



**Cavanaugh Macdonald**  
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**Report of the Actuary on the Annual Valuation of the City of East  
Point Employees Retirement Plan**

**Prepared as of January 1, 2016  
For the City's Fiscal Year July 1, 2017 – June 30, 2018**





# Cavanaugh Macdonald

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April 12, 2016

Pension Board of Trustees  
City of East Point Employees Retirement Plan  
P.O. Box 90129  
East Point, Georgia 30364

Dear Trustees:

We are pleased to submit revised results of the annual actuarial valuation of the City of East Point Employees Retirement Plan prepared as of January 1, 2016. The purpose of this report is to provide a summary of the funded status of the Plan as of January 1, 2016, and to recommend rates of employer contribution. While not verifying the data at source, the actuary performed tests for consistency and reasonability. Separate reports will be required to provide accounting information under Governmental Accounting Standards Board Statements No. 67 and 68.

The January 1, 2014 actuarial valuation was the first valuation prepared by Cavanaugh Macdonald Consulting, LLC. All results presented in the report as of January 1, 2013 and for prior years were prepared by the prior actuary.

Previously, the actuarially determined contribution was determined on a calendar year basis for the fiscal year ending six months following the valuation date. Now, the City's actuarially determined contribution is determined on a calendar year basis for the fiscal year ending eighteen months following the valuation date. In order to transition to this new process, the January 1, 2015 valuation set the City's actuarially determined contribution rate for the 2015/2016 and 2016/2017 fiscal years. The January 1, 2016 valuation will set the City's actuarially determined contribution rate for the 2017/2018 fiscal year. This pattern will be repeated on an ongoing basis.

The total actuarially determined contribution rate for the 2017/2018 fiscal year is 41.56% of compensation. In comparison, the City's actuarially determined contribution rate for the 2015/2016 and 2016/2017 fiscal years is 42.77% of compensation. A detailed analysis of the gains and losses during the year are shown in Section III of the report.

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The promised benefits of the Plan are included in the actuarially calculated employer contribution rates which are developed using the entry normal cost method. Gains and losses are reflected in the unfunded accrued liability and are amortized on a closed basis over an 8 year period. The assumptions recommended by the actuary are in aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

Assuming that the annual required employer contributions to the Plan are made by the City from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the Plan may be safely anticipated.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Actuarial computations presented in this report are for purposes of determining the funding amounts for the City of East Point Employees Retirement Plan. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Plan's funding requirements and goals. Please direct any inquiries regarding this report to the Pension Board.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Todd B. Green' followed by a horizontal flourish.

Todd B. Green ASA, FCA, MAAA  
Principal & Consulting Actuary

TBG/jmy;nkh



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## Section I – Summary of Principal Results

### Summary of Results

For convenience of reference, the principal results of the current valuation are summarized below.

Valuation Date	January 1, 2015	January 1, 2016
Active Participants:		
a. Number	435	462
b. Covered Compensation	\$ 17,949,686	\$ 19,171,323
Retired Participants and Beneficiaries:		
a. Number	356	351
b. Total Annual Benefits	\$ 7,574,086	\$ 7,663,671
Number of Terminated Vested Participants	17	21
Assets:		
a. Market Value	\$ 79,000,656	\$ 80,569,741
b. Actuarial Value	\$ 75,496,622	\$ 83,584,374
Actuarial Accrued Liability	\$ 116,476,102	\$ 118,177,465
Unfunded actuarial accrued liability	\$ 40,979,480	\$ 34,593,090
Amortization Period	9 years	8 years
Fiscal Year Ending	June 30, 2016 & June 30, 2017	June 30, 2018
Actuarially Determined Contribution		
a. Normal Cost Rate	12.46%	13.83%
b. Admin Expenses	1.47%	1.45%
c. Unfunded Accrued Liability Rate	<u>34.84%</u>	<u>32.29%</u>
d. Total City Contribution	48.77%	47.56%
Required City Contribution		
a. Required City Contribution	42.77%	41.56%
b. Required Member Contribution	<u>6.00%</u>	<u>6.00%</u>
c. Total Contribution	48.77%	47.56%

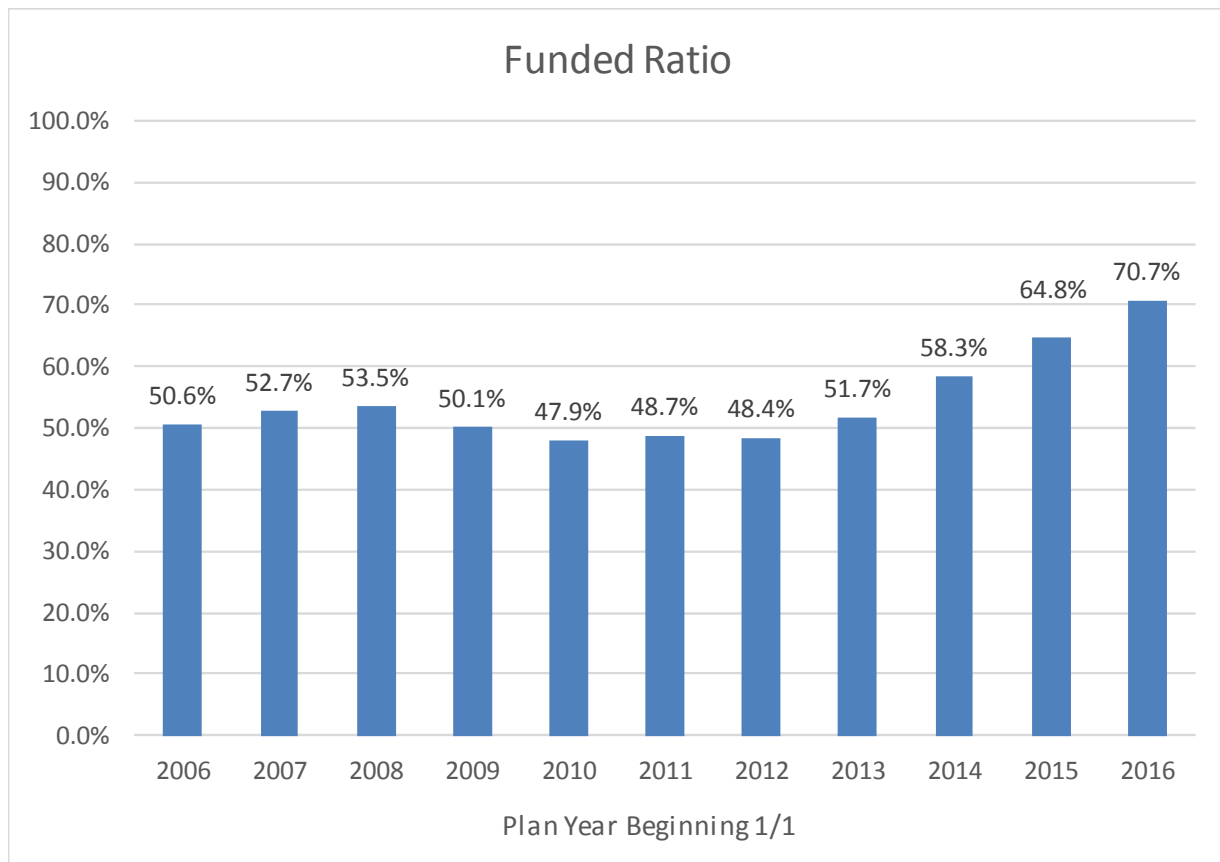


## Section I – Summary of Principal Results

- A. The promised benefits of the City of East Point Employees Retirement Plan are included in the actuarially determined contribution rates which are developed using the entry age normal cost method. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level dollar amount over an 8 year period. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

The valuation has been prepared in accordance with the parameters set forth in Georgia funding standards as set forth in Code Section 47-20-10 of the Georgia Public Retirement System Standards.

The following table represents the City’s historical funded ratio for the past ten years. The funded ratio represents the percentage of the plan actuarial accrued liability that is covered by the actuarial value of plan assets as of the valuation date.





## Section I – Summary of Principal Results

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- B.** The major benefit and contribution provisions of the City as reflected in the valuation are summarized in Section VIII. There have been no changes in the plan provisions since the previous valuation.
- C.** Section VII of this report outlines the full set of actuarial assumptions and methods used in the valuation.
- D.** The individual entry age normal cost method was used to prepare the valuation. Section VII contains a brief description of the actuarial cost method.
- E.** Comments on the valuation results as of January 1, 2016 are given in Section I and further discussion of the contributions is set out in Section II.



## Section I – Summary of Principal Results

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### Contributions Payable

- A. The City of East Point Employees Retirement Plan requires employees to contribute 6% of pay on a before-tax basis.
- B. The City contribution for the fiscal year ending June 30, 2018 consists of three components. The first component is the normal cost. Under the entry age normal cost method, the normal cost is a level percentage of payroll over the service life of each individual. The employer portion of the normal cost for the fiscal year ending June 30, 2018 is 7.83% of covered payroll.
- C. The second component of the City contribution is a load for administration expenses. The administration expenses for the fiscal year ending June 30, 2018 is 1.45% of covered payroll.
- D. The third component of the City contribution is the amortization of the unfunded liability. The amortization cost for the fiscal year ending June 30, 2018 is 32.29% of covered payroll based on a level dollar amortization over an 8 year period.
- E. The total required contribution to the Plan for the fiscal year ending June 30, 2018 is 41.56% of covered payroll.
- F. The following table summarizes the employer contribution which was determined as of January 1, 2016.

#### **City Actuarially Determined Contribution For Fiscal Year Ending June 30, 2018**

<b>Contribution</b>	<b>Percentage of Active Participants' Compensation</b>
a. Normal Cost Rate	7.83%
b. Admin Expenses	1.45%
c. Unfunded Accrued Liability Rate	<u>32.29%</u>
d. Total City Actuarially Determined Contribution	41.56%





## Section I – Summary of Principal Results

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### Assets

As of January 1, 2016 the total market value of assets amounted to \$80,569,741. The actuarial value of assets used for the current valuation was \$83,584,374. Section V shows the development of the actuarial value of assets as of January 1, 2016. The method for determining the Actuarial Value of Assets recognizes investment gains and losses over a five year period. Asset information was provided by Resource Centers.

### Comments on the Valuation

Section II of this report contains the valuation balance sheet which shows the present assets and liabilities of the Plan as of January 1, 2016. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method set forth in Section VII.

The valuation balance sheet shows that the Plan has a present value of prospective benefits of \$135,228,615 of which \$80,295,517 is for the future benefits payable on behalf of inactive members and \$54,933,098 is payable on account of future benefits for present active members. Against these liabilities, the Plan has present actuarial value of assets of \$83,584,374 as of January 1, 2016. The difference of \$51,644,240 between the total present value of benefits and total present actuarial value of assets represents the present value of contributions to be made in the future.

The normal cost contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active participant's payroll. For the 2017 plan year the total normal cost contribution rate is determined to be 13.83% of payroll and is determined under the entry age normal cost method. Members contribute 6.00% of compensation; therefore the City's portion of the total normal cost rate is 7.83%. Prospective employer normal contributions have a present value of \$8,878,979 and prospective member contributions have a present value of \$7,535,987. When these amounts are subtracted from \$51,644,240, there remains \$34,593,090 as the amount of unfunded accrued liability. The amount necessary to amortize the unfunded liability is 32.29% of payroll. The development of the unfunded accrued liability is shown in Section II.



## Section II - Plan Contribution Development

### Normal Cost

The Normal Cost component of the contribution represents active participant benefits accruing during the 2016 plan year. The following table shows the Normal Cost attributable to plan benefits under the current plan.

	January 1, 2015	January 1, 2016
<b>1. Total Normal Cost</b>		
a. Retirement Benefits	\$ 1,237,249	\$ 1,345,842
b. Termination Benefits	738,299	850,727
c. Death Benefits	125,957	129,127
d. Disability Benefits	<u>53,447</u>	<u>59,794</u>
e. Total	<b>\$ 2,154,952</b>	<b>\$ 2,385,490</b>
<b>2. Valuation Payroll</b>	<b>\$ 17,949,686</b>	<b>\$ 17,249,185</b>
<b>3. Total Normal Cost as a Percent of Payroll</b>	<b>12.46%</b>	<b>13.83%</b>
<b>4. Member Portion of Normal Cost</b>	<b>6.00%</b>	<b>6.00%</b>
<b>5. Employer Portion of Normal Cost</b>	<b>6.46%</b>	<b>7.83%</b>



## Section II - Plan Contribution Development

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### Actuarial Accrued Liability

The Actuarial Accrued Liability represents the obligations of the plan as of the valuation date for active and inactive participant benefits. The following table shows the components of the liability.

	January 1, 2015	January 1, 2016
<b>1. Actuarial Accrued Liability</b>		
a. Inactive Participants		
i. Retired Participants and Beneficiaries	\$ 77,657,184	\$ 77,876,217
ii. Terminated Vested Participants Deferred	1,642,839	2,254,358
iii. Terminated Non-Vested Participants	<u>380,978</u>	<u>164,942</u>
iv. Total Inactive	79,681,001	80,295,517
b. Active Participants	\$ 36,795,101	\$ 37,881,948
<b>2. Total Actuarial Accrued Liability</b>	<b>\$116,476,102</b>	<b>\$118,177,465</b>



## Section II - Plan Contribution Development

### Development of the Unfunded Actuarial Accrued Liability

The Unfunded Actuarial Accrued Liability represents the Actuarial Accrued Liability less the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability as of January 1, 2016 is \$34,593,090. In other words, the plan liabilities exceed the plan assets by this amount as of the valuation date. The following table shows the components of the Unfunded Actuarial Accrued Liability of the plan.

	January 1, 2015	January 1, 2016
<b>1. Actuarial Accrued Liability</b>		
a. Present Active Participants	\$ 36,795,101	\$ 37,881,948
b. Present retired participants, beneficiaries, terminated participants entitled to deferred vested benefits and participants due a refund	<u>79,681,001</u>	<u>80,295,517</u>
c. Total	\$ 116,476,102	\$ 118,177,465
<b>2. Actuarial Value of Assets</b>	\$ 75,496,622	\$ 83,584,374
<b>3. Unfunded Actuarial Accrued Liability (1c.) - (2)</b>	\$ 40,979,480	\$ 34,593,090
<b>4. Payment to Amortize Unfunded Actuarial Accrued Liability</b>	\$ 6,025,010	\$ 5,533,846
<b>5. Covered Compensation</b>	\$ 17,949,686	\$ 19,171,323
<b>6. Contribution Rate to Amortize Unfunded Actuarial Accrued Liability</b>	34.84%	32.29%
$((4) * 1.0775^{.5}) / (5)^{\wedge}$		
$((4) * 1.0775^{1.5}) / (5)^{\wedge\wedge}$		

<sup>^</sup>Used for the January 1, 2015 Valuation.

<sup>^^</sup>Used for the January 1, 2016 Valuation.



## Section II - Plan Contribution Development

### Development of the Annual Contribution

The following exhibits show the development of the fiscal year ending June 30, 2018 required contribution. This contribution was developed using level dollar amortization of the unfunded liability with an 8 year closed amortization period.

	January 1, 2015	January 1, 2016
<b>1. Actuarial Accrued Liability</b>		
a. Active Participants	\$ 36,795,101	\$ 37,881,948
b. Retirees & Beneficiaries	77,657,184	77,876,217
c. Deferred Vested & Non-Vested	<u>2,023,817</u>	<u>2,419,300</u>
d. Total	\$ 116,476,102	\$ 118,177,465
<b>2. Covered Compensation for Active Participants</b>	\$ 17,949,686	\$ 19,171,323
<b>3. Actuarial Value of Assets</b>	\$ 75,496,622	\$ 83,584,374
<b>4. Unfunded Actuarial Accrued Liability</b>	\$ 40,979,480	\$ 34,593,090
<b>5. City Actuarially Determined Contribution (Fiscal Year Ending)</b>	<b>June 30, 2016 &amp; June 30, 2017</b>	<b>June 30, 2018</b>
a. Normal Cost Rate	6.46%	7.83%
b. Admin Expenses	1.47%	1.45%
c. Unfunded Accrued Liability Rate	<u>34.84%</u>	<u>32.29%</u>
d. Total City ADC	42.77%	41.56%



## Section III – Gain/(Loss) Analysis

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### Development of the Actuarial Gain/(Loss)

(1)	Unfunded Accrued Liability (UAL) as of January 1, 2015	\$ 40,979,480
(2)	Normal Cost	2,154,952
(3)	Contributions	10,630,792
(4)	Interest	2,930,975
(5)	Expected UAL at January 1, 2016 (1) + (2) - (3) + (4)	35,434,615
(6)	Actual UAL at January 1, 2016	34,593,090
(7)	Total Gain / (Loss) (6) - (5)	841,525
(8)	Asset Gain / (Loss)	116,863
(9)	Plan Amendments	0
(10)	Assumption and Method Changes	(129,491)
(11)	Liability Gain / (Loss) (7) - (8) - (9) - (10)	\$ 854,153



## Section III – Gain/(Loss) Analysis

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**Analysis of Total Gain / (Loss)**  
**January 1, 2015 to January 1, 2016**  
**(Dollars in Millions)**

(1)	Actuarial assets (return of 7.90%)	\$ 116,863
(2)	Salary increases more than expected	(27,288)
(3)	Less retirements and lower benefits than expected	791,998
(4)	Data changes	106,568
(5)	New Plan participants and rehires	(551,473)
(6)	Mortality	477,726
(7)	Termination	43,759
(8)	Assumption and Method Changes	(129,491)
(9)	Other Gains / (Losses)	<u>12,863</u>
(10)	Total Gain / (Loss)	<u>\$ 841,525</u>



## Section IV – Additional Disclosures

### Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
January 1, 2016	\$ 83,584,374	\$ 118,177,465	\$ 34,593,090	70.7%	\$ 19,171,323	180.4%
January 1, 2015	75,496,622	116,476,102	40,979,480	64.8%	17,949,686	228.3%
January 1, 2014	67,442,177	115,671,696	48,229,519	58.3%	17,920,581	269.1%
January 1, 2013	59,041,617	114,213,800	55,186,563	51.7%	17,732,754	311.1%
January 1, 2012	55,473,617	114,717,480	59,243,863	48.4%	18,920,699	313.1%
January 1, 2011	54,407,669	111,721,874	57,314,205	48.7%	18,471,549	310.3%
January 1, 2010	52,815,701	110,322,330	57,506,629	47.9%	18,141,948	317.0%
January 1, 2009	53,310,907	106,468,681	53,106,684	50.1%	17,248,956	307.9%
January 1, 2008	57,782,237	108,091,103	50,308,866	53.5%	21,146,659	237.9%
January 1, 2007	55,645,262	105,625,551	49,980,289	52.7%	21,163,964	236.2%
January 1, 2006	53,415,122	105,614,057	52,198,935	50.6%	19,701,757	264.9%
January 1, 2005	51,903,054	101,088,251	49,185,197	51.3%	18,316,832	268.5%

### Actuarial Methods and Assumptions

Valuation date	January 1, 2016
Actuarial cost method	Individual Entry Age Normal
Amortization method	Level Dollar – Closed
Remaining amortization period	8 years
Asset valuation method	Five-year smoothed market value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.75%
Projected salary increases (includes inflation)	3.50%
Inflation	2.25%
COLA	1.75%





## Section V – Assets

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### Reconciliation of Market Value of Assets

	January 1, 2015	January 1, 2016
1. Beginning of Year Market Value of Assets	\$ 72,915,491	\$ 79,000,656
2. Expenditures		
a. Benefit Payments	\$ 8,728,041	\$ 8,332,803
b. Administrative Expenses	<u>263,307</u>	<u>257,170</u>
c. Total	\$ 8,991,348	\$ 8,589,973
3. Income		
a. Employer Contributions	\$ 9,178,327	\$ 9,504,258
b. Employee Contributions	\$ 1,056,133	\$ 1,126,534
c. Other Receipts	<u>-</u>	<u>-</u>
d. Total	\$ 10,234,460	\$ 10,630,792
4. Investment Income		
a. Investment gains/losses	\$ 5,295,314	\$ 5,612
b. Investment expense	<u>(453,261)</u>	<u>(477,346)</u>
c. Total	\$ 4,842,053	\$ (471,734)
5. End of Year Market Value of Assets (1 - 2c + 3d + 4c)	\$ 79,000,656	\$ 80,569,741
6. Rate of Return on Market Value of Assets	6.58%	(0.59%)

## Section V - Assets



### Development of Actuarial Value of Assets

Valuation Date January 1:	2015	2016	2017	2018	2019	2020
1. Actuarial Value Beginning of Year	\$ 67,442,177	\$ 75,496,622				
2. Market Value End of Year	\$ 79,000,656	\$ 80,569,741				
3. Market Value Beginning of Year	\$ 72,915,491	\$ 79,000,656				
4. Cash Flow						
a. Contributions	\$ 10,234,460	\$ 10,630,792				
b. Other Revenue	0	0				
c. Benefit Payments	(8,728,041)	(8,332,803)				
d. Administrative Expenses	(263,307)	(257,170)				
e. Investment Expenses	(453,261)	(477,346)				
f. Net	\$ 789,851	\$ 1,563,473				
5. Investment Income						
a. Market Total	\$ 5,295,314	\$ 5,612				
b. Assumed Rate	7.75%	7.75%				
c. Amount for Immediate Recognition	6,152,382	6,678,979				
d. Amount for Phased-In Recognition	\$ (857,068)	\$ (6,334,558)				
6. Phased-In Recognition of Investment Income						
a. Current Year: 0.20 *5.d.	\$ (171,414)	\$ (1,266,912)	\$ 0	\$ 0	\$ 0	\$ 0
b. First Prior Year	1,283,626	(171,414)	(1,266,912)	0	0	0
c. Second Prior Year	0	1,283,626	(171,414)	(1,266,912)	0	0
d. Third Prior Year	0	0	1,283,626	(171,414)	(1,266,912)	0
e. Fourth Prior Year	0	0	0	1,283,626	(171,414)	(1,266,912)
f. Total Recognized Investment Gain	\$ 1,112,212	\$ (154,700)	\$ (154,700)	\$ (154,700)	\$ (1,438,326)	\$ (1,266,912)
7. Actuarial Value End of Year	\$ 75,496,622	\$ 83,584,374				
8. Difference Between Market & Actuarial Values	\$ 3,504,034	\$ (3,014,633)	\$ (2,859,937)	\$ (2,705,238)	\$ (1,266,912)	\$ -
9. Rate of Return on Actuarial Value	10.01%	7.90%				
10. Rate of Return on Market Value	6.58%	(0.59%)				

The actuarial value of assets recognizes assumed investment income (line 5c) fully each year. Differences between actual and assumed investment income (line 5d) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, the actuarial value will tend to be less than market value. During periods when investment performance is less than assumed, the actuarial value will tend to be greater than the market value.



## Section VI - Data

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- A. Data regarding the participants in the Plan for use as a basis of the valuation were furnished by the City and Resource Centers. The valuation included active participants with annualized compensation totaling \$19,171,323.
- B. The following table shows the number of retired participants and beneficiaries as of January 1, 2016 together with the amount of their annual retirement benefits payable under the Plan as of that date.

**The Number and Average Annual Benefits of  
Retired Participants and Beneficiaries  
as of January 1, 2016**

Group	Number	Average Annual Benefits
Service Retirements	260	\$ 24,486
Beneficiaries of Deceased Members	87	14,109
Disability Retirements	<u>4</u>	17,452
Total	351	\$ 21,834

- C. Table 1 on the next page shows the distribution by age and years of service of the number of active participants included in the valuation, while Table 2 shows the number and annual benefits of retired participants and beneficiaries included in the valuation, distributed by age. Table 3 shows the reconciliation of valuation data from last year's valuation carried forward to this year's valuation.



## Section VI - Data

**Table 1: Distribution of Active Participants by Age and Service Groups as of January 1, 2016**

Attained Age	Completed Years of Service									
	Under 3	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 or More	Total
Under 25	16	0	0	0	0	0	0	0	0	16
Average Pay	29,104	0	0	0	0	0	0	0	0	29,104
25 to 29	26	8	7	0	0	0	0	0	0	41
Average Pay	35,552	39,631	33,861	0	0	0	0	0	0	36,059
30 to 34	26	7	19	1	0	0	0	0	0	53
Average Pay	34,544	32,562	41,759	45,215	0	0	0	0	0	37,070
35 to 39	21	6	12	8	3	0	0	0	0	50
Average Pay	37,499	36,953	42,476	43,677	38,684	0	0	0	0	39,688
40 to 44	19	8	21	13	20	1	0	0	0	82
Average Pay	36,187	29,597	43,010	41,679	51,649	78,997	0	0	0	42,455
45 to 49	9	4	17	14	13	8	4	0	0	69
Average Pay	38,540	35,943	41,567	44,219	51,620	63,048	74,980	0	0	47,706
50 to 54	8	8	8	14	10	4	8	2	0	62
Average Pay	34,028	45,459	33,088	36,297	42,761	31,559	57,592	56,019	0	40,893
55 to 59	5	5	16	10	9	2	4	2	1	54
Average Pay	32,325	43,065	42,085	41,108	42,077	55,402	57,662	59,241	63,534	43,769
60 to 64	3	4	7	3	2	2	2	4	0	27
Average Pay	43,854	41,192	48,797	35,955	31,393	48,227	49,516	57,490	0	45,704
65 to 69	0	0	2	3	0	1	0	0	0	6
Average Pay	0	0	71,258	35,925	0	43,675	0	0	0	48,995
70 & up	0	0	2	0	0	0	0	0	0	2
Average Pay	0	0	39,109	0	0	0	0	0	0	39,109
Total Count	133	50	111	66	57	18	18	8	1	462
Average Pay	35,154	37,820	41,895	40,764	47,178	53,364	60,574	57,560	63,534	41,496



## Section VI - Data

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**Table 2: Number of Retired Participants and Beneficiaries and their Benefits as of January 1, 2016**

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
49 & Under	5	\$ 74,745	\$ 14,949
50 – 54	6	119,744	19,957
55 – 59	24	522,746	21,781
60 – 64	54	1,523,517	28,213
65 – 79	88	2,059,223	23,400
70 – 74	64	1,596,276	24,942
75 – 79	45	831,971	18,488
Over 80	65	935,449	14,392
<b>Total</b>	<b>351</b>	<b>\$ 7,663,672</b>	<b>\$ 21,834</b>



## Section VI - Data

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**Table 3: Reconciliation of Plan Participants as of January 1, 2016**

	Active Participants	Inactive Participants with Deferred Benefits	Inactive Participants Receiving Benefits	Total
<b>January 1, 2015</b>	<b>435</b>	<b>17</b>	<b>356</b>	<b>808</b>
Retirements	(7)	(1)	8	
Deaths	(2)		(18)	<b>(20)</b>
Non Vested Terminations	(16)			<b>(16)</b>
Vested Terminations	(3)	3		
Refunds	(28)			<b>(28)</b>
Rehires	3			<b>3</b>
New Entrants	80			<b>80</b>
New Beneficiaries			5	<b>5</b>
Benefits Expired				
Data Adjustments		2		<b>2</b>
Net Change	27	4	(5)	<b>26</b>
<b>January 1, 2016</b>	<b>462</b>	<b>21</b>	<b>351</b>	<b>834</b>



## Section VII - Actuarial Assumptions & Methods

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**A. Investment Return:**

7.75% per year, compounded annually.

**B. Inflation:**

2.25% per year

**C. Salary Increases:**

3.50% per year

**D. Cost of Living Adjustment**

1.75% per year

**E. Pre and Post Retirement Mortality:**

RP-2000 Combined Mortality Table, sex distinct, Projected Scale AA to the valuation date.

Representative values of the assumed annual rates of mortality are shown in the following table.

Age	Male	Female
25	0.04%	0.02%
30	0.04	0.03
35	0.08	0.05
40	0.11	0.07
45	0.15	0.11
50	0.21	0.17
55	0.36	0.27
60	0.67	0.50
65	1.27	0.97
70	2.22	1.67
75	3.78	2.81
80	6.43	4.59
85	11.07	7.74



## Section VII - Actuarial Assumptions & Methods

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### F. Post Disablement Mortality:

RP-2000 Disabled Retiree Mortality Table, sex distinct.

Representative values of the assumed annual rates of mortality are shown in the following table.

Age	Male	Female
25	2.26%	0.75%
30	2.26	0.75
35	2.26	0.75
40	2.26	0.75
45	2.26	0.75
50	2.90	1.15
55	3.54	1.65
60	4.20	2.18
65	5.02	2.80
70	6.26	3.76
75	8.21	5.22
80	10.94	7.23
85	14.16	10.02

### G. Separation From Active Service:

Representative values of the assumed annual rates of withdrawal and disability are shown in the following table.

Age	Rates of Termination	Rates of Disability
20	25.80%	.05%
25	19.80	.06
30	15.60	.06
35	12.15	.06
40	9.45	.07
45	7.80	.10
50	5.85	.18
55	0.00	.34





## Section VII - Actuarial Assumptions & Methods

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Representative values of the assumed annual rates of retirement are shown in the following table.

Age	Rates of Retirement	
	Class 2 & 5	Class 3
50 - 59	5%	5%
60	5	100
61	5	100
62	5	100
63	5	100
64	5	100
65	100	100

### H. Actuarial Value of Assets:

The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed prior year valuation rate of 7.75%. The amount recognized each year is 20% of the difference between market value and expected market value.

### I. Actuarial Cost Method:

Entry Age Normal. This method produces a normal cost as a level percentage of pay over the service life of each participant and amortization of the Unfunded Actuarial Accrued Liability (UAAL). Gains and losses are reflected in the Unfunded Actuarial Accrued Liability and are included in its amortization. The unfunded actuarial accrued liabilities are amortized over a level dollar closed 8 year period.

### J. Percent Married:

80% of the plan participants are assumed married with males three years older than females.

The active retiree liability contains a 2% load to account for the GATT lump sum option available to retirees upon retirement.



## Section VIII – Plan Provisions

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### A. **Effective Date**

As amended and restated to January 1, 2013

### B. **Eligibility Requirements**

Employees working 40 hours (not casual employees) per week, or firefighters on 24 hour on/48 hour off schedule. Certain management positions may be excluded from the Plan.

### C. **Classes**

Class 1: Transferred from old Plan on June 19, 1975  
Class 2: General Employees and elected officials hired before April 1, 1992  
Class 3: Police and Firefighters hired before April 1, 1992  
Class 5: Eligible full-time employees hired on or after April 1, 1992

Note: Any Class may elect the Class 5 benefit.

### D. **Compensation**

Excludes overtime pay, bonuses, fringe benefits and reimbursed expenses. Annual maximum \$200,000 as adjusted by the Secretary of the Treasury.

### E. **Average Monthly Compensation (AMC)**

Classes 2-3: Monthly average of the highest consecutive five years of earnings.  
Class 5: Sum of highest 78 consecutive pay periods divided by 36.

### F. **Normal Form of Payment**

Class 1: 66 2/3% Joint and Survivor Annuity  
Class 3: Life Annuity  
Class 2 & 5: 75% Joint and Survivor Annuity

### G. **Participant Contributions**

Effective July 1, 1998, participants contribute 6% of pay on a before-tax basis. The plan was noncontributory prior to July 1, 1998.



## Section VIII – Plan Provisions

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### H. Normal Retirement Date

- Class 2: Age 65 and 10 years of service. If elected official, Age 60 and 5 years of service.
- Class 3: Age 55 and 10 years of service.
- Class 5: Age 65 (55 Police and Firefighters) and 10 years of service. If elected official, Age 60 and 5 years of service.

### I. Early Retirement

- Class 2 & 3: Age 50 and 10 years of service
- Class 5: Age 55 and 10 years of service for general employees. Age 50 and 10 years of service for Police and Firefighters.

The benefit is reduced 3% for each year retirement proceeds Normal Retirement Date.

### J. Retirement Benefit Formula (Accrued Benefit)

- Class 2 & 3: 2.25% times AMC times service
- Class 5: Elected: \$30 times service.  
Non Elected: AMC times service times Applicable Benefit Percentage

<u>Retirement Age</u>	<u>Applicable Benefit Percentage</u>
50	1.75%*
51	1.80*
52	1.85*
53	1.90*
54	1.95*
55	2.00
56	2.05
57	2.10
58	2.15
59	2.20
60	2.30
61	2.40
62	2.50
63	2.60
64	2.70
65 and above	2.80

\*Applicable to Police Officers and Firefighters



## Section VIII – Plan Provisions

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### K. Vesting

Class 2 & 3: 10 years

Class 5: Must be age 45 (age 40 for police and firefighters) and have 10 years of service and be within 10 years of earliest retirement date. If elected official, 5 years of service.

### L. Termination of Employment Before Retirement

Class 5: A 1-time lump sum payment in accordance with the following schedule:

<u>Years of Credited Service</u>	<u>Percentage of Employee Contributions</u>
<1	100%
1 < 2	110
2 < 3	120
3 < 4	130
4 < 5	140
5 < 6	150
6 < 7	160
7 < 8	170
8 < 9	180
9 < 10	190
10 < 11	200
11 < 12	220
12 < 13	240
13 < 14	260
14 < 15	280
15 < 16	300
16 < 17	320
17 < 18	340
18 < 19	360
19 < 20	380
20 < 21	400
21 < 22	420
22 < 23	440
23 < 24	460
24 < 25	480
25 or more	500

Payments to deceased active or retired Class 5 participants will at least equal the above lump sum. Vested employees may elect a deferred monthly benefit.



## Section VIII – Plan Provisions

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### M. Disability Benefit

Class 2 & 3: Annuity payable immediately equal to the greater of Accrued Benefit or 20% times average monthly compensation for the last 12 calendar months.

Class 5: For less than 10 years of service, lump sum termination benefit. For 10 or more years of service, annuity payable immediately equal to the Accrued Benefit payable at the Normal Retirement Date.

### N. Death Benefits for Death Prior to Retirement

Class 2 & 3: Actuarial reserve at age 65 with add-on (maximum 10 years) for full-time employees employed prior to December 1, 1987. Actuarial reserve without add-on for elected officials and full-time employees employed on and after December 1, 1987.

Class 5: For active and terminated vested employees, spouse's annuity equal to the greater of the Accrued Benefit or, if an active employee, but not elected official, 60% of AMC. This is actuarially reduced for a qualified spouse under age 50. Minimum of service time \$30.

### O. Death Benefits after Retirement

Class 1: Married: Spouse will receive 2/3 of the benefit received by the member until the earlier of his/her death or remarriage.

Unmarried: The benefit paid to the beneficiary is dependent on the form of payment chosen at retirement by the member.

Class 2 & 3: The benefit paid to the beneficiary is dependent on the form of payment chosen at retirement by the member.

Class 5: Qualified Spouses, or Children until age 18 (24 if a full-time student), will receive a benefit equal to 75% of the member's benefit. The total distribution to member and beneficiary must be at least equal to the lump sum termination benefit.

### P. Cost of Living Adjustment (COLA)

Class 1-3: The yearly percentage increase of the Consumer Price Index (CPI) of the most recent November CPI reading. The maximum COLA is 3%, and there is no reduction of benefits if the CPI decreases.

Class 5: Retirement benefits are subject to a cost of living review and possible adjustment each two years by the City Council.