

**CITY OF JOLIET POLICE OFFICERS' PENSION FUND  
ANNUAL ACTUARIAL VALUATION  
FOR THE YEAR BEGINNING  
JANUARY 1, 2013**

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October 15, 2013

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, 2013, 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, 2013, and ending on December 31, 2013 (which directly affects the City's tax levy in the 2014 fiscal year that is collected and deposited into the Pension Trust in fiscal year 2014). 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.

This valuation also incorporates the Board approved modified funding policy equal to the sum of: (a) annual normal cost plus (b) amortization of unfunded liability as a level percent of pay between January 1, 2011, and January 1, 2046, 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, 2046. The contribution under this modified funding policy satisfies the statutory minimum funding requirements found in Public Act 96-1495.

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 10 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.

Both of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries (MAAA) to render the actuarial opinion contained herein.

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

Sincerely,



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



Paul T. Wood, A.S.A., M.A.A.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, 2012</u>	<u>January 1, 2013</u>
<b>Employee Data</b>	Number of Active Police Officers	253	247
	Number of Service Retirees	119	119
	Number of Disabled Lives	13	14
	Number of Widow Beneficiaries	28	26
	Number of Children Beneficiaries	0	0
	Number of Separated Deferred Police Officers	7	9
	Number of Handicapped Beneficiaries	1	1
	<b>TOTAL</b>	421	416
	Total Annual Salaries of Police Officers	\$ 25,893,398	\$ 25,548,490
<b>Plan Liabilities</b>	Gross Actuarial Accrued Liability:		
	Active Police Officers	\$ 131,789,545	\$ 139,086,812
	Retirees, Beneficiaries & Disabled	145,940,572	149,369,245
	<b>TOTAL</b>	\$ 277,730,117	\$ 288,456,057
	Actuarial Value of Assets at Valuation Date	\$ 141,001,705	\$ 152,658,155
	Unfunded (Overfunded) Actuarial Accrued Liability	\$ 136,728,412	\$ 135,797,902
	<b>Funded Position of Plan's Gross Actuarial Accrued Liability <sup>2</sup></b>	50.8 %	52.9 %
		<b><u>For the 2012</u></b>	<b><u>For the 2013</u></b>
		<b><u>Fiscal Year</u></b>	<b><u>Fiscal Year</u></b>
<b>Normal Cost</b>	Gross Annual Normal Cost	\$ 7,937,008	\$ 7,813,771
	Less Expected Member Contributions (for Applicable Plan Year)	2,566,036	2,531,855
	Net Annual Normal Cost (Municipality Paid)	\$ 5,370,972	\$ 5,281,916
	Net Annual Normal Cost (As a percentage of pay) <sup>1</sup>	20.7 %	20.7 %

<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, 2012</u><sup>a</sup></b>	<b><u>December 31, 2013</u><sup>b</sup></b>
Net Annual Normal Cost (Municipality Paid)	\$5,370,972	\$5,281,916
Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability as a level percentage of payroll	6,185,696	6,254,298
Interest Adjustment to Expected Date of Payment into the Fund (Optional)	<u>1,234,444</u>	<u>1,232,259</u>
Total Minimum Annual Contribution Requirement for the Current Plan Year	<u><u>\$12,791,112</u></u>	<u><u>\$12,768,473</u></u>
Minimum Annual Contribution (As a percentage of pay)	49.4%	50.0%

<sup>a</sup> Unfunded Actuarial Accrued Liability is amortized over a 34 year closed period.

<sup>b</sup> Unfunded Actuarial Accrued Liability is amortized over a 33 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 \$11,680,000 or 42.64 percent of projected pay.



**DERIVATION OF EXPERIENCE GAIN (LOSS)  
YEAR ENDED JANUARY 1, 2013**

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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 01/01/2012	\$ 136,728,412
2. Normal Cost Due at 01/01/2012	7,937,008
3. Interest on (1) and (2) to 12/31/2012 (at 7.00% per annum)	10,126,579
4. Contributions (Employer and Employee) applicable to the 2012 Plan Year, with interest to 12/31/2012	14,655,446
5. Expected Unfunded Actuarial Accrued Liability at 01/01/2013 [(1) + (2) + (3) - (4)]	\$ 140,136,553
6. Actual Unfunded Actuarial Accrued Liability at 01/01/2013	\$ 135,797,902
7. Gain (Loss) for the 2012 Plan Year [(5) - (6)]	\$ 4,338,651

<b>Valuation Date January 01</b>	<b>Experience Gain (Loss) As % of Accrued Liability at the Prior Valuation Date <sup>1</sup></b>
2001	(2.93)%
2002	1.48 %
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 %

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

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## 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>
12/31/1993	6.8 %	6.2 %
12/31/1994	5.8	6.5
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

The Salary Scale increase has averaged 7.0% 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 5.2%. We believe the 7.00% 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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***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	\$ (2,068,419)
(b) Other sources ("net effect" of salary increases, terminations, new entrants, retirements, etc.)	<u>6,407,070</u>
<b>Total Gain/(Loss): [(a) + (b)]</b>	<b>\$ 4,338,651</b>

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***Changes in the Annual Contribution***

The dollar amount of the plan's annual minimum required contribution of \$12,768,473 is approximately 0.2% lower than the level for the prior plan year of \$12,791,112. As a percentage of payroll, the contribution requirement is higher than last year (i.e., increasing from 49.4% to 50.0%). The important factors producing this change are summarized as follows:

1. Minimum Annual Contribution Requirement for prior plan year	\$ 12,791,112
2. Actual Asset Performance (based on actuarial value of assets)	105,439
3. Increase in Normal Cost and Amortization Amount due to anticipated pay increases	511,644
4. Changes in Assumptions	0
6. Other Sources (demographic (gains)/losses)	(639,722)
7. Minimum Annual Contribution Requirement for current plan year (sum of items 1 through 6)	<u><u>\$ 12,768,473</u></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, 2012, are not included in assets for Government accounting standards purposes but are included in assets for funding purposes.

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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.

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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, 2013 (Based on Projected Unit Credit Cost Method)**  
(\$ in Thousands)

<b>Year</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>
2013	\$279,051	\$136,413	\$140,112	\$138,939	50.21%	\$25,548	\$25,548	\$5,603	\$11,680	42.64%	\$2,532	\$10,418
2014	296,538	150,948	152,733	143,806	51.51%	26,423	26,423	5,854	12,125	42.64%	2,619	11,057
2015	314,952	164,776	164,647	150,305	52.28%	27,390	27,390	6,072	12,604	42.64%	2,714	11,766
2016	334,261	179,395	179,395	154,866	53.67%	28,433	28,433	6,257	13,102	42.64%	2,818	12,576
2017	354,395	194,799	194,799	159,596	54.97%	29,558	29,556	6,410	13,612	42.64%	2,929	13,517
2018	375,251	210,935	210,935	164,316	56.21%	30,725	30,716	6,536	14,129	42.64%	3,044	14,541
2019	396,768	227,785	227,785	168,983	57.41%	31,920	31,898	6,636	14,642	42.64%	3,161	15,658
2020	418,870	245,311	245,311	173,559	58.56%	33,134	33,089	6,696	15,134	42.64%	3,279	16,901
2021	441,427	263,427	263,427	178,000	59.68%	34,336	34,253	6,693	15,624	42.64%	3,395	18,311
2022	464,150	281,976	281,976	182,174	60.75%	35,489	35,249	6,629	16,144	42.64%	3,493	19,892
2023	486,830	300,793	300,793	186,037	61.79%	36,638	36,140	6,532	16,662	42.64%	3,581	21,594
2024	509,290	319,793	319,793	189,497	62.79%	37,858	36,995	6,377	17,209	42.64%	3,666	23,441
2025	531,309	338,832	338,832	192,478	63.77%	39,074	37,733	6,182	17,781	42.64%	3,739	25,373
2026	552,705	357,841	357,841	194,863	64.74%	40,356	38,408	5,953	18,387	42.64%	3,806	27,403
2027	573,288	376,737	376,737	196,551	65.72%	41,697	39,006	5,694	19,037	42.64%	3,866	29,493
2028	592,887	395,478	395,478	197,409	66.70%	43,119	39,508	5,418	19,750	42.64%	3,915	31,603
2029	611,383	414,066	414,066	197,317	67.73%	44,642	39,922	5,144	20,486	42.64%	3,956	33,712
2030	628,704	432,549	432,549	196,155	68.80%	46,315	40,316	4,852	21,271	42.64%	3,995	35,857
2031	644,720	450,904	450,904	193,816	69.94%	48,040	40,587	4,558	22,109	42.64%	4,022	38,034
2032	659,291	469,126	469,126	190,165	71.16%	49,882	40,807	4,266	22,997	42.64%	4,044	40,163
2033	672,367	487,305	487,305	185,062	72.48%	51,845	40,974	3,975	23,974	42.64%	4,060	42,266
2034	683,865	505,511	505,511	178,354	73.92%	53,928	41,081	3,714	24,998	42.64%	4,071	44,257
2035	693,817	523,949	523,949	169,868	75.52%	56,219	41,222	3,472	26,084	42.64%	4,085	46,164
2036	702,229	542,772	542,772	159,457	77.29%	58,620	41,297	3,256	27,267	42.64%	4,093	48,007
2037	709,077	562,132	562,132	146,945	79.28%	61,167	41,330	3,098	28,525	42.64%	4,096	49,666
2038	714,514	582,353	582,353	132,161	81.50%	63,943	41,447	2,998	29,855	42.64%	4,107	51,115
2039	718,732	603,798	603,798	114,934	84.01%	66,891	41,611	2,956	31,252	42.64%	4,124	52,377
2040	721,911	626,826	626,826	95,085	86.83%	70,011	41,852	2,969	7,731	10.09%	4,148	53,464
2041	724,228	651,805	651,805	72,423	90.00%	73,286	42,171	3,015	7,888	9.85%	4,179	54,441
2042	725,782	653,204	653,204	72,578	90.00%	76,645	42,514	3,093	8,049	9.61%	4,213	55,295
2043	726,677	654,009	654,009	72,668	90.00%	80,122	42,922	3,198	8,209	9.39%	4,254	56,003
2044	727,044	654,340	654,340	72,704	90.00%	83,729	43,412	3,317	8,358	9.17%	4,302	56,600
2045	726,982	654,284	654,284	72,698	90.00%	87,426	43,958	3,443	8,502	8.95%	4,356	57,111
2046	726,555	653,899	653,899	72,655	90.00%	91,197	44,527	3,567	8,631	8.72%	4,413	57,562
2047	725,802	653,222	653,222	72,580	90.00%	95,037	45,137	3,684	8,741	8.49%	4,473	57,967
2048	724,740	652,266	652,266	72,474	90.00%	98,934	45,775	3,792	8,834	8.26%	4,536	58,332

**City of Joliet Police Officers Pension Fund**  
**Actuarial Valuation Projection Results Based on 33 Years Closed Amortization as of January 1, 2013 (Based on Entry Age Normal Cost Method)**  
(\$ in Thousands)

<b>Fiscal Year</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>Annual Required Contribution<sup>1</sup></b>	<b>ARC as % of Pay</b>	<b>City Contribution</b>	<b>City Contribution % of Pay</b>	<b>Employee Contributions</b>	<b>Benefit Payments</b>
2013	\$288,456	\$136,413	\$152,658	\$135,798	52.92%	\$25,548	\$25,548	\$5,282	\$12,520	49.00%	\$12,768	49.98%	\$2,532	\$10,418
2014	306,221	150,948	165,076	141,145	53.91%	27,390	27,390	5,410	12,908	47.13%	13,318	48.62%	2,619	11,057
2015	324,798	165,903	178,649	146,149	55.00%	28,433	28,433	5,527	13,296	46.76%	13,858	48.74%	2,714	11,766
2016	344,169	181,836	195,233	148,936	56.73%	29,558	29,556	5,633	13,563	45.89%	14,288	48.34%	2,818	12,576
2017	364,282	198,708	212,521	151,761	58.34%	30,725	30,716	5,723	13,989	45.53%	14,720	47.91%	2,929	13,517
2018	385,045	216,345	230,576	154,469	59.88%	31,920	31,898	5,800	14,416	45.16%	15,152	47.47%	3,044	14,541
2019	406,408	234,720	249,368	157,040	61.36%	33,134	33,089	5,863	14,844	44.80%	15,581	47.03%	3,161	15,658
2020	428,301	253,790	268,853	159,448	62.77%	34,336	34,253	5,901	15,264	44.45%	16,000	46.60%	3,279	16,901
2021	450,606	273,472	288,939	161,666	64.12%	35,489	35,249	5,901	15,661	44.13%	16,391	46.19%	3,395	18,311
2022	473,039	293,621	309,466	163,573	65.42%	36,638	36,140	5,859	16,029	43.75%	16,747	45.71%	3,493	19,892
2023	495,420	314,047	330,237	165,184	66.66%	37,858	36,995	5,797	16,390	43.29%	17,094	45.15%	3,581	21,594
2024	517,595	334,599	351,124	166,471	67.84%	39,074	37,733	5,694	16,726	42.81%	17,410	44.56%	3,666	23,441
2025	539,355	355,121	371,951	167,404	68.96%	40,356	38,408	5,562	17,050	42.25%	17,710	43.88%	3,739	25,373
2026	560,537	375,478	392,598	167,939	70.04%	41,697	39,006	5,407	17,368	41.65%	17,999	43.17%	3,806	27,403
2027	580,967	395,535	412,935	168,033	71.08%	43,119	39,508	5,230	17,685	41.01%	18,281	42.40%	3,866	29,493
2028	600,488	415,189	432,861	167,627	72.08%	44,642	39,922	5,036	18,004	40.33%	18,559	41.57%	3,915	31,603
2029	618,990	434,374	452,315	166,675	73.07%	46,315	40,316	4,838	18,341	39.60%	18,847	40.69%	3,956	33,712
2030	636,404	453,046	471,266	165,138	74.05%	48,040	40,587	4,618	18,682	38.89%	19,130	39.82%	3,995	35,857
2031	652,596	471,139	489,633	162,963	75.03%	49,882	40,807	4,392	19,043	38.18%	19,425	38.94%	4,022	38,034
2032	667,433	488,562	507,341	160,093	76.01%	51,845	40,974	4,163	19,433	37.48%	19,735	38.06%	4,044	40,163
2033	680,866	505,323	524,401	156,464	77.02%	53,928	41,081	3,930	19,855	36.82%	20,061	37.20%	4,060	42,266
2034	692,814	521,414	540,808	152,007	78.06%	56,219	41,222	3,716	20,337	36.17%	20,428	36.34%	4,071	44,257
2035	703,310	536,915	556,663	146,646	79.15%	58,620	41,297	3,502	20,870	35.60%	20,818	35.51%	4,085	46,164
2036	712,343	551,916	572,042	140,301	80.30%	61,167	41,330	3,298	21,470	35.10%	21,240	34.72%	4,093	48,007
2037	719,883	566,466	586,999	132,884	81.54%	63,943	41,447	3,122	22,170	34.67%	21,717	33.96%	4,096	49,666
2038	726,059	580,752	601,747	124,312	82.88%	66,891	41,611	2,972	22,993	34.37%	22,248	33.26%	4,107	51,115
2039	731,030	595,039	616,547	114,483	84.34%	70,011	41,852	2,850	23,973	34.24%	22,836	32.62%	4,124	52,377
2040	734,944	609,580	631,657	103,288	85.95%	73,286	42,171	2,756	25,163	34.34%	23,484	32.04%	4,148	53,464
2041	737,950	624,641	647,344	90,606	87.72%	76,645	42,514	2,677	26,646	34.76%	24,177	31.54%	4,179	54,441
2042	740,120	640,443	663,815	76,305	89.69%	80,122	42,922	2,619	28,611	35.71%	24,921	31.10%	4,213	55,295
2043	741,544	657,214	681,306	60,239	91.88%	83,729	43,412	2,584	31,498	37.62%	25,720	30.72%	4,254	56,003
2044	742,346	675,231	700,095	42,251	94.31%	87,426	43,958	2,567	36,602	41.87%	26,556	30.38%	4,302	56,600
2045	742,617	694,761	720,433	22,184	97.01%	91,197	44,527	2,565	50,421	55.29%	27,393	30.04%	4,356	57,111
2046	742,427	716,044	742,526	(98)	100.01%	95,037	45,137	2,574	28,957	30.47%	2,740	2.88%	4,413	57,562
2047	741,819	739,269	741,917	(98)	100.01%	98,934	45,775	2,592	5,142	5.20%	2,760	2.79%	4,473	57,967
2048	740,816	738,239	740,907	(90)	100.01%	102,908	46,440	2,619	5,196	5.05%	2,799	2.72%	4,536	58,332

<sup>1</sup> Based on an amortization period equal to the lesser 30 years and the amortization period used to determine the City's Contribution, with interest adjustment.

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**SECTION C**

BENEFIT PROVISIONS AND VALUATION DATA

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## BRIEF SUMMARY OF PLAN PROVISIONS (JANUARY 1, 2013)

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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: January 5, 2012

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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.



## 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;
- 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; and,
- 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, 2013  
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	<u>Years of Service to Valuation Date</u>									<u>Totals</u>	
	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>			10							<b>10</b>	<b>893,812</b>
<b>30-34</b>		3	34	6						<b>43</b>	<b>3,970,037</b>
<b>35-39</b>		3	19	26	6					<b>54</b>	<b>5,352,026</b>
<b>40-44</b>			6	24	31	4				<b>65</b>	<b>6,950,269</b>
<b>45-49</b>			1	4	19	20	1			<b>45</b>	<b>5,022,947</b>
<b>50-54</b>					6	12	5	2		<b>25</b>	<b>2,798,436</b>
<b>55-59</b>					1	2	1		1	<b>5</b>	<b>560,963</b>
<b>60-64</b>										<b>0</b>	<b>0</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>0</b>	<b>6</b>	<b>70</b>	<b>60</b>	<b>63</b>	<b>38</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>247</b>	<b>\$25,548,490</b>

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

Age: 41.2 years  
 Service: 14.5 years  
 Annual Pay: \$103,435

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

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<b>Expected Return on Market Value of Assets for Prior Year</b>	1. Market value of assets at 01/01/2012	\$ 123,317,022
	2. Actual income and disbursements in prior year weighted for timing:	

Item	Amount	Weight for Timing	Weighted Amount
(a) Member Contributions	\$ 2,478,202	50.00%	\$ 1,239,101
(b) City Contributions	11,689,752	50.00%	5,844,876
(c) Miscellaneous Revenue	172,856	50.00%	86,428
(d) Benefit Payments	(10,441,427)	50.00%	(5,220,714)
(e) Administration	(85,185)	50.00%	(42,593)
(f) Total			\$ 1,907,098

3. Market value of assets adjusted for actual income disbursements [(1) + (2)(f)]	\$ 125,224,120
4. Assumed rate of return on plan assets for the year	7.00%
5. Expected return [(3) * (4)]	\$ 8,765,688

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<b>Actual Return on Market Value of Assets for Prior Year</b>	6. Market value of assets at 01/01/2012	\$ 123,317,022
	7. Income (less investment income) for prior plan year	14,340,810
	8. Disbursements paid in prior year	10,526,612
	9. Market value of assets at 01/01/2013	136,413,412
	10. Actual Return [(9) + (8) - (7) - (6)]	9,282,192

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<b>Gain/(Loss)</b>	11. Investment gain/(loss) for prior year based on market value of assets [(10) - (5)]	\$ 516,504
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**DEVELOPMENT OF ACTUARIAL (MARKET-RELATED) VALUE OF ASSETS  
(CONTINUED)**

*Actuarial  
Value of  
Assets as of  
01/01/2013*

	12. Market value of assets at 01/01/2013				\$ 136,413,412
	13. Deferred investment gains and (losses) for last 3 years:				
	<b>Plan Year Beginning</b>	<b>Gain/(Loss)</b>	<b>Percent Deferred</b>	<b>Deferred Amount</b>	
a)	2010	\$ (721,986)	25.00%	\$ (180,497)	
b)	2011	(8,171,978)	50.00%	(4,085,989)	
c)	2012	516,504	75.00%	387,378	
d)	Total	\$ (8,377,460)		\$ (3,879,108)	
	14. Item (12) less item 13(d)				\$ 140,292,520
	15. 2013 Tax Year Levy (i.e., the 2012 Plan Year Contributions)				12,791,112
	16. Interest Adjustment on item (15) to 01/01/2013				(425,477)
	17. Actuarial Value of Plan Assets at 01/01/2013 [(14) + (15) + (16)]				\$ 152,658,155

- Notes:
- (1) The calculated value 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% per year.
  - (2) Assumes the 2013 tax year levy is collected and deposited in the Pension Fund on July 1, 2013.

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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;
- 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 33 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
- 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 are the same as those used in the previous valuation.



## VALUATION ASSUMPTIONS

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The assumed rate of investment return used was 7.00%, 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.

Sample Attained Ages	Single Life Retirement Values			
	Present Value of \$1		Future Life	
	Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$ 147.78	\$ 154.93	30.69	34.89
55	138.58	147.42	26.15	30.17
60	127.35	137.85	21.83	25.59
65	114.51	126.50	17.84	21.28
70	100.68	113.58	14.29	17.31
75	85.70	98.39	11.12	13.60
80	70.13	81.90	8.37	10.31

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

Sample Attained Ages	Single Life Retirement Values			
	Present Value of \$1		Future Life	
	Monthly for Life		Expectancy (years)	
	Men	Women	Men	Women
50	\$ 146.24	\$ 153.76	29.80	34.03
55	136.65	145.92	25.29	29.34
60	125.02	135.95	21.01	24.78
65	111.80	124.22	17.08	20.51
70	97.71	110.98	13.60	16.60
75	82.56	95.50	10.51	12.96
80	66.96	78.84	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 NOS. 25 AND 27

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**REQUIRED SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF FUNDING PROGRESS**

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<b>Actuarial Valuation Date</b>	<b>GASB 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>
1/1/2008	\$103,850,735	\$195,400,478	\$91,549,743	53.1%	\$24,954,438	366.9%
1/1/2009	108,992,202	207,987,440	98,995,238	52.4	24,731,587	400.3
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

## 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>
12/31/2008	\$ 9,238,713	\$ 5,972,492	64.6%
12/31/2009	9,749,187	9,475,303	97.2
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	TBD	TBD

## 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 1/1/2046 plus (c) interest on (a) and (b) to date of payment.

*Plan members* 9.910% of regular salary

<b><i>Annual Required Contribution for fiscal year ending December 31, 2013:</i></b>	Net Annual Normal Cost (Municipality Paid)	\$	5,281,916
	Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability Over 30 Years as a level percentage of payroll		7,238,081
	Annual Required Contribution (ARC)	\$	12,519,997
<b><i>Annual Pension Cost for fiscal year ending December 31, 2013:</i></b>	Annual Required Contribution (ARC)	\$	12,519,997
	Interest on Net Pension Obligation		637,147
	Adjustment to ARC		(444,655)
	Total Annual Pension Cost	\$	12,712,489

<b><i>Net Pension Obligation (NPO):</i></b>	Net Pension Obligation (NPO) at Beginning of year, January 01, 2012:	\$	8,016,758
	Total Annual Pension Cost from Previous Year:		12,775,088
	Total Employer Contribution for year ended December 31, 2012:		11,689,752
	<b>Net Pension Obligation (NPO) at End of year, December 31, 2012:</b>	<b>\$</b>	<b>9,102,094</b>

## 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>
2008	\$ 9,288,977	\$ 5,972,492	64.3%	\$ 6,530,610
2009	9,841,433	9,475,303	96.3	6,896,740
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	TBD	TBD	TBD



