	13	1.0
South African rand	3,297,888	1.4	6,015,670	3.1
Total	<u>\$ 240,921,661</u>	<u>100.0%</u>	<u>\$ 192,653,400</u>	<u>100.0%</u>

### NOTE 3. INVESTMENTS (CONTINUED)

#### Derivatives

The Plan's investment managers may enter into derivative transactions as permitted by their guidelines. A derivative financial instrument is an investment whose payoff depends on the value of an underlying, such as bond or stock prices, a market index, or commodity prices. Derivative financial instruments 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. The Plan's managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits and exposure monitoring procedures. Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to decrease or become more costly to settle. The market risk associated with derivatives, the prices of which are constantly fluctuating, is regulated by imposing strict limits as to the types, amounts, and degree of risk that investment managers may undertake.

During the year, the Plan's derivative investments included foreign currency forward contracts and financial futures. Foreign currency forward contracts are used to hedge against the currency risk in the Plan's foreign stock and fixed income security portfolios. Financial futures are used to improve yield, adjust the duration of the fixed income portfolio, or to hedge changes in interest rates.

The following table summarizes the derivatives held within the Plan's investment portfolio as of December 31, 2017 and 2016:

Derivative Type	2017		2016	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Hedging derivative instruments				
Foreign currency forward contracts purchased	\$ -	\$ 219,076,851	\$ -	\$ 96,846,033
Foreign currency forward contracts sold	-	(219,350,888)	-	(95,513,300)
Total hedging derivative instruments	-	(274,037)	-	1,332,733
Investment derivative instruments				
Futures				
Fixed income	(571,754)	-	(2,403,761)	-
Cash and cash equivalent	-	-	4,948,000	-
Total investment derivative instruments	(571,754)	-	2,544,239	-
Total	\$ (571,754)	\$ (274,037)	\$ 2,544,239	\$ 1,332,733

**NOTE 3. INVESTMENTS (CONTINUED)**

Foreign currency forward contracts are agreements to buy or sell a specific amount of a specific currency at a specified delivery or maturity date for an agreed upon price. The gain or loss on forward contracts is recognized as deferred inflows/outflows on the Statements of Fiduciary Net Position until the contract is closed or is sold at which time a gain or loss is recognized in the Statements of Changes in Fiduciary Net Position. The counterparties to the foreign currency forward contracts are banks which are rated A, or above, by rating agencies. The fair value of forward contracts outstanding at December 31, 2017 and 2016 is as follows:

Currency	Fair Value	
	2017	2016
Foreign currency exchange purchases:		
Australian dollar	\$ 13,593,111	\$ 3,696,711
Canadian dollar	10,650,602	1,750,601
Swiss franc	5,511,965	2,363,702
Euro	12,145,915	5,247,894
British pound sterling	6,824,977	3,844,344
Hong Kong dollar	-	27,360
Indonesian rupiah	-	10,497
Japanese yen	13,749,967	3,885,853
South Korea won	4,647,720	-
Mexican peso	529,767	700,566
Norwegian krone	12,077,662	4,494,231
New Zealand dollar	8,043,971	4,351,362
Swedish krona	9,975,556	5,661,489
Thai baht	-	20,925
United States dollar	120,173,225	60,726,732
South African rand	1,152,413	63,766
Total purchases	<u>\$ 219,076,851</u>	<u>\$ 96,846,033</u>

**NOTE 3. INVESTMENTS (CONTINUED)**

Currency	Fair Value	
	2017	2016
Foreign currency exchange sales:		
Australian dollar	\$ (16,719,264)	\$ (7,517,706)
Canadian dollar	(7,810,191)	(3,636,968)
Swiss franc	(10,958,562)	(3,860,498)
Euro	(24,699,527)	(11,724,264)
British pound sterling	(12,116,259)	(7,671,300)
Hong Kong dollar	(31,919)	-
Japanese yen	(14,636,261)	(7,784,728)
South Korea won	(5,050,839)	-
Mexican peso	(529,551)	(1,864,693)
Norwegian krone	(7,249,973)	(2,311,362)
New Zealand dollar	(13,699,222)	(7,356,993)
Polish zloty	(190,837)	(158,727)
Swedish krona	(6,890,844)	(3,647,341)
Thai baht	-	(43,205)
United States dollar	(97,654,188)	(36,945,296)
South African rand	(1,113,450)	(990,219)
Total sales	<u>\$ (219,350,887)</u>	<u>\$ (95,513,300)</u>

Financial futures are similar to forward contracts, except futures contracts are standardized and traded on organized exchanges. As the market value of the underlying assets vary from the original contract price, a gain or loss is recognized in the Statements of Changes in Fiduciary Net Position and is settled through the clearinghouse.

Rights and warrants allow the Plan's investment managers to replicate any underlying security they wish to hold (sell) in the portfolio. Rights and warrants provide the holder with the right, but not the obligation, to buy or sell a company's stock at a predetermined price. Rights usually expire after a few weeks and warrants can expire from one to several years. These investments are reported within the equities classification.

The following table summarizes the changes in fair value, which were recognized as income in the Plan's Statements of Changes in Fiduciary Net Position for the year ended December 31, 2017 and 2016:

Derivative Type	Changes in Fair Value	
	2017	2016
Foreign currency forward contracts	\$ (1,645,606)	\$ 1,628,784
Futures	(37,590)	(657,868)
Rights/warrants	12,273	9,463
Total	<u>\$ (1,670,923)</u>	<u>\$ 980,379</u>

#### NOTE 4. SECURITIES LENDING

The Statutes and the Board permit the Plan to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. Deutsche Bank, acting as lending agent, lends securities for collateral in the form of cash, U.S. Government obligations and Non-U.S. sovereign debt securities equal to 102% of the fair value of domestic securities and foreign securities that are denominated in the same currency as the collateral provided plus accrued interest and 105% of the fair value of foreign securities that are not denominated in the same currency as the collateral provided plus accrued interest.

The Plan receives 85% of the net revenue derived from the securities lending activities, and the lending agent receives the remainder of the net revenue.

The Plan is currently not restricted as to the type of securities it may loan. The Plan does not have the right to sell or pledge securities received as collateral unless the borrower defaults.

The average term of securities loaned was 67 days at December 31, 2017 and 88 days at December 31, 2016; however, any loan may be terminated on demand by either the Plan or the borrower. Cash collateral may be invested in a short-term investment pool, which had an average weighted maturity of 28 days as of December 31, 2017 and an average weighted maturity of 16 days as of December 31, 2016. Cash collateral may also be invested in term loans, in which the investments (term loans) match the term of the securities loaned. These loans can be terminated on demand by either the lender or the borrower.

At December 31, 2017 and 2016, the Plan had no credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts owed to the Plan. At December 31, 2017 and 2016, the fair value of securities loaned was as follows:

	<u>2017</u>	<u>2016</u>
Equities	\$ 59,436,939	\$ 44,331,068
Fixed income	<u>6,787,281</u>	<u>9,609,004</u>
Total	<u>\$ 66,224,220</u>	<u>\$ 53,940,072</u>

At December 31, 2017 and 2016, the securities loaned were collateralized as follows:

	<u>2017</u>	<u>2016</u>
Collateralized by cash	\$ 51,184,334	\$ 55,358,674
Collateralized by other than cash	<u>16,692,550</u>	<u>-</u>
Total	<u>\$ 67,876,884</u>	<u>\$ 55,358,674</u>

During 2017 and 2016, there were no losses due to default of a borrower or the lending agent. The contract with the Plan requires the lending agent to indemnify the Plan if borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the Plan for income distributions by the issuers of securities while the securities are on loan.

#### **NOTE 5. MORTGAGE BACKED SECURITIES**

The Plan invests in mortgage-backed securities, representing interests in pools of mortgage loans, as part of its interest rate risk management strategy. The mortgage-backed securities are not used to leverage investments in fixed income portfolios. The mortgage-backed securities held by the Plan were guaranteed by federally sponsored agencies, such as: Government National Mortgage Association, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation.

The financial instruments are carried at fair value and are included in investments on the Statements of Fiduciary Net Position. The gain or (loss) on financial instruments is recognized and recorded on the Statements of Changes in Fiduciary Net Position as part of investment income.

#### **NOTE 6. DEFERRED COMPENSATION PLAN**

The Plan offers its employees a deferred compensation plan established in accordance with Internal Revenue Code Section 457. The deferred compensation plan, which is funded through employee contributions, is available to all Plan employees and permits them to defer a portion of their salary until future years. The deferred compensation plan is managed by a third party administrator and participation by employees is optional. The assets of the deferred compensation plan are placed in trust with the third party for the exclusive benefit of the participants and their beneficiaries and are not considered assets of the Plan.

#### **NOTE 7. SUMMARY OF EMPLOYER FUNDING POLICIES**

For years prior to 2018, the City shall levy a tax annually which, when added to the amounts deducted from the salaries of the employees or otherwise contributed by them, will be sufficient for the requirements of the Plan. The tax will produce an amount that does not exceed the amount of contributions by the employees to the Plan made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 1.00. Beginning in payment year 2018, the City's required annual contribution to the Plan shall be: for 2018, \$36,000,000; for 2019, \$48,000,000; for 2020, \$60,000,000; for 2021, \$72,000,000; and for 2022, \$84,000,000. For payment years 2023 through 2058, the City's required annual contribution to the Plan shall be the amount determined by the Plan to be equal to the sum of the City's portion of projected normal cost for that fiscal year plus an amount determined on a level percentage of applicable employee payroll basis 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. For payment years after 2058, the City's required annual contribution to the Plan shall be equal to the amount, if any, needed to bring the total actuarial assets of the Plan up to 90% of the total actuarial liabilities of the Plan by the end of the year.

When the balance of the prior service reserve equals its liabilities (including in addition to all other liabilities, the present value of all annuities, present or prospective, according to applicable mortality tables and rates of interest), the City shall cease to contribute the amounts to provide prior service annuities and other annuities and benefits.

**NOTE 7. SUMMARY OF EMPLOYER FUNDING POLICIES (CONTINUED)**

The actuarial valuations of the Plan as of December 31, 2017 (2018 Tax Levy) and as of December 31, 2016 (2017 Tax Levy) indicated that a minimum annual contribution was required by the City to maintain the Plan on a minimum valuation basis. The recommended minimum annual contribution based on an annual payroll of \$208,442,487 for 2,794 members for the 2018 tax levy and \$208,154,918 for 2,822 active members for the 2017 tax levy is computed as follows:

	Tax Levy	
	<u>2018</u>	<u>2017</u>
Normal cost	\$ 39,336,823	\$ 38,910,344
30 year level dollar amortization of unfunded liability	102,735,335	98,108,966
Interest adjustment for semi-monthly payment	<u>5,244,688</u>	<u>5,228,594</u>
Total minimum contribution	147,316,846	142,247,904
Less estimated plan member contributions	<u>(18,069,262)</u>	<u>(18,021,862)</u>
Actuarially Determined Contribution (ADC)	<u>\$ 129,247,584</u>	<u>\$ 124,226,042</u>
Tax levy multiple for Plan	<u>8.28</u>	<u>8.14</u>

**NOTE 8. NET PENSION LIABILITY OF THE PLAN**

The components of the net pension liability of the Plan at December 31, 2017 were as follows:

Total pension liability	\$ 2,630,107,508
Plan fiduciary net position	<u>1,267,554,561</u>
Net pension liability	<u>\$ 1,362,552,947</u>
Plan fiduciary net position as a percentage of total pension liability	48.19%

**NOTE 8. NET PENSION LIABILITY OF THE PLAN (CONTINUED)**

**Actuarial Assumptions** - The total pension liability was determined by an actuarial valuation as of December 31, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.25 percent
Salary increases	3.00 percent wage inflation plus a service-based increase in the first 9 years
Investment rate of return	7.25 percent, net of investment expense, including inflation

Post-retirement mortality rates were based on scaling factors of 117% for males, and 102% for females of the RP-2014 Blue Collar Healthy Annuitant mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales. No adjustment is made for post-disabled mortality.

Pre-retirement mortality rates were based on scaling factors of 109% for males, and 103% for females of the RP-2014 Blue Collar Employee mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales.

The actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study for the period of January 1, 2012 through December 31, 2016.

The long-term expected rate of return on pension plan investments was determined by taking into consideration the Plan's target asset allocation along with long-term capital markets assumptions—estimated expected returns, volatilities and correlations among different asset classes—from a variety of nationally known investment consulting firms. Each set of capital markets assumptions was used to calculate an estimated geometric real rate of return for the Plan's target asset allocation, which was then converted to a nominal rate based on the Plan's inflation assumption, as well as an estimate of portfolio volatility. An average of the expected return and volatility figures across all sets of capital markets assumptions was used to calculate an aggregate distribution in order to determine an acceptable range of expected rates of return. The long-term expected rate of return on pension plan investments falls within this range.

**NOTE 8. NET PENSION LIABILITY OF THE PLAN (CONTINUED)**

Best estimates of geometrically determined real rates of return for each major asset class included in the Plan’s target asset allocation as of December 31, 2017, utilizing the assumed rate of inflation of 1.9%, are summarized in the following table:

<u>Asset class</u>	<u>Long-term Expected Real Rate of Return</u>
U.S. equity	5.8%
Non U.S. equity	5.7
Global low volatility equity	5.0
Fixed income	(0.2)
Hedge funds	3.6
Private debt	8.2
Private equity	9.4
Real estate	5.4
Private real assets	5.8

**Single Discount Rate**

A Single Discount Rate of 7.07% was used to measure the total pension liability. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.25% and a municipal bond rate of 3.31% (based on the weekly rate closest to but not later than the measurement date of the “state & local bonds” rate from Federal Reserve statistical release (H.15)). The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made under the statutory funding policy. Based on these assumptions, the pension plan’s fiduciary net position and future contributions were sufficient to finance the benefit payments only through the year 2071. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2071, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan’s net pension liability, calculated using a Single Discount Rate of 7.07%, as well as what the plan’s net pension liability would be if it were calculated using a Single Discount Rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption			
	1% Decrease <u>6.07%</u>	Current Single Discount Rate Assumption <u>7.07%</u>	1% Increase <u>8.07%</u>
Plan's net pension liability	\$ 1,680,427,775	\$ 1,362,552,947	\$ 1,096,678,255

## NOTE 9. RESERVES FOR ACTUARIAL LIABILITIES

The reserves for actuarial liabilities are based on an annual valuation submitted by the Plan's consulting actuary. The annual actuarial valuation establishes the reserves required for various statutory liabilities which arise from pension benefit schedules that are part of the current pension code legislation. Market value of net assets held in trust for pension benefits as of December 31, 2017 and 2016, were comprised of the following Plan surplus (deficit) balances:

	<u>2017</u>	<u>2016</u>
Prior Service Fund	\$ 1,528,899,145	\$ 1,477,747,189
City Contribution Fund	279,634,909	270,944,305
Salary Deduction Fund	279,587,718	270,872,913
Annuity Payment Fund and Reserve	490,553,716	489,638,542
Supplementary Payment Service	69,562	69,562
Fund Reserve - (deficit)	<u>(1,311,190,489)</u>	<u>(1,341,531,787)</u>
Net Position - Restricted for Pension Benefits	<u>\$ 1,267,554,561</u>	<u>\$ 1,167,740,724</u>

The Prior Service Fund is a reserve account for the accumulation of City contributions to provide for: 1) employee and spouse annuities that are based on service performed before the Plan's effective date of July 1, 1935, and 2) any excess in minimum annuity formula requirements over the amounts required for age and service annuities and for spouse annuities.

The City Contribution Fund is used to accumulate amounts contributed by the City to provide for annuities based on age and service of each employee and spouse. An individual account is to be kept for each employee and spouse until the employee retires, at which time the individual account balances are transferred to the Annuity Payment Fund.

The Salary Deduction Fund is similarly used to accumulate deductions made from employee salaries for age and service annuities for the employee and spouse. Individual accounts are kept until the employee retires or withdraws from service before qualifying for an annuity. At retirement, account balances are transferred to the Annuity Payment Fund. In case an eligible employee elects to take a refund of contributions instead of an annuity, the contribution refund is charged to this reserve fund.

The Annuity Payment Fund receives the amounts transferred from the individual accounts in the City Contribution Fund and the Salary Deduction Fund when an employee retires and qualifies for an annuity. All age and service annuity payments are charged to this fund.

The Supplementary Payment Reserve was established in 1969 to fund postretirement benefit increases for future and current annuitants who elected to pay into the Plan the amount necessary to receive the postretirement benefits.

**NOTE 9. RESERVES FOR ACTUARIAL LIABILITIES (CONTINUED)**

The Fund Reserve represents the difference between the actuarially determined present value of all future pension payments and the value of the Plan's assets plus the present value of future contributions. A surplus indicates that assets and future contributions exceed the expected requirements for future pension payments, while a deficit indicates that additional assets will be needed to provide for future benefits.

**NOTE 10. EMPLOYER (TAXES) RECEIVABLE (PAYABLE) – NET**

	<u>2017</u>	<u>2016</u>
Employer contributions	\$ 36,661,445	\$ 15,762,116
Less allowance for uncollectible accounts	<u>(1,171,532)</u>	<u>(1,222,199)</u>
Total	<u>\$ 35,489,913</u>	<u>\$ 14,539,917</u>

**NOTE 11. LEASE AGREEMENTS**

The Plan leases its office facilities under a fifteen year non-cancelable agreement in effect through February 28, 2026. The base rent has an abatement provision of 17 months. The Plan is amortizing the abated rent over the period covered by the agreement. Real estate taxes and maintenance charges are additional costs to the base rent and are subject to annual escalation. Rent expense, net of rent abatements, for the years ended December 31, 2017 and 2016 was \$406,965 and \$318,657, respectively. Future minimum rental payments required under non-cancelable leases are as follows:

Year ending December 31,	
2018	\$ 421,697
2019	426,687
2020	431,676
2021	436,666
2022	441,655
2023 through 2026	<u>1,431,146</u>
	<u>\$ 3,589,527</u>

**NOTE 12. INSURANCE COVERAGE**

The Plan is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Plan has minimized the risk of loss through private insurance carriers for commercial, business owners, and automobile policies. The deductible for this insurance coverage ranges from \$250 to \$500 per occurrence. There has been no significant reduction of insurance coverage from the prior year. The Plan has not had any insurance claims filed or paid in the past five fiscal years.

The Plan has elected to self-insure against the risk of loss due to a breach in workmen's compensation claims. There have been no claims or settlements in the last five years.

**NOTE 13. PROPERTY AND EQUIPMENT**

Property and equipment detail for the years ended December 31, 2017 and 2016 is as follows:

	<u>2017</u>	<u>2016</u>
Office equipment	\$ 110,114	\$ 110,114
Custom software package	<u>6,457,788</u>	<u>6,457,788</u>
	6,567,902	6,567,902
Accumulated depreciation	<u>(6,566,972)</u>	<u>(6,562,647)</u>
	<u>\$ 930</u>	<u>\$ 5,255</u>

Depreciation expense for the years ended December 31, 2017 and 2016 was \$4,325 and \$172,931, respectively.

**NOTE 14. OTHER POST EMPLOYMENT BENEFIT PLAN - CITY RETIREES**

**Plan Description** - The Plan and the City agreed to share in the cost of the Settlement Health Care Plan, a single employer defined benefit plan for City retirees administered by the City. This agreement was in effect beginning July 1, 2008 and was terminated on December 31, 2016. This plan provides medical and prescription drug benefits to eligible retirees, spouses, and dependent children.

**Funding Policy** - The Plan's contribution requirement is established by the state legislature and may be amended. From July 1, 2008 through December 31, 2016, the amount of Plan paid health care premiums is \$95 per month for non-Medicare recipients and \$65 per month for Medicare recipients. The remaining cost to participate in the program is borne by the City and the annuitant.

In this report, the Plan, in accordance with GASB No. 43, *Financial Reporting for Post-employment Benefit Plans other than Pensions*, includes disclosures of the separate annual required contribution (ARC) for Other Postemployment Benefits (OPEB). It also requires that the investment return assumption (or "discount rate") used to value OPEB liabilities be based on the estimated long-term yield on the investments expected to be used to finance the payment of benefits. The OPEB liabilities are considered to be funded on a pay-as-you-go basis. That is, the health insurance supplement is financed with current contributions, and no separate healthcare asset account exists to pay the health insurance supplement.

**NOTE 14. OTHER POST EMPLOYMENT BENEFIT PLAN - CITY RETIREES (CONTINUED)**

**Annual Required Contribution** - The Plan's annual required contribution, employer contribution, and the percentage of annual required contribution contributed to the Plan since fiscal year end 2012, are as follows:

<u>Fiscal Year Ended</u>	<u>Annual Required Contribution (ARC)</u>	<u>Employer Contribution</u>	<u>Percentage of ARC Contributed</u>
12/31/2012	\$ 3,070,025	\$ 2,561,930	83.4%
12/31/2013	3,090,718	2,517,588	81.5
12/31/2014	2,519,877	2,359,700	93.6
12/31/2015	2,401,638	2,154,073	89.7
12/31/2016	2,182,389	1,839,998	84.3
12/31/2017 <sup>(1)</sup>			

<sup>(1)</sup> As was noted in the plan description, the Plan was terminated on December 31, 2016. Litigation outcome still outstanding. See Note 16, Carmichael, et al. v. Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, et al., for further information.

**Funded Status and Funding Progress** - Pursuant to the provisions contained in P.A. 98-0043, the City terminated health insurance supplement payments to eligible annuitants as of December 31, 2016, resulting in no OPEB liability at December 31, 2016 and forward.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revisions as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Funding Progress on page 53, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

**Actuarial Methods and Assumptions** - Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

## **NOTE 14. OTHER POST EMPLOYMENT BENEFIT PLAN - CITY RETIREES (CONTINUED)**

### **Actuarial Methods and Assumptions (continued)**

The actuarial cost method used in the actuarial valuation was the entry age normal actuarial cost method. The actuarial assumptions included a 4.5% investment rate of return and an annual healthcare cost trend rate of 0% due to the fact that the OPEB is a fixed dollar subsidy and trend is not applicable. The assumptions include projected salary increases of 3.75% and an inflation rate of 3.0% per year. The actuarial value of assets is zero (no assets) as the OPEB is on a pay-as-you-go basis. For December 31, 2015, the amortization method is level dollar on a one year closed period.

## **NOTE 15. OTHER POST EMPLOYMENT BENEFIT PLAN: THE PLAN AS EMPLOYER**

**Plan Description** - The Plan, as an employer, administers a single-employer postemployment healthcare plan (Retiree Health Plan). The Retiree Health Plan provides lifetime health and dental care insurance for eligible retirees and their spouses through the Plan's group health insurance plan, which covers both active and retired members. Currently, 9 retirees are in the plan and 20 active employees could be eligible at retirement.

**Funding Policy** - The contributions requirements of plan members and the Plan are established by the Plan's Board. The required contribution is based on projected pay-as-you-go financing requirements. For 2017 and 2016, the Plan contributed \$55,235 and \$78,180, respectively, toward premiums. Plan members receiving benefits contributed \$36,964 in 2017 or 40.1% of the total premiums for the year, through their required contributions of between \$116 and \$1,144 per month based on coverage. In 2016, Plan members contributed \$31,945 or 29.0% of the total premiums for the year through their required contributions of between \$113 and \$1,112 per month.

**Annual OPEB Cost and Net OPEB Obligation** - The Plan's annual other postemployment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years. The following table shows the components of the Plan's annual OPEB cost, the amount actually contributed to the plan, and changes in the Plan's net OPEB obligation to the Retiree Health Plan:

**NOTE 15. OTHER POST EMPLOYMENT BENEFIT PLAN: THE PLAN AS EMPLOYER  
(CONTINUED)**

**Annual OPEB Cost and Net OPEB Obligation (continued)**

	<u>2017</u>	<u>2016</u>
Annual required contribution	\$ 440,635	\$ 413,993
Interest on net OPEB obligation	120,370	107,695
Adjustment to ARC	<u>(157,144)</u>	<u>(140,597)</u>
Annual OPEB expense	403,861	381,091
Contributions made	<u>(70,884)</u>	<u>(99,427)</u>
Increase in net OPEB obligation	332,977	281,664
Net OPEB obligation - beginning of year	<u>2,674,895</u>	<u>2,393,231</u>
Net OPEB obligation - end of year	<u>\$ 3,007,872</u>	<u>\$ 2,674,895</u>

In 2017 and 2016, the Plan contributed 16.1% and 24.0%, respectively, of the annual required OPEB contribution to the plan.

**Actuarial Valuation Information**

Actuarial Valuation Date *	Value of Plan Net Assets (a)	Accrued Liability (AAL) (b)	Actuarial Liability (UAL) (c)	Funded Ratio (a/b)	Covered Annual Payroll (d)	Percentage of Covered Payroll (c/d)
12/31/2015	\$ -	\$ 4,038,264	\$ 4,038,264	0.00%	\$ 1,601,020	252.23%

\* For a plan the size of the Plan as Employer, GASB allows a valuation report to be used for up to 3 years if there are not significant changes in plan design, premiums/claims, or demographics that would materially change the results. The next actuarial valuation is scheduled to be performed as of December 31, 2017 which will be completed in 2018.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Funding Progress on page 54, presented as required supplementary information following the notes to the financial statements, presents trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

**NOTE 15. OTHER POST EMPLOYMENT BENEFIT PLAN: THE PLAN AS EMPLOYER  
(CONTINUED)**

**Actuarial Methods and Assumptions** - Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the December 31, 2015, actuarial valuation, the entry age normal actuarial cost method was used. The actuarial assumptions included a 4.5% investment rate of return and an annual healthcare cost trend rate for medical of 8.5% per year graded down to 4.5% per year (ultimate trend in 0.5% increments) and a rate for dental of 4.5% per year. The assumption includes projected wage inflation of 3.75% per year. The actuarial value of assets is zero (no assets) as the OPEB is on a pay-as-you-go basis. The amortization method is level dollar on an open basis and the remaining amortization period at December 31, 2015 was 30 years.

**NOTE 16. CONTINGENCIES**

On October 9, 2012, a civil action was filed in the Circuit Court of Cook County, Illinois, *Carmichael, et al. v. Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, et al.*, Case No. 12 CH 37712, wherein the plaintiffs allege that amendments to the Illinois Pension Code in P.A. 97-0651 (the "Act") violate the U.S. and Illinois Constitution. The defendants include the Plan and the Plan's Board, along with two other public employee pension funds and their respective boards.

On November 27, 2013 and September 29, 2014, the Circuit Court dismissed certain of Plaintiffs' claims with prejudice. On April 6, 2017, the Circuit Court heard oral argument on cross motions for summary judgment as to Plaintiffs' remaining claims, after which the Circuit Court took the matter under advisement. On July 14, 2017, the Circuit Court granted in part and denied in part the parties' motions for summary judgment. The Illinois Attorney General filed a direct appeal to the Illinois Supreme Court based on the Circuit Court's ruling that the Act was, in part, unconstitutional. Briefing in the Illinois Supreme Court is now proceeding. The outcome would have no material actuarial impact and the Act affects a relatively small group of members. Plaintiffs do not make a prayer for monetary relief but do seek attorney's fees. The Plan is defending this lawsuit. The outcome of the lawsuit is uncertain.

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.*, seeking class certification and an order requiring the City and the defendant pension funds to continue subsidizing retiree health insurance premiums past the June 30, 2013 statutory expiration date. The City removed the case to federal court. The City's motion to dismiss was granted, but on appeal, the Seventh Circuit Court of Appeals vacated the district court's order and remanded the case with instructions for the district court to remand the case to the Circuit Court of Cook County. On April 9, 2015, the Plaintiffs moved to reinstate the Underwood complaint in the

**NOTE 16. CONTINGENCIES (CONTINUED)**

Circuit Court of Cook County, and their motion was granted. All defendants, including the Plan, moved to dismiss the Complaint. On December 3, 2015, the Court granted in part and denied in part the Plan's motion to dismiss, leaving only a claim for lifetime retiree health insurance benefits for employees working for the City between August 1985 and August 1989, based on an amendment to Article 11 of the Illinois Pension Code effective August 23, 1985. The Plaintiffs filed a Third Amended Complaint on January 13, 2016. All defendants again moved to dismiss. On July 21, 2016, the Circuit Court entered a written order granting in part the defendants' motions to dismiss, other than claims by a group of employees that were hired by the City prior to August 21, 1989, who claim a right to a health care subsidy of \$25 per month under then-existing state law. Plaintiffs appealed this ruling to the First District Illinois Appellate Court. On June 29, 2017, the Appellate Court affirmed in relevant part the Circuit Court's dismissal order, other than expanding the group that is entitled to a \$25 per month health insurance subsidy. The Illinois Supreme Court denied further review. The case is being remanded to the Circuit Court to determine the mechanics of the payment of the \$25 per month subsidy. The Plan continues to defend this lawsuit. The outcome is uncertain.

**NOTE 17. SUBSEQUENT EVENTS**

Subsequent events have been evaluated through May 10, 2018, which is the date the financial statements were available to be issued. This review and evaluation revealed no other new material event or transactions which would require additional adjustment to or disclosure in the accompanying financial statements.

**REQUIRED SUPPLEMENTARY INFORMATION**

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017 AND 2016

**SCHEDULES OF CHANGES IN NET PENSION LIABILITY  
AND RELATED RATIOS MULTIYEAR**

	2017	2016	2015
<b>Total pension liability</b>			
Service cost including pension plan administrative expense	\$ 80,231,718	\$ 82,960,086	\$ 38,388,765
Interest on the total pension liability	154,047,387	150,166,006	153,811,897
Benefit changes	150,457	-	384,032,638
Difference between expected and actual experience	(62,178,234)	(30,428,098)	(46,084,758)
Assumption changes	(1,074,754,285)	(62,905,368)	1,175,935,546
Benefit payments	(154,767,434)	(151,922,150)	(150,013,189)
Refunds	(2,282,455)	(2,760,872)	(2,516,351)
Pension plan administrative expense	(3,984,947)	(4,080,239)	(3,844,346)
<b>Net change in total pension liability</b>	(1,063,537,793)	(18,970,635)	1,549,710,202
<b>Total pension liability - beginning</b>	3,693,645,301	3,712,615,936	2,162,905,734
<b>Total pension liability - ending (a)</b>	<u>\$ 2,630,107,508</u>	<u>\$ 3,693,645,301</u>	<u>\$ 3,712,615,936</u>
 <b>Plan fiduciary net position</b>			
Employer contributions	\$ 35,456,607	\$ 12,603,498	\$ 12,412,471
Employee contributions	17,410,821	17,245,913	16,844,246
Pension plan net investment income	207,981,245	57,997,329	(22,318,476)
Benefit payments	(154,767,434)	(151,922,150)	(150,013,189)
Refunds	(2,282,455)	(2,760,872)	(2,516,351)
Pension plan administrative expense	(3,984,947)	(4,080,239)	(3,844,346)
<b>Net change in plan fiduciary net position</b>	99,813,837	(70,916,521)	(149,435,645)
<b>Plan fiduciary net position - beginning</b>	1,167,740,724	1,238,657,245	1,388,092,890
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 1,267,554,561</u>	<u>\$ 1,167,740,724</u>	<u>\$ 1,238,657,245</u>
 <b>Net pension liability - ending (a) - (b)</b>	<u>\$ 1,362,552,947</u>	<u>\$ 2,525,904,577</u>	<u>\$ 2,473,958,691</u>
<b>Plan fiduciary net position as a percentage of total pension liability</b>	48.19 %	31.61 %	33.36 %
<b>Covered payroll</b>	<u>\$ 208,442,487</u>	<u>\$ 208,154,918</u>	<u>\$ 204,772,903</u>
<b>Net pension liability as a percentage of covered payroll</b>	653.68 %	1,213.47 %	1,208.15 %

*10 fiscal years will be built prospectively. Please see the following page for additional notes relating to the Schedule of Changes in Net Pension Liability and Related Ratios.*

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**ADDITIONAL NOTES TO SCHEDULES OF CHANGES IN NET PENSION LIABILITY AND RELATED  
RATIOS MULTIYEAR**

The significant decrease in the Total Pension Liability during fiscal year end December 31, 2017, was primarily due to the increase in the Single Discount Rate from 4.17% at the beginning of the fiscal year to 7.07% at the end of the fiscal year. The change in the funding policy under P.A. 100-0023 was the primary reason for the increase in the Single Discount Rate.

The Total Pension Liability at the beginning of fiscal year 2017 used a Single Discount Rate of 4.17% and the benefit provisions and funding policy in effect as of the December 31, 2016, funding actuarial valuation. The Single Discount Rate of 4.17% was based on a long-term expected rate of return on pension plan investments of 7.50% for years 2017 through 2027 and a long-term municipal bond rate as of December 29, 2016, of 3.78% for subsequent years after 2027.

The Total Pension Liability at the end of fiscal year 2017 used a Single Discount Rate of 7.07% and the benefit provisions and funding policy in effect as of the December 31, 2017, funding actuarial valuation. The Single Discount Rate of 7.07% was based on a long-term expected rate of return on pension plan investments of 7.25% for years 2018 through 2071 and a long-term municipal bond rate as of December 29, 2017, of 3.31% for subsequent years after 2071.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**SCHEDULE OF THE NET PENSION LIABILITY MULTIYEAR**

<b>FY Ending December 31,</b>	<b>Total Pension Liability</b>	<b>Plan Net Position</b>	<b>Net Pension Liability</b>	<b>Plan Net Position as a % of Total Pension Liability</b>	<b>Covered Payroll*</b>	<b>Net Pension Liability as a % of Covered Payroll</b>
2014	\$2,162,905,734	\$1,388,092,890	\$ 744,812,844	64.18%	\$ 202,673,014	382.30%
2015	3,712,615,936	1,238,675,245	2,473,958,691	33.36%	204,772,903	1208.15%
2016	3,693,645,301	1,167,740,724	2,525,904,577	31.61%	208,154,918	1213.47%
2017	2,630,107,508	1,267,554,561	1,362,552,947	48.19%	208,442,487	653.68%

\* Covered payroll shown is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during the fiscal year.

10 fiscal years will be built prospectively.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**SCHEDULE OF CONTRIBUTIONS MULTIYEAR  
Last 10 Fiscal Years**

<b>FY Ending December 31,</b>	<b>Actuarially Determined Contribution*</b>	<b>Actual Contribution</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered Payroll**</b>	<b>Actual Contribution as a % of Covered Payroll</b>	<b>Statutory Contribution***</b>	<b>Statutory Contribution Deficiency/(Excess)</b>
2008	\$ 17,652,023	\$ 15,232,804	\$ 2,419,219	\$216,744,211	7.03%	\$ 15,543,376	\$ 310,572
2009	33,517,429	14,626,771	18,890,658	208,626,493	7.01%	14,982,660	355,889
2010	46,664,704	15,351,944	31,312,760	199,863,410	7.68%	15,652,734	300,790
2011	57,258,593	12,778,697	44,479,896	195,238,332	6.55%	13,055,795	277,098
2012	77,566,394	11,852,905	65,713,489	198,789,741	5.96%	12,336,770	483,865
2013	106,199,410	11,583,051	94,616,359	200,351,820	5.78%	12,098,712	515,661
2014	106,018,725	12,160,815	93,857,910	202,673,014	6.00%	12,714,800	553,985
2015	79,850,835	12,412,471	67,438,364	204,772,903	6.06%	12,857,827	445,356
2016	117,033,100	12,603,498	104,429,603	208,154,918	6.05%	13,179,003	575,505
2017	124,226,042	35,456,607	88,769,435	208,442,487	17.01%	36,000,000	543,393

\* The LABF Statutory Funding Policy does not conform to Actuarial Standards of Practice, therefore, the Actuarially Determined Contribution is equal to the normal cost plus an amount to amortize the unfunded liability using level dollar payments and a 30-year open amortization period.

\*\* Covered payroll shown is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during the fiscal year.

\*\*\* Excludes amounts paid for health insurance supplement in fiscal years prior to December 31, 2017.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**NOTES TO SCHEDULE OF CONTRIBUTIONS MULTIYEAR**

**Valuation date:** December 31, 2017

Notes: Actuarially determined contribution rates are calculated as of December 31, which is 12 months prior to the end of the fiscal year in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates as of the Valuation Date:**

Actuarial Cost Method                      Entry Age Normal

Amortization Method                      Prior to 2017, the total City contribution is generated by a tax equal to 1.00 times the contributions by participants to the Plan two years prior to the year of the tax levy. For tax levy years 2017-2021, the statutory contributions are equal to \$36 million, \$48 million, \$60 million, \$72 million, and \$84 million, respectively. For tax levy years on and after 2022, the statutory contributions are equal to a level percentage of pay contribution determined so that the Plan attains a 90% funded ratio by the end of 2058 on an open group basis.

Remaining Amortization Period              Not Applicable. An amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution.

Asset Valuation Method                      5 year smoothed market

Inflation                                      2.25% as of the December 31, 2017 actuarial valuation

Salary Increases                              Salary increase rates based on service-related productivity and merit rates plus wage inflation of 3.00%.

Post Retirement Benefit Increases              Post retirement benefit increases are equal to 3.00 percent, compounded annually, for Tier 1 members. Post retirement increases for Tier 2 and Tier 3 members are equal to the lesser of 3.00 percent or one-half the annual unadjusted percentage increase (but no less than zero) in the Consumer Price Index-U for the 12 months ending with the September preceding the date of the increase, using simple interest.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**NOTES TO SCHEDULE OF CONTRIBUTIONS MULTIYEAR (CONTINUED)**

Investment Rate of Return	7.25% as of the December 31, 2017 actuarial valuation.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2017, valuation pursuant to an experience study of the period January 1, 2012, through December 31, 2016.
Mortality	<p>Post Retirement Mortality: Scaling factors of 117% for males, and 102% for females of the RP-2014 Blue collar Healthy Annuitant mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales. No adjustment is made for post-disabled mortality.</p> <p>Pre-Retirement Mortality: Scaling factors of 109% for males, and 103% for females of the RP-2014 Blue Collar Employee mortality table, sex distinct, with generational mortality improvement using MP-2017 2-dimensional mortality improvement scales.</p>

**Other Information:**

Notes	The actuarial valuation is based on the statutes in effect as of December 31, 2017. Benefit changes as a result of P.A. 100-0023 were recognized in the Total Pension Liability as of December 31, 2017.
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**Method and Assumptions Used for Accounting Purposes as of the Valuation Date:**

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market
Discount Rate:	4.17 % as of the December 31, 2016 valuation 7.07 % as of the December 31, 2017 valuation

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**SCHEDULE OF INVESTMENT RETURNS MULTIYEAR**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	18.7%	5.0%	-1.5%	3.2%

*10 fiscal years will be built prospectively.*

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**SCHEDULE OF FUNDING PROGRESS OF OPEB LIABILITIES FOR CITY RETIREES**  
(dollar amounts in thousands)

Actuarial Valuation Date December 31,	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Surplus) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll (b-a)/(c)
2012	\$ -	\$ 38,653	\$ 38,653	0.00%	\$ 198,790	19.44%
2013	-	7,074	7,074	0.00	200,352	3.53
2014	-	4,593	4,593	0.00	202,673	2.27
2015	-	2,133	2,133	0.00	204,773	1.04
2016 <sup>1</sup>						
2017 <sup>1</sup>						

<sup>1</sup> Pursuant to the provisions contained in P.A. 98-0043, the city terminated health insurance supplement payments to eligible annuitants as of December 31, 2016, resulting in no OPEB liability. Litigation outcome still pending.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS OF OPEB LIABILITIES FOR CITY RETIREES**  
(dollar amounts in thousands)

Year Ended December 31,	Annual Required Contribution	Percentage of ARC Contributed
2012	\$ 3,070	83.45%
2013	3,091	81.46
2014	2,520	93.64
2015	2,402	89.69
2016	2,182	84.31
2017	-	0.00

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**SCHEDULE OF FUNDING PROGRESS OF OPEB LIABILITIES FOR THE PLAN AS EMPLOYER**  
(dollar amounts in thousands)

Actuarial Valuation Date December 31,	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Surplus) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as % of Covered Payroll (b-a)/(c)
2006	\$ -	\$ 1,875	\$ 1,875	0.00%	\$ 1,221	153.62%
2009	-	3,362	3,362	0.00	1,581	231.58
2012	-	3,318	3,318	0.00	1,536	216.01
2015 <sup>1</sup>	-	4,038	4,038	0.00	1,601	252.23

**SCHEDULE OF EMPLOYER CONTRIBUTIONS OF OPEB LIABILITIES FOR THE PLAN AS EMPLOYER**  
(dollar amounts in thousands)

Year Ended December 31,	Annual Required Contribution	Percentage of ARC Contributed
2012	\$ 432	9.80%
2013	288	12.41
2014	331	14.22
2015	352	22.20
2016	414	24.02
2017	441	16.09

<sup>1</sup> The next actuarial valuation is scheduled for December 31, 2017 to be completed in 2018.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**NOTES TO SCHEDULE OF FUNDING PROGRESS  
AND SCHEDULE OF EMPLOYER CONTRIBUTIONS  
OF OPEB LIABILITIES**

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

Amortization method	Level Dollar; Open
Amortization period	30 Years
Actuarial cost method	Entry Age Normal
Asset valuation method	No Assets (Pay-as-you-go)
Actuarial assumptions:	
OPEB investment rate of return <sup>1</sup>	4.5%
Projected base salary increase <sup>1</sup>	3.75% per year
	<sup>1</sup> includes inflation at 3% per year
Merit and seniority increases	0.00% - 6.25%

<sup>1</sup> Actuarial assumptions for the City Retiree Plan are not included due to the City terminating the health insurance supplement payments to eligible annuitants as of December 31, 2016, pursuant to the provisions in P.A. 83-0043. Litigation outcome still pending.

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**REQUIRED SUPPLEMENTARY INFORMATION**

DECEMBER 31, 2017

**NOTES TO SCHEDULE OF FUNDING PROGRESS  
AND SCHEDULE OF EMPLOYER CONTRIBUTIONS  
OF OPEB LIABILITIES (CONTINUED)**

Healthcare cost trend rate	8.5% per year graded down .5% per year through 2024; 4.5% thereafter
	Excess trend rate of .34% over the base healthcare trend rate beginning in 2020 applied only to pre-Medicare per capita claim cost to account for the excise tax under the Health Care Reform Act.
Dental cost trend rate	4.5% per year

## **SUPPLEMENTARY INFORMATION**

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**SCHEDULES OF INVESTED ASSETS  
COST AND FAIR VALUE  
(In Thousands)**

	2017		2016					
	Cost Value	Fair Value	Cost Value	Fair Value				
Cash and short-term investments	\$ 40,128	4.1%	\$ 27,042	2.6%	\$ 27,042	2.3%		
U.S. equities	222,943	22.6%	294,180	23.7%	257,128	24.4%	284,808	24.7%
Foreign equities	210,659	21.3%	297,414	23.9%	216,318	20.5%	231,328	20.0%
Equity funds	74,767	7.6%	104,842	8.4%	85,350	8.1%	95,695	8.3%
U.S. Government obligations and municipal bonds	55,580	5.6%	55,413	4.5%	49,115	4.7%	48,381	4.2%
U.S. corporate bonds	37,508	3.8%	37,504	3.0%	34,218	3.2%	34,195	3.0%
Foreign fixed income securities	69,778	7.1%	71,605	5.8%	62,177	5.9%	58,605	5.1%
Fixed income funds	78,015	7.9%	91,215	7.3%	74,420	7.1%	82,708	7.2%
Private markets	21,429	2.2%	25,045	2.0%	27,248	2.6%	34,179	3.0%
Real estate	50,891	5.2%	65,763	5.3%	51,991	4.9%	63,491	5.5%
Hedge funds	75,119	7.6%	84,710	6.8%	72,929	6.9%	79,436	6.9%
Global Asset Allocation	51,184	5.2%	74,836	6.0%	97,145	9.2%	113,969	9.9%
Invested assets at cost/fair value	\$ 988,001	100.0%	\$ 1,242,661	100.0%	\$ 1,055,080	100.0%	\$ 1,153,837	100.0%

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**SCHEDULES OF ADMINISTRATIVE EXPENSES,  
INVESTMENT EXPENSES AND PROFESSIONAL SERVICES**

YEARS ENDED DECEMBER 31, 2017 AND 2016

**SCHEDULES OF ADMINISTRATIVE EXPENSES**

	<u>2017</u>	<u>2016</u>
Personnel services	\$ 2,165,736	\$ 2,055,436
Professional services	603,881	630,638
OPEB expense	403,861	381,091
Depreciation	4,325	172,931
Litigation expense	68,200	71,413
Occupancy and utilities	406,033	355,185
Fiduciary liability insurance premiums	188,430	213,934
Document retention	5,246	6,648
Supplies and equipment	40,476	48,257
Printing and technical services	20,007	31,665
Disaster recovery site	13,216	30,586
Telecommunications and internet	20,601	31,977
Postage	13,923	16,646
Miscellaneous	31,012	33,832
Total	<u>\$ 3,984,947</u>	<u>\$ 4,080,239</u>

**SCHEDULES OF INVESTMENT EXPENSES**

	<u>2017</u>	<u>2016</u>
Investment management fees	\$ 7,863,901	\$ 8,241,591
Other investment expenses	97,433	112,207
Investment consultant fee	287,875	296,082
Investment custody fees	213,555	214,164
Total	<u>\$ 8,462,764</u>	<u>\$ 8,864,044</u>

**SCHEDULES OF PROFESSIONAL SERVICES**

	<u>2017</u>	<u>2016</u>
Actuarial valuation	\$ 68,000	\$ 74,500
Actuarial consultation	-	18,250
Auditing	41,768	39,846
Benefit check production	92,320	92,772
Custom software development	240,800	113,760
IT consultant	7,460	20,695
Legal services	93,485	213,263
Legislative consultant	18,480	16,800
Medical consultant	41,568	40,752
Total	<u>\$ 603,881</u>	<u>\$ 630,638</u>

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'  
ANNUITY AND BENEFIT FUND OF CHICAGO**

**SCHEDULES OF INVESTMENT EXPENSES**

YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
<b>INVESTMENT MANAGEMENT FEES</b>		
AFL-CIO Housing Investment Trust	\$ 91,728	\$ 92,744
Apex Capital Management, Inc.	-	127,314
Ariel Investment, LLC	402,197	479,195
ASB Capital Management LLC	334,696	215,594
Ballie Gifford Oversees Ltd	410,274	340,350
Baird Advisors	55,927	63,019
BMO Harris Investment	-	215,714
Brightwood Capital Advisors, LLC	96,091	3,893
EntrustPermal Partners	76,636	357,982
Fiera Capital Inc.	520,945	290,670
Glouston Capital Partners	125,000	250,685
Hexavest Inc.	297,845	238,804
Holland Capital Management	-	177,513
Hopewell Partners, LLC	38,317	79,837
John Buck Company	47,505	(2,387)
Keeley Asset Management Corp.	155,583	181,591
Lighthouse Investment Partners, LLC	250,063	216,945
LM Capital Group, LLC.	215,488	113,608
Long Wharf Real Estate Partners LLC	150,000	212,466
Mesirow Financial Private Equity Advisors, Inc.	166,773	244,356
Mesirow Financial Investment Management, Inc.	191,283	154,069
MMF Capital Management LLC	12,308	31,432
Morgan Stanley AIP GP LP	192,452	139,067
Neuberger Berman Investment Advisers LLC	210,299	344,986
Newport Capital	17,482	36,363
Pantheon Ventures (US) LP	243,000	270,000
PIMCO	295,244	292,457
Pluscios Management LLC	213,020	109,899
Progress Investment Management Company, LLC	886,593	680,185
RhumbLine Advisers Limited Partnership	13,352	5,140
Rock Creek Group, LP	-	130,779
Stenham Asset Management Inc.	-	64,136
Thomas White International, Lt.d	-	78,891
USB Asset Management	-	62,236
Vontobel Asset Management, Inc.	444,386	407,982
Wasatch Advisors Inc.	617,399	375,948
Wellington Management Company LLP	533,304	598,609
Western Asset Management Company	214,894	258,225
William Blair & Company, L.L.C.	343,817	301,293
Total investment management fees	7,863,901	8,241,591
<b>OTHER INVESTMENT EXPENSES</b>		
Northern Trust Company	97,433	112,207
<b>INVESTMENT CONSULTING FEES</b>		
Marquette Associates, Inc.	163,333	-
NEPC LLC	124,542	296,082
	287,875	296,082
<b>INVESTMENT CUSTODY FEES</b>		
Northern Trust Company	213,555	214,164
Total investment expenses	\$ 8,462,764	\$ 8,864,044