Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve

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

Prepared as of January 1, 2017
For the City's Fiscal Year July 1, 2018 – June 30, 2019

April 2, 2017

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, 2017. The purpose of this report is to provide a summary of the funded status of the Plan as of January 1, 2017, 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.

The January 1, 2017 valuation will set the City's actuarially determined contribution rate for the 2018/2019 fiscal year.

The total actuarially determined contribution rate for the 2018/2019 fiscal year is 39.56% of compensation. In comparison, the City's actuarially determined contribution rate for the 2017/2018 fiscal years is 41.56% of compensation. A detailed analysis of the gains and losses during the year are shown in Section III of the report.

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 a 7 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,

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

Beverly V. Bailey, ASA, EA, FCA, MAAA
Senior Actuary

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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.

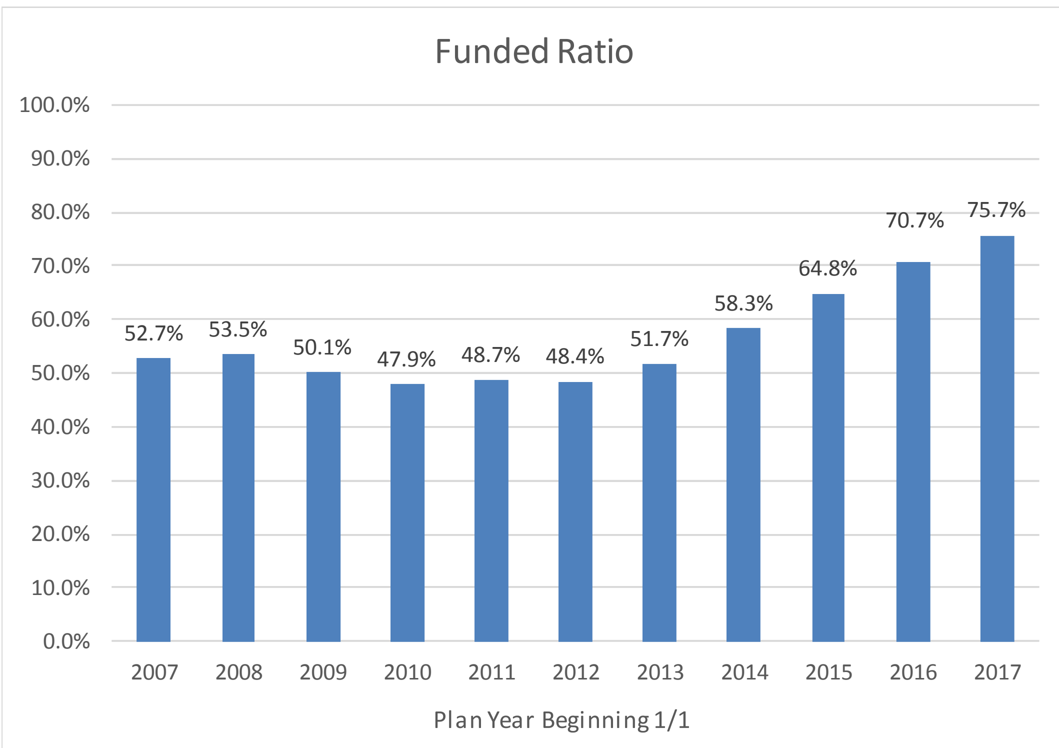
Valuation Date	January 1, 2016	January 1, 2017
Active Participants:		
a. Number	462	447
b. Covered Compensation	$ 19,171,323	$ 19,192,214
Retired Participants and Beneficiaries:		
a. Number	351	345
b. Total Annual Benefits	$ 7,663,671	$ 7,700,966
Number of Terminated Vested Participants	21	26
Assets:		
a. Market Value	$ 80,569,741	$ 89,921,618
b. Actuarial Value	$ 83,584,374	$ 91,243,478
Actuarial Accrued Liability	$ 118,177,465	$ 120,587,907
Unfunded actuarial accrued liability	$ 34,593,090	$ 29,344,429
Amortization Period	8 years	7 years
Fiscal Year Ending	June 30, 2018	June 30, 2019
Actuarially Determined Contribution		
a. Normal Cost Rate	13.83%	13.93%
b. Admin Expenses	1.45%	1.41%
c. Unfunded Accrued Liability Rate	32.29%	30.22%
d. Total City Contribution	47.56%	45.56%
Required City Contribution		
a. Required City Contribution	41.56%	39.56%
b. Required Member Contribution	6.00%	6.00%
c. Total Contribution	47.56%	45.56%

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 7 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.



B. The major benefit and contribution provisions of the City as reflected in the valuation are summarized in Section VIII. Since the previous valuation the eligibility requirement for vested benefits has been changed 10 years of service.

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, 2017 are given in Section I and further discussion of the contributions is set out in Section II.

F. Since the previous valuation, Class 4 & 5 members are fully vested upon the completion of ten years of service regardless of age. This change increased the accrued liability by $611.

Section I – Summary of Principal Results

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, 2019 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, 2019 is 7.93% 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, 2019 is 1.41% 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, 2019 is 30.22% of covered payroll based on a level dollar amortization over a 7 year period.

E. The total required contribution to the Plan for the fiscal year ending June 30, 2019 is 39.56% of covered payroll.

F. The following table summarizes the employer contribution which was determined as of January 1, 2017.

City Actuarially Determined Contribution
For Fiscal Year Ending June 30, 2019

Contribution	Percentage of Active Participants' Compensation
a. Normal Cost Rate	7.93%
b. Admin Expenses	1.41%
c. Unfunded Accrued Liability Rate	30.22%
d. Total City Actuarially Determined Contribution	39.56%

Section I – Summary of Principal Results

Assets

As of January 1, 2017 the total market value of assets amounted to $89,921,618. The actuarial value of assets used for the current valuation was $91,243,478. Section V shows the development of the actuarial value of assets as of January 1, 2017. 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, 2017. 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 $137,663,546 of which $81,743,628 is for the future benefits payable on behalf of inactive members and $55,919,918 is payable on account of future benefits for present active members. Against these liabilities, the Plan has present actuarial value of assets of $91,243,478 as of January 1, 2017. The difference of $46,420,068 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 2018 plan year the total normal cost contribution rate is determined to be 13.93% 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 7.93%. Prospective employer normal contributions have a present value of $9,566,347 and prospective member contributions have a present value of $7,509,292. When these amounts are subtracted from $46,420,068, there remains $29,344,429 as the amount of unfunded accrued liability. The amount necessary to amortize the unfunded liability is 30.22% 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 2017 plan year. The following table shows the Normal Cost attributable to plan benefits under the current plan.

		January 1, 2016	January 1, 2017
1.	**Total Normal Cost**		
	a. Retirement Benefits	$ 1,345,842	$ 1,388,648
	b. Termination Benefits	850,727	848,553
	c. Death Benefits	129,127	141,174
	d. Disability Benefits	59,794	59,286
	e. Total	**$ 2,385,490**	**$ 2,437,661**
2.	**Valuation Payroll**	**$ 17,249,185**	**$ 17,503,499**
3.	**Total Normal Cost as a Percent of Payroll**	**13.83%**	**13.93%**
4.	**Member Portion of Normal Cost**	**6.00%**	**6.00%**
5.	**Employer Portion of Normal Cost**	**7.83%**	**7.93%**

Section II - Plan Contribution Development

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, 2016	January 1, 2017
1.	**Actuarial Accrued Liability**		
	a. Inactive Participants		
	i. Retired Participants and Beneficiaries	$ 77,876,217	$ 77,888,939
	ii. Terminated Vested Participants Deferred	2,254,358	3,567,589
	iii. Terminated Non-Vested Participants	164,942	287,100
	iv. Total Inactive	80,295,517	81,743,628
	b. Active Participants	$ 37,881,948	$ 38,844,279
2.	**Total Actuarial Accrued Liability**	**$118,177,465**	**$120,587,907**

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, 2017 is $29,344,429. 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, 2016	January 1, 2017
1.	**Actuarial Accrued Liability**		
	a. Present Active Participants	$ 37,881,948	$ 38,844,279
	b. Present retired participants, beneficiaries, terminated participants entitled to deferred vested benefits and participants due a refund	80,295,517	81,743,628
	c. Total	$ 118,177,465	$ 120,587,907
2.	**Actuarial Value of Assets**	$ 83,584,374	$ 91,243,478
3.	**Unfunded Actuarial Accrued Liability (1c.) - (2)**	$ 34,593,090	$ 29,344,429
4.	**Payment to Amortize Unfunded Actuarial Accrued Liability**	$ 5,533,846	$ 5,186,223
5.	**Covered Compensation**	$ 19,171,323	$ 19,192,214
6.	**Contribution Rate to Amortize Unfunded Actuarial Accrued Liability (((4) * 1.0775^1.5) / (5))^**	32.29%	30.22%

Section II - Plan Contribution Development

Development of the Annual Contribution

The following exhibits show the development of the fiscal year ending June 30, 2019 required contribution. This contribution was developed using level dollar amortization of the unfunded liability with a 7 year closed amortization period.

		January 1, 2016	January 1, 2017
1.	**Actuarial Accrued Liability**		
	a. Active Participants	$ 37,881,948	$ 38,844,279
	b. Retirees & Beneficiaries	77,876,217	77,888,939
	c. Deferred Vested & Non-Vested	2,419,300	3,854,689
	d. Total	$ 118,177,465	$ 120,587,907
2.	**Covered Compensation for Active Participants**	$ 19,171,323	$ 19,192,214
3.	**Actuarial Value of Assets**	$ 83,584,374	$ 91,243,478
4.	**Unfunded Actuarial Accrued Liability**	$ 34,593,090	$ 29,344,429
5.	**City Actuarially Determined Contribution (Fiscal Year Ending)**	**June 30, 2018**	**June 30, 2019**
	a. Normal Cost Rate	7.83%	7.93%
	b. Admin Expenses	1.45%	1.41%
	c. Unfunded Accrued Liability Rate	32.29%	30.22%
	d. Total City ADC	41.56%	39.56%

Section III – Gain/(Loss) Analysis

Development of the Actuarial Gain/(Loss)

(1)	Unfunded Accrued Liability (UAL) as of January 1, 2016	$	34,593,090
(2)	Normal Cost		2,385,490
(3)	Contributions		10,030,557
(4)	Interest		2,477,156
(5)	Expected UAL at January 1, 2017 (1) + (2) - (3) + (4)		29,425,179
(6)	Actual UAL at January 1, 2017		29,344,429
(7)	Total Gain / (Loss) (6) - (5)		80,750
(8)	Asset Gain / (Loss)		(3,816)
(9)	Plan Amendments		(611)
(10)	Assumption and Method Changes		(180,941)
(11)	Liability Gain / (Loss) (7) - (8) - (9) - (10)	$	266,118

Section III – Gain/(Loss) Analysis

Analysis of Total Gain / (Loss)
January 1, 2016 to January 1, 2017
(Dollars in Millions)

(1)	Actuarial assets (return of 7.75%)	$ (3,816)
(2)	Salary increases more than expected	(282)
(3)	Retirements	(230,569)
(4)	Data changes	2,513
(5)	New Plan participants and rehires	(53,641)
(6)	Mortality	722,453
(7)	Disability	(20,132)
(8)	Benefit Payments	(48,182)
(9)	Termination	(97,890)
(10)	Plan Amendment	(611)
(11)	Assumption and Method Changes	(180,941)
(12)	Other Gains / (Losses)	(8,152)
(13)	Total Gain / (Loss)	$ 80,750

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, 2017	$ 91,243,478	$ 120,587,907	$ 29,344,429	75.7%	$ 19,192,214	152.9%
January 1, 2016	83,584,374	118,177,465	34,593,091	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%

Actuarial Methods and Assumptions

Valuation date	January 1, 2017
Actuarial cost method	Individual Entry Age Normal
Amortization method	Level Dollar – Closed
Remaining amortization period	7 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%

Reconciliation of Market Value of Assets

		January 1, 2016	January 1, 2017
1.	Beginning of Year Market Value of Assets	$ 79,000,656	$ 80,569,741
2.	Expenditures		
	a. Benefit Payments	$ 8,332,803	$ 8,638,756
	b. Administrative Expenses	257,170	250,881
	c. Total	$ 8,589,973	$ 8,889,637
3.	Income		
	a. Employer Contributions	$ 9,504,258	$ 8,674,036
	b. Employee Contributions	$ 1,126,534	$ 1,356,521
	c. Other Receipts	-	-
	d. Total	$ 10,630,792	$ 10,030,557
4.	Investment Income		
	a. Investment gains/losses	$ 5,612	$ 8,717,624
	b. Investment expense	(477,346)	(506,667)
	c. Total	$ (471,734)	$ 8,210,957
5.	End of Year Market Value of Assets (1 - 2c + 3d + 4c)	$ 80,569,741	$ 89,921,618
6.	Rate of Return on Market Value of Assets	(0.59%)	10.12%

Development of Actuarial Value of Assets

	Valuation Date January 1:	2016	2017	2018	2019	2020	2021
1.	Actuarial Value Beginning of Year	$ 75,496,622	$ 83,584,374				
2.	Market Value End of Year	$ 80,569,741	$ 89,921,618				
3.	Market Value Beginning of Year	$ 79,000,656	$ 80,569,741				
4.	Cash Flow						
	a. Contributions	$ 10,630,792	$ 10,030,557				
	b. Other Revenue	0	0				
	c. Benefit Payments	(8,332,803)	(8,638,756)				
	d. Administrative Expenses	(257,170)	(250,881)				
	e. Investment Expenses	(477,346)	(506,667)				
	f. Net	$ 1,563,473	$ 634,253				
5.	Investment Income						
	a. Market Total	$ 5,612	$ 8,717,624				
	b. Assumed Rate	7.75%	7.75%				
	c. Amount for Immediate Recognition	6,678,979	6,795,033				
	d. Amount for Phased-In Recognition	$ (6,334,558)	$ 1,922,591				
6.	Phased-In Recognition of Investment Income						
	a. Current Year: 0.20 *5.d.	$ (1,266,912)	$ 384,518	$ 0	$ 0	$ 0	$ 0
	b. First Prior Year	(171,414)	(1,266,912)	384,518	0	0	0
	c. Second Prior Year	1,283,626	(171,414)	(1,266,912)	384,518	0	0
	d. Third Prior Year	0	1,283,626	(171,414)	(1,266,912)	384,518	0
	e. Fourth Prior Year	0	0	1,283,626	(171,414)	(1,266,912)	384,518
	f. Total Recognized Investment Gain	$ (154,700)	$ 229,818	$ 229,818	$ (1,053,808)	$ (882,394)	$ 384,518
7.	Actuarial Value End of Year	$ 83,584,374	$ 91,243,478				
8.	Difference Between Market & Actuarial Values	$ (3,014,633)	$ (1,321,860)	$ (1,551,684)	$ (497,876)	$ 384,518	$ -
9.	Rate of Return on Actuarial Value	7.90%	7.75%				
10.	Rate of Return on Market Value	(0.59%)	10.12%				

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

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 $19,192,214.

B. The following table shows the number of retired participants and beneficiaries as of January 1, 2017 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, 2017

Group	Number	Average Annual Benefits
Service Retirements	257	$ 25,102
Beneficiaries of Deceased Members	85	14,127
Disability Retirements	3	16,309
Total	345	$ 22,322

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, 2017

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	19	1	0	0	0	0	0	0	0	20
Average Pay	31,102	40,992	0	0	0	0	0	0	0	31,597
25 to 29	27	7	3	0	0	0	0	0	0	37
Average Pay	33,099	38,719	36,502	0	0	0	0	0	0	34,438
30 to 34	21	6	15	5	0	0	0	0	0	47
Average Pay	39,524	38,171	40,389	41,163	0	0	0	0	0	39,802
35 to 39	19	10	15	5	3	0	0	0	0	52
Average Pay	39,044	37,351	42,245	47,612	47,404	0	0	0	0	40,948
40 to 44	16	5	22	8	17	1	0	0	0	69
Average Pay	35,233	42,304	43,555	45,267	47,627	80,577	0	0	0	43,273
45 to 49	6	4	13	13	24	6	2	0	0	68
Average Pay	41,354	41,468	36,704	52,941	48,967	64,612	63,600	0	0	48,080
50 to 54	9	4	11	13	10	5	8	2	0	62
Average Pay	39,157	43,971	48,790	40,596	45,366	37,052	68,665	68,291	0	47,057
55 to 59	4	1	17	8	10	5	6	1	1	53
Average Pay	33,544	43,062	46,611	41,717	45,069	43,290	56,142	90,270	64,805	46,461
60 to 64	8	1	14	4	1	0	2	2	0	32
Average Pay	37,367	30,918	40,641	33,807	35,468	0	44,807	60,314	0	39,993
65 to 69	2	0	1	2	0	1	0	0	0	6
Average Pay	53,940	0	65,795	76,435	0	44,549	0	0	0	61,849
70 & up	0	0	0	0	1	0	0	0	0	1
Average Pay	0	0	0	0	0	0	0	0	0	0
Total Count	131	39	111	58	66	18	18	5	1	447
Average Pay	36,349	39,534	42,777	45,583	46,468	50,806	61,277	69,496	64,805	42,936

Table 2: Number of Retired Participants and Beneficiaries and their Benefits as of January 1, 2017

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
49 & Under	4	$ 56,011	$ 14,003
50 – 54	8	165,950	20,744
55 – 59	21	420,045	20,002
60 – 64	51	1,442,038	28,275
65 – 79	85	2,096,849	24,669
70 – 74	68	1,712,986	25,191
75 – 79	50	949,479	18,990
Over 80	58	857,609	14,786
Total	**345**	**$ 7,700,967**	**$ 22,322**

Table 3: Reconciliation of Plan Participants as of January 1, 2017

	Active Participants	Inactive Participants with Deferred Benefits	Inactive Participants Receiving Benefits	Total
January 1, 2016	**462**	**21**	**351**	**834**
Retirements	(9)	(1)	10	
Deaths			(22)	**(22)**
Non Vested Terminations	(19)			**(19)**
Vested Terminations	(7)	7		
Refunds	(36)	(1)		**(37)**
Rehires	1			**1**
New Entrants	55			**55**
New Beneficiaries			6	**6**
Benefits Expired				
Data Adjustments				
Net Change	(15)	5	(6)	**(16)**
January 1, 2017	**447**	**26**	**345**	**818**

Section VII - Actuarial Assumptions & Methods

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

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

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

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.

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

Retirement Age	Applicable Benefit Percentage
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

K. Vesting

Class 2 & 3: 10 years

Class 5: 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:

Years of Credited Service	Percentage of Employee Contributions
<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.

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.