

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

# CONTENTS

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<u>Section</u>	<u>Page</u>	
		<b><i>Introduction</i></b>
A		<b><i>Valuation Results</i></b>
	1-2	Summary of Actuarial Valuation Results
	3	Derivation of Experience Gain (Loss)
	4-7	Comments and Analysis
B		<b><i>Projections</i></b>
	1	Projection under P.A. 96-1495
	2	Projection with 29 Years Closed Amortization
C		<b><i>Benefit Provisions and Valuation Data</i></b>
	1-10	Brief Summary of Plan Provisions
	11	Active Member Data
	12	Development of Actuarial (Market-Related) Value of Assets
D		<b><i>Valuation Procedures</i></b>
	1	Actuarial Cost Method
	2	Actuarial Assumptions in the Valuation Process
	3-5	Valuation Assumptions
E		<b><i>GASB Statement No 27</i></b>
	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 Police Officers' 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 Police Officers' 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 prior to 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 3 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,

A handwritten signature in cursive script that reads "Alex Rivera".

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

A handwritten signature in cursive script that reads "Paul T. Wood".

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.

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**SECTION A**  
VALUATION RESULTS

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## SUMMARY OF ACTUARIAL VALUATION RESULTS

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	Valuation Date as of	<u>January 1, 2014</u>	<u>January 1, 2015</u>
<b>Employee</b>	Number of Active Police Officers	256	262
<b>Data</b>	Number of Service Retirees	124	127
	Number of Disabled Lives	12	13
	Number of Widow Beneficiaries	28	27
	Number of Children Beneficiaries	0	0
	Number of Separated Deferred Police Officers	9	8
	Number of Handicapped Beneficiaries	0	2
	<b>TOTAL</b>	429	439
	Total Annual Salaries of Police Officers	\$ 26,144,818	\$ 26,720,995
<b>Plan</b>	Gross Actuarial Accrued Liability:		
<b>Liabilities</b>	Active Police Officers	\$ 151,096,422	\$ 160,195,428
	Retirees, Beneficiaries & Disabled	162,141,791	168,422,325
	<b>TOTAL</b>	\$ 313,238,213	\$ 328,617,753
	Actuarial Value of Assets at Valuation Date	\$ 167,960,403	\$ 184,130,516
	Unfunded (Overfunded) Actuarial Accrued Liability	\$ 145,277,810	\$ 144,487,237
	<b>Funded Position of Plan's Gross Actuarial Accrued Liability <sup>2</sup></b>	53.6 %	56.0 %
		<b>For the 2014 Fiscal Year</b>	<b>For the 2015 Fiscal Year</b>
<b>Normal</b>	Gross Annual Normal Cost	\$ 8,494,903	\$ 8,669,493
<b>Cost</b>	Less Expected Member Contributions (for Applicable Plan Year)	2,590,951	2,648,051
	Net Annual Normal Cost (Municipality Paid)	\$ 5,903,952	\$ 6,021,442
	Net Annual Normal Cost (As a percentage of pay) <sup>1</sup>	22.6 %	22.5 %

<sup>1</sup> Percents above represent annual plan contributions expressed as percentages of covered Police Officers' salaries.

<sup>2</sup> Equals the ratio of the actuarial value of assets to the total gross actuarial accrued liability.

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

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<b>Annual Contribution Requirements Plan Year End</b>	<b><u>December 31, 2014</u><sup>a</sup></b>	<b><u>December 31, 2015</u><sup>b</sup></b>
Net Annual Normal Cost (Municipality Paid)	\$5,903,952	\$6,021,442
Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability as a level percentage of payroll	6,609,922	7,011,468
Interest Adjustment to Expected Date of Payment into the Fund (Optional)	<u>1,288,176</u>	<u>1,341,606</u>
Total Minimum Annual Contribution Requirement for the Current Plan Year	<u><u>\$13,802,050</u></u>	<u><u>\$14,374,516</u></u>
Minimum Annual Contribution (As a percentage of pay)	52.8%	53.8%

<sup>a</sup> Unfunded Actuarial Accrued Liability is amortized over a 32 year closed period.

<sup>b</sup> 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 \$12,500,000 or 43.57 percent of projected pay for the plan year ending December 31, 2015.



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

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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	\$ 145,277,810
2. Normal Cost Due at 01/01/2014	8,494,903
3. Interest on (1) and (2) to 12/31/2014 (at 6.75% per annum)	10,379,658
4. Contributions (Employer and Employee) applicable to the 2014 Plan Year, with interest to 12/31/2014	17,385,227
5. Expected Unfunded Actuarial Accrued Liability at 01/01/2015 [(1) + (2) + (3) - (4)]	\$ 146,767,144
6. Actual Unfunded Actuarial Accrued Liability at 01/01/2015	\$ 144,487,237
7. Gain (Loss) for the 2014 Plan Year [(5) - (6)]	\$ 2,279,907

<b>Valuation Date January 01</b>	<b>Experience Gain (Loss) As % of Accrued Liability at the Prior Valuation Date<sup>1</sup></b>
2003	(5.74)%
2004	(2.50)%
2005	(5.28)%
2006	2.11 %
2007	(13.32)%
2008	1.38 %
2009	(1.33)%
2010	(8.87)%
2011	(4.14)%
2012	(4.27)%
2013	1.56 %
2014	0.58 %
2015	0.73 %

<sup>1</sup>Excluding Plan and assumption changes.

## COMMENTS AND ANALYSIS

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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:

<b>Plan Year Ending</b>	<b>Rate of Return On Plan Assets</b>	<b>Salary Scale Increase</b>
12/31/1995	9.6 %	7.1 %
12/31/1996	3.4	8.7
12/31/1997	7.1	3.6
12/31/1998	8.8	5.8
12/31/1999	5.5	8.7
12/31/2000	6.9	6.0
12/31/2001	3.4	5.4
12/31/2002	(0.3)	7.6
12/31/2003	9.4	7.4
12/31/2004	4.9	9.9
12/31/2005	3.8	2.7
12/31/2006	9.0	22.0
12/31/2007	7.1	6.5
12/31/2008	(8.6)	1.6
12/31/2009	7.7	6.4
12/31/2010	6.3	10.2
12/31/2011	0.2	9.3
12/31/2012	7.4	0.8
12/31/2013	12.1	2.2
12/31/2014	4.4	2.2

The Salary Scale increase has averaged 6.6% 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)**

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<b><i>Analysis of the Experience Gain (Loss)</i></b>	The experience gain(loss) reported on page A-3, is the net result of the following:	
	(a) From plan asset performance	\$ (762,081)
	(b) Other sources ("net effect" of salary increases, terminations, new entrants, retirements, etc.)	<u>3,041,988</u>
	Total Gain/(Loss): [(a) + (b)]	\$ 2,279,907

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<b><i>Changes in the Annual Contribution</i></b>	The dollar amount of the plan's annual minimum required contribution of \$14,374,516 is approximately 4.1% higher than the level for the prior plan year of \$13,802,050. As a percentage of payroll, the contribution requirement is higher than last year (i.e., increasing from 52.8% to 53.8%). The important factors producing this change are summarized as follows:	
	1. Minimum Annual Contribution Requirement for prior plan year	\$ 13,802,050
	2. Actual Asset Performance (based on actuarial value of assets)	39,034
	3. Increase in Normal Cost and Amortization Amount due to anticipated pay increases	552,082
	4. Changes in Funding Policy (decreasing amortization period from 31 years as of January 1, 2015, to 29 years)	332,621
	5. Other Sources (demographic and salary (gains)/losses)	(351,271)
	6. Minimum Annual Contribution Requirement for current plan year (sum of items 1 through 5)	<u>\$ 14,374,516</u>

## COMMENTS AND ANALYSIS (CONTINUED)

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*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 loss (see Section B 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)

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***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 Police Officers 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. Section D of this report provides further details and explanations on these regulations.

***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. A measurement of the single equivalent discount rate, unfunded liability and pension expense has not yet been performed.

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**SECTION B**  
PROJECTIONS

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**City of Joliet Police Officers' 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)

<b>Jan. 1,</b>	<b>Actuarial Accrued Liability</b>	<b>Market Value of Assets</b>	<b>Actuarial Value of Assets</b>	<b>Unfunded Liability</b>	<b>Actuarial Value Funded Ratio</b>	<b>Uncapped Payroll</b>	<b>Capped Payroll</b>	<b>Employer Normal Cost</b>	<b>Statutory Minimum Contribution</b>	<b>Statutory Contribution % of Projected Pay</b>	<b>Employee Contributions</b>	<b>Benefit Payments</b>
2015	\$319,884	\$171,647	\$170,772	\$149,112	53.39%	\$26,721	\$26,721	\$6,428	\$12,500	43.57%	\$2,648	\$11,734
2016	339,050	188,105	188,200	150,850	55.51%	27,675	27,675	6,631	12,971	43.57%	2,743	12,500
2017	359,038	203,636	204,570	154,467	56.98%	28,687	28,685	6,805	13,475	43.57%	2,843	13,407
2018	379,729	219,867	219,867	159,862	57.90%	29,768	29,756	6,949	13,987	43.57%	2,949	14,368
2019	401,092	236,833	236,833	164,259	59.05%	30,926	30,888	7,060	14,492	43.57%	3,061	15,451
2020	423,017	254,470	254,470	168,547	60.16%	32,101	32,006	7,126	14,983	43.57%	3,172	16,648
2021	445,374	272,697	272,697	172,678	61.23%	33,259	33,069	7,132	15,472	43.57%	3,277	17,993
2022	467,970	291,379	291,379	176,591	62.26%	34,385	34,040	7,083	15,987	43.57%	3,373	19,492
2023	490,592	310,379	310,379	180,212	63.27%	35,509	34,944	6,999	16,506	43.57%	3,463	21,153
2024	513,030	329,571	329,571	183,460	64.24%	36,691	35,831	6,864	17,055	43.57%	3,551	22,904
2025	535,125	348,875	348,875	186,250	65.20%	37,882	36,626	6,697	17,624	43.57%	3,630	24,721
2026	556,740	368,254	368,254	188,486	66.14%	39,141	37,382	6,499	18,218	43.57%	3,705	26,623
2027	577,717	387,640	387,640	190,077	67.10%	40,447	38,068	6,271	18,850	43.57%	3,773	28,586
2028	597,910	406,991	406,991	190,919	68.07%	41,812	38,681	6,024	19,546	43.57%	3,833	30,586
2029	617,202	426,298	426,298	190,904	69.07%	43,262	39,251	5,782	20,256	43.57%	3,890	32,592
2030	635,526	445,613	445,613	189,913	70.12%	44,858	39,838	5,517	21,026	43.57%	3,948	34,644
2031	652,745	464,905	464,905	187,841	71.22%	46,487	40,304	5,251	21,837	43.57%	3,994	36,727
2032	668,740	484,190	484,190	184,550	72.40%	48,254	40,763	4,985	22,676	43.57%	4,040	38,767
2033	683,471	503,555	503,555	179,916	73.68%	50,116	41,163	4,702	23,602	43.57%	4,079	40,828
2034	696,807	523,004	523,004	173,803	75.06%	52,041	41,471	4,433	24,571	43.57%	4,110	42,832
2035	708,717	542,685	542,685	166,033	76.57%	54,167	41,817	4,162	25,616	43.57%	4,144	44,808
2036	719,138	562,689	562,689	156,449	78.24%	56,391	42,078	3,906	26,734	43.57%	4,170	46,747
2037	728,012	583,146	583,146	144,866	80.10%	58,790	42,346	3,687	27,938	43.57%	4,196	48,592
2038	735,374	604,261	604,261	131,113	82.17%	61,354	42,658	3,522	29,232	43.57%	4,227	50,238
2039	741,388	626,376	626,376	115,012	84.49%	64,117	43,033	3,415	30,611	43.57%	4,265	51,703
2040	746,219	649,845	649,845	96,375	87.08%	67,088	43,476	3,366	8,246	11.21%	4,309	53,004
2041	750,027	675,024	675,024	75,003	90.00%	70,253	43,982	3,363	8,383	10.89%	4,359	54,179
2042	752,927	677,634	677,634	75,293	90.00%	73,541	44,488	3,407	8,537	10.60%	4,409	55,171
2043	755,098	679,588	679,588	75,510	90.00%	76,983	45,042	3,489	8,706	10.34%	4,464	55,994
2044	756,711	681,040	681,040	75,671	90.00%	80,542	45,629	3,601	8,881	10.09%	4,522	56,687
2045	757,899	682,109	682,109	75,790	90.00%	84,223	46,240	3,730	9,054	9.86%	4,582	57,279
2046	758,756	682,881	682,881	75,876	90.00%	87,999	46,851	3,866	9,220	9.63%	4,643	57,797
2047	759,346	683,411	683,411	75,935	90.00%	91,850	47,459	4,000	9,376	9.40%	4,703	58,256
2048	759,708	683,737	683,737	75,971	90.00%	95,759	48,063	4,127	9,518	9.17%	4,763	58,679
2049	759,856	683,870	683,870	75,986	90.00%	99,727	48,660	4,241	9,645	8.94%	4,822	59,083
2050	759,782	683,803	683,803	75,978	90.00%	103,753	49,249	4,341	9,755	8.71%	4,881	59,469

**City of Joliet Police Officers' 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)

<b>Jan. 1,</b>	<b>Actuarial Accrued Liability</b>	<b>Market Value of Assets</b>	<b>Actuarial Value of Assets</b>	<b>Unfunded Liability</b>	<b>Actuarial Value Funded Ratio</b>	<b>Uncapped Payroll</b>	<b>Capped Payroll</b>	<b>Employer Normal Cost</b>	<b>City Contribution</b>	<b>City Contribution % of Pay</b>	<b>Employee Contributions</b>	<b>Benefit Payments</b>
2015	\$328,618	\$171,647	\$184,131	\$144,487	56.03%	\$26,721	\$26,721	\$6,021	\$14,375	53.79%	\$2,648	\$11,734
2016	347,940	188,105	202,113	145,828	58.09%	27,675	27,675	6,138	14,762	53.34%	2,743	12,500
2017	368,001	205,573	220,795	147,206	60.00%	28,687	28,685	6,242	15,155	52.83%	2,843	13,407
2018	388,697	223,785	238,453	150,244	61.35%	29,768	29,756	6,335	15,652	52.58%	2,949	14,368
2019	410,010	242,751	257,900	152,110	62.90%	30,926	30,888	6,408	16,086	52.01%	3,061	15,451
2020	431,841	262,507	278,077	153,765	64.39%	32,101	32,006	6,453	16,503	51.41%	3,172	16,648
2021	454,075	282,924	298,896	155,179	65.83%	33,259	33,069	6,458	16,891	50.79%	3,277	17,993
2022	476,538	303,867	320,216	156,322	67.20%	34,385	34,040	6,427	17,257	50.19%	3,373	19,492
2023	499,039	325,177	341,879	157,160	68.51%	35,509	34,944	6,376	17,615	49.61%	3,463	21,153
2024	521,382	346,678	363,727	157,655	69.76%	36,691	35,831	6,286	17,948	48.92%	3,551	22,904
2025	543,423	368,283	385,655	157,769	70.97%	37,882	36,626	6,171	18,272	48.23%	3,630	24,721
2026	565,037	389,895	407,580	157,457	72.13%	39,141	37,382	6,033	18,588	47.49%	3,705	26,623
2027	586,076	411,413	429,404	156,673	73.27%	40,447	38,068	5,867	18,894	46.71%	3,773	28,586
2028	606,403	432,751	451,038	155,365	74.38%	41,812	38,681	5,684	19,200	45.92%	3,833	30,586
2029	625,904	453,841	472,425	153,479	75.48%	43,262	39,251	5,499	19,527	45.14%	3,890	32,592
2030	644,513	474,658	493,558	150,955	76.58%	44,858	39,838	5,291	19,849	44.25%	3,948	34,644
2031	662,098	495,158	514,369	147,729	77.69%	46,487	40,304	5,078	20,189	43.43%	3,994	36,727
2032	678,539	515,269	534,810	143,729	78.82%	48,254	40,763	4,858	20,546	42.58%	4,040	38,767
2033	693,796	535,030	554,916	138,881	79.98%	50,116	41,163	4,623	20,911	41.73%	4,079	40,828
2034	707,745	554,403	574,643	133,102	81.19%	52,041	41,471	4,397	21,313	40.95%	4,110	42,832
2035	720,356	573,423	594,052	126,304	82.47%	54,167	41,817	4,162	21,733	40.12%	4,144	44,808
2036	731,561	592,136	613,171	118,391	83.82%	56,391	42,078	3,930	22,186	39.34%	4,170	46,747
2037	741,300	610,569	632,042	109,258	85.26%	58,790	42,346	3,717	22,692	38.60%	4,196	48,592
2038	749,591	628,836	650,799	98,793	86.82%	61,354	42,658	3,536	23,265	37.92%	4,227	50,238
2039	756,580	647,190	669,707	86,873	88.52%	64,117	43,033	3,383	23,907	37.29%	4,265	51,703
2040	762,402	665,899	689,038	73,364	90.38%	67,088	43,476	3,258	24,621	36.70%	4,309	53,004
2041	767,186	685,235	709,065	58,121	92.42%	70,253	43,982	3,150	25,403	36.16%	4,359	54,179
2042	771,017	705,452	730,039	40,979	94.69%	73,541	44,488	3,067	26,276	35.73%	4,409	55,171
2043	774,047	726,869	752,301	21,746	97.19%	76,983	45,042	3,008	27,468	35.68%	4,464	55,994
2044	776,426	749,840	776,426	-	100.00%	80,542	45,629	2,970	3,444	4.28%	4,522	56,687
2045	778,270	774,937	778,270	-	100.00%	84,223	46,240	2,948	3,420	4.06%	4,582	57,279
2046	779,668	776,357	779,668	-	100.00%	87,999	46,851	2,937	3,410	3.87%	4,643	57,797
2047	780,677	777,377	780,677	-	100.00%	91,850	47,459	2,937	3,412	3.71%	4,703	58,256
2048	781,344	778,042	781,344	-	100.00%	95,759	48,063	2,947	3,424	3.58%	4,763	58,679
2049	781,693	778,379	781,693	-	100.00%	99,727	48,660	2,963	3,444	3.45%	4,822	59,083
2050	781,728	778,395	781,728	-	100.00%	103,753	49,249	2,985	3,293	3.17%	4,881	59,469



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**SECTION C**

BENEFIT PROVISIONS AND VALUATION DATA

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

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*Plan* Police Pension Fund as Incorporated in Chapter 40, Act 5, Article 3 of the Illinois Compiled Statutes

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*Effective Date* Enacted: July 25, 1963

Last Amended Effective: August 26, 2014

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*Eligibility to Participate* Generally, any person who is in the Police 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 3 of the Illinois Compiled Statutes concerning Police Officers' pensions, is eligible to participate, subject to the following:

- (a) The person has been appointed to the Police force of a Police Department and sworn and commissioned to perform Police duties; 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; and
- (c) The person is found to be physically and mentally fit to perform the duties of a Police Officer.

Notwithstanding, the following persons are not considered eligible for participation in this Fund: part-time Police Officers, special Police Officers, night watchmen, temporary employees, traffic guards, or auxiliary Police Officers (specially appointed to aid or direct traffic at or near schools or public functions, or to aid in civil defense), municipal parking lot attendants, clerks or other civilian employees of a Police Department who perform clerical duties exclusively.

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## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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***Employee  
Contributions  
(Mandatory)***

In order to participate in the plan, each Police Officer must contribute 9.910% of his/her regular salary. "Salary" in this instance means annual salary and includes longevity pay attached to the Police Officer's rank but excludes overtime pay, holiday pay, bonus pay, merit pay or any other cash benefit over and above the salary established by the appropriation ordinance.

***Creditable Service***

"Creditable Service" is the time period during which a person serves as a Police Officer of a regularly constituted Police force of a municipality. Furloughs without pay exceeding 30 days in any one year shall not be counted, but all leaves of absence for illness or accident, regardless of length, shall be counted. Also, time attributable to disability for which the Police Officer does not receive disability pension benefits under this Article shall be counted as "Creditable Service."

In addition, creditable service includes 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 Police Officer, provided that the Police Officer contributes to the Fund the amount that he/she would have paid had he/she been a regular contributor during such Military service. Not more than five years may be counted under this provision.

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

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

Benefit: A Police Officer who is age 50 (or more) and has 20 years (or more) of Creditable Service and is no longer in service as a Police Officer is entitled to a pension payable for life equal to 50% of his/her salary attached to the rank held by the Officer one year immediately prior to retirement.

## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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Effective July 1, 1987, for persons terminating service on or after that date, the applicable salary will be the greater of: (1) the salary attached to the rank held on the last day of service; or (2) the salary one year prior to the last day of service.

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

- 2.5% of the Police Officer's salary for each additional year over 20 years of Creditable Service, up to 30 years, subject to the maximum of 75% of his/her salary.

Notwithstanding the above, no Pension in effect or granted for a Police Officer with 20 or more years of service after January 1999 is to be less than \$600.00 per month. This increases to \$800.00 per month on January 1, 2000, and \$1,000.00 per month on January 1, 2001.

***II. Eligibility—  
Age 60 (or  
More) and 8  
(but Less than  
20) Years of  
Creditable  
Service***

Benefit: A Police Officer who retires or is separated from service having at least 8 years (but less than 20) of Creditable Service and who does not apply for a refund of contributions at separation from service, is entitled to a monthly pension upon attaining age 60, payable for life, equal to years of Creditable Service multiplied by 2-1/2% of the salary attached to the rank he/she held in the Police force one year prior to retirement. Effective July 1, 1987, for persons terminating service on or after that date, the applicable salary will be the greater of: (1) the salary attached to the rank held on the last day of service; or (2) the salary one year prior to the last day of service.

## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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A Police Officer who is mandatorily retired from service by reason of age through an operation of law, and has accumulated at least 8 years (but less than 20 years) of Creditable Service, is entitled to a pension payable for life equal to years of Creditable Service multiplied by 2-1/2% of the salary attached to the rank he/she held on the Police force one year immediately prior to retirement. Effective July 1, 1987, for persons terminating service on or after that date, the applicable salary will be the greater of: (1) the salary attached to the rank held on the last day of service; or (2) the salary one year prior to the last day of service.

### *III. Pension Allowance Increases*

- A Police Officer who retired from service with 20 or more years of Creditable Service on or before July 1, 1971, is entitled to an increase of 3% of his/her original monthly pension for each year the Police Officer 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 thereafter, the monthly pension is increased by 3% of the original monthly pension amount.
  
- A Police Officer who retired from service after July 1, 1971, and prior to January 1, 1986, is entitled to an increase of 3% 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 the retirement date, or (b) the first of the month following the Police Officer's attainment of age 60 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January thereafter, the monthly pension is increased by 3% of the original monthly pension amount.

## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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- A Police Officer 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 the retirement date, or (b) the first of the month following the Police Officer's attainment of age 55 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January thereafter, the monthly pension is increased by 3% of the original monthly pension amount.
  - Notwithstanding the provisions of the second paragraph listed above, a Police Officer who retired from service after January 1, 1977, and prior to January 1, 1986, and did not receive a pension increase before July 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 the later of either: (a) the first anniversary of the date of retirement, or (b) the attainment of age 55, or (c) July 1, 1987. Each subsequent January thereafter, the monthly pension is increased by 3% of the original pension amount.
  - Notwithstanding the provisions of the previous paragraphs, beginning with increases granted on or after July 1, 1993, the second and all subsequent automatic annual increases under these provisions shall be calculated as 3% of the amount of pension payable at the time of the increase, including any increases previously granted under the prior provisions, rather than 3% of the originally granted pension amount.
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## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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### *Eligibility For and Amount of Disability Benefits*

- I. Disability Incurred in the Line of Duty** If a Police Officer is injured or suffers an accident or sickness as the result of carrying out his/her duties as a Police Officer (even if those duties take him/her to a place away from the municipality in which he/she serves as a Police Officer, and assuming such duties are related to the Police protection service of such municipality), then such a disabled Police Officer is entitled to a disability retirement pension equal to the maximum of: (a) 65% of the monthly salary attached to the rank held by the officer in the Police Department at the date of suspension of duty or retirement, or (b) his/her accrued benefit.
- II. Disability on Account of Occupational Hazards** If a Police Officer suffers a heart attack as a result of the performance and discharge of duties as a Police Officer, then he/she is eligible for any benefits provided under this Article for Police Officers who are injured in the performance of an act of duty.
- III. Disability Due to Occurrences Unrelated to Duties** If a Police Officer becomes mentally or physically disabled as the result of any cause other than the performance of an act of duty, he/she is entitled to a disability pension equal to 50% of the salary attached to the rank held by the officer in the Police Department at the date of suspension of duty or retirement.
- Notwithstanding the provisions of I, II and III above, no disability pension in effect or granted after January 1, 1987, is to be less than \$600.00 per month. This increases to \$800.00 per month on January 1, 2000, and \$1,000.00 per month on January 1, 2001.
- IV. Special Disability Pension Option** A Police Officer, age 50 or more, who is receiving a disability pension and who has completed 20 years of service may apply for a retirement pension equal to 1/2 of the salary attached to his/her rank on the Police force at the date of his/her retirement for disability. In computing years of service for this benefit option, the period during which the Police Officer received a disability pension should be added to his/her period of active service.
- V. Disability Pension Allowance Increase** A Police Officer who is receiving a disability pension is entitled to receive an automatic increase upon the attainment of age 60. At this date, the monthly pension is increased by 3% of the original monthly pension for each year the Police Officer was in receipt of monthly pension payments. Each subsequent January thereafter, the monthly pension is again increased by 3% of the original monthly pension amount.

## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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### *Death Benefits to Surviving Spouse or Dependents*

- I. *Death in Line of Duty*** If a Police Officer dies while in the line of duty as a result of any injuries or if a Police Officer sustains injuries from which he/she thereafter dies, then the surviving spouse is entitled to a pension equal to 100% of the salary attached to the rank the Police Officer held for one year immediately prior to his/her death. This benefit is payable to the survivors in the sequence noted in Section VI — Rights on Death of a Pensioner.
- II. *Death in Service With 10 or More but Less than 20 Years of Creditable Service*** If a Police Officer dies while in service after having at least 10 but less than 20 years of Creditable Service, then his/her surviving spouse is entitled to a pension equal to 50% of the salary attached to the rank held by the Police Officer for one year immediately prior to his/her death. Such benefit is payable to the survivors in the sequence noted in Section VI — Rights on Death of a Pensioner.
- III. *Death in Service With 20 or More Years of Creditable Service*** If a Police Officer dies while in service after having at least 20 years of Creditable Service (regardless of age), then the surviving spouse is entitled to a pension earned by the Police Officer as of the date of death. Such benefit is payable to the survivors in the sequence noted in Section VI — Rights on Death of a Pensioner.
- IV. *Death While on Disability*** If a Police Officer who is receiving a disability pension dies while still disabled, his/her disability pension shall continue to be paid to the surviving spouse or dependents in the sequence noted in Section VI — Rights on Death of a Pensioner.

Notwithstanding the provisions of I, II, III or IV above, effective January 1, 1999, the minimum death benefit payable to the surviving spouse or dependents is \$400.00 per month. This increases to \$800.00 per month on January 1, 2000, and \$1,000 per month on January 1, 2001.



## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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**V. *Less than 10 Years of Creditable Service***      If a Police Officer dies before he/she has 10 years of Creditable Service, all contributions made by the Officer shall be refunded to the surviving spouses without interest.

**VI. *Rights on Death of a Pensioner***      If a Police Officer who was receiving or was entitled to receive a monthly pension dies, the surviving spouse is entitled to the pension to which the Police Officer was then entitled. Upon the surviving spouse's death or re-marriage, the Police Officer's unmarried children (under age 18) or unmarried children who are dependent because of a physical or mental disability are entitled to equal shares of the pension. If there is no eligible surviving spouse and no eligible children, the dependent parent or parents of the Police Officer are entitled to receive or share such pension until their death, or marriage, or remarriage.

**Special Note:** If a Police Officer marries subsequent to retirement on any pension, the surviving spouse and the children of such surviving spouse shall receive no pension on the death of the Officer.

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### ***Termination of Employment Benefits***

***Refund of Employee Contributions***      A Police Officer 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 Police Pension Fund during his/her period of service. If the Police Officer should be subsequently re-employed, he/she must repay to the fund the amount of refund which was received, plus interest at 2% per annum from the date of refund to the date of repayment, before commencing service. When repayment is made, the Police Officer will receive credit for the previous years of service for which the refund was received.

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## BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)

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***Financing of Pension Benefits*** Pension benefits are to be funded by "employee" deductions from wages and salaries of Police Officers 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 a reserve for the pensions and benefits earned by the Police Officers and all beneficiaries — provided that the reserve to be accumulated shall not exceed the estimated total actuarial requirements of the fund,

and

- (2) 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.

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***Administration*** The Police Pension Fund is administered by a Board of Trustees located in each municipality maintaining a Pension Fund for its Police Officers. 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 pensions to establish rules, to pay expenses, to invest funds and to keep records.

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### **Benefits Under P.A. 96-1495**

Under P.A. 96-1495, members of the City of Joliet Police Officers' 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, 2015, 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.

## **BRIEF SUMMARY OF PLAN PROVISIONS (CONTINUED)**

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- 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 Police Officers' 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
<b>Under 20</b>										<b>0</b>	<b>\$ 0</b>
<b>20-24</b>										<b>0</b>	<b>0</b>
<b>25-29</b>		3	7							<b>10</b>	<b>725,955</b>
<b>30-34</b>	6	5	35	7						<b>53</b>	<b>4,452,183</b>
<b>35-39</b>		2	16	21	7					<b>46</b>	<b>4,519,553</b>
<b>40-44</b>			5	26	27	7				<b>65</b>	<b>6,922,003</b>
<b>45-49</b>				10	15	25	6			<b>56</b>	<b>6,456,792</b>
<b>50-54</b>					6	8	8	1		<b>23</b>	<b>2,495,290</b>
<b>55-59</b>					1	1	3	2	1	<b>8</b>	<b>1,045,084</b>
<b>60-64</b>					1					<b>1</b>	<b>104,135</b>
<b>65-69</b>										<b>0</b>	<b>0</b>
<b>Over 70</b>										<b>0</b>	<b>0</b>
<b>Total</b>	<b>6</b>	<b>10</b>	<b>63</b>	<b>64</b>	<b>57</b>	<b>41</b>	<b>17</b>	<b>3</b>	<b>1</b>	<b>262</b>	<b>\$26,720,995</b>

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

Age: 41.6 years  
Service: 14.8 years  
Annual Pay: \$101,989

## DEVELOPMENT OF ACTUARIAL (MARKET-RELATED) VALUE OF ASSETS

Year Ending December 31,	2014	2015	2016	2017
Beginning of Year:				
(1) Market Value of Assets	\$ 159,141,859			
(2) Actuarial Value of Assets Including Contribution Receivable	167,960,403			
(3) Actuarial Value of Assets Excluding Contribution Receivable	155,602,209			
End of Year:				
(4) Market Value of Assets	171,646,738			
(5) Contributions and Disbursements				
(5a) City Contributions	13,610,557			
(5b) Member Contributions	3,216,045			
(5c) Miscellaneous Revenue	20,041			
(5d) Benefit Payouts & Refunds	(11,411,510)			
(5e) Administrative Expenses	<u>(110,517)</u>			
(5f) Net of Contributions and Disbursements	5,324,616			
(6) Total Investment Income				
=(4)-(1)-(5e)	7,180,263			
(7) Projected Rate of Return	6.75%			
(8) Projected Investment Income				
=(1)x(7)+([1+(7)] <sup>.5-1</sup> )x(5e)	10,918,847			
(9) Investment Income in Excess of Projected Income	(3,738,584)			
(10) Excess Investment Income Recognized				
This Year (4-year recognition)				
(10a) From This Year	\$ (934,646)			
(10b) From One Year Ago	1,774,798	\$ (934,646)		
(10c) From Two Years Ago	129,126	1,774,798	\$ (934,646)	
(10d) From Three Years Ago	<u>(2,042,994)</u>	129,126	1,774,796	\$ (934,646)
(10e) Total Recognized Investment Gain	(1,073,716)	969,278	840,150	(934,646)
(11) Change in Actuarial Value of Assets				
=(5f)+(8)+(10e)	15,169,747			
End of Year:				
<b>(4) Market Value of Assets</b>	<b>\$ 171,646,738</b>			
<b>(12) Actuarial Value of Assets Excluding Contribution Receivable = (3)+(11)</b>	<b>\$ 170,771,956</b>			
<b>(13) 2015 Tax Year Levy (i.e., the 2014 Plan Year Contributions)</b>	<b>\$ 13,802,050</b>			
<b>(14) Interest Adjustment on item (13) to 01/01/2015</b>	<b>\$ (443,490)</b>			
<b>(15) Actuarial Value of Plan Assets at 01/01/2015 = (12)+(13)+(14)</b>	<b>\$ 184,130,516</b>			

*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.*

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**SECTION D**

VALUATION PROCEDURES

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## ACTUARIAL COST METHOD

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*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

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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.

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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

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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 Monthly for Life		Future 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 Monthly for Life		Future 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)**

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*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.

<b>Years of Service</b>	<b>Sample Employee Withdrawal Rate Per 1,000 Employees</b>	
	<b>Males</b>	<b>Females</b>
0	40.0	40.0
5	24.0	24.0
10	9.0	9.0
15	9.0	9.0
20	9.0	9.0
25	6.0	6.0
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.

<b>Years of Service</b>	<b>Salary Increase Assumptions For an Individual Member</b>
	<b>Increase</b>
1	30.00%
2	27.50%
3	18.00%
4	8.00%
>=5	5.25%

**VALUATION ASSUMPTIONS  
(CONTINUED)**

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*Sample rates of disability* were as follows:

<b>Employee Disablement Rate Per 1,000 Employees</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
25	0.4	0.4
30	0.5	0.5
35	0.7	0.7
40	1.0	1.0
45	1.6	1.6
50	2.6	2.6
55	5.0	5.0
60	8.7	8.7
65	14.3	14.3

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

<b>Rates of Retirement</b>			
<b>Age</b>	<b>Rate</b>	<b>Age</b>	<b>Rate</b>
50	7.5 %	60	25.0 %
51	7.5	61	50.0
52	15.0	62	50.0
53	15.0	63	50.0
54	15.0	64	50.0
55	25.0	65	100.0
56	25.0	66	100.0
57	25.0	67	100.0
58	25.0	68	100.0
59	25.0	69	100.0

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## **SECTION E**

### **GASB STATEMENT NO 27**

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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**

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<b>Actuarial Valuation Date</b>	<b>GASB #27 Value of Assets (a)</b>	<b>Actuarial Accrued Liability (b)</b>	<b>Unfunded AAL (UAAL) (b - a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Payroll [(b - a)/c]</b>
1/1/2010	\$116,137,856	\$226,844,622	\$110,706,766	51.2%	\$23,117,412	478.9%
1/1/2011	123,381,539	256,768,733	133,387,194	48.1	24,847,562	536.8
1/1/2012	129,638,304	277,730,117	148,091,813	46.7	25,893,398	571.9
1/1/2013	140,292,520	288,456,057	148,163,537	48.6	25,548,490	579.9
1/1/2014	155,602,209	313,238,213	157,636,004	49.7	26,144,818	602.9
1/1/2015	170,771,956	328,617,753	157,845,797	52.0	26,720,995	590.7

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

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<b>Fiscal Year Ended</b>	<b>Annual Required Contribution (a)</b>	<b>Total Employer Contribution (b)</b>	<b>Percentage Contributed (b / a)</b>
12/31/2010	\$ 10,350,416	\$ 10,185,546	98.4%
12/31/2011	11,670,558	10,952,624	93.8
12/31/2012	12,605,549	11,689,752	92.7
12/31/2013	12,519,997	13,307,906	106.3
12/31/2014	13,383,213	13,610,557	101.7

## ANNUAL PENSION COST AND CONTRIBUTIONS

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***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*** 9.910% of regular salary

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<b><i>Net Pension Obligation (NPO):</i></b>	Net Pension Obligation (NPO) at Beginning of year, January 01, 2014:	\$ 8,506,677
	Total Annual Pension Cost from Previous Year:	13,553,803
	Total Employer Contribution for year ended December 31, 2014:	13,610,557
	<b>Net Pension Obligation (NPO) at End of year, December 31, 2014:</b>	<hr/> \$ 8,449,923

## PENSION COST SUMMARY FOR GASB #27

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<b>Year Ended December 31</b>	<b>Annual Pension Cost</b>	<b>Total Employer Contribution</b>	<b>% of Annual Pension Cost Contributed</b>	<b>Net Pension Obligation</b>
2010	\$ 10,436,471	\$ 10,185,546	97.6%	\$ 7,147,665
2011	11,821,717	10,952,624	92.6	8,016,758
2012	12,775,088	11,689,752	91.5	9,102,094
2013	12,712,489	13,307,906	104.7	8,506,677
2014	13,553,803	13,610,557	100.4	8,449,923



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## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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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:

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<i>Valuation Date</i>	January 1, 2015
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<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
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<i>Actuarial Value of Assets</i>	4-year smoothed market
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*Actuarial Assumptions:*

<i>Investment Rate of Return</i>	6.75% per year
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<i>Projected Salary Increases</i> *	5.25% per year with a three-year service-based select period
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* <i>Includes Wage Inflation Increases</i>	4.00% per year
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<i>Cost-of-Living Increases</i>	3.00% per year
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