

CITY OF EVANSTON
FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION
AS OF JANUARY 1, 2015

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDED DECEMBER 31, 2015

October 6, 2015

Board of Trustees
City of Evanston
Firefighters' Pension Fund
2100 Ridge Avenue
Evanston, IL 60201

Re: City of Evanston Firefighters' Pension Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Evanston Firefighters' Pension Fund. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Article 4, Illinois Pension Code, as well as applicable federal laws and regulations.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

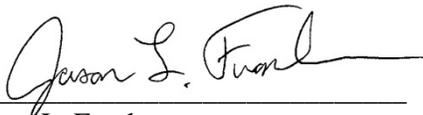
The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Evanston, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Evanston Firefighters' Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By: 

Jason L. Franken
Enrolled Actuary #14-6888

JLF/lke
Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	7
	c. Comparative Summary of Principal Valuation Results	8
II	Valuation Information	
	a. Development of January 1, 2015 Amortization Payment	13
	b. Projection of Benefit Payments	14
	c. Actuarial Assumptions and Methods	15
	d. Valuation Notes	17
III	Trust Fund	18
IV	Member Statistics	
	a. Statistical Data	20
	b. Age and Service Distribution	21
	c. Member Reconciliation	22
V	Summary of Plan Provisions	23
VI	Governmental Accounting Standards Board Disclosure Information	26

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Evanston Firefighters’ Pension Fund, performed as of January 1, 2015, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended December 31, 2015.

The contribution requirements, compared with those set forth in the January 1, 2014 actuarial report as prepared by TCG Public Consulting, Ltd., are as follows:

Valuation Date	<u>1/1/2015</u>	<u>1/1/2014</u>
Total Required Contribution	\$8,281,368	\$7,084,948
% of Total Annual Payroll	84.1%	77.0%
Member Contributions (Est.)	930,503	870,020
% of Total Annual Payroll	9.455%	9.455%
City Required Contribution	7,350,865	6,214,928
% of Total Annual Payroll	78.0%	67.5%

As you can see, the Total Required Contribution, when expressed as a percentage of annual payroll, shows an increase when compared to the results determined in the January 1, 2014 actuarial valuation report.

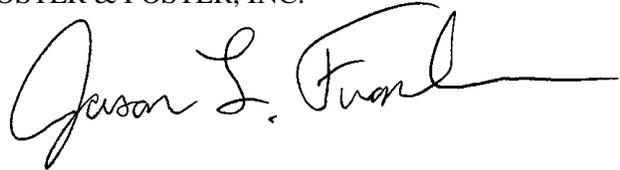
The primary reason for this increase is the change in assumptions used to develop this year’s recommended contribution. The recommended contribution for the year, when developed using the methods and assumptions used by TGC Public Consulting, Ltd., is somewhat lower than last year’s recommended contribution when expressed as a percentage of payroll, mostly due to an increase in annual payroll. After adjusting these methods and assumptions to what we believe more accurately reflects the plan’s anticipated experience, the recommended contribution for the year reflects a significant increase over last year’s recommended contribution, when expressed as a percentage of payroll.

The plan experienced a mix of favorable and unfavorable experience. The favorable experience included an investment return (Actuarial Asset basis) of 6.96%, which exceeded the assumed return of 6.50%. This was balanced by an unfavorable increase in average salary of 6.92% for members who were in both the 2014 and 2015 valuations, exceeding the assumed average increase of 4.39% for these members.

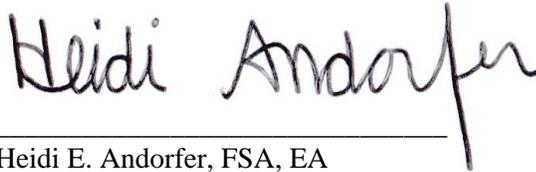
The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.



By: _____
Jason L. Franken, FSA, EA, MAAA



By: _____
Heidi E. Andorfer, FSA, EA

Plan Changes Since Prior Valuation

There have been no plan changes since the prior valuation.

Actuarial Assumption/Method Changes Since Prior Valuation

The following method changes were made since the prior valuation:

1. Administrative expenses were included in the development of this year's recommended contribution, while they were not considered for the recommended contribution as shown in last year's valuation as prepared by TCG Public Consulting, Ltd.

The following assumption changes were made since the prior valuation:

1. Mortality Rates were updated from the table used by TCG Public Consulting, Ltd., which was RP-2000 Combined Healthy Mortality (male) with a blue collar adjustment and a 200% load for participants under age 50 and 125% for participants age 50 and over. The new tables used in this valuation are the RP-2000 Combined Healthy Mortality with a blue collar adjustment for all healthy lives and the RP2000 Disabled Retiree Mortality table for disabled lives.
2. Retirement Rates, Termination Rates and Disability Rates were updated to align with the formal study commissioned by the Illinois Department of Insurance. This study used actual experience from all Fire Plans in Illinois to derive experience-based assumptions.
3. The assumption for in-service disability incidence was increased from 15% to 90%.
4. The percent married assumption was changed from 85% to 80%.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assum/Mthd <u>1/1/2015</u>	Old Assum/Mthd <u>1/1/2015</u>	<u>1/1/2014</u> ¹
A. Participant Data			
Number Included			
Actives	107	107	104
Service Retirees	86	86	90
Beneficiaries	33	33	22
Terminated Vested	3	3	2
Disability Retirees	23	23	24
Total	<u>252</u>	<u>252</u>	<u>242</u>
Total Annual Payroll	\$9,841,383	\$9,841,383	\$9,201,691
Payroll Under Assumed Ret. Age	9,841,383	9,841,383	9,201,691
Annual Rate of Payments to:			
Service Retirees	5,493,139	5,493,139	5,148,864
Beneficiaries	1,060,442	1,060,442	697,836
Terminated Vested	0	0	0
Disability Retirees	1,242,564	1,242,564	1,266,996
B. Assets			
Actuarial Value	67,487,404	67,487,404	63,416,947
Market Value	68,241,712	68,241,712	65,024,941
C. Liabilities			
Present Value of Benefits			
Active Members			
Retirement Benefits	56,692,928	50,122,306	52,875,671
Disability Benefits	8,210,688	12,302,585	14,601,533
Death Benefits	1,494,570	2,495,680	2,649,905
Vested Benefits	2,243,841	619,216	655,227
Service Retirees	79,412,776	72,670,557	65,413,002
Beneficiaries	9,086,068	7,704,697	4,166,751
Terminated Vested	108,515	108,515	66,799
Disability Retirees	19,779,141	19,037,993	20,003,019
Total	<u>177,028,527</u>	<u>165,061,549</u>	<u>160,431,907</u>

¹ Values reported for 1/1/2014 are consistent with the report issued by TCG Public Consulting, Ltd.

	New Assum/Mthd <u>1/1/2015</u>	Old Assum/Mthd <u>1/1/2015</u>	<u>1/1/2014</u> ¹
C. Liabilities - (Continued)			
Present Value of Future Salaries	107,188,865	115,892,752	N/A
Present Value of Future Member Cont.	10,134,707	10,957,660	N/A
Normal Cost			
Retirement Benefits	1,859,951	1,653,170	1,725,318
Disability Benefits	479,783	613,260	693,693
Death Benefits	89,525	164,636	134,944
Vested Benefits	<u>143,587</u>	<u>44,200</u>	<u>52,635</u>
Total Normal Cost	2,572,846	2,475,266	2,606,590
Present Value of Future Normal Costs	26,509,069	27,546,508	29,765,050
Actuarial Accrued Liability			
Retirement Benefits	37,286,636	31,616,347	N/A
Disability Benefits	3,173,011	5,418,383	N/A
Death Benefits	588,443	703,762	N/A
Vested Benefits	1,084,868	254,787	N/A
Inactives	<u>108,386,500</u>	<u>99,521,762</u>	<u>N/A</u>
Total Actuarial Accrued Liability	150,519,458	137,515,041	130,666,857
Unfunded Actuarial Accrued Liab (UAAL)	83,032,054	70,027,637	67,429,910
Funded Ratio	44.8%	49.1%	48.5%
D. Actuarial Present Value of Accrued Benefits			
Vested Accrued Benefits			
Inactives	108,386,500	99,521,762	N/A
Actives	17,222,404	15,446,284	N/A
Member Contributions	<u>8,095,493</u>	<u>8,095,493</u>	<u>N/A</u>
Total	133,704,397	123,063,539	N/A
Non-vested Accrued Benefits	<u>1,146,698</u>	<u>624,832</u>	<u>N/A</u>
Total Present Value Accrued Benefits	134,851,095	123,688,371	N/A
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	N/A	
Assumption Changes	11,162,724	N/A	
New Accrued Benefits	0	N/A	
Benefits Paid	0	N/A	
Interest	0	N/A	
Other	<u>0</u>	<u>N/A</u>	
Total:	11,162,724	N/A	

¹ Values reported for 1/1/2014 are consistent with the report issued by TCG Public Consulting, Ltd.

Valuation Date Applicable to Fiscal Year Ending	New Assum/Mthd 1/1/2015 <u>12/31/2015</u>	Old Assum/Mthd 1/1/2015 <u>12/31/2015</u>	1/1/2014 <u>12/31/2014</u> ²
E. Pension Cost			
Normal Cost (with interest) % of Total Annual Payroll ¹	\$2,740,081 27.8	\$2,636,158 26.8	\$2,776,018 30.2
Administrative Expense (with interest) % of Total Annual Payroll ¹	55,645 0.6	0 0.0	0 0.0
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 26 years (as of 1/1/2015) % of Total Annual Payroll ¹	5,485,642 55.7	4,541,191 46.1	4,308,930 46.8
Total Required Contribution % of Total Annual Payroll ¹	8,281,368 84.1	7,177,349 72.9	7,084,948 77.0
Expected Member Contributions % of Total Annual Payroll ¹	930,503 9.5	930,503 9.5	870,020 9.5
Expected City Village Contribution % of Total Annual Payroll ¹	7,350,865 74.6	6,246,846 63.4	6,214,928 67.5
F. Past Contributions			
Plan Year Ending:	<u>12/31/2014</u>		
Total Required Contribution	6,823,357		
City Requirement	5,903,483		
Actual Contributions Made:			
Members	919,874		
City	<u>6,527,697</u>		
Total	<u>7,447,571</u>		
G. Net Actuarial Gain (Loss)	(3,105,183)		

¹ Contributions developed as of 1/1/2015 are expressed as a percentage of projected annual payroll at 1/1/2015 of \$9,841,383.

² The results reported for 1/1/2014 are consistent with the TCG Public Consulting, Ltd. actuarial valuation.

H. Schedule Illustrating the Amortization of the Amortizable Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Amortizable Unfunded Accrued Liability</u>
2015	\$67,980,108
2016	66,913,174
2017	65,776,889
2022	58,886,765
2027	49,446,698
2037	18,792,688
2041	0

I. (i) 3 Year Comparison of Actual and Assumed Increases in Pensionable Compensation

		<u>Actual</u>	<u>Assumed ¹</u>
Year Ended	12/31/2014	6.92%	4.39%
Year Ended	12/31/2013	N/A	N/A
Year Ended	12/31/2012	N/A	N/A

¹ Assumed salary increases are according to a age-related table, with rates grading from 7.69% to 3.62% at age 55. The rate shown here is the expected increase for the active population in aggregate, given the age distribution of the active employees who were in both the prior and current valuation.

(ii) 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended	12/31/2014	6.96%	6.50%
Year Ended	12/31/2013	N/A	N/A
Year Ended	12/31/2012	N/A	N/A

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of the Illinois Pension Code and adhere to the Actuarial Standards of Practice. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

A handwritten signature in black ink that reads "Jason L. Franken". The signature is written in a cursive style with a long horizontal line extending to the right.

Jason L. Franken, FSA, EA, MAAA
Enrolled Actuary #14-6888

DEVELOPMENT OF JANUARY 1, 2015 AMORTIZATION PAYMENT

(1) Unfunded Actuarial Accrued Liability as of January 1, 2014		\$67,429,910 ¹
(2) City's Normal Cost Applicable for the year		1,736,570
(3) Interest on (1) and (2)		4,495,821
(4) Sponsor Contributions to the System during the year ending December 31, 2014		6,527,697
(5) Interest on (4)		<u>212,150</u>
(6) Expected UAAL as of January 1, 2015 (1)+(2)+(3)-(4)-(5)		\$66,922,454
(7) Change in UAAL Due to Actuarial (Gain)/Loss and Assumption Changes		
(a) (Gain)/Loss	3,105,183	
(b) Assumption Changes	13,004,417	
(c) Total		<u>16,109,600</u>
(8) Unfunded Actuarial Accrued Liability as of January 1, 2015		\$83,032,054

	<u>Date Established</u>	<u>Years Remaining</u>	<u>1/1/2015 Amount</u>	<u>Amortization Amount</u>
	1/1/2015	26	<u>67,980,108</u>	<u>5,150,837</u>
Total			67,980,108	5,150,837

¹ Note, this is based on the TCG Public Consulting, Ltd. actuarial valuation report.

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2015	286,481	7,898,787	8,185,268
2016	557,898	7,971,036	8,528,934
2017	815,432	8,118,140	8,933,572
2018	1,067,889	8,230,136	9,298,025
2019	1,324,067	8,331,456	9,655,523
2020	1,605,318	8,416,336	10,021,654
2021	1,875,596	8,469,230	10,344,826
2022	2,156,409	8,503,674	10,660,083
2023	2,473,420	8,536,632	11,010,052
2024	2,816,966	8,537,308	11,354,274
2025	3,184,596	8,520,231	11,704,827
2026	3,565,788	8,484,158	12,049,946
2027	3,961,619	8,427,437	12,389,056
2028	4,392,193	8,348,376	12,740,569
2029	4,801,649	8,245,223	13,046,872
2030	5,220,157	8,116,150	13,336,307
2031	5,649,518	7,959,692	13,609,210
2032	6,112,252	7,774,818	13,887,070
2033	6,601,425	7,560,780	14,162,205
2034	7,112,944	7,317,390	14,430,334
2035	7,652,744	7,081,837	14,734,581
2036	8,158,217	6,783,516	14,941,733
2037	8,639,737	6,458,618	15,098,355
2038	9,115,963	6,109,590	15,225,553
2039	9,547,789	5,739,411	15,287,200
2040	9,945,035	5,351,954	15,296,989
2041	10,277,606	4,951,911	15,229,517
2042	10,580,514	4,544,524	15,125,038
2043	10,836,827	4,135,494	14,972,321
2044	11,080,989	3,730,509	14,811,498
2045	11,241,802	3,335,147	14,576,949
2046	11,328,075	2,955,013	14,283,088
2047	11,362,947	2,594,825	13,957,772
2048	11,351,965	2,258,196	13,610,161
2049	11,299,269	1,948,296	13,247,565
2050	11,206,089	1,667,184	12,873,273
2051	11,074,856	1,415,688	12,490,544
2052	10,909,102	1,193,953	12,103,055
2053	10,709,902	1,000,847	11,710,749
2054	10,479,491	834,540	11,314,031

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate	RP-2000 Combined Healthy Mortality with no projection and a blue collar adjustment.																
Disabled Mortality Rate	RP-2000 Disabled Retiree Mortality with no projection.																
Interest Rate	6.50% per year compounded annually, net of investment related expenses.																
Retirement Age	See table on following page.																
Disability Rate	See table on following page. 90% of the disabilities are assumed to be in the line of duty.																
Termination Rate	See table on following page.																
Salary Increases	Graded schedule based on age. <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Age</th> <th style="text-align: center;">Increase</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">25</td> <td style="text-align: center;">7.36%</td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">5.48%</td> </tr> <tr> <td style="text-align: center;">35</td> <td style="text-align: center;">4.53%</td> </tr> <tr> <td style="text-align: center;">40</td> <td style="text-align: center;">4.02%</td> </tr> <tr> <td style="text-align: center;">45</td> <td style="text-align: center;">3.81%</td> </tr> <tr> <td style="text-align: center;">50</td> <td style="text-align: center;">3.68%</td> </tr> <tr> <td style="text-align: center;">55+</td> <td style="text-align: center;">3.62%</td> </tr> </tbody> </table>	Age	Increase	25	7.36%	30	5.48%	35	4.53%	40	4.02%	45	3.81%	50	3.68%	55+	3.62%
Age	Increase																
25	7.36%																
30	5.48%																
35	4.53%																
40	4.02%																
45	3.81%																
50	3.68%																
55+	3.62%																
Payroll Growth	None.																
Cost-of-Living Adjustment	<p><u>Tier 1:</u> 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.</p> <p><u>Tier 2:</u> 1.25% per year after the later of attainment of age 60 or first anniversary of retirement.</p>																
Administrative Expenses	Expenses paid out of the fund other than investment-related expenses are assumed to be equal to those paid in the previous year.																
Marital Status	80% of Members are assumed to be married.																
Spouse's Age	Males are assumed to be three years older than females.																

<u>% Terminating During the Year</u>		<u>% Becoming Disabled During the Year</u>		<u>% Retiring During the Year *</u>	
<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	9.00%	20	0.10%	50 - 53	14.0%
25	5.00%	25	0.10%	54 - 59	20.0%
30	2.50%	30	0.20%	60 - 62	25.0%
35	2.00%	35	0.35%	63 - 64	33.0%
40	1.00%	40	0.50%	65 - 69	50.0%
45	1.00%	45	0.65%	70	100.0%
50	1.00%	50	1.00%		
55	1.00%	55	1.50%		
60	1.00%	60	3.00%		
65	1.00%	65	4.25%		

* 100% at 30 years of service.

Funding Method

Entry Age Normal Cost Method.

Actuarial Asset Method

Investment gains and losses are smoothed over a 5-year period.

Amortization Method

Funding to a 90% funded ratio using the Level Dollar method over a period ending in 2040.

VALUATION NOTES

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Unfunded Accrued Liability is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

Total Required Contribution is equal to the Normal Cost plus an amortization payment on the Unfunded Accrued Liability. The required amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
December 31, 2014
Actuarial Asset Basis

INCOME		
Contributions:		
Member	919,874	
City	6,527,697	
Total Contributions		7,447,571
Earnings from Investments		
Interest & Dividends	1,179,581	
Net Realized Gain (Loss)	0	
Change in Actuarial Value	3,415,004	
Total Earnings and Investment Gains		4,594,585
EXPENSES		
Administrative Expenses:		
Investment Related*	191,768	
Other	52,248	
Total Administrative Expenses		244,016
Distributions to Members:		
Benefit Payments	7,727,683	
Refund of Contributions/Transfers	0	
Total Distributions		7,727,683
Change in Net Assets for the Year		4,070,457
Net Assets Beginning of the Year		63,416,947
Net Assets End of the Year**		67,487,404

*Investment Related expenses include investment advisory, custodial and performance monitoring fees.

**Net Assets may be limited for actuarial consideration

ACTUARIAL ASSET VALUATION

December 31, 2014

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.

Plan Year Ending	Gain/(Loss)	Gains/(Losses) Not Yet Recognized				
		Amounts Not Yet Recognized by Valuation Year				
		2015	2016	2017	2018	2019
12/31/2011	(1,945,156)	(389,031)	0	0	0	0
12/31/2012	(97,940)	(39,176)	(19,588)	0	0	0
12/31/2013	2,859,775	1,715,865	1,143,910	571,955	0	0
12/31/2014	(666,688)	(533,350)	(400,013)	(266,675)	(133,338)	0
Total		754,308	724,309	305,280	(133,338)	0

Development of Investment Gain/(Loss)

Market Value of Assets, 12/31/2013	65,024,941
Contributions Less Benefit Payments & Administrative Expenses	(332,360)
Expected Investment Earnings *	4,215,819
Actual Net Investment Earnings	3,549,131
2015 Actuarial Investment Gain/(Loss)	<u>(666,688)</u>

*Expected Investment Earnings = 6.50% x (65,024,941 + 0.5 x -332,360)

Development of Actuarial Value of Assets

Market Value of Assets, 12/31/2014	68,241,712
(Gains)/Losses Not Yet Recognized	<u>(754,308)</u>
Actuarial Value of Assets, 12/31/2014	67,487,404

(A) 12/31/2013 Actuarial Assets: 63,416,947

(I) Net Investment Income:

1. Interest and Dividends	1,179,581
2. Realized Gains (Losses)	0
3. Change in Actuarial Value	3,415,004
4. Investment Expenses	<u>(191,768)</u>
Total	4,402,817

(B) 12/31/2014 Actuarial Assets: 67,487,404

Actuarial Asset Rate of Return = (2 x I) / (A + B - I): 6.96%

Market Value of Assets Rate of Return: 5.47%

1/1/2015 Limited Actuarial Assets: 67,487,404

STATISTICAL DATA ¹

	<u>1/1/2012</u>	<u>1/1/2013</u>	<u>1/1/2014</u>	<u>1/1/2015</u>
<u>Active Members</u>				
<i>Tier 1</i>				
Number	N/A	N/A	N/A	81
Average Current Age	N/A	N/A	N/A	42.7
Average Age at Employment	N/A	N/A	N/A	28.0
Average Past Service	N/A	N/A	N/A	14.7
Average Annual Salary	N/A	N/A	N/A	\$98,712
<i>Tier 2</i>				
Number	N/A	N/A	N/A	26
Average Current Age	N/A	N/A	N/A	30.1
Average Age at Employment	N/A	N/A	N/A	28.2
Average Past Service	N/A	N/A	N/A	1.9
Average Annual Salary	N/A	N/A	N/A	\$70,990
<u>Retirees & Beneficiaries</u>				
Number	N/A	N/A	112	119
Average Current Age	N/A	N/A	N/A	68.5
Average Annual Benefit	N/A	N/A	\$52,203	\$55,072
<u>Disability Retirees</u>				
Number	N/A	N/A	24	23
Average Current Age	N/A	N/A	N/A	62.2
Average Annual Benefit	N/A	N/A	\$52,792	\$54,025
<u>Terminated Vested Members</u>				
Number	N/A	N/A	2	3
Average Current Age	N/A	N/A	N/A	31.5
Average Annual Benefit	N/A	N/A	\$0 ²	\$0 ²

¹ Foster & Foster does not have the complete historical data to include all information prior to 1/1/2015.

² The terminated vested participants who are included in the valuation are awaiting a refund of employee contributions. Therefore, they will not be entitled to a future annual benefit from the plan.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	1	0	0	0	0	0	0	0	0	0	0	1
25 - 29	4	2	3	2	0	0	0	0	0	0	0	11
30 - 34	1	0	2	8	1	16	0	0	0	0	0	28
35 - 39	1	0	0	1	0	8	6	0	0	0	0	16
40 - 44	0	0	0	1	0	3	11	4	0	0	0	19
45 - 49	0	0	0	0	0	1	4	7	2	0	0	14
50 - 54	0	0	0	0	0	0	0	0	3	7	0	10
55 - 59	0	0	0	0	0	0	0	1	1	4	0	6
60 - 64	0	0	0	0	0	0	0	1	0	1	0	2
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	2	5	12	1	28	21	13	6	12	0	107

PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 1/1/2014	104
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested or full lump sum distribution received	1
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	3
f. Voluntary withdrawal	<u>0</u>
g. Continuing participants	100
h. New entrants	<u>7</u>
i. Total active life participants in 1/1/2015 valuation	107

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	Vested <u>Deferred</u>	Receiving Disability <u>Benefits</u>	Receiving Death <u>Benefits</u>	<u>Total</u>
Participants, 1/1/2014	90	2	24	22	138
Retired	3	0	0	0	3
Vested Deferred	0	1	0	0	1
Death, With Survivor	0	0	(1)	1	0
Death, No Survivor	(2)	0	0	(4)	(6)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Data Corrections	(5)	0	0	14	9
Participants, 1/1/2015	86	3	23	33	145

SUMMARY OF CURRENT PLAN

<u>Article 4 Pension Fund</u>	The Plan is established and administered as prescribed by “Article 4. Firefighters’ Pension Fund – Municipalities 500,000 and Under” of the Illinois Pension Code.
<u>Credited Service</u>	Years and fractional parts of years of service as a sworn Firefighter employed by the City.
<u>Salary</u>	Annual salary, including longevity, attached to firefighter’s rank, as established by the municipality appropriation ordinance, excluding overtime pay, holiday pay and bonus pay.
<u>Normal Retirement</u>	
Date	Tier 1: Age 50 and 20 years of Credited Service. Tier 2: Age 55 with 10 years of service.
Benefit	Tier 1: 50% of annual salary attached to rank on last day of service plus 2.50% of annual salary for each year of service over 20 years, up to a maximum of 75% of salary. The minimum monthly benefit is \$1,159.27 per month. Tier 2: 2.50% per year of service times the average salary for the eight consecutive years prior to retirement times the number of years of service. The maximum benefit is 75% of average salary.
Form of Benefit	Tier 1: For married retirees, an annuity payable for the life of the Member; upon the death of the member, 100% of the Member’s benefit payable to the spouse until death. For unmarried retirees, the normal form is a Single Life Annuity. Tier 2: Same as above, but with 66 2/3% of benefit continued to spouse.
<u>Cost-of-Living Adjustment</u>	Tier 1: <i>Retirees:</i> An annual increase equal to 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Disabled Retirees: An annual increase equal to 3.00% per year of the original benefit amount beginning at age 60. Those that become disabled prior to age 60 receive an increase of 3.00% of the original benefit amount for each year since benefit commencement upon reaching age 60.

Tier 2: An annual increase each January 1 equal to 3.00% per year or one-half of the annual unadjusted percentage increase in the consumer price index-u for the 12 months ending with the September preceding each November 1, whichever is less, of the original pension after the attainment of age 60 or first anniversary of pension start date whichever is later.

Disability Benefit

Eligibility Total and permanent as determined by the Board of Trustees. Seven years of service required for non-service connected disability.

Benefit Amount A maximum of:
a.) 65% of salary attached to the rank held by Member on last day of service, and;
b.) The monthly retirement pension that the Member is entitled to receive if he or she retired immediately.

For non-service connected disabilities, a benefit of 50% of salary attached to rank held by Member on last day of service.

Pre-Retirement Death Benefit

Service Incurred 100% of salary attached to rank held by Member on last day of service.

Non-Service Incurred A maximum of:
a.) 54% of salary attached to the rank held by Member on last day of service, and;
b.) The monthly retirement pension earned by the deceased Member at the time of death, regardless of whether death occurs before or after age 50.

Contributions

Employee 9.455% of Salary.

City Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over a period ending in 2040.

Vesting (Termination)

Less than 10 years

Refund of Member Contributions.

10 or more years

Either the termination benefit, payable upon reaching age 60, provided contributions are not withdrawn, or a refund of member contributions.

The termination benefit is based on the monthly salary attached to the Member's rank at separation from service. The following schedule applies:

<u>Service</u>	<u>% of Salary</u>
10	15.0%
11	17.6%
12	20.4%
13	23.4%
14	26.6%
15	30.0%
16	33.6%
17	37.4%
18	41.4%
19	45.6%

Board of Trustees

The Board consists of two members appointed by the City, two active Members of the Fire Department elected by the Membership and one retired Member of the Fire Department elected by the Membership.

DISCLOSURE INFORMATION PER STATEMENT NO. 27 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS BOARD

ANNUAL PENSION COSTS AND RELATED INFORMATION

Contribution rates as of 12/31/2014

City	63.7%
Plan Members	9.455%
Annual Pension Cost	5,887,612
Contributions made	6,527,697
Actuarial valuation date	1/1/2014
Actuarial cost method	Entry Age Normal
Amortization method	Level % of payroll, closed
Remaining amortization period	19.5 Years (as of 1/1/2014)
Asset valuation method	Five-Year Smoothed
Actuarial assumptions:	
Investment rate of return	6.75%
Projected salary increase**	Graded from 7.69% to 3.62%
** Includes inflation at	2.50%
Post Retirement COLA	3.00%

<u>Year</u> <u>Ending</u>	<u>Annual</u> <u>Pension</u> <u>Cost</u>	<u>Percentage</u> <u>of APC *</u> <u>Contributed</u>	<u>Net</u> <u>Pension</u> <u>Obligation</u>
12/31/2014	5,887,612	111%	6,918,379

* Annual Pension Cost from City sources.

DISCLOSURE INFORMATION PER STATEMENT NO. 27 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS BOARD

DEVELOPMENT OF NET PENSION OBLIGATION (NPO)

The recent development of the Net Pension Obligation is as follows:

	<u>12/31/2014</u>
Actuarially Determined	
Contribution (A)	5,865,595
Interest on NPO	510,196
Adjustment to (A)	(488,179)

Annual Pension Cost	5,887,612
Contributions Made	6,527,697

Increase in NPO	(640,085)
NPO Beginning of Year	7,558,464

NPO End of Year	6,918,379

STATEMENT OF FIDUCIARY NET POSITION
DECEMBER 31, 2014

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	977,257
Cash	1,011,277
Total Cash and Equivalents	1,988,534
Receivables:	
From General Trust Fund	43,629
From City	949,873
Accrued Past Due Interest	125,748
Total Receivable	1,119,250
Investments:	
U.S. Gov't and Agency Obligations	5,263,714
Stock Equities	6,166,001
Corporate Bonds	12,224,505
Mutual Funds	41,484,694
Total Investments	65,138,914
Total Assets	68,246,698
<u>LIABILITIES</u>	
Payables:	
Vouchers Payable	4,986
Total Liabilities	4,986
NET POSITION RESTRICTED FOR PENSIONS	68,241,712

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2014
Market Value Basis

ADDITIONS

Contributions:

Member	919,874	
City	6,527,697	
Total Contributions		7,447,571
 Investment Income:		
Net Increase in Fair Value of Investments	2,561,318	
Interest & Dividends	1,179,581	
Less Investment Expense ¹	(191,768)	
Net Investment Income		3,549,131
 Total Additions		10,996,702

DEDUCTIONS

Distributions to Members:

Benefit Payments	7,727,683	
Total Distributions		7,727,683
 Administrative Expenses		 52,248
Total Deductions		7,779,931
 Net Increase in Net Position		3,216,771
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		65,024,941
 End of the Year		 68,241,712

¹Investment Related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended December 31, 2014)

Plan Description

Plan Administration

The Board consists of two members appointed by the City, two active Members of the Fire Department elected by the Membership and one retired Member of the Fire Department elected by the Membership.

Plan Membership as of January 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	136
Inactive Plan Members Entitled to but Not Yet Receiving Benefits	2
Active Plan Members	104
	242

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

Normal Retirement:

Date: Tier 1: Age 50 and 20 years of Credited Service. Tier 2: Age 55 with 10 years of service.

Benefit: Tier 1: 50% of annual salary attached to rank on last day of service plus 2.50% of annual salary for each year of service over 20 years, up to a maximum of 75% of salary. The minimum monthly benefit is \$1,159.27 per month.

Tier 2: 2.50% per year of service times the average salary for the eight consecutive years prior to retirement times the number of years of service. The maximum benefit is 75% of average salary.

Cost-of-Living Adjustment:

Tier 1: Retirees: An annual increase equal to 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Disabled Retirees: An annual increase equal to 3.00% per year of the original benefit amount beginning at age 60.

Those that become disabled prior to age 60 receive an increase of 3.00% of the original benefit amount for each year since benefit commencement upon reaching age 60.

Tier 2: An annual increase each January 1 equal to 3.00% per year or one-half of the annual unadjusted percentage increase in the consumer price index-u for the 12 months ending with the September preceding each November 1, whichever is less, of the original pension after the attainment of age 60 or first anniversary of pension start date whichever is later.

Disability Benefit:

Eligibility: Total and permanent as determined by the Board of Trustees. Seven years of service required for non-service connected disability.

Benefit: A maximum of: a.) 65% of salary attached to the rank held by Member on last day of service, and;

b.) The monthly retirement pension that the Member is entitled to receive if he or she retired immediately.

For non-service connected disabilities, a benefit of 50% of salary attached to rank held by Member on last day of service.

Pre-Retirement Death Benefit:

Service Incurred: 100% of salary attached to rank held by Member on last day of service.

Non-Service Incurred: A maximum of: a.) 54% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension earned by the deceased Member at the time of death, regardless of whether death occurs before or after age 50.

Vesting (Termination):

Less than 10 years: Refund of Member Contributions.

10 or more years: Either the termination benefit, payable upon reaching age 60, provided contributions are not withdrawn, or a refund of member contributions.

The termination benefit is based on the monthly salary attached to the Member's rank at separation from service.

The following schedule applies:

<u>Service</u>	<u>% of Salary</u>
10	15.0%
11	17.6%
12	20.4%
13	23.4%
14	26.6%
15	30.0%
16	33.6%
17	37.4%
18	41.4%
19	45.6%

Contributions

Employee: 9.455% of Salary, including longevity, but excluding overtime pay, holiday pay, bonus pay, merit pay or other cash benefit. Additional 1% of salary if combined service credit option is selected.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability by December 31, 2040.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of December 31, 2014:

<u>Asset Class</u>	<u>Target Allocation</u>
Cash	1.0%
US Fixed Income	40.3%
High Yield	1.5%
US Large Cap Growth Equity	14.1%
US Large Cap Value Equity	12.2%
US Mid Cap Growth Equity	3.4%
US Mid Cap Value Equity	3.4%
US Small Cap Growth Equity	2.7%
US Small Cap Value Equity	2.7%
Europe Equity	5.3%
Japan Equity	0.7%
Emerging Market Equity	0.6%
Real Estate	2.1%
Infrastructure	3.3%
Hedged Strategies	6.8%
<u>Total</u>	<u>100%</u>

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's fiduciary net position.

Rate of Return:

For the year ended December 31, 2014, the annual money-weighted rate of return on Pension Plan investments, net of pension plan investment expense, was 5.47 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NET PENSION LIABILITY OF THE SPONSOR

The components of the net pension liability of the sponsor on December 31, 2014 were as follows:

Total Pension Liability	\$ 144,657,092
Plan Fiduciary Net Position	\$ (68,241,712)
Sponsor's Net Pension Liability	<u>\$ 76,415,380</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	47.17%

Actuarial Assumptions:

The total pension liability was determined by an actuarial valuation as of January 1, 2014 updated to December 31, 2014 using the following actuarial assumptions.

Inflation	2.50%
Salary Increases	Graded by age from 7.69% to 3.62% at age 55 and later
Investment Rate of Return	6.75%

Mortality

RP-2000 Combined Healthy Mortality Table with a Blue Collar Adjustment. Disabled mortality: RP-2000 Disabled Mortality Table .

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2014 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Cash	0.5%
US Fixed Income	2.1%
High Yield	5.9%
US Large Cap Growth Equity	7.5%
US Large Cap Value Equity	7.1%
US Mid Cap Growth Equity	8.6%
US Mid Cap Value Equity	7.9%
US Small Cap Growth Equity	9.5%
US Small Cap Value Equity	8.6%
Europe Equity	7.6%
Japan Equity	7.1%
Emerging Market Equity	9.4%
Real Estate	6.8%
Infrastructure	5.9%
Hedged Strategies	3.5%

Discount Rate:

The discount rate used to measure the total pension liability was 6.75 percent.

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 sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

	1% Decrease 5.75%	Current Discount Rate 6.75%	1% Increase 7.75%
Sponsor's Net Pension Liability	\$ 94,105,898	\$ 76,415,380	\$ 61,640,923

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>12/31/2014</u>
Total Pension Liability	
Service Cost	2,326,092
Interest	9,391,253
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes of Assumptions	-
Contributions - Buy Back	-
Benefit Payments, Including Refunds of Employee Contributions	(7,727,683)
Net Change in Total Pension Liability	3,989,662
Total Pension Liability - Beginning	140,667,430
Total Pension Liability - Ending (a)	<u>\$ 144,657,092</u>
Plan Fiduciary Net Position	
Contributions - Employer	6,527,697
Contributions - Employee	919,874
Contributions - Buy Back	-
Net Investment Income	3,549,131
Benefit Payments, Including Refunds of Employee Contributions	(7,727,683)
Administrative Expense	(52,248)
Other	-
Net Change in Plan Fiduciary Net Position	3,216,771
Plan Fiduciary Net Position - Beginning	65,024,941
Plan Fiduciary Net Position - Ending (b)	<u>\$ 68,241,712</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 76,415,380</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	47.17%
Covered Employee Payroll	\$ 9,520,925
Net Pension Liability as a Percentage of covered Employee Payroll	802.60%

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	12/31/2014
Actuarially Determined Contribution	5,903,483
Contributions in Relation to the Actuarially Determined Contributions	6,527,697
Contribution Deficiency (Excess)	\$ (624,214)
Covered Employee Payroll	\$ 9,520,925
Contributions as a Percentage of Covered Employee Payroll	68.56%

Notes to Schedule

Valuation Date: 01/01/2014
 Actuarially determined contribution rates are calculated as of January 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Entry Age Normal
 Investment Return: 6.75% per annum, compounded annually (net of expenses).
 Salary Increases: Representative values of assumed salary increases are as follows:

<u>Age</u>	<u>Increase %</u>
25	4.8611
30	2.9848
35	2.0341
40	1.5239
45	1.3083
50	1.1846
55	1.1220

Payroll Growth: 0%
 Cost-of-Living Adjustments: An additional inflation allowance of 2.50% per year is added to the above.
 It was assumed that the Consumer Price Index - Urban (CPI-U) would increase 2.50% per year.

Actuarial Asset Method: The actuarial value of assets recognizes future gains and losses based on a 5-year smoothed market method as prescribed by Statute.

In a 5-year smoothed market method, the current market value of assets is reduced (increased) for the current year and each of three succeeding years, by a portion of the gain/(loss) in market value during the prior year. Such gain/(loss) is determined as the excess/(deficit) of the current market value of assets over the market value of assets as of the prior year, increased to reflect interest at the actuarial rate and adjusted to reflect contributions and benefit payments during the prior year. The portion of such gain/(loss) by which the current market value of assets is reduced (increased) shall be 80% in the current year, 60% in the first succeeding year, 40% in the second succeeding year and 20% in the third succeeding year.

Additionally, in accordance with government accounting standards, the actuarial value of assets is adjusted to remove any contributions receivable on the reporting date.

Mortality Active Lives: RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over. Five percent (5%) of deaths amongst active firefighters are assumed to be in the performance of their duty.

Mortality Non-Active Lives: RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over.

Termination: Illustrative rates of withdrawal from the plan for reasons other than death or disability are as follows:

<u>Age</u>	<u>Rate of Withdrawal</u>
20	0.0397
25	0.0250
30	0.0146
35	0.0079
40	0.0042
45	0.0029

It is assumed that terminated firefighters will not be rehired.

Disability Rates: Incidence of disability amongst firefighters eligible for disability benefits:

<u>Age</u>	<u>Rate</u>
25	0.0009
30	0.0025
35	0.0046
40	0.0065
45	0.0097
50	0.0166
55	0.0314

15% of disabilities amongst active firefighters are assumed to be in the performance of their duty.

Retirement Rates:

Retirement are assumed to occur between the ages of 50 and 69 in accordance with the following table:

<u>Age</u>	<u>Rate of Retirement</u>	<u>Age</u>	<u>Rate of Retirement</u>
50	0.19	60	0.28
51	0.12	61	0.36
52	0.04	62	0.44
53	0.06	63	0.52
54	0.09	64	0.60
55	0.12	65	0.68
56	0.15	66	0.76
57	0.19	67	0.84
58	0.22	68	0.92
59	0.25	69	1.00

Marital Status:

85% of Firefighters are assumed to be married.

Spouse's Age:

Wives are assumed to be 3 years older than their husbands.

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>12/31/2014</u>
Annual Money-Weighted Rate of Return Net of Investment Expense	5.47%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended December 31, 2014)

General Information about the Pension Plan

Plan Description

The Plan is established and administered as prescribed by “Article 4. Firefighters’ Pension Fund – Municipalities 500,000 and Under” of the Illinois Pension Code.

The Board consists of two members appointed by the City, two active Members of the Fire Department elected by the Membership and one retired Member of the Fire Department elected by the Membership.

Plan Membership as of January 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	136
Inactive Plan Members Entitled to but Not Yet Receiving Benefits	2
Active Plan Members	104
	242
	242

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

Normal Retirement:

Date: Tier 1: Age 50 and 20 years of Credited Service. Tier 2: Age 55 with 10 years of service.

Benefit: Tier 1: 50% of annual salary attached to rank on last day of service plus 2.50% of annual salary for each year of service over 20 years, up to a maximum of 75% of salary. The minimum monthly benefit is \$1,159.27 per month.

Tier 2: 2.50% per year of service times the average salary for the eight consecutive years prior to retirement times the number of years of service. The maximum benefit is 75% of average salary.

Cost-of-Living Adjustment:

Tier 1: Retirees: An annual increase equal to 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55.

Disabled Retirees: An annual increase equal to 3.00% per year of the original benefit amount beginning at age 60.

Those that become disabled prior to age 60 receive an increase of 3.00% of the original benefit amount for each year since benefit commencement upon reaching age 60.

Tier 2: An annual increase each January 1 equal to 3.00% per year or one-half of the annual unadjusted percentage increase in the consumer price index-u for the 12 months ending with the September preceding each November 1, whichever is less, of the original pension after the attainment of age 60 or first anniversary of pension start date whichever is later.

Disability Benefit:

Eligibility: Total and permanent as determined by the Board of Trustees. Seven years of service required for non-service connected disability.

Benefit: A maximum of: a.) 65% of salary attached to the rank held by Member on last day of service, and;

b.) The monthly retirement pension that the Member is entitled to receive if he or she retired immediately.

For non-service connected disabilities, a benefit of 50% of salary attached to rank held by Member on last day of service.

Pre-Retirement Death Benefit:

Service Incurred: 100% of salary attached to rank held by Member on last day of service.

Non-Service Incurred: A maximum of: a.) 54% of salary attached to the rank held by Member on last day of service, and; b.) The monthly retirement pension earned by the deceased Member at the time of death, regardless of whether death occurs before or after age 50.

Vesting (Termination):

Less than 10 years: Refund of Member Contributions.

10 or more years: Either the termination benefit, payable upon reaching age 60, provided contributions are not withdrawn, or a refund of member contributions.

The termination benefit is based on the monthly salary attached to the Member's rank at separation from service.

The following schedule applies:

<u>Service</u>	<u>% of Salary</u>
10	15.0%
11	17.6%
12	20.4%
13	23.4%
14	26.6%
15	30.0%
16	33.6%
17	37.4%
18	41.4%
19	45.6%

Contributions

Employee: 9.455% of Salary, including longevity, but excluding overtime pay, holiday pay, bonus pay, merit pay or other cash benefit. Additional 1% of salary if combined service credit option is selected.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability by December 31, 2040.

Net Pension Liability

The Sponsor's net pension liability was measured as of December 31, 2014.

The total pension liability used to calculate the net pension liability was determined as of that date.

Actuarial Assumptions:

The total pension liability was determined by an actuarial valuation as of January 1, 2014 updated to December 31, 2014 using the following actuarial assumptions.

Inflation	2.50%
Salary Increases	Graded by age from 7.69% to 3.62% at age 55 and later
Investment Rate of Return	6.75%

Mortality

RP-2000 Combined Healthy Mortality Table with a Blue Collar Adjustment. Disabled mortality: RP-2000 Disabled Mortality Table .

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December, 31 2014 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Cash	1.0%	0.50%
US Fixed Income	40.3%	2.10%
High Yield	1.5%	5.90%
US Large Cap Growth Equity	14.1%	7.50%
US Large Cap Value Equity	12.2%	7.10%
US Mid Cap Growth Equity	3.4%	8.60%
US Mid Cap Value Equity	3.4%	7.90%
US Small Cap Growth Equity	2.7%	9.50%
US Small Cap Value Equity	2.7%	8.60%
Europe Equity	5.3%	7.60%
Japan Equity	0.7%	7.10%
Emerging Market Equity	0.6%	9.40%
Real Estate	2.1%	6.80%
Infrastructure	3.3%	5.90%
Hedged Strategies	6.8%	3.50%
<u>Total</u>	<u>100%</u>	

Discount Rate:

The discount rate used to measure the total pension liability was 6.75 percent.

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 sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at December 31, 2013	\$ 140,667,430	\$ 65,024,941	\$ 75,642,489
Changes for a Year:			
Service Cost	2,326,092		2,326,092
Interest	9,391,253		9,391,253
Differences Between Expected and Actual Experience	-		-
Changes of Assumptions	-		-
Changes of Benefit Terms	-		-
Contributions - Employer		6,527,697	(6,527,697)
Contributions - Employee		919,874	(919,874)
Contributions - Buy Back	-	-	-
Net Investment Income		3,549,131	(3,549,131)
Benefit Payments, Including Refunds of Employee Contributions	(7,727,683)	(7,727,683)	-
Administrative Expense		(52,248)	52,248
Other Changes	-	-	-
New Changes	3,989,662	3,216,771	772,891
Balances at December 31, 2014	<u>\$ 144,657,092</u>	<u>\$ 68,241,712</u>	<u>\$ 76,415,380</u>

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.75%	6.75%	7.75%
Sponsor's Net Pension Liability	\$ 94,105,898	\$ 76,415,380	\$ 61,640,923

Pension plan fiduciary net position.

Detailed information about the pension plan's fiduciary net position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS
OF RESOURCES RELATED TO PENSIONS

For the year ended December 31, 2015 the Sponsor will recognize a pension expense of \$6,637,520. On December 31, 2015 the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	
Differences Between Expected and Actual Experience	-	-	
Changes of Assumptions	-	-	
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	663,068	-	
Total	\$ 663,068	\$ -	

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended September 30:		
2016	\$	165,767
2017	\$	165,767
2018	\$	165,767
2019	\$	165,766
2020	\$	-
Thereafter	\$	-

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>12/31/2014</u>
Total Pension Liability	
Service Cost	2,326,092
Interest	9,391,253
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes of Assumptions	-
Contributions - Buy Back	-
Benefit Payments, Including Refunds of Employee Contributions	(7,727,683)
Net Change in Total Pension Liability	<u>3,989,662</u>
Total Pension Liability - Beginning	140,667,430
Total Pension Liability - Ending (a)	<u><u>\$ 144,657,092</u></u>
Plan Fiduciary Net Position	
Contributions - Employer	6,527,697
Contributions - Employee	919,874
Contributions - Buy Back	-
Net Investment Income	3,549,131
Benefit Payments, Including Refunds of Employee Contributions	(7,727,683)
Administrative Expense	(52,248)
Other	-
Net Change in Plan Fiduciary Net Position	<u>3,216,771</u>
	-
Plan Fiduciary Net Position - Beginning	65,024,941
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 68,241,712</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 76,415,380</u></u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	47.17%
Covered Employee Payroll	\$ 9,520,925
Net Pension Liability as a Percentage of covered Employee Payroll	802.60%

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	12/31/2014
Actuarially Determined Contribution	5,903,483
Contributions in Relation to the	
Actuarially Determined Contributions	6,527,697
Contribution Deficiency (Excess)	\$ (624,214)
Covered Employee Payroll	\$ 9,520,925
Contributions as a Percentage of	
Covered Employee Payroll	68.56%

Notes to Schedule

Valuation Date: 01/01/2014

Actuarially determined contribution rates are calculated as of January 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Entry Age Normal
 Investment Return: 6.75% per annum, compounded annually (net of expenses).
 Salary Increases: Representative values of assumed salary increases are as follows:

<u>Age</u>	<u>Increase %</u>
25	4.8611
30	2.9848
35	2.0341
40	1.5239
45	1.3083
50	1.1846
55	1.1220

An additional inflation allowance of 2.50% per year is added to the above.

Payroll Growth: 0%

Cost-of-Living Adjustments: It was assumed that the Consumer Price Index - Urban (CPI-U) would increase 2.50% per year.

Actuarial Asset Method:

The actuarial value of assets recognizes future gains and losses based on a 5-year smoothed market method as prescribed by Statute.

In a 5-year smoothed market method, the current market value of assets is reduced (increased) for the current year and each of three succeeding years, by a portion of the gain/(loss) in market value during the prior year. Such gain/(loss) is determined as the excess/(deficit) of the current market value of assets over the market value of assets as of the prior year, increased to reflect interest at the actuarial rate and adjusted to reflect contributions and benefit payments during the prior year. The portion of such gain/(loss) by which the current market value of assets is reduced (increased) shall be 80% in the current year, 60% in the first succeeding year, 40% in the second succeeding year and 20% in the third succeeding year.

Additionally, in accordance with government accounting standards, the actuarial value of assets is adjusted to remove any contributions receivable on the reporting date.

Mortality Active Lives:

RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over. Five percent (5%) of deaths amongst active firefighters are assumed to be in the performance of their duty.

Mortality Non-Active Lives:

RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over.

Termination:

Illustrative rates of withdrawal from the plan for reasons other than death or disability are as follows:

<u>Age</u>	<u>Rate of Withdrawal</u>
20	0.0397
25	0.025
30	0.0146
35	0.0079
40	0.0042
45	0.0029

It is assumed that terminated firefighters will not be rehired.

Disability Rates:

Incidence of disability amongst firefighters eligible for disability benefits:

<u>Age</u>	<u>Rate</u>
25	0.0009
30	0.0025
35	0.0046
40	0.0065
45	0.0097
50	0.0166
55	0.0314

15% of disabilities amongst active firefighters are assumed to be in the performance of their duty.

Retirement Rates:

Retirement are assumed to occur between the ages of 50 and 69 in accordance with the following table:

<u>Age</u>	<u>Rate of Retirement</u>	<u>Age</u>	<u>Rate of Retirement</u>
50	0.19	60	0.28
51	0.12	61	0.36
52	0.04	62	0.44
53	0.06	63	0.52
54	0.09	64	0.60
55	0.12	65	0.68
56	0.15	66	0.76
57	0.19	67	0.84
58	0.22	68	0.92
59	0.25	69	1.00

Marital Status:

85% of Firefighters are assumed to be married.

Spouse's Age:

Wives are assumed to be 3 years older than their husbands.

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR DECEMBER 31, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 75,642,489	\$ -	\$ 6,527,697	
Total pension liability factors:				
Service cost	2,326,092			2,326,092
Interest	9,391,253			9,391,253
Changes in Benefit terms	-			-
Contributions - Buy back	-			-
Differences between expected and actual experience with regard to economic or demographic assumptions	-	-	-	
Current year amortization		-	-	-
Changes in assumptions about future economic or demographic factors or other inputs	-	-	-	
Current year amortization		-	-	-
Benefit payments	(7,727,683)			(7,727,683)
Net change	<u>3,989,662</u>	<u>-</u>	<u>-</u>	<u>3,989,662</u>
Plan fiduciary net position:				
Contributions - Employer	6,527,697		(6,527,697)	
Contributions - Employee	919,874			(919,874)
Contributions - Buy back	-			-
Net investment income	4,377,966			(4,377,966)
Difference between projected and actual earnings on pension plan investments	(828,835)	-	828,835	
Current year amortization		-	(165,767)	165,767
Benefit payments	(7,727,683)			7,727,683
Administrative expenses	(52,248)			52,248
Other	-			-
Net change	<u>3,216,771</u>	<u>-</u>	<u>(5,864,629)</u>	<u>2,647,858</u>
Ending Balance	<u>\$ 76,415,380</u>	<u>\$ -</u>	<u>\$ 663,068</u>	<u>\$ 6,637,520</u>