

**CITY OF JOLIET FIREFIGHTERS' PENSION FUND
ANNUAL ACTUARIAL VALUATION
FOR THE YEAR BEGINNING
JANUARY 1, 2015**

CONTENTS

<u>Section</u>	<u>Page</u>	
		<i>Introduction</i>
A		<i>Valuation Results</i>
	1-2	Summary of Actuarial Valuation Results
	3	Derivation of Experience Gain (Loss)
	4-7	Comments and Analysis
B		<i>Projections</i>
	1	Projection under P.A. 96-1495
	2	Projection with 29 Years Closed Amortization
C		<i>Benefit Provisions and Valuation Data</i>
	1-10	Brief Summary of Plan Provisions
	11	Active Member Data
	12	Development of Actuarial (Market-Related) Value of Assets
D		<i>Valuation Procedures</i>
	1	Actuarial Cost Method
	2	Actuarial Assumptions in the Valuation Process
	3-5	Valuation Assumptions
E		<i>GASB Statement No 27</i>
	1	Required Supplementary Information Schedule of Funding Progress
	2	Schedule of Employer Contributions
	3	Annual Pension Cost and Contributions
	4	Pension Cost Summary for GASB #27
	5	Summary of Actuarial Methods and Assumptions



September 4, 2015

The Pension Board
City of Joliet Firefighters' Pension Fund
Joliet, Illinois

Dear Board Members:

We are pleased to provide our formal annual Actuarial Valuation Report as of January 1, 2015, covering the City of Joliet Firefighters' Pension Fund. This report provides, among other things, the minimum annual contribution requirements of the Plan for the Plan Year commencing January 1, 2015, and ending on December 31, 2015 (which directly affects the City's tax levy in the 2016 fiscal year that is collected and deposited into the Pension Trust in fiscal year 2016). This valuation was based on the plan provisions as outlined in Section C of this report, the Plan participant data as provided by the City of Joliet (i.e., Plan Sponsor) and on the actuarial cost method and the set of actuarial assumptions as described in Section D of the report.

The assumptions used in this valuation are the same as those used in the previous valuation.

Beginning with this valuation, the Board approved a modified funding policy that shortened the amortization period used to finance the unfunded actuarial accrued liability from 31 years as of January 1, 2015, to 29 years. The modified funding policy is equal to the sum of: (a) annual normal cost plus (b) amortization of unfunded liability as a level percent of pay between January 1, 2015, and January 1, 2044, plus (c) interest on (a) and (b) to date of payment, that is projected to produce a funded ratio of 100 percent by January 1, 2044. The contribution under this modified funding policy satisfies the statutory minimum funding requirements found in Public Act 96-1495.

The assumptions and methods used in this valuation, with the exception of the discount rate, are based on an experience review performed using census information from the period January 1, 2005, to January 1, 2010, which first became effective for the January 1, 2011, valuation. The discount rate of 6.75 percent was adopted effective for the January 1, 2014, valuation. We recommend that an experience review be performed based on census data from the period January 1, 2010, to January 1, 2015. As part of this study, all economic and demographic assumptions will be reviewed, including the mortality assumption.

Chapter 40, Act 5, Article 4 of the Illinois Compiled Statutes requires an actuarial balance sheet (i.e., actuarial valuation) be prepared by a qualified actuary in order to determine the annual tax levy to meet the annual actuarial requirements of the Pension Fund. Alex Rivera and Paul Wood of Gabriel, Roeder, Smith & Company have the following qualifications:

Alex Rivera is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries and an Enrolled Actuary with over 25 years of responsible experience in the actuarial and pension consulting field.

Paul Wood is an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries with over 12 years of responsible experience in the actuarial and pension consulting field.

It is our understanding, in accordance with the Illinois Compiled Statutes, that the undersigned more than satisfy the minimum requirements as set forth in the referenced Pension Code as recently amended.

In addition, it is also our understanding that the Pension Code requires that a Member of the American Academy of Actuaries perform the required annual actuarial valuation and does not mandate that the Illinois Department of Insurance's annual actuarial valuation of the Pension Fund be controlling or that the Department of Insurance accept or approve another actuarial valuation of the Pension Fund.

Alex Rivera and Paul Wood are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We will be pleased to review this report with you at your convenience.

Sincerely,



Alex Rivera, F.S.A., E.A., M.A.A.A., F.C.A.
Senior Consultant



Paul T. Wood, A.S.A., M.A.A.A., F.C.A.
Consultant

Additional Disclosures Required by Actuarial Standards of Practice

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

SECTION A
VALUATION RESULTS

SUMMARY OF ACTUARIAL VALUATION RESULTS

	Valuation Date as of	<u>January 1, 2014</u>	<u>January 1, 2015</u>
Employee	Number of Active Firefighters	201	209
Data	Number of Service Retirees	71	70
	Number of Disabled Lives	29	30
	Number of Widow Beneficiaries	40	37
	Number of Children Beneficiaries	5	10
	Number of Separated Deferred Firefighters	1	1
	Number of Handicapped Beneficiaries	0	0
	TOTAL	347	357
	Total Annual Salaries of Firefighters	\$ 21,727,130	\$ 22,345,662
Plan	Gross Actuarial Accrued Liability:		
Liabilities	Active Firefighters	\$ 115,220,367	\$ 123,519,577
	Retirees, Beneficiaries & Disabled	119,896,978	119,837,299
	TOTAL	\$ 235,117,345	\$ 243,356,876
	Actuarial Value of Assets at Valuation Date	\$ 112,968,415	\$ 125,378,311
	Unfunded (Overfunded) Actuarial Accrued Liability	\$ 122,148,930	\$ 117,978,565
	Funded Position of Plan's Gross Actuarial Accrued Liability ²	48.0 %	51.5 %
		For the 2014 Fiscal Year	For the 2015 Fiscal Year
Normal	Gross Annual Normal Cost	\$ 7,331,123	\$ 7,425,956
Cost	Less Expected Member Contributions (for Applicable Plan Year)	2,054,300	2,112,782
	Net Annual Normal Cost (Municipality Paid)	\$ 5,276,823	\$ 5,313,174
	Net Annual Normal Cost (As a percentage of pay) ¹	24.3 %	23.8 %

¹ Percents above represent net annual normal cost expressed as percentages of covered Firefighters' salaries.

² Equals the ratio of the actuarial value of assets to the total gross actuarial accrued liability.

**SUMMARY OF ACTUARIAL VALUATION RESULTS
(CONTINUED)**

Annual Contribution Requirements Plan Year End	<u>December 31, 2014</u> ^a	<u>December 31, 2015</u> ^b
Net Annual Normal Cost (Municipality Paid)	\$5,276,823	\$5,313,174
Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability as a level percentage of payroll	5,557,593	5,725,093
Interest Adjustment to Expected Date of Payment into the Fund (Optional)	<u>1,115,293</u>	<u>1,136,277</u>
Total Minimum Annual Contribution Requirement for the Current Plan Year	<u><u>\$11,949,709</u></u>	<u><u>\$12,174,544</u></u>
Minimum Annual Contribution (As a percentage of pay)	55.0%	54.5%

^a Unfunded Actuarial Accrued Liability is amortized over a 32 year closed period.

^b Unfunded Actuarial Accrued Liability is amortized over a 29 year closed period.

The contributions shown above satisfy the statutory minimum funding requirements found in Public Act 96-1495 that employer contribution produces 90 percent funding by the end of fiscal year 2040. The statutory minimum funding requirement produces a contribution of \$10,400,000 or 43.06 percent of projected pay for the plan year ending December 31, 2015.

**DERIVATION OF EXPERIENCE GAIN (LOSS)
YEAR ENDED JANUARY 1, 2015**

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over time, but year-to-year fluctuations are not uncommon. Detail on the derivation of the experience gain (loss) is shown below, along with a year-by-year comparative schedule.

1. Unfunded Actuarial Accrued Liability at 01/01/2014	\$ 122,148,930
2. Normal Cost Due at 01/01/2014	7,331,123
3. Interest on (1) and (2) to 12/31/2014 (at 6.75% per annum)	8,739,904
4. Contributions (Employer and Employee) applicable to the 2014 Plan Year, with interest to 12/31/2014	14,636,688
5. Expected Unfunded Actuarial Accrued Liability at 01/01/2015 [(1) + (2) + (3) - (4)]	\$ 123,583,269
6. Actual Unfunded Actuarial Accrued Liability at 01/01/2015	\$ 117,978,565
7. Gain (Loss) for the 2014 Plan Year [(5) - (6)]	\$ 5,604,704

Valuation Date January 01	Experience Gain (Loss) As % of Accrued Liability at the Prior Valuation Date ¹
2003	(6.65)%
2004	(2.42)%
2005	(0.88)%
2006	(0.89)%
2007	(9.08)%
2008	(2.66)%
2009	(4.45)%
2010	(9.18)%
2011	(1.58)%
2012	(2.73)%
2013	0.23 %
2014	1.87 %
2015	2.38 %

¹ Excluding Plan and assumption changes.

COMMENTS AND ANALYSIS

The valuation results pertaining to the current Plan Year are analyzed and discussed in the following paragraphs.

Plan History

The following table provides a summary of the Plan's rate of return on assets and salary increase experience over the last 20 actuarial valuations performed by Gabriel, Roeder, Smith & Company:

Plan Year Ending	Rate of Return On Plan Assets	Salary Scale Increase
12/31/1995	12.0 %	9.1 %
12/31/1996	5.9	8.2
12/31/1997	11.3	5.5
12/31/1998	9.7	11.1
12/31/1999	7.9	15.5
12/31/2000	(1.2)	4.5
12/31/2001	(1.0)	7.3
12/31/2002	(1.4)	6.4
12/31/2003	9.4	7.2
12/31/2004	6.8	10.9
12/31/2005	4.4	7.8
12/31/2006	7.8	6.9
12/31/2007	5.7	10.0
12/31/2008	(13.3)	5.8
12/31/2009	8.2	14.2
12/31/2010	10.3	4.0
12/31/2011	1.3	7.4
12/31/2012	8.0	1.6
12/31/2013	13.3	1.6
12/31/2014	4.2	0.8

The Salary Scale increase has averaged 7.2% over the last 20 years. We believe the 5.25% salary increase assumption continues to be a reasonable long-term assumption. The salary scale was recently adjusted to recognize that members with less than three years of service receive higher pay increases. As part of each annual valuation, we will review salary scale increases and determine whether the current assumption continues to be appropriate.

Over the same 20-year period, the Plan's assets have averaged an annual rate of investment return of 5.3%. We believe the 6.75% annual rate of return on Plan assets is within the range of reasonable assumptions. However, we recommend that the City monitor this assumption for continuing reasonableness at each future valuation.

**COMMENTS AND ANALYSIS
(CONTINUED)**

Analysis of the Experience Gain (Loss) The experience gain(loss) reported on page A-3, is the net result of the following:

(a) From plan asset performance	\$ (198,534)
(b) Other sources ("net effect" of salary increases, terminations, new entrants, retirements, etc.)	5,803,238
Total Gain/(Loss): [(a) + (b)]	\$ 5,604,704

Changes in the Annual Contribution

The dollar amount of the plan's annual minimum required contribution of \$12,174,544 is approximately 1.9% higher than the level for the prior plan year of \$11,949,709. As a percentage of payroll, the contribution requirement is lower than last year (i.e., decreasing from 55.0% to 54.5%). The important factors producing this change are summarized as follows:

1. Minimum Annual Contribution Requirement for prior plan year without amendatory Act of the 93rd General Assembly ¹	\$ 11,402,869
2. Actual Asset Performance (based on actuarial value of assets)	10,169
3. Increase in Normal Cost and Amortization Amount due to anticipated pay increases	477,988
4. Changes in Funding Policy (decreasing amortization period from 31 years as of January 1, 2015, to 29 years)	271,594
5. Changes in Plan Provisions due to the ¹ amendatory Act of the 93rd General Assembly	526,010
6. Other Sources (demographic and salary (gains)/losses)	(514,086)
7. Minimum Annual Contribution Requirement for current plan year (sum of items 1 through 7)	\$ 12,174,544

¹(P.A. 93-0689, effective 7-1-04.)

COMMENTS AND ANALYSIS (CONTINUED)

*Comments on
Actuarial Value of
Assets*

Government accounting standards mandate the use of market value of assets or market-related value of assets for accounting purposes. The Pension Fund used market-related value of assets for both government accounting and funding purposes. This market-related value of assets will recognize gains and losses due to return on plan assets over a four-year period. Hence, only a portion of this year's investment gain (see Section C for details) is included in the current year actuarial value of assets. The remainder of the gain or loss will be incorporated into Pension Fund assets over the next three years. The purpose of this technique is to minimize contribution volatility due to fluctuations in the market value of assets. Finally, receivables for plan years prior to the current plan year which are not in Plan assets by December 31, 2014, are not included in assets for Government accounting standards purposes but are included in assets for funding purposes.

COMMENTS AND ANALYSIS (CONTINUED)

***GASB Statements
No. 25 and 27***

GASB Statement No. 25 is applicable to fiscal years beginning after June 15, 1996. It was adopted by the City of Joliet Firefighters Pension Fund in the January 1997 report. GASB Statement 27 is applicable to fiscal years beginning after June 15, 1997. It was adopted by the City of Joliet in the January 1998 report. A transition pension liability (asset) has been developed under Statement No. 27 equal to the cumulative difference between the actuarially determined funding requirement and the actual amount contributed for fiscal years 1987 to the date GASB 27 is adopted. As of the adoption date, all outstanding pension liabilities (assets) are adjusted to equal the transition NPO.

***GASB Statements
No. 67 and 68***

Effective with Fiscal Year Ending December 31, 2014, GASB No. 67 is replacing GASB No. 25 for pension plan financial reporting requirements. GASB No. 68 is replacing GASB No. 27 for employer financial reporting effective with fiscal year ending December 31, 2015. The discount rate used for GASB No. 67 and No. 68 reporting purposes will produce a single equivalent discount rate based on 6.75 percent for the projected benefits for all current members that can be paid from current assets and projected investment return, future employee contributions from current members, and future employer contributions attributable to current members, and a municipal bond rate for the portion of the projected benefits after assets are depleted. The municipal bond rate is based on a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

Due to the single equivalent discount rate and shorter amortization periods required under GASB No. 67 and No. 68, the unfunded liabilities and pension expense will be much higher and more volatile than under the current standards. The measurements required under GASB No. 67 are provided in a separate report. The measurements required under GASB Statement No. 68 have yet to be performed.

SECTION B
PROJECTIONS

City of Joliet Firefighters' Pension Fund
Actuarial Valuation Projection Results Based on P.A. 96-1495 as of January 1, 2015 (Based on Projected Unit Credit Cost Method)
(\$ in Thousands)

Jan. 1,	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Actuarial Value Funded Ratio	Uncapped Payroll	Capped Payroll	Employer Normal Cost	Statutory Minimum Contribution	Statutory Contribution % of Projected Pay	Employee Contributions	Benefit Payments
2015	\$238,432	\$114,830	\$113,813	\$124,620	47.7%	\$22,346	\$22,346	\$5,364	\$10,400	43.06%	\$2,113	\$9,623
2016	252,566	127,169	127,108	125,458	50.3%	23,191	23,191	5,507	10,817	43.06%	2,193	10,221
2017	267,274	138,204	138,896	128,378	52.0%	24,156	24,113	5,639	11,254	43.06%	2,280	10,858
2018	282,549	149,845	149,845	132,704	53.0%	25,123	24,991	5,758	11,689	43.06%	2,363	11,507
2019	298,402	162,139	162,139	136,262	54.3%	26,138	25,858	5,857	12,139	43.06%	2,445	12,280
2020	314,718	174,999	174,999	139,718	55.6%	27,149	26,740	5,934	12,615	43.06%	2,528	13,130
2021	331,429	188,400	188,400	143,029	56.8%	28,195	27,616	6,002	13,100	43.06%	2,611	14,022
2022	348,507	202,362	202,362	146,146	58.1%	29,299	28,505	6,046	13,608	43.06%	2,695	14,949
2023	365,917	216,896	216,896	149,022	59.3%	30,427	29,355	6,074	14,138	43.06%	2,775	15,958
2024	383,575	231,976	231,976	151,600	60.5%	31,606	30,185	6,088	14,683	43.06%	2,854	17,056
2025	401,391	247,568	247,568	153,822	61.7%	32,838	30,987	6,084	15,175	43.06%	2,930	18,176
2026	419,327	263,698	263,698	155,629	62.9%	34,104	31,731	5,996	15,704	43.06%	3,000	19,461
2027	437,129	280,169	280,169	156,959	64.1%	35,246	32,224	5,866	16,261	43.06%	3,047	20,833
2028	454,625	296,929	296,929	157,695	65.3%	36,473	32,686	5,705	16,864	43.06%	3,090	22,270
2029	471,692	313,957	313,957	157,735	66.6%	37,769	33,086	5,527	17,494	43.06%	3,128	23,788
2030	488,193	331,227	331,227	156,966	67.8%	39,167	33,468	5,322	18,143	43.06%	3,164	25,367
2031	503,996	348,720	348,720	155,276	69.2%	40,631	33,773	5,084	18,834	43.06%	3,193	26,989
2032	518,966	366,418	366,418	152,548	70.6%	42,138	33,978	4,835	19,549	43.06%	3,213	28,669
2033	532,967	384,308	384,308	148,658	72.1%	43,743	34,146	4,574	20,284	43.06%	3,229	30,383
2034	545,880	402,391	402,391	143,488	73.7%	45,405	34,226	4,298	21,076	43.06%	3,236	32,131
2035	557,572	420,656	420,656	136,915	75.4%	47,112	34,234	4,031	21,941	43.06%	3,237	33,883
2036	567,958	439,163	439,163	128,795	77.3%	48,950	34,250	3,792	22,849	43.06%	3,238	35,578
2037	577,041	458,062	458,062	118,979	79.4%	50,959	34,311	3,585	23,806	43.06%	3,244	37,189
2038	584,857	477,516	477,516	107,341	81.6%	53,069	34,389	3,420	24,826	43.06%	3,251	38,707
2039	591,464	497,712	497,712	93,752	84.1%	55,291	34,510	3,309	25,931	43.06%	3,263	40,094
2040	596,978	518,904	518,904	78,074	86.9%	57,661	34,710	3,262	7,036	11.18%	3,282	41,319
2041	601,569	541,422	541,422	60,147	90.0%	60,228	35,026	3,270	7,182	10.92%	3,312	42,375
2042	605,419	544,877	544,877	60,542	90.0%	62,950	35,418	3,323	7,337	10.68%	3,349	43,275
2043	608,695	547,826	547,826	60,870	90.0%	65,792	35,868	3,407	7,499	10.46%	3,391	44,061
2044	611,516	550,364	550,364	61,152	90.0%	68,708	36,350	3,508	7,666	10.26%	3,437	44,778
2045	613,942	552,548	552,548	61,394	90.0%	71,662	36,821	3,620	7,832	10.06%	3,481	45,435
2046	616,021	554,419	554,419	61,602	90.0%	74,712	37,301	3,738	7,992	9.86%	3,527	46,035
2047	617,795	556,015	556,015	61,779	90.0%	77,858	37,789	3,854	8,144	9.65%	3,573	46,592
2048	619,286	557,357	557,357	61,929	90.0%	81,083	38,282	3,963	8,286	9.44%	3,620	47,126
2049	620,492	558,443	558,443	62,049	90.0%	84,371	38,768	4,063	8,416	9.23%	3,666	47,643
2050	621,402	559,262	559,262	62,140	90.0%	87,727	39,253	4,153	8,534	9.01%	3,711	48,140

City of Joliet Firefighters' Pension Fund
Actuarial Valuation Projection Results Based on 29 Years Closed Amortization as of January 1, 2015 (Based on Entry Age Normal Cost Method)
(\$ in Thousands)

Jan. 1,	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Actuarial Value Funded Ratio	Uncapped Payroll	Capped Payroll	Employer Normal Cost	City Contribution	City Contribution % of Pay	Employee Contributions	Benefit Payments
2015	\$243,357	\$114,830	\$125,378	\$117,979	51.5%	\$22,346	\$22,346	\$5,313	\$12,175	54.48%	\$2,113	\$9,623
2016	257,769	127,169	138,891	118,877	53.9%	23,191	23,191	5,423	12,496	53.88%	2,193	10,221
2017	272,738	140,037	152,823	119,915	56.0%	24,156	24,113	5,516	12,821	53.07%	2,280	10,858
2018	288,251	153,537	165,945	122,305	57.6%	25,123	24,991	5,596	13,226	52.64%	2,363	11,507
2019	304,315	167,699	180,500	123,815	59.3%	26,138	25,858	5,670	13,594	52.01%	2,445	12,280
2020	320,830	182,522	195,679	125,152	61.0%	27,149	26,740	5,726	13,955	51.40%	2,528	13,130
2021	337,732	197,934	211,440	126,292	62.6%	28,195	27,616	5,774	14,319	50.79%	2,611	14,022
2022	354,993	213,923	227,782	127,211	64.2%	29,299	28,505	5,803	14,674	50.09%	2,695	14,949
2023	372,582	230,496	244,699	127,882	65.7%	30,427	29,355	5,815	15,026	49.38%	2,775	15,958
2024	390,414	247,596	262,139	128,275	67.1%	31,606	30,185	5,814	15,375	48.65%	2,854	17,056
2025	408,398	265,160	280,041	128,357	68.6%	32,838	30,987	5,794	15,719	47.87%	2,930	18,176
2026	426,498	283,192	298,405	128,093	70.0%	34,104	31,731	5,701	15,997	46.91%	3,000	19,461
2027	444,468	301,541	317,023	127,445	71.3%	35,246	32,224	5,576	16,256	46.12%	3,047	20,833
2028	462,150	320,046	335,779	126,371	72.7%	36,473	32,686	5,429	16,507	45.26%	3,090	22,270
2029	479,431	338,628	354,604	124,827	74.0%	37,769	33,086	5,268	16,759	44.37%	3,128	23,788
2030	496,178	357,195	373,415	122,763	75.3%	39,167	33,468	5,087	17,007	43.42%	3,164	25,367
2031	512,270	375,681	392,142	120,128	76.5%	40,631	33,773	4,880	17,245	42.44%	3,193	26,989
2032	527,581	394,026	410,717	116,865	77.8%	42,138	33,978	4,662	17,491	41.51%	3,213	28,669
2033	541,979	412,138	429,068	112,911	79.2%	43,743	34,146	4,430	17,741	40.56%	3,229	30,383
2034	555,345	429,973	447,145	108,201	80.5%	45,405	34,226	4,185	17,999	39.64%	3,236	32,131
2035	567,555	447,473	464,893	102,662	81.9%	47,112	34,234	3,947	18,288	38.82%	3,237	33,883
2036	578,527	464,610	482,310	96,217	83.4%	48,950	34,250	3,729	18,621	38.04%	3,238	35,578
2037	588,256	481,453	499,475	88,780	84.9%	50,959	34,311	3,527	18,997	37.28%	3,244	37,189
2038	596,767	498,117	516,504	80,263	86.6%	53,069	34,389	3,350	19,428	36.61%	3,251	38,707
2039	604,104	514,736	533,540	70,564	88.3%	55,291	34,510	3,208	19,926	36.04%	3,263	40,094
2040	610,363	531,500	550,786	59,577	90.2%	57,661	34,710	3,105	20,501	35.55%	3,282	41,319
2041	615,691	548,664	568,507	47,184	92.3%	60,228	35,026	3,036	21,150	35.12%	3,312	42,375
2042	620,243	566,521	586,991	33,253	94.6%	62,950	35,418	2,993	21,878	34.75%	3,349	43,275
2043	624,167	585,361	606,536	17,632	97.2%	65,792	35,868	2,972	22,845	34.72%	3,391	44,061
2044	627,568	605,457	627,568	-	100.0%	68,708	36,350	2,965	3,392	4.94%	3,437	44,778
2045	630,498	627,215	630,498	-	100.0%	71,662	36,821	2,970	3,399	4.74%	3,481	45,435
2046	633,000	629,710	633,000	-	100.0%	74,712	37,301	2,984	3,417	4.57%	3,527	46,035
2047	635,115	631,809	635,115	-	100.0%	77,858	37,789	3,006	3,442	4.42%	3,573	46,592
2048	636,870	633,539	636,870	-	100.0%	81,083	38,282	3,032	3,472	4.28%	3,620	47,126
2049	638,270	634,909	638,270	-	100.0%	84,371	38,768	3,061	3,506	4.16%	3,666	47,643
2050	639,309	635,916	639,309	-	100.0%	87,727	39,253	3,093	3,543	4.04%	3,711	48,140

SECTION C

BENEFIT PROVISIONS AND VALUATION DATA

**BRIEF SUMMARY OF PLAN PROVISIONS
(JANUARY 1, 2015)**

Plan Firefighters' Pension Fund as Incorporated in Chapter 40, Act 5, Article 4 of the Illinois Compiled Statutes.

Effective Date Enacted: March 18, 1963

Last Amended Effective: August 26, 2014

Eligibility to Participate Generally, any person who is in the Firefighters' Department of a city, village or incorporated town (whose population is 500,000 or less) which has adopted the provisions of Chapter 40, Act 5, Article 4 of the Illinois Compiled Statutes concerning Firefighters' pensions, is eligible to participate, subject to the following:

- (a) The person has attained age 18 but not age 35 at the time of the first appointment; and
- (b) Within three months after receiving his/her first appointment (or within three months after any re-appointment), the person makes written application to the Board to be covered under the provisions of the Article.

NOTE:

If the person had been regularly enrolled as a volunteer Firefighter for 5 years immediately preceding the time that the municipality began employing him/her full time, the age limitation in (a) above does not apply.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

***Employee
Contributions
(Mandatory)***

In order to participate in the plan, each Firefighter must contribute 9.455% of his/her regular salary. "Salary" in this instance excludes overtime pay, holiday pay, bonus pay, merit pay or any other cash benefit over and above the salary established by the appropriation ordinance. Prior to July 1, 2004, each Firefighter had to contribute 8.455% of his/her regular salary.

Creditable Service

"Creditable Service" is the time period during which a person serves as a Firefighter of a municipality. Furloughs and Leave of Absences without pay exceeding 30 days in any one year are not counted unless such periods are attributable to illness or accident. Time attributable to disability absence for which the Firefighter does not receive disability pension benefits will be counted as "Creditable Service."

Furloughs and Leave of Absence less than 30 days in any one year may be included in "Creditable Service" if the Firefighter makes the regular employee contributions to the Fund he/she would have made if he/she had not been on the furlough or leave of absence. Such contributions must be made not more than 90 days following the end of the furlough or leave of absence.

In addition, all periods of service in the Military, Naval or Air Forces of the United States of America, entered into when the person was an active Firefighter and up to eight Years of Service as an officer in a statewide firefighters' association while on leave of absence from a municipality's payroll, shall be counted as "Credited Service," provided that the Firefighter contributes to the Fund the amount he/she would have paid had he/she been a regular contributor during such military service; in general, not more than five years may be counted under this provision. Credited Service shall not include time spent as a volunteer Firefighter whether or not compensation was received.

***Eligibility For and
Amount of Regular
Retirement Benefits***

***I. Eligibility —
Age 50 (or
More) and 20
or More Years
of Creditable
Service***

Benefit: A Firefighter who is age 50 (or more) and has 20 years or more of Creditable Service and is no longer a Firefighter is entitled to 1/2 of the monthly salary attached to the rank held by him/her at the date of actual retirement.

For Creditable Service over 20 years, the monthly pension is increased as follows:

- 1/12 of 2.5% of the Firefighter's monthly salary for each additional year over 20 to the limitation that the monthly pension does not exceed 75% of his/her monthly salary.

BRIEF SUMMARY OF PLAN PROVISIONS
(CONTINUED)

Notwithstanding the above, as of January 1, 1999, no Pension in effect or granted with 20 or more Years of Service after May 1, 1993, is to be less than \$600.00 per month. This minimum is increased to \$800.00 per month on January 1, 2000, \$1,000.00 per month on January 1, 2001, \$1,030.00 per month on July 1, 2004, \$1,060.90 per month on July 1, 2005, \$1,092.73 per month on July 1, 2006, \$1,125.51 per month on July 1, 2007, \$1,159.27 per month on July 1, 2008.

**II. Eligibility—
Age 60 (or
More) and 10
(but Less than
20) Years of
Creditable
Service**

A Firefighter who is age 60 or more and has at least 10 Years (but less than 20) of Creditable Service and who is no longer a Firefighter, is entitled to a monthly pension payable for life based on the monthly salary attached to the rank held by him/her at the date of retirement or separation from service according to the following schedule:

For 10 Years of Service —	15.0% of salary;
For 11 Years of Service —	17.6% of salary;
For 12 Years of Service —	20.4% of salary;
For 13 Years of Service —	23.4% of salary;
For 14 Years of Service —	26.6% of salary;
For 15 Years of Service —	30.0% of salary;
For 16 Years of Service —	33.6% of salary;
For 17 Years of Service —	37.4% of salary;
For 18 Years of Service —	41.4% of salary;
For 19 Years of Service —	45.6% of salary;

Notwithstanding the foregoing, a Firefighter affected by the above shall not be entitled to a pension benefit if the option for a refund of employee contributions was exercised when the Firefighter last separated from service or if he/she is entitled to a disability pension benefit.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

III. Pension Allowance Increases

- A Firefighter who retired from service with 20 or more years of Creditable Service on or before May 1, 1971, is entitled to an increase of 2% of his/her original monthly pension for each year the Firefighter was in receipt of pension payments; such increase takes effect in the January of the year following the year in which he/she attains age 65, or January of 1972, if then age 65. Each subsequent January, the monthly pension is increased by 2% of the original monthly pension amount. Beginning January, 1976, the rate of such increases was raised to 3% of the original monthly pension.

- A Firefighter who retired from service after May 1, 1971, and prior to January 1, 1986, is entitled to an increase of 2% of his/her original monthly pension either upon: (a) the first of the month following the first anniversary of his/her date of retirement if he/she was age 60 or more on that date, or (b) the first of the month following the Firefighter's attainment of age 60 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January, the monthly pension is increased by 2% of the original monthly pension amount. Beginning January, 1976, the rate of such increase was raised to 3% of the original monthly pension. In July 2009, a Firefighter who retired before July 1, 1977, had his/her benefit recalculated and increased to reflect the amount that he/she would have received in July 2009 had he/she been receiving a 3% compounded increase for each year he/she received pension payments after January 1, 1986, plus any increases in pension received for each year prior to January 1, 1986. In each January thereafter, he or she shall receive an additional increase of 3% of the amount of the pension then being paid.

- A Firefighter who retired from service on or after January 1, 1986, is entitled to an increase of 3% of his/her original monthly pension for each full year that has elapsed since the pension began. This occurs either upon: (a) the first of the month following the anniversary of his/her date of retirement if he/she was age 55 or older on that date, or (b) the first of the month following the Firefighter's attainment of age 55 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January, the monthly pension is increased by 3% of the immediately preceding year's pension amount.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

- Notwithstanding the provisions of the second paragraph listed above, a Firefighter who retired from service after January 1, 1977, and prior to January 1, 1986, and did not receive a pension increase before May 1, 1987, is entitled to a 3% increase of his/her original monthly pension for each full year that has elapsed since the pension began. This occurs on the first day of the month following either: (a) the first anniversary of the date of retirement, or (b) the attainment of age 55, or (c) May 1, 1987. Each subsequent January, the monthly pension is increased by 3% of the immediately preceding year's pension amount.

Eligibility For and Amount of Disability Benefits

I. Disability Incurred in the Line of Duty

- a) If a Firefighter is injured or suffers an accident or sickness as the result of carrying out his/her duties as a Firefighter (even if those duties take him/her to a place away from the municipality in which he/she serves as a Firefighter, and assuming such duties are related to the fire protection service of such municipality), then such a disabled Firefighter is entitled to a disability retirement pension equal to the greater of: (i) the Firefighter's accrued pension benefit at the date of disability or (ii) 65% of the monthly salary attached to the rank held by him/her in the Fire Department at the date he/she is removed from the municipality's Fire Department payroll.
- b) A Firefighter who is entitled to disability payments, as discussed in (a) above, also has the right to receive a benefit of \$20 per month for every unmarried child less than 18 years of age.

The total amount of the benefits described in both (a) and (b) above shall not exceed 75% of the amount of salary the Firefighter was receiving at the time of the grant of the disability benefit.

II. Disability on Account of Occupational Hazards

- a) If a Firefighter who has completed 5 or more Years of Service is unable to perform his/her duties in the Fire Department by reason of heart disease, tuberculosis, disabling cancer, or any disease of the lungs or respiratory tract, resulting solely from his/her service as a Firefighter, then he/she is entitled to an occupational disease disability pension equal to the greater of: (i) the Firefighter's accrued pension benefit at the date of disability or (ii) 65% of his/her salary at the time of his/her removal from the Fire Department payroll.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

- a) A Firefighter who is entitled to a disability payments as described in (a) above also has the right to receive a benefit of \$20.00 per month for every unmarried child less than 18 years of age and who is dependent upon the Firefighter for financial support.

The total amount of the benefits described in both (a) and (b) above are not to exceed 75% of the amount of salary the Firefighter was receiving at the time of the grant of the disability benefit.

III. Disability Due to Occurrences Unrelated to Duties

If a Firefighter, who has 7 years of Creditable Service, becomes mentally or physically disabled as the result of any cause other than the performance of an act or acts of duty, he/she is entitled to a disability pension equal to 50% of the monthly salary attached to the rank held by him/her in the Fire Department at the date he/she is removed from the municipality's Fire Department payroll.

IV. Special Disability Pension Option

A Firefighter who is receiving any form of disability pension and whose Creditable Service plus years of disability equals 20 or more and who is age 50 or older may elect to retire from the Fire Department by submitting a written application to the Board. His/her lifetime retirement pension will be equal to the same amount he/she was entitled to as a disabled Firefighter as of the date he/she was removed from Municipality's payroll for disability. A Firefighter who exercises this option is entitled to the automatic 3% per annum increase in benefits.

If a Firefighter who is on any form of disability pension accumulates enough Creditable Service to be eligible for a pension (at least 10 years at age 60 or at least 20 years at age 50 or more), he/she may elect to permanently retire from the Fire Department by submitting a written application to the Board. The Firefighter would be entitled to a lifetime pension based on the salary attached to the rank he/she held in the Fire Department as of the date of his/her election to retire. A Firefighter who exercises this option is entitled to the automatic 3% per annum increase in benefits.

V. Disability Pension Allowance Increase

A Firefighter who is receiving a disability pension is entitled to receive an automatic increase effective January 1, 1974, and upon the attainment of age 60. At this date, the monthly pension is increased by 2% of the original monthly pension for each year the Firefighter was in receipt of monthly pension payments. Each subsequent January, the monthly pension is again increased by 2% of the original monthly pension amount. Effective January 1976, the rate of such increase was raised to 3% of the original monthly pension.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

Death Benefits to Surviving Spouse or Dependents

I. Surviving Spouse's Benefit

If an active Firefighter dies while in the line of duty as a result of any injuries or if a Firefighter sustains injuries from which he/she thereafter dies, then the surviving spouse is entitled to a monthly pension equal to 100% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department. The benefit is payable to the surviving spouse for life.

If an active Firefighter dies as a result of any illness or accident unrelated to duty or if a Firefighter dies from any cause while receiving disability pension benefits, or if a Firefighter dies during his/her retirement (after 20 years of service), then his/her surviving spouse is entitled to a monthly pension equal to 100% of the monthly retirement pension earned by the deceased firefighter at the time of death. This benefit is payable to the surviving spouse for life. Previously, the surviving spouse was entitled to a monthly pension equal to 54% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department.

Beginning January 1, 1999, the minimum amount payable under this provision is \$600.00 per month for both current and future surviving spouses. This minimum is increased to \$800.00 per month on January 1, 2000, \$1,000.00 per month on January 1, 2001, \$1,030.00 per month on July 1, 2004, \$1,060.90 per month on July 1, 2005, \$1,092.73 per month on July 1, 2006, \$1,125.51 per month on July 1, 2007, \$1,159.27 per month on July 1, 2008.

II. Dependent's Benefit

The dependent's benefit is applicable in the event of the death of the Firefighter under the conditions enumerated above for the surviving spouse's benefit. The guardian (spouse or otherwise) of any minor child (or children), including a child who had been conceived but not yet born, is entitled to a monthly benefit equal to 12% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department prior to his/her death. Such benefit is payable for each such child until the child attains age 18 or marries, if earlier.

If the deceased Firefighter leaves no surviving spouse or unmarried minor children under age 18, but leaves a dependent father or mother, each one is entitled to a monthly benefit equal to 18% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

Notes: (a) The aggregate above monthly death benefits are not to exceed 75% of the monthly salary of the deceased Firefighter.

(b) Adopted children are entitled to the same benefits as provided for natural children, if adopted before the Firefighter attained age 50.

(c) If the Firefighter leaves no surviving spouse, unmarried children under the age of 18 or dependent father or mother, the Board will refund to his/her estate the amount of his/her accumulated contributions, less any amount of pension payments made to the deceased Firefighter while he/she was living.

Termination of Employment Benefits.

I. Refund of Employee Contributions

A Firefighter who has less than 20 Years of Service and who resigns or is discharged (and has not received any disability payments), is entitled to a refund of his/her total amount contributed to the fund during his/her period of service. If the Firefighter should be subsequently re-employed, he/she must repay to the fund the amount of refund which he/she received before commencing service. When repayment is made, the Firefighter will receive credit for the previous Years of Service for which he/she received his/her refund.

II. Re-entry Into Service

- If a retired Firefighter (who is receiving pension benefits) re-enters active service, his/her pension benefits will cease while in active service. If he/she again retires, his/her monthly payments will resume in the same amount as he/she had received as a pensioner.
- If a "deferred" pensioner reenters service and remains in service for less than three years, and then again retires or is discharged, his/her pension will be based on the salary attached to the rank he/she held in the Fire Department at the date of his/her earlier retirement. Conversely, if the pensioner re-enters service and remains in service for three or more years, and again retires or is discharged, his/her pension will be based on the salary attached to the rank he/she held in the Fire Department at the date of his/her last retirement.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

Notwithstanding the foregoing, if a pensioner or deferred pensioner returns to active service and is subsequently injured (and the injury is not relate to an injury for which the member was previously receiving benefits), the 3-year requirement does not apply in order for the member to receive his/her pension based on his/her rate of pay at the time of his/her new injury.

Financing of Pension Benefits

Pension benefits are to be funded by "employee" deductions from wages and salaries of Firefighters and by a property tax levied by the Municipality. The amount derived from these two sources should equal the sum sufficient to meet the annual actuarial requirements of the pension fund as stated below:

- (1) Provide actuarial reserves for the pensions and benefits earned by the Firefighters during the year (the reserve requirement is to be computed at a rate of not less than 17.5% of the salaries and wages earned by the Firefighters during the year),

And

- (1) In a municipality that has a reserve less than the actuarial requirements of the fund, the Board of the Pension Fund shall designate the proportionate amount needed annually to insure the accumulation of such actuarial reserve over a period of 35 years subsequent to January 1, 2011, in the case of pension funds in operation on that date.

The minimum funding requirements under P.A. 96-1495 are disclosed on the following page.

Administration

The Firefighters' Pension Fund is administered by a Board of Trustees located in each municipality maintaining a Pension Fund for its Firefighters. Its duties are: to control and manage the pension fund, to enforce the collection of the contributions, to hear and determine applications for pensions, to authorize payment of pension, to establish rules, to pay expenses, to invest funds and to keep records.

BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

Benefits Under P.A. 96-1495

Under P.A. 96-1495, members of the City of Joliet Firefighters' Pension Fund hired after December 31, 2010, are eligible for the following tier-two benefits:

- Minimum retirement eligibility at age 55 with 10 years of service with annuity based on accrual rate of 2.5 percent, subject to a maximum of 75 percent.
- Minimum retirement eligibility at age 50 with 10 years of service with annuity based on accrual rate of 2.5 percent, reduced by ½ of a percent per month for retirement prior to age 55, subject to a maximum of 75 percent.
- Final average salary based on 96 consecutive months within last 120 months.
- Annual salary capped at \$106,800, indexed annually at lesser of 3.0 percent and 50 percent of CPI-U. For the January 1, 2014, valuation, annual salary is capped at \$110,631.26.
- COLA equal to lesser of 3.0 percent and 50 percent of CPI-U, commencing at age 60, with no cap, applied to originally granted retirement annuity.
- Widow benefits at 66-2/3 percent of retiree's benefit.
- Widow COLAs equal to the lesser of 3.0 percent and 50 percent of CPI-U, commencing when the survivor reaches age 60 and applied to originally granted retirement annuity.

Minimum Funding Requirements under P.A. 96-1495

P.A. 96-1495 includes the following changes to the statutory funding requirements:

- Employer contribution (combined with members contributions and other fund revenue) produces 90 percent funding by the end of fiscal year 2040.
- Contributions based on open group projection and level percent of pay financing.
- Actuarial liabilities based on projected unit credit cost method.
- Assets marked to market at March 30, 2011. For fiscal years after March 30, 2011, actuarial value of assets based on 5-year smoothing.

If the City does not make the statutorily required contributions, then the State, starting in FY 2016, could withhold State grants to the City, and directly deposit the withheld funds into the City of Joliet Firefighters' Pension Fund. The withheld funds are limited to 33 percent of total State grants to the City in FY 2016, 67 percent in FY 2017 and 100 percent on and after FY 2018.

The contribution determined in accordance with P.A. 96-1495 serves as a minimum contribution requirement. The funding policy adopted for this valuation exceeds the minimum contribution established under this Public Act.

**ACTIVE MEMBERS AS OF JANUARY 1, 2015
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date									Totals	
	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	Totals	Valuation Payroll
Under 20										0	\$ 0
20-24										0	0
25-29	4	1	2							7	533,159
30-34	4	6	25	5						40	3,713,657
35-39	1	1	24	18	2					46	4,683,685
40-44			11	21	15	1				48	5,195,748
45-49				7	13	13	4			37	4,381,344
50-54					5	9	6			20	2,496,526
55-59					2	6	3			11	1,341,543
60-64										0	0
65-69										0	0
Over 70										0	0
Total	9	8	62	51	37	29	13	0	0	209	\$22,345,662

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 41.7 years
Service: 13.8 years
Annual Pay: \$106,917

DEVELOPMENT OF ACTUARIAL (MARKET-RELATED) VALUE OF ASSETS

Year Ending December 31,	2014	2015	2016	2017
Beginning of Year:				
(1) Market Value of Assets	\$ 105,572,502			
(2) Actuarial Value of Assets Including Contribution Receivable	112,968,415			
(3) Actuarial Value of Assets Excluding Contribution Receivable	101,900,206			
End of Year:				
(4) Market Value of Assets	114,830,316			
(5) Contributions and Disbursements				
(5a) City Contributions	12,098,687			
(5b) Member Contributions	2,067,693			
(5c) Benefit Payouts & Refunds	(9,343,434)			
(5d) Administrative Expenses	<u>(80,858)</u>			
(5e) Net of Contributions and Disbursements	4,742,088			
(6) Total Investment Income				
=(4)-(1)-(5e)	4,515,726			
(7) Projected Rate of Return	6.75%			
(8) Projected Investment Income				
=(1)x(7)+[(1+(7))^5-1]x(5e)	7,283,576			
(9) Investment Income in Excess of Projected Income	(2,767,850)			
(10) Excess Investment Income Recognized				
This Year (4-year recognition)				
(10a) From This Year	\$ (691,963)			
(10b) From One Year Ago	1,444,470	\$ (691,963)		
(10c) From Two Years Ago	204,693	1,444,470	\$ (691,963)	
(10d) From Three Years Ago	(1,070,498)	204,692	1,444,469	\$ (691,961)
(10e) Total Recognized Investment Gain	<u>(113,298)</u>	957,199	752,506	(691,961)
(11) Change in Actuarial Value of Assets				
=(5e)+(8)+(10e)	11,912,366			
End of Year:				
(4) Market Value of Assets	\$ 114,830,316			
(12) Actuarial Value of Assets Excluding Contribution Receivable = (3)+(11)	\$ 113,812,572			
(13) 2015 Tax Year Levy (i.e., the 2014 Plan Year Contributions)	\$ 11,949,709			
(14) Interest Adjustment on item (13) to 01/01/2015	\$ (383,970)			
(15) Actuarial Value of Plan Assets at 01/01/2015 = (12)+(13)+(14)	\$ 125,378,311			

The actuarial value of assets is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last four years at the rate of 25 percent per year. The contribution receivable or 2015 tax year levy is assumed to be collected and deposited in the Pension Fund on July 1, 2015.

SECTION D
VALUATION PROCEDURES

ACTUARIAL COST METHOD

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using the *individual entry-age actuarial cost method* having the following characteristics:

- The annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement; and
- Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level (principal and interest combined) percent of payroll contributions over 29 future years.

Actuarial Value of Pension Plan Assets. The current market value of assets (including discounted contributions due for prior Plan Years and not received as of the valuation date) is reduced (increased) for the current year and each of two 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 75% in the current year; 50% in the first succeeding year and 25% in the second succeeding year.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The contribution and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described on the previous page.

The principal areas of financial risk which require assumptions about future experiences are:

- Long-term rates of investment return to be generated by the assets of the System;
- Patterns of pay increases to members;
- Rates of mortality among members, retirees and beneficiaries;
- Rates of withdrawal of active members;
- Rates of disability among members; and
- The age patterns of actual retirement.

In a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

The assumptions used in this valuation, with exception to the assumed rate of investment return, are the same as those used in the previous valuation.

VALUATION ASSUMPTIONS

The assumed rate of investment return used was 6.75%, net of expenses, annually.

The mortality table used to measure retirement mortality is the 1994 Group Annuity Mortality Table. This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. This is a static table with no provisions for future mortality improvement.

Single Life Retirement Values				
Sample Attained Ages	Present Value of \$1		Future Life	
	Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$ 151.44	\$ 159.02	30.69	34.89
55	141.72	151.04	26.15	30.17
60	129.97	140.94	21.83	25.59
65	116.60	129.05	17.84	21.28
70	102.28	115.60	14.29	17.31
75	86.85	99.89	11.12	13.60
80	70.91	82.94	8.37	10.31

The disability retirement mortality table was based on 110% of the 1994 Group Annuity Mortality Table.

Single Life Retirement Values				
Sample Attained Ages	Present Value of \$1		Future Life	
	Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$ 149.80	\$ 157.77	29.80	34.03
55	139.70	149.44	25.29	29.34
60	127.53	138.95	21.01	24.78
65	113.79	126.67	17.08	20.51
70	99.21	112.90	13.60	16.60
75	83.63	96.91	10.51	12.96
80	67.67	79.80	7.85	9.75

**VALUATION ASSUMPTIONS
(CONTINUED)**

Rates of separation from active membership are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment.

Years of Service	Sample Employee Withdrawal Rate Per 1,000 Employees	
	Males	Females
0	14.0	14.0
5	9.0	9.0
10	6.0	6.0
15	3.0	3.0
20	2.0	2.0
25	1.0	1.0
30 and Over	0.0	0.0

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries at the time upon which benefit amounts will be based.

Years of Service	Salary Increase Assumptions For an Individual Member
	Increase
1	30.00%
2	27.50%
3	20.00%
4	15.00%
>=5	5.25%

**VALUATION ASSUMPTIONS
(CONTINUED)**

Sample rates of disability were as follows:

Employee Disablement Rate Per 1,000 Employees		
Age	Male	Female
25	1.0	1.0
30	1.0	1.0
35	1.2	1.2
40	1.5	1.5
45	2.1	2.1
50	7.8	7.8
55	13.6	13.6
60	23.0	23.0
65	33.5	33.5

Probabilities of retirement for members eligible to retire during the next year were as follows:

Rates of Retirement			
Age	Rate	Age	Rate
50	5.0 %	60	30.0 %
51	5.0	61	50.0
52	5.0	62	50.0
53	10.0	63	50.0
54	20.0	64	50.0
55	25.0	65	100.0
56	30.0	66	100.0
57	30.0	67	100.0
58	30.0	68	100.0
59	30.0	69	100.0

SECTION E

GASB STATEMENT NO. 27

Auditor's Note – This information is subject to review by the Fund's auditor. Please let us know if the Fund's auditor recommends any changes.

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	GASB No. 27 Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Payroll [(b - a)/c]
1/1/2010	\$68,158,236	\$176,212,143	\$108,053,907	38.7%	\$19,834,928	544.8%
1/1/2011	73,457,570	192,271,318	118,813,748	38.2	20,431,852	581.5
1/1/2012	80,031,690	205,192,787	125,161,097	39.0	21,949,202	570.2
1/1/2013	89,643,330	217,728,604	128,085,274	41.2	22,050,623	580.9
1/1/2014	101,900,206	235,117,345	133,217,139	43.3	21,727,130	613.1
1/1/2015	113,812,572	243,356,876	129,544,304	46.8	22,345,662	579.7

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended	Annual Required Contribution (a)	Total Employer Contribution (b)	Percentage Contributed (b / a)
12/31/2010	\$ 10,224,930	\$ 9,477,572	92.7%
12/31/2011	10,487,255	10,915,951	104.1
12/31/2012	11,097,584	10,450,183	94.2
12/31/2013	11,191,101	11,728,540	104.8
12/31/2014	11,597,497	12,098,687	104.3

ANNUAL PENSION COST AND CONTRIBUTIONS

Contribution rates:

City Proceeds from a tax levy equal to the sum of: (a) annual normal cost plus (b) amortization of unfunded liability as a level percent of pay between now and 1/1/2044 plus (c) interest on (a) and (b) to date of payment.

Plan members 9.455% of regular salary

<i>Net Pension</i>	Net Pension Obligation (NPO) at Beginning	
<i>Obligation (NPO):</i>	of year, January 01, 2014:	\$ 6,255,430
	Total Annual Pension Cost from Previous Year:	11,722,940
	Total Employer Contribution	
	for year ended December 31, 2014:	12,098,687
	Net Pension Obligation (NPO) at	<hr/>
	End of year, December 31, 2014:	\$ 5,879,683

PENSION COST SUMMARY FOR GASB #27

Year Ended December 31	Annual Pension Cost	Total Employer Contribution	% of Annual Pension Cost Contributed	Net Pension Obligation
2012	\$ 11,221,943	\$ 10,450,183	93.1%	\$ 6,652,189
2013	11,331,781	11,728,540	103.5	6,255,430
2014	11,722,940	12,098,687	103.2	5,879,683

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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

<i>Valuation Date</i>	January 1, 2015
<hr/>	
<i>Actuarial Cost Method and Amortization Method</i>	Entry-Age-Normal 29-Year Closed Level-Percentage-of-Pay Amortization (from January 1, 2015) for Funding. 29 years remaining
<hr/>	
<i>Actuarial Value of Assets</i>	4-year smoothed market
<hr/>	
<i>Actuarial Assumptions:</i>	
<i>Investment Rate of Return</i>	6.75% per year
<i>Projected Salary Increases</i>	5.25% per year with a three-year service-based select period
<i>Wage Inflation Increases</i>	4.00% per year
<hr/>	
<i>Cost-of-Living Increases</i>	3.00% per year
<hr/>	