FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO (A FIDUCIARY FUND OF THE CITY OF CHICAGO, ILLINOIS)

FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

DECEMBER 31, 2017 AND 2016

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REPORT OF INDEPENDENT AUDITORS

To the Board of Trustees of Firemen's Annuity and Benefit Fund of Chicago

Report on the Financial Statements

We have audited the accompanying financial statements of Firemen's Annuity and Benefit Fund of Chicago (the Plan), a fiduciary fund of the City of Chicago, Illinois, which comprise the combining statements of pension plan fiduciary net position and health insurance supplement plan net position as of December 31, 2017 and 2016, and the related combining statements of changes in pension plan fiduciary net position and health insurance supplement plan 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 for the Financial Statements

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

An audit includes performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. 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 in the first paragraph present fairly, in all material respects, the plan net position of Firemen's Annuity and Benefit Fund of Chicago as of December 31, 2017 and 2016, and the changes in plan net position for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 11, Public Act 98-0043 (the Act) which was effective June 28, 2013, terminates the retiree healthcare subsidy paid by the Plan as of December 31, 2016. As a result, the statement of health insurance supplement plan net position, changes in health insurance supplement plan net position, and required supplementary information related to the health insurance supplement plan will be eliminated in subsequent years' financial statement presentations. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis on pages 4 through 4e and the required supplementary information on pages 33 through 38 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the Plan's basic financial statements as a whole. The accompanying supplementary information on pages 39 through 41 is presented for purposes of additional analysis and is not a required part of the 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 basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Matters (continued)

Previously Audited Information

Legacy Professionals LLP

We also have previously audited the basic financial statements for the years ended December 31, 2015, 2014, 2013, and 2012 (which are not presented herein), and we expressed unmodified opinions on those financial statements. In our opinion, the information on page 41 is fairly stated in all material respects in relation to the basic financial statements from which it has been derived.

Westchester, Illinois

June 18, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

DECEMBER 31, 2017 AND 2016

This section presents Management's Discussion and Analysis of the financial position and performance of the Firemen's Annuity and Benefit Fund of Chicago (the Plan) as of and for the year ended December 31, 2017 and 2016. This discussion is presented as an overview of the financial activities of the Plan and should be read in conjunction with the Plan's financial statements.

Overview of the Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's basic financial statements. The financial statements are prepared on an economic sources focus and accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) pronouncements. The basic components of the financial package are described below:

Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position provides a snapshot of account balances and net position held in trust for future benefit payments and any liabilities as of the Plan's year end. Over time, increases and decreases in net position may serve as a useful indicator of whether the financial position of the Plan is improving or deteriorating.

Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position shows the revenues (additions) and expenses (deductions) during the year, where additions less deductions equal net increase (decrease) in net position. The net increase (decrease) in net position reports the change in net position as reported in the combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position of the prior year and the current year.

Notes to the Financial Statements provides additional information that is essential to achieving a better understanding of the data provided in the basic financial statements.

Required Supplementary Information provides schedules and related notes concerning actuarial information, funding progress, employer contributions, and investment returns.

Supplementary Information includes schedules of administrative expenses, investment expenses, additions by source, and deductions by type.

Financial Highlights

Plan Net Position

The condensed Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position reflect the resources available to pay benefits to members. A summary of the Combining Statements of Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position is as follows:

Plan Net Position As of December 31,

				Current Y	
				Increase/(Decr	ease) in
	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>Dollars</u>	Percent
Assets:					
Receivables	\$ 232,724,014	\$ 208,693,164	\$ 245,450,243	\$ 24,030,850	11.5 %
Prepaid expenses	165,861	213,718	173,206	(47,857)	-22.4 %
Investments, at fair value	901,201,369	814,391,075	802,505,864	86,810,294	10.7 %
Collateral held for					
securities on loan	111,709,566	123,059,048	140,197,357	(11,349,482)	-9.2 %
Total assets	1,245,800,810	1,146,357,005	1,188,326,670	99,443,805	8.7 %
Liabilities:					
Payables	7,937,930	4,284,164	3,028,220	3,653,766	85.3 %
Securities lending collateral	111,709,566	123,059,048	140,197,357	(11,349,482)	-9.2 %
Total liabilities	119,647,496	127,343,212	143,225,577	(7,695,716)	-6.0 %
Plan net position	\$ 1,126,153,314	\$ 1,019,013,793	\$ 1,045,101,093	\$ 107,139,521	10.5 %

Plan net position increased by \$107,139,521 or 10.5% from \$1,019,013,793 at December 31, 2016 to \$1,126,153,314 at December 31, 2017. Comparatively, plan net position decreased by \$26,087,300 or 2.5% from \$1,045,101,093 at December 31, 2015 to \$1,019,013,793 at December 31, 2016.

The increase in plan net position for the year ended December 31, 2017 was primarily due to strong investment returns and a significant increase in employer contributions from the previous year.

The decrease in plan net position for the year ended December 31, 2016 was primarily due to a significant decrease in employer contributions of 34.5% for the year ended December 31, 2016. The overall decline of plan net position was significantly offset by investment returns.

Changes in Plan Net Position

The condensed Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position reflects the changes in the resources available to pay benefits to members. A summary of the Combining Statements of Changes in Pension Plan Fiduciary Net Position and Health Insurance Supplement Plan Net Position is as follows:

Changes in Plan Net Position For the Years Ended December 31,

				Current Y	ear
				Increase/(Decr	ease) in
	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>Dollars</u>	Percent
Additions:					
Employer contributions	\$ 228,452,611	\$ 156,158,391	\$ 238,485,820	\$ 72,294,220	46.3 %
Plan member contributions	47,364,276	48,959,929	46,552,247	(1,595,653)	-3.3 %
Net investment income (loss)	139,910,123	54,708,936	(873,305)	85,201,187	155.7 %
Net securities lending income	597,279	653,249	526,419	(55,970)	-8.6 %
Other	85,333	5,525,415	7,949,589	(5,440,082)	-98.5 %
Total additions	416,409,622	266,005,920	292,640,770	150,403,702	56.5 %
Deductions:					
Benefits	302,518,486	283,085,767	274,459,754	19,432,719	6.9 %
Administrative expenses	3,171,986	3,216,823	3,149,549	(44,837)	-1.4 %
Annuitant health care	-	2,056,995	2,381,458	(2,056,995)	-100.0 %
Litigation settlement	-	60,385	-	(60,385)	-100.0 %
Refunds of contributions	3,579,629	3,673,250	3,557,317	(93,621)	-2.5 %
Total deductions	309,270,101	292,093,220	283,548,078	17,176,881	5.9 %
Net increase (decrease)					
in plan net position	\$ 107,139,521	\$ (26,087,300)	\$ 9,092,692	\$ 133,226,821	-510.7 %

Additions to Plan Net Position

Total additions were \$416,409,622 in 2017, \$266,005,920 in 2016 and \$292,640,770 in 2015.

Employer contributions increased by \$72,294,220 or 46.3% from \$156,158,391 for the year ended December 31, 2016 to \$228,452,611 for the year ended December 31, 2017. Comparatively, employer contributions decreased by \$82,327,429 or 34.5% from \$238,485,820 for the year ended December 31, 2015 to \$156,158,391 for the year ended December 31, 2016. During the year ended December 31, 2016, the Plan recognized a decrease in employer contributions due to Public Act 99-0506 which significantly deferred employer contributions to future years. During the year ended December 31, 2015, the Plan recognized an increase in contributions as a result of Public Act 96-1495, which was subsequently amended by the aforementioned Public Act 99-0506.

Additions to Plan Net Position (continued)

Plan member contributions decreased by \$1,595,653 or 3.3% from \$48,959,929 for the year ended December 31, 2016 to \$47,364,276 for the year ended December 31, 2017. Comparatively, plan member contributions increased by \$2,407,682 or 5.2% from \$46,552,247 for the year ended December 31, 2015 to \$48,959,929 for the year ended December 31, 2016. Plan member contributions for the year ended December 31, 2017 decreased due to employee contributions received as a result of the Godfrey litigation settlement during the year ended December 31, 2016, which was partially offset by the annual cost of living increases.

Net investment income increased by \$85,201,187 or 155.7% from \$54,708,936 for the year ended December 31, 2016 to \$139,910,123 for the year ended December 31, 2017. Comparatively, net investment income increased by \$55,582,241 from a loss of (\$873,305) for the year ended December 31, 2015 to a gain of \$54,708,936 for the year ended December 31, 2016. Investment earnings fluctuate primarily from the overall performance of the financial markets from year to year.

The Plan's realized return on investments for the year ended December 31, 2017 was 18.3% versus 8.0% for the year ended December 31, 2016 and 0.4% for the year ended December 31, 2015. Over the previous twenty years, the Plan's annual return is 7.6% compared to the actuarial assumed expected rate of return of 7.5%.

Portfolio Rate of Return For the Years Ended December 31,

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Domestic Equities	21.5%	13.1%	1.3%
S&P 500 Benchmark	21.8%	12.0%	1.4%
International Equities MS World Ex US	28.8%	4.0%	0.3%
	24.8%	3.3%	-2.6%
Fixed income	6.1%	4.8%	-0.3%
Barclays Aggregate Benchmark	3.5%	2.7%	0.6%
Total Plan	18.3%	8.0%	0.4%

Deductions to Plan Net Position

Total deductions were \$309,270,101 in 2017, \$292,093,220 in 2016 and \$283,548,078 in 2015.

Benefits increased by \$19,432,719 or 6.9% from \$283,085,767 for the year ended December 31, 2016 to \$302,518,486 for the year ended December 31, 2017. Comparatively, benefits increased by \$8,626,013 or 3.1% from \$274,459,754 for the year ended December 31, 2015 to \$283,085,767 for the year ended December 31, 2016. In recent times, benefits have increased yearly due to several factors; a contractual free healthcare incentive which has added annuitants above the expected number, cost of living increases, and new annuitants coming on the pension roll at higher rates than the annuitants that are being removed from the pension roll.

Annuitant health care decreased from \$2,056,995 and \$2,381,458 for the years ended December 31, 2016 and 2015, respectively, to \$0 for the year ended December 31, 2017. Public Act 98-0043 which was effective June 28, 2013 terminated the retiree healthcare subsidy paid by the Plan as of December 31, 2016.

Administrative expenses, litigation settlements and refunds of contributions have all remained at relatively constant amounts over the last three years.

Actuarial Information

Pension Benefits

The Plan's funding for pension benefits as of December 31, 2017, 2016 and 2015 is as follows:

Funding for Pension Benefits For the Years Ended December 31,

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total pension liability Plan fiduciary net position City's net pension liability	\$ 5,746,150,005 1,126,153,314 \$ 4,619,996,691	\$ 5,149,258,197 1,019,013,793 \$ 4,130,244,404	\$ 4,826,084,038 1,045,101,093 \$ 3,780,982,945
Plan fiduciary net position as a percentage of the total pension liability	<u>19.60</u> %	<u>19.79</u> %	<u>21.66</u> %

Actuarial Information (continued)

Postemployment Healthcare Benefits

The Plan's funding for postemployment healthcare benefits as of December 31, 2017, 2016 and 2015 is as follows:

Funding for Health Insurance Supplement For the Years Ended December 31,

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Unfunded actuarial accrued liability	\$ -	\$ -	\$ 2,398,609
Funded ratio	<u>0.00</u> %	0.00%	0.00%

Contributions for postemployment healthcare benefits are made on a "pay-as-you-go" basis resulting in a 0.00% funded ratio. Public Act 98-0043, effective June 29, 2013, terminates the retiree healthcare subsidy paid by the Plan after December 31, 2016.

Contact Information

This financial report is designed to provide plan participants, retirees, beneficiaries, the employer and all other interested users with a complete, detailed, easy to understand financial portrait of the Plan at December 31, 2017. Comments, questions or concerns regarding this report or requests for additional information should be addressed to:

Steve Swanson, Executive Director Firemen's Annuity and Benefit Fund of Chicago 20 S. Clark Street, Suite 1400 Chicago, IL 60603

COMBINING STATEMENTS OF PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

DECEMBER 31, 2017 AND 2016

		2017			2016	
		<u> </u>	Health		<u> </u>	Health
			Insurance			Insurance
	<u>Total</u>	Pension	Supplement	<u>Total</u>	Pension	Supplement
Assets						
Receivables						
Employer contributions - net	\$ 222,194,272	\$ 222,194,272	\$ -	\$ 200,385,829	\$ 200,385,829	\$ -
Investment income	2,559,800	2,559,800	-	2,404,085	2,404,085	=
Other	3,090,610	3,090,610	-	2,940,740	2,940,740	=
Securities lending	88,334	88,334	-	88,214	88,214	=
Unsettled trades	4,790,998	4,790,998		2,874,296	2,874,296	
Total receivables	232,724,014	232,724,014		208,693,164	208,693,164	
Prepaid expenses	165,861	165,861		213,718	213,718	
Investments						
Cash deposits and short-term investments	46,195,477	46,195,477	-	66,904,580	66,904,580	-
Corporate bonds	121,812,826	121,812,826	-	112,584,442	112,584,442	-
Equities	617,148,695	617,148,695	-	520,286,225	520,286,225	-
Pooled funds	31,170,538	31,170,538	-	28,675,801	28,675,801	-
Private equity and venture capital	16,485,995	16,485,995	-	21,896,500	21,896,500	-
U.S. and Foreign Government obligations	68,387,838	68,387,838	-	64,043,527	64,043,527	-
Total investments	901,201,369	901,201,369	-	814,391,075	814,391,075	
Collateral held for securities on loan	111,709,566	111,709,566		123,059,048	123,059,048	
Total assets	1,245,800,810	1,245,800,810		1,146,357,005	1,146,357,005	
Liabilities						
Accounts payable and accrued expenses	1,342,608	1,342,608	-	1,067,983	1,067,983	=
Participant accounts	519,101	519,101	-	574,919	574,919	=
Securities lending collateral	111,709,566	111,709,566	-	123,059,048	123,059,048	=
Securities lending	22,063	22,063	-	22,023	22,023	=
Unsettled trades	6,054,158	6,054,158		2,619,239	2,619,239	
Total liabilities	119,647,496	119,647,496		127,343,212	127,343,212	
NET POSITION						
Net position restricted for pensions	1,126,153,314	1,126,153,314	-	1,019,013,793	1,019,013,793	-
Net position held in trust for health insurance supplement benefits	- · · · · · -	-	-	- · · · · -	- · · · · · -	-
	\$ 1,126,153,314	\$ 1,126,153,314	\$ -	\$ 1,019,013,793	\$ 1,019,013,793	\$ -

COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017			2016		
	<u>Total</u>	Pension	Health Insurance <u>Supplement</u>	<u>Total</u>	Pension	Health Insurance Supplement
Additions						
Contributions						
Employer contributions						
Statutory	\$ 223,432,162	\$ 223,432,162	\$ -	\$ 156,158,391	\$ 154,101,396	\$ 2,056,995
Exempt rank funding	5,020,449	5,020,449				
Total employer contributions	228,452,611	228,452,611		156,158,391	154,101,396	2,056,995
Plan member	·					
Annuities	47,222,223	47,222,223	-	48,809,966	48,809,966	-
Death benefits	142,053	142,053		149,963	149,963	
Total plan member contributions	47,364,276	47,364,276	<u> </u>	48,959,929	48,959,929	<u> </u>
Investment income						
Net appreciation in fair value of investments	125,047,682	125,047,682	-	40,957,812	40,957,812	-
Interest	8,864,708	8,864,708	-	8,071,511	8,071,511	-
Dividends	11,491,614	11,491,614		10,686,533	10,686,533	
	145,404,004	145,404,004	-	59,715,856	59,715,856	-
Less investment expenses	(5,493,881)	(5,493,881)		(5,006,920)	(5,006,920)	
Net investment income	139,910,123	139,910,123	-	54,708,936	54,708,936	
Securities lending						
Income	1,766,076	1,766,076	-	1,005,661	1,005,661	-
Borrower rebates	(970,095)	(970,095)	-	(135,212)	(135,212)	-
Management fees	(198,702)	(198,702)		(217,200)	(217,200)	
Net securities lending income	597,279	597,279		653,249	653,249	
Gift Fund donations	4,330	4,330		4,680	4,680	
Miscellaneous income	18,549	18,549		1,814	1,814	
Tax levy interest	13,543	13,543		4,157	4,157	
Interest on settlement	48,911	48,911	<u> </u>	5,514,764	5,514,764	
Total additions	416,409,622	416,409,622		266,005,920	263,948,925	2,056,995

COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND HEALTH INSURANCE SUPPLEMENT PLAN NET POSITION

YEARS ENDED DECEMBER 31, 2017 AND 2016

		2017			2016	
	<u>Total</u>	<u>Pension</u>	Health Insurance Supplement	<u>Total</u>	<u>Pension</u>	Health Insurance Supplement
Deductions						
Benefits						
Age and service benefits						
Employees	\$ 243,139,971	\$ 243,139,971	\$ -	\$ 224,451,968	\$ 224,451,968	\$ -
Spouses	34,672,687	34,672,687	-	32,905,931	32,905,931	-
Dependents	966,833	966,833		969,126	969,126	
Total age and service benefits	278,779,491	278,779,491		258,327,025	258,327,025	
Disability benefits						
Duty	15,154,696	15,154,696	-	15,400,377	15,400,377	-
Occupational	7,172,217	7,172,217	-	8,022,899	8,022,899	-
Ordinary	249,882	249,882		159,866	159,866	
Total disability benefits	22,576,795	22,576,795	-	23,583,142	23,583,142	-
Gift Fund payments	378,000	378,000		500,000	500,000	
Death benefits	784,200	784,200		675,600	675,600	-
Total benefits	302,518,486	302,518,486	-	283,085,767	283,085,767	-
Administrative expenses	3,171,986	3,171,986	-	3,216,823	3,216,823	-
Annuitant health care	-	-	-	2,056,995	-	2,056,995
Litigation settlement	-	-	-	60,385	60,385	-
Refunds of contributions	3,579,629	3,579,629		3,673,250	3,673,250	
Total deductions	309,270,101	309,270,101		292,093,220	290,036,225	2,056,995
NET INCREASE (DECREASE)	107,139,521	107,139,521	-	(26,087,300)	(26,087,300)	-
NET POSITION						
Beginning of year	1,019,013,793	1,019,013,793		1,045,101,093	1,045,101,093	
End of year	\$ 1,126,153,314	\$ 1,126,153,314	\$ -	\$ 1,019,013,793	\$ 1,019,013,793	\$ -

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity - Accounting principles generally accepted in the United States of America define a financial reporting entity as consisting of the primary government and its component units for which the primary government is financially accountable. Financial accountability includes appointing a voting majority of a component unit's governing board, the ability of a primary government to impose its will on the component unit, or a potential for a component unit to provide specific financial benefits to or impose specific financial burdens on the primary government. Firemen's Annuity and Benefit Fund of Chicago (the Plan) has determined that no other outside entity meets the above criteria and, therefore, no other entity has been included as a component unit in the Plan's financial statements.

Based on the above criteria, the Plan is considered to be a fiduciary fund of the City of Chicago, Illinois (the City) and is included in the City's financial statements.

New Accounting Pronouncement - The Plan has implemented Governmental Accounting Standards Board (GASB) Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68 and No. 73* (GASB 82), which 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) contribution requirements.

Method of Accounting - The financial statements are presented using the accrual basis of accounting. Employer contributions are recognized as income pursuant to legal requirements as specified by the Illinois Compiled Statutes (the Statutes). Plan member contributions are recognized in the period in which the contributions are due. 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. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss.

Capital Assets - The Plan has set a capitalization threshold of \$100,000 for all capital asset types. As of December 31, 2017 and 2016, the Plan does not have any capital assets.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Estimates - The preparation of financial statements in conformity with 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.

Subsequent Events - Subsequent events have been evaluated through June 18, 2018, which is the date the financial statements were available to be issued.

NOTE 2. PLAN DESCRIPTION

The Plan was established in 1931 and is governed by legislation contained in the Statutes, particularly 40 ILCS, Act 5, Article 6 (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 established for the purpose of providing retirement and disability benefits for employees of the City of Chicago employed under the provisions of the Municipal Personnel Ordinance as fire service and for the dependents of such employees.

The Statutes authorize a Board of Trustees (the Board) of eight members to carry out the provisions of the Article. According to the Article, four members of the Board are ex officio and four are elected by the employee members of the Plan. The four ex officio members are the City Treasurer, the City Clerk, the City Comptroller and the Deputy Fire Commissioner. All members of the Board of Trustees 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 benefit and to have exclusive original jurisdiction in all matters relating to or affecting the Plan. The Board approves its own budget prepared by the Plan's administrative staff. The Board is required annually to submit to the City Council of the City of Chicago a detailed report of the financial affairs and status of the reserves of the Plan. Provisions in other articles of 40 ILCS require the Board to submit its annual audit and actuarial valuation reports to the State of Illinois Department of Insurance, as well as another detailed annual report, the form and content of which are specified by the Department of Insurance.

The Plan provides retirement benefits, as well as, death and disability benefits. Employees who reach compulsory retirement age of 63, except for emergency medical technicians, which is age 65, with at least 10 years of service and less than 20 years of service are entitled to receive an annuity of 30% of average salary for the first ten years of service plus an additional 2% for each year in excess of 10 years with partial City contributions to a maximum of 50%.

NOTE 2. PLAN DESCRIPTION (CONTINUED)

At age 50 or more with 10 or more but less than 20 years of service, a Tier 1 employee is entitled to an annuity of the entire sum accumulated for age and service annuity from deductions from salary, plus 1/10 of the sum accumulated from contributions by the City for each completed year of service after the first 10 years. For Tier 2 employees, the annuity is based on an accrual rate of 2.5% reduced by one half of one percent per month for retirement prior to age 55, subject to a maximum of 75%.

Employees with at least 20 years of service are entitled to receive a minimum formula annuity upon attainment of age 50 for Tier 1 employees and age 55 for Tier 2 employees, of 50% of final average salary plus an additional amount equal to 2.5% of final average salary for each year of service or fraction thereof in excess of 20 years of service. For Tier 1 employees, final average salary is based on the highest average annual salary for any four consecutive years within the last ten years of service immediately preceding the date of retirement. For Tier 2 employees, the final average salary is based on 96 consecutive months within the last 120 months, capped at \$106,800 indexed annually at the lesser of 3% and 50% of the Consumer Price Index (CPI-U). This annuity shall not exceed 75% of the final average salary. The monthly annuity is increased by 3% of the original annuity at the first of the month following the later of age 55 or the first anniversary of retirement and by 3% each first day of January thereafter, if born before January 1, 1966. There is no limit on the increases. If born after January 1, 1966, the monthly annuity is increased by 1.5% of the original annuity at the first of the month following the later of age 60 or the first anniversary of retirement and 1.5% on each first day of January thereafter, but not to exceed a total increase of 30%.

Participants should refer to the applicable State Statutes for more complete information.

Any employee of the City employed under the provisions of the Municipal Personnel Ordinance as fire service is covered by the Plan. At December 31, 2017 and 2016, participation in the Plan consisted of the following:

	<u>2017</u>	<u>2016</u>
Retirees and beneficiaries currently receiving benefits	4,878	4,777
Terminated plan participants entitled to but not yet receiving benefits	77	88
Active plan participants	4,613	4,760
Total participants	9,568	9,625

NOTE 3. EMPLOYER'S PENSION LIABILITY

Net Pension Liability

The components of the city's net pension liability of the Plan for the years ended December 31, 2017 and 2016 are as follows:

	<u>2017</u>	<u>2016</u>
Total pension liability	\$ 5,746,150,005	\$ 5,149,258,197
Plan fiduciary net position	1,126,153,314	1,019,013,793
City's net pension liability	\$ 4,619,996,691	\$ 4,130,244,404
Plan fiduciary net position as a percentage of the total pension liability	19.60%	19.79%
of the total pension had nity	17.00/0	17.17

See the schedule of changes in the city's net pension liability and related ratios in the required supplementary information for additional information related to the funded status of the Plan.

The actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study conducted by Gabriel Roeder Smith & Company for the period of January 1, 2012 through December 31, 2016, which was adopted and effective as of March 21, 2018.

The actuarial assumptions used in the December 31, 2016 valuation were based on the results of an actuarial experience study conducted by Gabriel Roeder Smith & Company for the period of January 1, 2003 through December 31, 2010, which was adopted and effective as of December 31, 2011.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Net Pension Liability (continued)

The net pension liabilities were determined by actuarial valuations performed as of December 31, 2017 and 2016 using the following actuarial methods and assumptions:

Actuarial valuation date December 31, 2017 and 2016

Actuarial cost method Entry-Age Normal
Asset valuation method 5 year smoothed market

Actuarial assumptions:

Inflation 2.50% per year

Salary increases 3.75% per year, plus additional service based increases

Investment rate of return 7.50% per year

Retirement age Experience-based table of rates that are specific to the type of

eligibility condition. 2017 - last updated pursuant to an experience study of the period January 1, 2012 through December 31, 2016. 2016 - last updated pursuant to an experience study of the period January 1,

2003, through December 31, 2010.

Mortality 2017 - Scaled RP-2014 Blue Collar Healthy Annuitant Mortality

Table, sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales. 2016 - RP-

2000 Combined Health Mortality Table, sex distinct.

Disabled mortality 2017 - Scaled RP-2014 Blue Collar Healthy Annuitant Mortality

Table, sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales. 2016 - RP-2000 Combined Health Mortality Table, sex distinct, set forward six

years.

Pre-retirement mortality 2017 - Scaled RP-2014 Blue Collar Healthy Annuitant Mortality

Table, sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales. 2016 - 80

percent of the post-retirement rates.

Postretirement annuity

increases

Tier 1 participants - 1.50% simple interest for 20 years for members born after January 1, 1966, 3.00% simple interest for life for members born before January 1, 1966. Tier 2 participants - the lesser of 3.0%

or one half of the increase in the Consumer Price Index.

NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

Discount Rate

A discount rate of 7.23% was used to measure the total pension liability at December 31, 2017. The discount rate was based on an expected rate of return on Plan investments of 7.50% and a municipal bond rate of 3.31%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the statutory contribution rates and the member rate. Based on these assumptions, the Plan's fiduciary net position and future contributions were sufficient to finance the benefit payments only through the year 2070. As a result, the long-term expected rate of return on Plan investments was applied to projected benefit payments through the year 2070, and the municipal bond rate was applied to all benefit payments after that date.

A discount rate of 7.30% was used to measure the total pension liability at December 31, 2016. The discount rate was based on an expected rate of return on Plan investments of 7.50% and a municipal bond rate of 3.78%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the statutory contribution rates and the member rate. Based on these assumptions, the Plan's fiduciary net position and future contributions were sufficient to finance the benefit payments only through the year 2066. As a result, the long-term expected rate of return on Plan investments was applied to projected benefit payments through the year 2066, and the municipal bond rate was applied to all benefit payments after that date.

The municipal bond rates were from the Federal Reserve statistical release (H.15) and described as Bond Buyer Index, general obligation, 20 years to maturity, mixed quality.

Discount Rate Sensitivity

The following is an analysis of the net pension liability's sensitivity to changes in the discount rate at December 31, 2017 and 2016. The following table presents the net pension liability of the city using the blended discount rate as well as the city's net pension liability calculated using a discount rate 1 percent lower and 1 percent higher than the current discount rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
City's Net Pension Liability -	6.23%	7.23%	8.23%
December 31, 2017	\$ 5,303,879,317	\$ 4,619,996,691	\$ 4,046,477,380
		Current	
	1% Decrease	Discount Rate	1% Increase
City's Net Pension Liability -	6.30%	7.30%	8.30%
December 31, 2016	\$ 4,700,967,631	\$ 4,130,244,404	\$ 3,644,822,548

NOTE 4. SUMMARY OF EMPLOYER FUNDING POLICIES

Covered employees are required to contribute 9.125% of their salary to the Plan. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with statutory interest.

The City, for its employer portion, is required by the Statutes to contribute the remaining amounts necessary to finance the requirements of the Plan. Public Act 99-0506, enacted into law on May 30, 2016, specifies the amounts of contributions to be paid by the City as follows:

	Required
Plan year ending	Statutory
December 31,	Contribution
2016	\$ 208,000,000
2017	\$ 227,000,000
2018	\$ 235,000,000
2019	\$ 245,000,000

Beginning with the Plan year ending December 31, 2020, the City is required to fund the Plan on an actuarial basis sufficient to produce a funding level of 90% by the year ended December 31, 2055.

NOTE 5. 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. The pension code legislation can be amended only by the Illinois Legislature.

The Prior Service Annuity Reserve is a reserve account for the accumulation of City contributions to provide for: a) employee and spouse annuities that are based on service performed before the Plan's effective date of July 1, 1931 and b) any excess in minimum annuity formula requirements over the amounts required for age and service annuities, and for spouse annuities.

The City Contribution Reserve 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 maintained for each employee and spouse until the employee retires, at which time the individual account balances are transferred to the Annuity Payment Reserve.

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

NOTE 5. RESERVES FOR ACTUARIAL LIABILITIES (CONTINUED)

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

The Death Benefit Reserve accumulates contributions from employees and the City for ordinary death benefits. All ordinary death benefits paid are charged to this reserve.

The Ordinary Disability Reserve accumulates contributions from employees and the City for ordinary disability benefits. All ordinary disability benefits paid are charged to this reserve.

The Supplementary Payment Reserve accumulates amounts to provide automatic annual postretirement increases to employee annuitants who retired before September 1, 1959 and amounts in excess of the original annuity grant due to increases in the minimum annuity.

The Gift Reserve accumulates donations to be used to provide an extra benefit to widowed spouse annuitants and orphaned child annuitants.

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

Net position restricted for pensions as of December 31, 2017 and 2016 were comprised of the following reserve surplus (deficit) balances:

	<u>2017</u>	<u>2016</u>
Prior Service Annuity Reserve	\$ 2,525,779,195	\$ 2,187,704,567
City Contribution Reserve	829,966,098	834,958,773
Annuity Payment Reserve	1,020,357,166	1,051,808,490
Salary Deduction Reserve	684,030,774	688,378,161
Death Benefit Reserve (deficit)	(20,022,931)	(18,807,011)
Ordinary Disability Reserve	575,231	511,694
Supplementary Payment Reserve (deficit)	(132,298)	(65,982)
Gift Reserve	12,575,998	10,706,237
Reserve (deficit)	 (3,926,975,919)	 (3,736,181,136)
Total fiduciary net position		
for pension benefits	\$ 1,126,153,314	\$ 1,019,013,793

NOTE 6. INVESTMENTS

Investment Policies

The Board of Trustees is responsible for establishing reasonable and consistent investment objectives, policies and guidelines governing the investment of Plan assets in accordance with the Statutes. 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 "prudent person" provisions of the Statutes. All of the Plan's financial instruments are consistent with the permissible investments outlined in the Statutes and any index-linked financial instruments are limited to those indices that replicate the permissible investments outlined in the Statutes. During the years ended December 31, 2017 and 2016, there were no significant changes to the investment policies.

Long-Term Expected Rate of Return

The Plan's investment policies in accordance with the Statutes establish the following target allocation across asset classes:

		Long-term
	Target	Expected Real
Asset Class	Allocation	Rate of Return
Equity	60.00%	7.25%
Fixed income	20.00%	7.34%
Real estate	8.00%	7.62%
Other investments	<u>12.00</u> %	7.70%
Total	100.00%	

The long-term expected real rate of return on the Plan's investments was determined using an asset allocation study conducted by the Plan's investment management consultant in which best estimate ranges of expected future real rates of return (net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates or arithmetic real rates of return for each major asset class included in the Plan's target asset allocation are listed in the preceding table.

Annual Money-Weighted Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 17.9% and 7.5% for the years ended December 31, 2017 and 2016, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. 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 Plan establishes minimum investment rating guidelines for each investment manager based on their area of concentration and level of allowable risk. The following table presents a summarization at December 31, 2017 and 2016 of the lowest credit quality rating of investments in corporate bonds, foreign government obligations, short-term investments, and fixed income mutual funds as valued by Moody's Investors Service and/or Standard & Poor's, as applicable.

Credit Risk (continued)

Type of Investment	Rating	<u>2017</u>	<u>2016</u>
Cash deposits and short-term investments	Not Rated	\$ 46,195,477	\$ 66,904,580
Corporate bonds	Aaa/AAA Aa/AA A/A Baa/BBB Ba/BB B/B Caa/CCC Ca/CC C/C D/D Not Rated	\$ 7,440,119 3,205,088 16,218,585 43,162,492 18,735,419 6,650,539 1,980,849 454,909 305,655 318,005 12,929,229	\$ 3,466,761 2,931,745 13,971,213 41,586,196 19,280,962 7,740,062 3,464,173 355,454 268,508 426,159 9,339,899
U.S. Governmen	t Guaranteed	\$ 10,411,937 121,812,826	\$ 9,753,310 112,584,442
Pooled funds - fixed income	Aa/AA A/A Ba/BB B/B	\$ 18,149,195 665,837 - 6,644,256 25,459,288	\$ 17,417,372 850,851 2,772,448 2,121,108 23,161,779
U.S. and Foreign Government obligations U.S. Government	Aaa/AAA Aa/AA A/A Baa/BBB Ba/BB B/B Not Rated t Guaranteed	\$ 17,297,624 8,954,062 2,668,759 1,122,914 2,336,740 957,113 5,730,373 29,320,253 68,387,838	\$ 22,177,760 7,727,039 2,936,797 1,231,712 1,506,762 532,338 3,150,002 24,781,117 64,043,527

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. Investments are diversified to minimize the risk of loss resulting from overconcentration of assets in a specific maturity period, a single issuer, or an individual class of securities. The Plan requires investment managers to display an overall level of interest rate risk that is consistent with the benchmark specified by the Plan. The following table presents a summarization of debt investments at December 31, 2017 and 2016 using the segmented time distribution method:

Type of Investment	<u>Maturity</u>		<u>2017</u>		<u>2016</u>
Cash deposits and short-term investments	Less than 1 year	\$	46,195,477	\$	66,904,580
Corporate bonds	Less than 1 year 1-5 years 5-10 years Over 10 years	\$ <u>\$</u>	2,957,306 24,361,722 50,748,327 43,745,471 121,812,826	\$ <u>\$</u>	1,895,768 18,250,142 50,543,033 41,895,499 112,584,442
Pooled funds - fixed income	Less than 1 year 1-5 years 5-10 years	\$ 	4,543,866 20,915,422 - 25,459,288	\$ <u>\$</u>	3,623,299 19,538,480 23,161,779
U.S. and Foreign Government obligations	Less than 1 year 1-5 years 5-10 years Over 10 years	\$	3,108,685 19,664,102 13,858,852 31,756,199 68,387,838	\$	12,932,609 10,342,345 12,745,140 28,023,433 64,043,527

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Plan requires investment managers to invest in at least ten countries if investing in foreign obligations and/or equities. The Plan's exposure to foreign currency risk at December 31, 2017 and 2016 is as follows:

Type of Investment	Fair Value (USD) 2017	Fair Value (USD) 2016
Corporate bonds:		
Australian dollar	\$ -	\$ 261,665
Brazilian real	-	86,644
European euro	79,131	65,362
Mexican peso	787,148	713,704
U.S. dollar	 120,946,547	 111,457,067
	\$ 121,812,826	\$ 112,584,442
U.S. and Foreign Government obligations:		
Argentine peso	\$ 520,661	\$ -
Brazilian real	744,748	571,424
Chinese yuan	362,568	347,455
Colombian peso	-	471,586
European euro	-	30,335
Japanese yen	333,589	321,065
Malaysian ringgit	736,038	-
Mexican peso	1,909,301	2,149,608
Russian ruble	677,902	546,001
South African rand	842,834	-
U.S. dollar	 62,260,197	 59,606,053
	\$ 68,387,838	\$ 64,043,527

Foreign Currency Risk (continued)

Type of Investment	Fair Value (USD) 2017	Fair Value (USD) 2016
		
Equities: Australian dollar	\$ 4,402,116	\$ 3,815,575
Brazilian real	6,697,821	5,550,321
British pound	33,299,495	27,799,034
Canadian dollar	6,745,319	8,070,623
Chilean peso	550,258	334,457
Colombian peso	216,977	270,999
Czech koruna	210,777	95,675
Danish krone	2,526,384	635,811
Egyptian pound	355,698	135,720
European euro	50,541,477	42,528,139
Hong Kong dollar	21,389,351	13,581,586
Hungarian forint	767,989	517,061
Indian rupee	6,744,901	4,110,500
Indonesian rupiah	2,322,752	1,643,011
Israeli shekel	1,213,282	146,502
Japanese yen	38,098,403	34,431,374
Malaysian ringgit	964,924	948,114
Mexican peso	2,717,515	1,180,452
New Zealand dollar	176,406	238,057
Norwegian krone	1,905,721	1,216,168
Pakistan rupee	80,898	116,056
Philippines peso	680,280	216,245
Polish zlotych	204,948	336,266
Singapore dollar	1,351,747	830,904
South African rand	3,924,147	3,343,198
South Korean won	12,770,503	10,810,970
Swedish krona	4,259,235	3,702,857
Swiss franc	8,339,352	7,227,847
Taiwan dollar	6,169,097	4,376,135
Thailand baht	1,214,626	1,562,545
Turkish lira	515,622	1,004,754
United Arab Emirates dirham	-	149,349
U.S. dollar	396,001,451	339,359,920
	\$ 617,148,695	\$ 520,286,225

Additional Investment Disclosures

During 2017 and 2016, net realized gain on investments sold, reflecting the difference between the proceeds received and cost value of securities sold, was \$46,678,187 and \$19,372,488 respectively. These amounts are included in the net appreciation in fair value of investments as reported on the combining statements of changes in pension plan fiduciary net position and health insurance supplement plan net position. The calculation of realized gains and losses is independent of the calculation of net appreciation in the fair value of plan investments. Investments purchased in a previous year and sold in the current year result 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 year and the previous year(s).

The Plan does not isolate that portion of net appreciation (depreciation) in fair value of investments resulting from changes in the foreign exchange rate on investments from fluctuations arising from changes in the market prices of the securities. Such fluctuations are included with net appreciation in fair value of investments. Net realized gains and (losses) on foreign currency transactions represent net exchange gains or losses on closed foreign currency contracts, disposition of foreign currencies, and the difference between the amount of investment income and foreign withholding taxes recorded on the Plan's books and the U.S. dollar equivalent amounts actually received or paid. Net unrealized gains and (losses) on foreign currency transactions arise from changes in the value of open foreign currency contracts and assets and liabilities other than investments at the year end, resulting from changes in the exchange rate.

NOTE 7. FAIR VALUE MEASUREMENTS

GASB Statement No. 72, *Fair Value Measurement and Application*, established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Basis of Fair Value Measurement

Level 1	Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities
Level 2	Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly
Level 3	Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The Plan has the following recurring fair value measurements as of December 31, 2017 and 2016:

		Fair Value Mea	asurements at 12/3	1/2017 Using
		Quoted		
		Prices in		
		Active	Significant	
		Markets for	Other	Significant
		Identical	Observable	Unobservable
		Assets	Inputs	Inputs
	Total	(Level 1)	(Level 2)	(Level 3)
Investments by fair value level				
Cash deposits and short-term investments	\$ 16,189,558	\$ 4,302,472	\$ 11,887,086	\$ -
Corporate bonds	121,812,826	ψ 1,502,172 -	121,812,826	Ψ -
Equities	617,148,695	617,148,695	-	_
Pooled funds	5,711,250	5,711,250	_	_
U.S. and Foreign Government obligations	68,387,838	-	68,387,838	_
one was recognized to the congulations	829,250,167	\$ 627,162,417	\$ 202,087,750	\$ -
Investments measured at net asset value	71,951,202			
Total investments at fair value	\$ 901,201,369			
		Fair Value Mea	asurements at 12/3	1/2016 Using
		Fair Value Mea	asurements at 12/3	1/2016 Using
		•	asurements at 12/3	1/2016 Using
		Quoted	Significant	1/2016 Using
		Quoted Prices in		1/2016 Using Significant
		Quoted Prices in Active	Significant	
		Quoted Prices in Active Markets for	Significant Other	Significant
	Total	Quoted Prices in Active Markets for Identical	Significant Other Observable	Significant Unobservable
Investments by fair value level	Total	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
Investments by fair value level Cash deposits and short-term investments		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash deposits and short-term investments	\$ 36,816,569	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs
Cash deposits and short-term investments Corporate bonds	\$ 36,816,569 112,584,442	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash deposits and short-term investments Corporate bonds Equities	\$ 36,816,569 112,584,442 520,286,225	Quoted Prices in Active Markets for Identical Assets (Level 1) \$ 6,180,818	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash deposits and short-term investments Corporate bonds Equities Pooled funds	\$ 36,816,569 112,584,442 520,286,225 5,514,022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2) \$ 30,635,751 112,584,442	Significant Unobservable Inputs (Level 3)
Cash deposits and short-term investments Corporate bonds Equities	\$ 36,816,569 112,584,442 520,286,225	Quoted Prices in Active Markets for Identical Assets (Level 1) \$ 6,180,818	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash deposits and short-term investments Corporate bonds Equities Pooled funds	\$ 36,816,569 112,584,442 520,286,225 5,514,022 64,043,527	Quoted Prices in Active Markets for Identical Assets (Level 1) \$ 6,180,818 - 520,286,225 5,514,022	Significant Other Observable Inputs (Level 2) \$ 30,635,751 112,584,442	Significant Unobservable Inputs (Level 3) \$

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

Level 1 Measurements

Cash deposits, equities, and pooled funds are traded in active markets on national and international securities exchanges and are valued at closing prices on the measurement date.

Level 2 Measurements

Short-term investments, corporate bonds, and U.S. Government and Foreign Government obligations are generally valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. To the extent that quoted prices are not available, fair value is determined based on a valuation model that include inputs such as interest rate yield curves and credit spreads. Securities traded in markets that are not considered active are valued based on quoted market prices, broker to dealer quotations, or alternative pricing sources with reasonable levels of price transparency. Securities that trade infrequently and therefore have little or no price transparency are valued using the investment manager's best estimates.

The valuation methods for investments measured at net asset value (NAV) are presented on the following table:

	Fair	Valu	ie	1	Unfunded	Redemption Frequency	Redemption Notice
	 12/31/2017		12/31/2016	Co	ommitments	(If Eligible)	Period
Investments measured at net asset value							
Short-term investments (1)	\$ 30,005,919	\$	30,088,011	\$	-	Daily	N/A
Pooled funds (2)	25,459,288		23,161,779		-	Daily	N/A
Private equity and venture capital (3)	 16,485,995		21,896,500		17,814,119	Closed-end	N/A
Total	\$ 71,951,202	\$	75,146,290				

- (1) <u>Short-term investments</u> This investment's objective is to invest in short-term investments of high quality and low risk to protect capital while achieving investment returns. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (2) <u>Pooled funds</u> This investment is made up of four funds with an investment objective to maximize the total return. The fair value of the investments in this type has been determined using the NAV per share of the investments.

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

(3) Private equity and venture capital - This investment consists of twelve limited partnership investments with an investment objective to achieve long-term capital appreciation, preserve capital, and achieve a consistent pattern of returns through investments in limited partnerships, privately issued securities, private equity funds, and other pooled investments with a focus on the venture sector and undervalued alternative investments. Closed-end limited partnership interests are generally illiquid and cannot be redeemed. It is expected that the liquidation of the limited partnership interests will generally coincide with the terms of the various partnership agreements. The limited partnership termination dates range from March 31, 2017 to September 21, 2024 but may be terminated earlier or extended later as set forth in the terms of the applicable partnership agreement. The fair value of the investments in this type has been determined using the NAV per share (or its equivalent) of the investments.

NOTE 8. SECURITIES LENDING

The Statutes and the Board of Trustees permit the Plan to lend its securities to broker-dealers and other entities with a simultaneous agreement to return collateral for the same securities in the future. The Plan's custodian, acting as the lending agent, lends securities for collateral in the form of cash, U.S. Government obligations and irrevocable letters of credit equal to 102% of the fair value of domestic securities plus accrued interest and 105% of the fair value of foreign securities plus accrued interest. The Plan is not restricted as to the type or amount 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 59 days in 2017 and 48 days in 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 at December 31, 2017 and 2016 of 27 days and 28 days, respectively. Cash collateral may also be invested in term loans in which the investments (term loans) match the term of the securities loaned.

As of December 31, 2017 and 2016, the fair value (carrying amount) of loaned securities was \$108,636,573 and \$119,669,227 respectively. As of December 31, 2017 and 2016, the fair value (carrying amount) of cash collateral received by the Plan was \$111,709,566 and \$123,059,048 respectively. The cash collateral is included as an asset and a corresponding liability on the statements of plan net position.

Although the Plan's securities lending activities are collateralized as described above, they involve both market and credit risk. In this context, market risk refers to the possibility that the borrower of securities will be unable to collateralize the loan upon a sudden material change in the fair value of the loaned securities. Credit risk refers to the possibility that counterparties involved in the securities lending program may fail to perform in accordance with the terms of their contracts.

NOTE 8. SECURITIES LENDING (CONTINUED)

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower. The contract with the lending agent requires it 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.

There were no losses due to default of a borrower or the lending agent during the years ended December 31, 2017 and 2016.

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

	<u>2017</u>	<u>2016</u>
Corporate bonds	\$ 12,254,513	\$ 11,866,690
Equities	90,776,836	100,503,199
U.S. and Foreign Government obligations	5,605,224	7,299,338
Total	\$ 108,636,573	\$ 119,669,227

NOTE 9. DERIVATIVES

The Plan invests in derivative financial instruments as provided by the Plan's statement of investment policy. The Plan uses derivative financial instruments to gain exposure to an asset class or manage portfolio risk. A derivative security is a financial contract whose value is based on, or "derived" from, a traditional security, an asset, or a market index. Derivative instruments include options, forward contracts, swaps, and futures as part of the Plan's portfolio. Derivative transactions involve, to varying degrees, credit risk, interest rate 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 the previously agreed upon terms. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. 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.

NOTE 9. DERIVATIVES (CONTINUED)

The Plan's portfolio includes the following derivative instruments at December 31, 2017 and 2016:

	2017		2016	
	Notional	Fair	Notional	Fair
<u>Derivative</u>	<u>Value</u>	<u>Value</u>	<u>Value</u>	<u>Value</u>
Options	\$ -	\$ 55,364	\$ -	\$ (19,069)
Futures purchase commitments	(83,730,5	31) -	(61,456,770)	-
Futures sales commitments	83,730,5	31 -	61,456,770	-
Swap assets	5,390,0	93,377	9,904,000	235,447
Swap liabilities	(3,939,5	00) (144,383)	(1,460,000)	(57,243)
Total	\$ 1,450,5	00 \$ 4,358	\$ 8,444,000	\$ 159,135

The Plan uses options to reduce the risk of holding an asset. An option is a contract that conveys the right, but not the obligation, to buy (call) or sell (put) an item at an agreed upon price during a certain period of time or on a specific date. For the years ended December 31, 2017 and 2016, the options expire approximately one to three months after year end.

Futures contracts are used to provide exposure to an asset class using uninvested cash. These contracts are a legally binding agreement, made on the trading floor of a futures exchange, to buy or sell a commodity or financial instrument sometime in the future. Futures contracts have little credit risk, as organized exchanges are the guarantors. For the year ended December 31, 2017, the futures contracts mature from one month to 2 years after year end. For the year ended December 31, 2016, the futures contracts mature from one month to sixteen months after year end.

Swaps are used by the Plan to hedge certain risks such as interest rate risk, or to speculate on changes in the underlying price of an asset. Traditionally, a swap is the exchange of one security for another to change the maturity, quality, structure of an issue, or because investment objectives have changed. For the year ended December 31, 2017, the swaps have maturity dates ranging from June 2022 through November 2043. For the year ended December 31, 2016, the swaps have maturity dates ranging from June 2021 through June 2026.

The Plan's derivative instruments are reported at fair value in equity investments on the combining statements of pension plan fiduciary net position and health insurance supplement plan net position. The gain or loss on derivative instruments is reported as part of investment income on the combining statements of changes in pension plan fiduciary net position and health insurance supplement plan net position.

NOTE 10. EMPLOYER CONTRIBUTIONS RECEIVABLE - NET

Employer contributions due and not paid prior to year end are recorded as contributions receivable and are reserved for uncertain collections. The allowance for uncollectible accounts is based on the likelihood of future collections. Employer contributions receivable at December 31, 2017 and 2016 consist of the following:

	<u>2017</u>	<u>2016</u>
Employer contributions receivable for	\$ 239,263,553	\$ 216,072,633
Less allowance for uncollectible accounts	(17,069,281)	(15,686,804)
Total	\$ 222,194,272	\$ 200,385,829

NOTE 11. HEALTH INSURANCE SUPPLEMENT PLAN

Plan Description

The City offered group health benefits to annuitants and their eligible dependents through the City of Chicago Annuitant Medical Benefits Program (the Program). The Plan and the City shared in the cost of providing health care coverage to the annuitants or their surviving spouses who elected to participate in the Program. The Plan, in accordance with State Statutes, subsidized the cost of monthly group health care premiums up to \$95 per month for non-Medicare recipients and \$65 per month for Medicare recipients. The remaining cost to participate in the Program was borne by the City and the annuitant.

Public Act 98-0043, effective June 28, 2013, terminated the retiree healthcare subsidy paid by the Plan after December 31, 2016.

At December 31, 2016, the number of annuitants or surviving spouses whose cost to participate in the Program was subsidized totaled 566.

NOTE 11. HEALTH INSURANCE SUPPLEMENT PLAN (CONTINUED)

Summary of Significant Accounting Policies

Valuation Date - December 31, 2015

Actuarial Cost Method - Entry age normal

Actuarial Value of Assets - No assets (pay-as-you-go)

Amortization Method - Level dollar

Amortization Period - 3 year closed period commencing December 31, 2013

Healthcare Investment Rate of Return - 4.5% per year

OPEB Investment Rate of Return - 4.5% per year

Health Care Cost Trend Rate - 0.0% (fixed dollar subsidy)

Projected Salary Increases - 3.75% per year, plus an additional percentage related to service and promotion

Method of Accounting - The Health Insurance Supplement Plan's financial statements have been combined with the Plan's financial statements and are presented using the accrual basis of accounting. The Plan considers the premium subsidy an additional retirement benefit, with no contribution rate or asset allocation associated with it.

Contributions - The Plan funds the Health Insurance Supplement Plan on a "pay-as-you-go" basis.

Administrative Costs - Administrative costs associated with the Health Insurance Supplement Plan are paid by the Plan's employer contributions.

Actuarial Valuations - Actuarial valuations of the Plan involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Actuarial calculations of the Plan reflect a long-term perspective and are based on the benefits provided under the terms of the Plan in effect at the time of each valuation and on the historical pattern of sharing of costs between the employer and Plan members to that point.

NOTE 11. HEALTH INSURANCE SUPPLEMENT PLAN (CONTINUED)

Funded Status and Funding Progress

As of December 31, 2016, the Health Insurance Supplement Plan was 0% funded on an actuarial basis, and the actuarial accrued liability for benefits was \$0 resulting in an unfunded accrued actuarial liability (UAAL) of \$0.

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

NOTE 12. 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. Participation in the deferred compensation plan is optional. The deferred compensation is managed by a third party administrator. 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 13. RELATED PARTY TRANSACTIONS

The Plan has allowed the Ende, Menzer, Walsh & Quinn Retirees', Widows' and Children's Assistance Fund (the Corporation) to utilize its facilities and equipment to accommodate the once a year distribution to widows and orphans in December at no additional expense to the Plan. This distribution by the Corporation, to the widows and orphans, had been handled by the Plan.

Three of the Plan's Trustees and the Executive Director are also directors of the Corporation.

During both of the years ended December 31, 2017 and 2016, the Plan contributed to the Corporation from the balances in the gift reserve account as allowed under the discretionary authority granted by 40ILCS Act 5, Article 6-202 to render financial assistance to qualified widows and children annuitants of the participants of the Plan.

NOTE 14. LEASE AGREEMENTS

The Plan leases office facilities with lease payments subject to an escalation clause for increases in real estate taxes and maintenance charges. The lease runs through March 2020. Rental expense for 2017 and 2016 was \$245,980 and \$246,863 respectively. Future minimum rental payments required under the noncancelable operating lease is as follows:

Total	\$ 291,630
2020	 33,273
2019	131,136
2018	\$ 127,221
Year ending December 31,	

NOTE 15. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE

In June 2015, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Statement No. 75 replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Statement No. 75 requires governments to report a liability on the financial statements for the other postemployment benefits that they provide. Statement No. 75 also requires more extensive note disclosures and required supplementary information about the other postemployment benefit liabilities. Statement No. 75 is effective for the Plan's fiscal year ending December 31, 2018.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. Statement No. 83 addresses accounting and financial reporting for certain asset retirement obligations and establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for asset retirement obligations. Statement No. 83 is effective for the Plan's fiscal year ending December 31, 2019.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. Statement No. 84 improves guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. Statement No. 84 is effective for the Plan's fiscal year ending December 31, 2019.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. Statement No. 85 addresses practice issues that have been identified during implementation and application of certain GASB Statements. It addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits). Statement No. 85 is effective for the Plan's fiscal year ending December 31, 2018.

NOTE 15. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE (CONTINUED)

In May 2017, GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. Statement No. 86 was issued to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources are placed in an irrevocable trust for the sole purpose of extinguishing debt. Statement No. 86 also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. Statement No. 86 is effective for the Plan's fiscal year ending December 31, 2018.

In June 2017, GASB issued Statement No. 87, *Leases*. Statement No. 87 was issued to improve accounting and financial reporting for leases by governments. This Statement increases the usefulness of governmental financial statements by requiring recognition of certain lease assets and liabilities for leases that were previously classified as operating leases. Statement No. 87 establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Statement No. 87 is effective for the Plan's fiscal year ending December 31, 2020.

In June 2017, GASB issued Statement No. 88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements. Statement No. 88 was issued to improve the information that is disclosed in notes to government financial statements related to debt. This Statement also clarifies which liabilities governments should include when disclosing information related to debt. Statement No. 88 is effective for the Plan's fiscal year ending December 31, 2019.

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



REQUIRED SUPPLEMENTARY INFORMATION - PENSION

SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY AND RELATED RATIOS

	<u>2017</u>		<u>2016</u>		<u>2015</u>	<u>2014</u>
Total pension liability						
Service cost including pension plan administrative expense	\$ 93,366,729	\$	94,115,473	\$	87,203,153	\$ 83,095,601
Interest on the total pension liability	371,622,080		342,084,603		338,986,636	329,965,941
Benefit changes	-		227,212,695		-	-
Difference between expected and actual experience	26,954,338		24,110,158		(7,980,712)	-
Assumption changes	414,218,762		(74,372,930)		176,281,502	88,448,895
Benefit payments	(302,518,486)		(283,085,767)		(274, 459, 754)	(261,571,672)
Refunds	(3,579,629)		(3,673,250)		(3,557,317)	(2,321,666)
Pension plan administrative expense	 (3,171,986)	_	(3,216,823)	_	(3,149,549)	 (3,069,192)
Net change in total pension liability	596,891,808		323,174,159		313,323,959	234,547,907
Total pension liability						
Beginning of year	5,149,258,197		4,826,084,038		4,512,760,079	4,278,212,172
End of year	\$ 5,746,150,005	\$	5,149,258,197	\$	4,826,084,038	\$ 4,512,760,079
Plan fiduciary net position						
Contributions - employer	\$ 228,452,611	\$	154,101,396	\$	236,104,362	\$ 107,334,399
Contributions - employee	47,364,276		48,959,929		46,552,247	48,056,393
Net investment income	140,569,856		60,881,106		7,595,562	30,867,889
Benefit payments	(302,518,486)		(283,085,767)		(274,459,754)	(261,571,672)
Refunds	(3,579,629)		(3,673,250)		(3,557,317)	(2,321,666)
Pension plan administrative expense	(3,171,986)		(3,216,823)		(3,149,549)	(3,069,192)
Other	22,879		(53,891)		7,141	 7,393
Net change in plan fiduciary net position	107,139,521		(26,087,300)		9,092,692	(80,696,456)
Plan fiduciary net position						
Beginning of year	1,019,013,793		1,045,101,093		1,036,008,401	1,116,704,857
End of year	\$ 1,126,153,314	\$	1,019,013,793	\$	1,045,101,093	\$ 1,036,008,401
City's net pension liability	\$ 4,619,996,691	\$	4,130,244,404	\$	3,780,982,945	\$ 3,476,751,678
Plan fiduciary net position as a percentage of the total pension liability	<u>19.60</u> %		<u>19.79</u> %		<u>21.66</u> %	<u>22.96</u> %
Covered-employee payroll	\$ 469,407,281	\$	478,470,944	\$	465,231,594	\$ 460,189,982
Employer's net pension liability as a percentage of covered-employee payroll	<u>984.22</u> %		863.22%		<u>812.71</u> %	<u>755.50</u> %

Note: This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

See Report of Independent Auditors.

REQUIRED SUPPLEMENTARY INFORMATION - PENSION

SCHEDULE OF CITY CONTRIBUTIONS AND RELATED NOTES

LAST TEN FISCAL YEARS

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Actuarially determined contribution	\$ 372,845,121	\$ 333,952,291	\$ 323,544,987	\$ 304,265,411	\$ 294,877,895	\$ 271,505,718	\$ 250,056,273	\$ 218,388,037	\$ 203,866,919	\$ 189,940,561
Contributions in relation to the actuarial determined contribution Contribution deficiency	ly (228,452,611) \$ 144,392,510	(154,101,396) \$ 179,850,895	(236,104,362) \$ 87,440,625	(107,334,399) \$ 196,931,012	(103,669,015) \$ 191,208,880	(81,521,883) \$ 189,983,835	(82,869,839) \$ 167,186,434	(80,947,311) \$ 137,440,726	(89,211,671) \$ 114,655,248	(81,257,754) \$ 108,682,807
Covered employee payroll	\$ 469,407,281	\$ 478,470,944	\$ 465,231,594	\$ 460,189,982	\$ 416,491,784	\$ 418,964,763	\$ 425,385,354	\$ 400,404,320	\$ 400,912,173	\$ 396,181,778
Contributions as a percentage of covered employee payroll	<u>48.67</u> %	32.21%	<u>50.75</u> %	<u>23.32</u> %	<u>24.89</u> %	<u>19.46</u> %	<u>19.48</u> %	<u>20.22</u> %	<u>22.25</u> %	<u>20.51</u> %

Notes to Schedule

Valuation Date: December 31, 2017

Methods and assumptions used to

determine contribution rates as of valuation date:

Amortization method Prior to 2015, the total City contribution was generated by a tax equal to 2.26 times the contributions by the firemen to the Plan

two years prior to the year of the tax levy. For years 2015-2019, the statutory contributions are \$199 million, \$208 million, \$227 million, \$235 million and \$245 million, respectively. For years on and after 2020, the statutory contributions are equal to a level percentage of

pay contribution determined so that the Plan attains a 90 percent funded ratio by the end of 2055 on an open group basis.

Remaining amortization period Not applicable

Asset valuation method 5 year smoothed market

Inflation 2.50% per year

Salary increases Salary increase rates based on age-related productivity and merit rates plus wage inflation of 3.75%.

Investment rate of return 7.50% per year

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 Post-retirement mortality: Scaling factors of 106% for males and 98% for females of the RP-2014 Blue Collar Healthy Annuitant mortality table,

sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales.

Disabled mortality: Scaling factors of 107% for males and 99% for females of the RP-2014 Blue Collar Healthy Annuitant mortality table,

sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales.

Pre-retirement mortality: Scaling factors of 92% for males and 100% for females of the RP-2014 Blue Collar Healthy Annuitant mortality table,

sex distinct, with generational mortality improvement using MP-2017 two-dimensional mortality improvement scales.

Future mortality improvements in pre and post-retirement mortality are reflected by projecting the base mortality tables back from the year 2014 to the

year 2006 using the MP-2014 projection scale and projecting from 2006 using the MP-2017 projection scale.

Postretirement annuity increases A retiree born before January 1, 1966, with at least 20 years of service or receiving a mandatory retirement

minimum annuity, receives an increase of 3 percent of the original annuity, starting on the first of the month following the first anniversary of

his retirement or the first of the month following attainment of age 55, whichever is later, and shall not be subject to a 30 percent

maximum increase. For retirees born after January 1, 1966, automatic increases are 1.5 percent of the

original annuity, commencing at age 60, or the first anniversary of retirement, if later, to a maximum of 30 percent. For participants that first became members on or after January 1, 2011, increases are equal to the lesser of 3.00 percent and 50 percent of CPI-U of the

original benefit, commencing at age 60.

REQUIRED SUPPLEMENTARY INFORMATION - PENSION

SCHEDULE OF INVESTMENT RETURNS

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	<u>17.9</u> %	<u>7.5</u> %	- <u>0.1</u> %	3.4%

Note: This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

See Report of Independent Auditors.

REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT

REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT SCHEDULE OF FUNDING PROGRESS

			ctuarial		uarial Accrued		Unfunded	Funded	Covered	UAAL as a Percentage of Covered
Year End	ded	Valu	e of Assets	Lia	ability (AAL) AA		AL (UAAL)	Ratio	Payroll	Payroll
December	31,		<u>(a)</u>		<u>(b)</u>		<u>(b-a)</u>	<u>(a/b)</u>	<u>(c)</u>	<u>(b-a)/(c)</u>
2011		\$	-	\$	46,980,335	\$	46,980,335	0.00%	\$ 425,385,354	11.04%
2012		\$	-	\$	46,205,891	\$	46,205,891	0.00%	\$ 418,964,763	11.03%
2013	(1)	\$	-	\$	7,691,833	\$	7,691,833	0.00%	\$ 416,491,784	1.85%
2014	(1)	\$	-	\$	4,994,927	\$	4,994,927	0.00%	\$ 460,189,982	1.09%
2015	(1)	\$	-	\$	2,398,609	\$	2,398,609	0.00%	\$ 465,231,594	0.52%
2016	(1)	\$	_	\$	_	\$	_	N/A	\$ 478,470,944	N/A

⁽¹⁾ Public Act 98-0043, effective June 28, 2013, terminates the retiree healthcare subsidy paid by the Plan after December 31, 2016.

See accompanying notes to schedule of funding progress and schedule of employer contributions.

FIREMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended December 31,	Co	Annual Required ontribution ARC) (a)		Actual Employer ontribution (b)	Percent of ARC Contributed (b/a)
2011 2012 2013 2014 2015 2016	\$ \$ \$ \$ \$	4,469,292 4,275,669 4,213,697 2,739,506 2,611,401 2,056,995	\$ \$ \$ \$ \$	2,628,163 2,622,445 2,550,785 2,471,055 2,381,458 2,056,995	58.80% 61.33% 60.54% 90.20% 91.19% 100.00%

Note: Public Act 98-0043, effective June 28, 2013, terminates the retiree healthcare subsidy paid by the Plan after December 31, 2016.

See accompanying notes to schedule of funding progress and schedule of employer contributions.

REQUIRED SUPPLEMENTARY INFORMATION - HEALTH INSURANCE SUPPLEMENT

Notes to Schedule of Funding Progress and Schedule of Employer Contributions

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

Valuation date December 31, 2015 Actuarial cost method Entry Age Normal

Actuarial value of assets No assets (Pay-as-you-go)

Amortization method Level Dollar

Amortization period 3 year closed period commencing December 31, 2013

Actuarial assumptions

Healthcare investment rate of return 4.50% per year

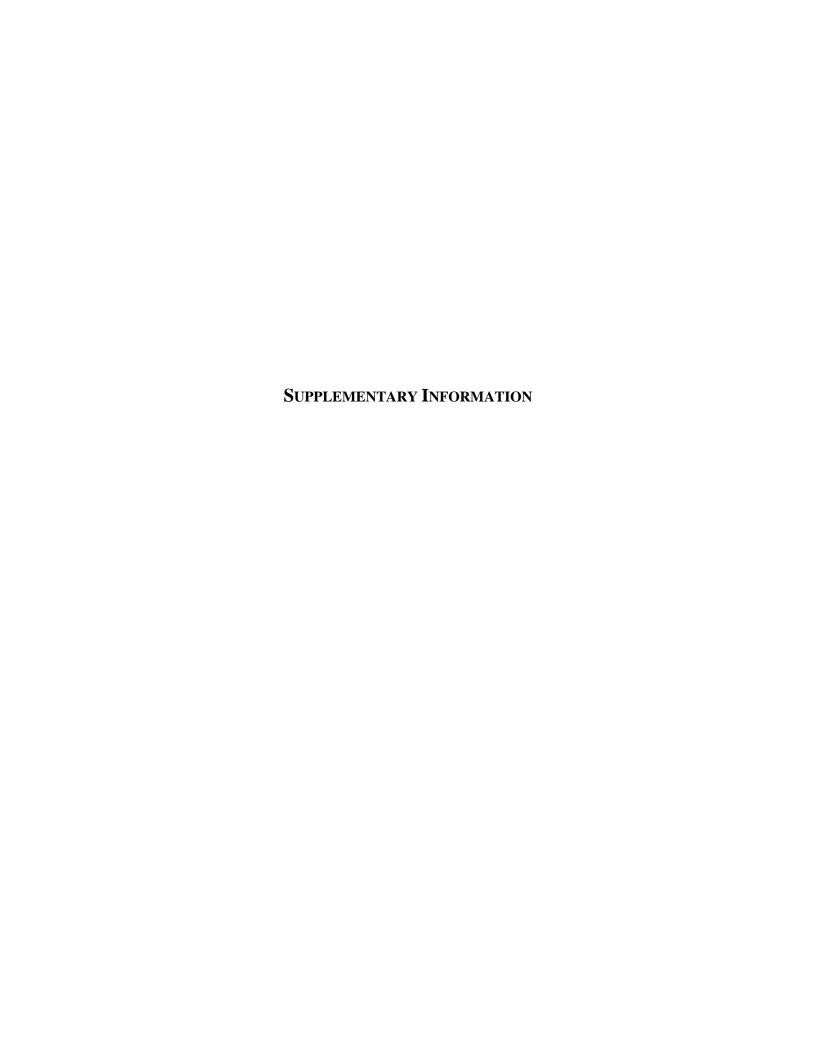
OPEB investment rate of return 4.50% per year

Health care cost trend rate 0.00% (fixed dollar subsidy)

Projected salary increases 2015 - 3.75% per year plus an additional percentage

related to service and promotion

Note: Public Act 98-0043, effective June 28, 2013, terminates the retiree healthcare subsidy paid by the Plan after December 31, 2016. The last actuarial valuation was performed as of December 31, 2015.



SUPPLEMENTARY INFORMATION

SCHEDULES OF ADMINISTRATIVE EXPENSES

YEARS ENDED DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
Administrative expenses		
Disaster recovery	\$ 4,217	\$ 26,060
Employee benefits	489,472	506,337
Equipment and maintenance	40,817	50,991
General and administrative	166,517	149,596
Insurance and surety bond	163,139	159,034
Office salaries	1,424,160	1,473,202
Printing and postage	53,467	80,396
Professional and consulting fees		
Actuarial	77,655	97,520
Audit	55,800	42,500
Consulting	33,307	18,307
Legal	308,688	276,130
Medical	104,354	85,525
Payroll administration	4,413	4,362
Rent	245,980	246,863
Total administrative expenses	\$ 3,171,986	\$ 3,216,823

SUPPLEMENTARY INFORMATION

SCHEDULES OF INVESTMENT EXPENSES

YEARS ENDED DECEMBER 31, 2017 AND 2016

		<u>2017</u>		<u>2016</u>
Investment manager expenses				
Adams Street Partners, LLC	\$	147,568	\$	122,658
Apollo Global Management, LLC		38,629		49,142
Neuberger Berman - Private Equity		123,273		62,511
Brandes Investment Partners		358,173		315,656
Brown Advisory		220,576		197,687
Chicago Equity Partners, LLC		67,774		57,140
Credit Suisse		11,318		10,836
Earnest Partners, LLC		151,294		155,479
Epoch Investment Partners, Inc.		352,631		298,863
GlobeFlex Capital, L.P.		462,524		383,022
Jackson Square (Formerly Delaware Investments)		240,744		212,165
Keeley Asset Management Corp.		181,773		164,844
Kennedy Capital Management		185,182		164,541
Logan Capital Management, Inc.		174,262		141,065
Loomis, Sayles & Company, L.P.		280,227		268,513
LSV Asset Management		427,213		338,773
Mesirow Financial		30,789		64,411
Muller & Monroe Asset Management, LLC		3,494		21,024
Neuberger Berman		347,153		315,971
Pomona Management, LLC		139,138		193,038
Rhumbline Advisers		16,377		14,606
The Boston Company Asset Management, LLC		161,372		147,199
Wells Fargo (Formerly Metropolitan West Capital Management, LLC)		194,539		171,232
Western Asset Management Company		205,148		191,878
William Blair & Company		353,733		313,541
	4	4,874,904		1,375,795
OTHER TRADING EXPENSES AND INVESTMENT FEES		, ,		
Northern Trust		274,381		309,750
		,		,
Investment consulting fees				
Callan Associates, Inc.		264,096		258,125
Investment custodian fees				
Northern Trust		80,500		63,250
Total investment expenses	\$:	5,493,881	\$ 5	5,006,920

SUPPLEMENTARY INFORMATION

ADDITIONS BY SOURCE

Net Investment and Net Securities Year Ended Employer Plan Member Lending Total December 31, Contributions **Contributions** Income (Loss) **Additions** <u>Other</u> 3,459,687 2012 \$ 84,144,328 \$ 53,272,730 \$ 135,196,492 \$ 276,073,237 \$ 106,219,800 \$ 2013 \$ 42,520,218 \$ 190,532,880 (57,079) \$ 339,215,819 2014 \$ 109,805,454 \$ 48,056,393 30,863,888 \$ 11,394 \$ 188,737,129 \$ (346,886) 2015 \$ 238,485,820 \$ 46,552,247 \$ 7,949,589 \$ 292,640,770 \$ 156,158,391 \$ 48,959,929 \$ 55,362,185 \$ \$ 266,005,920 2016 5,525,415 2017 \$ 228,452,611 \$ 47,364,276 \$ 140,507,402 \$ 85,333 \$ 416,409,622

DEDUCTIONS BY TYPE

				Annuitant		
Year Ended		Ac	lministrative	Health		Total
December 31,	Benefits		<u>Expenses</u>	<u>Care</u>	<u>Other</u>	<u>Deductions</u>
2012	\$ 228,585,731	\$	3,063,965	\$ 2,622,445	\$ 3,151,847	\$ 237,423,988
2013	\$ 247,057,741	\$	3,101,827	\$ 2,550,785	\$ 2,223,407	\$ 254,933,760
2014	\$ 261,571,672	\$	3,066,946	\$ 2,471,055	\$ 2,323,912	\$ 269,433,585
2015	\$ 274,459,754	\$	3,149,549	\$ 2,381,458	\$ 3,557,317	\$ 283,548,078
2016	\$ 283,085,767	\$	3,216,823	\$ 2,056,995	\$ 3,733,635	\$ 292,093,220
2017	\$ 302,518,486	\$	3,171,986	\$ -	\$ 3,579,629	\$ 309,270,101