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**GASB STATEMENT NO. 68 REPORT**

**FOR THE**

**CITY OF EAST POINT  
EMPLOYEES RETIREMENT PLAN**

**PREPARED AS OF**

**DECEMBER 31, 2016**





# Cavanaugh Macdonald

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November 9, 2017

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

Dear Trustees:

Presented in this report is information to assist the City of East Point Employees Retirement Plan (Plan) in providing necessary Governmental Accounting Standards Board (GASB) Statement No. 68 disclosure information to participating employers. GASB Statement No. 68 establishes accounting and financial reporting requirements for governmental employers who provide pension benefits to their employees through a trust. This report has been prepared as of December 31, 2016 for the fiscal year ending June 30, 2017.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of January 1, 2016 (The Valuation Date). The valuation was based upon data, furnished by Plan's staff, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 68.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the Plan. In addition, the calculations were completed in compliance with the laws governing the Plan. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

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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.

Respectfully submitted,

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

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

TBG:jmy



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**REPORT OF THE ANNUAL GASB STATEMENT NO. 68  
REQUIRED INFORMATION FOR THE  
CITY OF EAST POINT EMPLOYEES RETIREMENT PLAN  
PREPARED AS OF DECEMBER 31, 2016**

**SECTION I – SUMMARY**

<b>Valuation Date (VD):</b>	January 1, 2016
<b>Measurement Date (MD):</b>	December 31, 2016
<b>Reporting Date (RD):</b>	June 30, 2017
<b>Single Equivalent Interest Rate (SEIR):</b>	
Long-Term Expected Rate of Return	7.75%
Municipal Bond Index Rate	3.86%
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A
Single Equivalent Interest Rate	7.75%
<b>Net Pension Liability (Fiscal Year Ended 2015):</b>	
Total Pension Liability (TPL)	\$ 119,169,260
Fiduciary Net Position (FNP)	80,569,741
Net Pension Liability (NPL = TPL – FNP)	\$ 38,599,519
FNP as a percentage of TPL	67.61%
<b>Net Pension Liability (Fiscal Year Ended 2016):</b>	
Total Pension Liability (TPL)	\$ 120,933,076
Fiduciary Net Position (FNP)	89,921,618
Net Pension Liability (NPL = TPL – FNP)	\$ 31,011,458
FNP as a percentage of TPL	74.36%
<b>Pension Expense (PE):</b>	\$ 4,581,517
<b>Deferred Outflows of Resources:</b>	\$ 2,669,258
<b>Deferred Inflows of Resources:</b>	\$ 1,680,996



## **SECTION II – INTRODUCTION**

This report, prepared as of December 31, 2016 (the Measurement Date), presents information to assist the Plan in providing the required information under The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), “Accounting and Financial Reporting for Pensions” to the participating employers of the City of East Point Employees Retirement Plan for fiscal year ending June 30, 2017. Much of the material provided in this report is based on the results of the GASB 67 report for the Plan, which was issued on April 3, 2017. See that report for more information on the member data, actuarial assumptions and methods used in developing the GASB 67 results.

GASB 68 creates disclosure and reporting requirements that may or may not be consistent with the basis used for funding the Plan.

GASB 68 requires the recognition of a Pension Expense (PE) in the financial statements of each sponsoring employer.

The NPL shown in the GASB Statement No. 67 Report for the System as of December 31, 2016 and submitted April 3, 2017 is the NPL used for purposes of GASB 68. Please refer to that report for the derivation of the collective NPL.

Pension Expense includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the collective PE is shown in Section V.

The unrecognized portions of each year’s experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer’s financial statements. The development of the deferred inflows and outflows is shown in Section III.

Section I of this report is a summary of the principal results of the collective amounts under GASB 68. Section III and Section IV provides the results of all the necessary calculations, presented in the order laid out in GASB 68 for note disclosure and Required Supplementary Information (RSI).



### **SECTION III – FINANCIAL STATEMENT NOTES**

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate.

**Paragraph 40(a) and (b):** The information required to be prepared by the System and/or the individual employer.

**Paragraph 40(c):** The data required regarding the membership of the City of East Point Employees Retirement Plan were furnished by the Plan’s Staff. The following table summarizes the membership of the system as of January 1, 2016, the Valuation Date.

	Number
Inactive Members Or Their Beneficiaries Currently Receiving Benefits	351
Inactive Members Entitled To But Not Yet Receiving Benefits	21
Active Members	462
Total	834

**Paragraph 40(d) – (e):** The information required is to be supplied by the Plan and/or the individual employer.



**Paragraph 41:** This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule B. The total pension liability was determined by an actuarial valuation as of January 1, 2016. The result was rolled forward using standard actuarial techniques to the Measurement Date. The following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.25 percent
Salary increases	3.50 percent, including inflation
Investment rate of return	7.75 percent, net of pension plan investment expense, including inflation
Mortality	The rates of mortality for the period after service retirement are according to the RP-2000 Combined Mortality Table for males and females, Projected AA to the valuation date.

**Paragraph 42:**

- (a) **Discount rate:** The discount rate used to measure the total pension liability was 7.75%
- (b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution in the future.
- (c) **Long term rate of return:** The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.
- (d) **Municipal bond rate:** the discount rate determination does not use a municipal bond rate.
- (e) **Periods of projected benefit payments:** projected future benefit payments for all current plan members were projected through 2115.





(f) **Assumed Asset Allocation:** The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	58.6%	5.34%
Convertible Equity	4.4%	7.40%
Fixed Income	35.0%	1.82%
Cash	2.0%	-0.26%
Total	100.0%	

(g) **Sensitivity Analysis:** This paragraph requires disclosure of the sensitivity of the collective net pension liability to changes in the discount rate. The following presents the net pension liability of the Plan, calculated using the discount rate of percent, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease 6.75%	Current Discount Rate 7.75%	1% Increase 8.75%
System's net pension liability	\$44,263,793	\$31,011,458	\$19,858,709



**Paragraph 44:** This paragraph requires a schedule of changes in Net Pension Liability. The needed information is provided in the table below.

#### CHANGES IN THE NET PENSION LIABILITY

	Total Pension Liability (a)	Plan Net Position (b)	Pension Liability (a) - (b)
<b>Balance as of January 1, 2016</b>	119,169,260	80,569,741	38,599,519
<b>Changes for the year:</b>			
Service Cost	2,385,490		2,385,490
Interest	9,085,741		9,085,741
Benefit changes	0		0
Different between expected and actual experience	(1,068,659)		(1,068,659)
Changes of assumptions	0		0
Contributions - employer		8,674,036	(8,674,036)
Contributions - member		1,356,521	(1,356,521)
Net investment income		8,210,957	(8,210,957)
Refunds of contributions	(689,950)	(689,950)	0
Benefits paid	(7,948,806)	(7,948,806)	0
Plan administrative expenses		(250,881)	250,881
Other changes	0	0	0
<b>Net changes</b>	<u>1,763,816</u>	<u>9,351,877</u>	<u>(7,588,061)</u>
<b>Balance as of December 31, 2016</b>	<u>120,933,076</u>	<u>89,921,618</u>	<u>31,011,458</u>

**Paragraph 45(a):** January 1, 2016 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of December 31, 2016 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year and then applies the expected interest for the year. Please refer to the GASB 67 report dated April 3, 2017 for a detailed derivation of the TPL as of December 31, 2016.



**Paragraph 45(c):** There have been no changes of assumptions or other inputs that affected measurement of the total pension liability since the prior measurement date.

**Paragraph 45(d):** There were no changes in benefit terms that affected measurement of the total pension liability since the prior measurement period.

**Paragraphs 45(f):** There were no changes between the measurement date of the net pension liability and the employer's reporting date that are expected to have a significant effect on the net pension liability, and the amount of the expected resultant change in the net pension liability, if known.

**Paragraph 45(g):** The information required is to be supplied by the Employer.

**Paragraph 45(h):** Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense they are labeled deferred inflows. If they will increase pension expense they are labeled deferred outflows. As noted in the previous section, the amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five year period.

The table below provide a summary of the deferred inflows and outflows as of December 31, 2016.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 0	\$ 1,680,996
Changes of assumptions	0	0
Net difference between projected and actual earnings on plan investments	\$ 2,669,258	\$ 0
Total	<u>\$ 2,669,258</u>	<u>\$ 1,680,996</u>



**Paragraph 45(i):** Employer contributions subsequent to the valuation date are reported as deferred outflows of resources related to pensions resulting from Employer contributions subsequent to the Measurement Date will be recognized as a reduction of the net pension liability in the fiscal year ended June 30, 2016. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Deferred Amounts to be recognized in Fiscal Years Ending				
	Deferred Outflows of Resources		Deferred Inflows of Resources	
2018	\$	1,051,809	\$	547,517
2019		1,051,811		547,517
2020		950,157		400,491
2021		0		569,990
2022		0		0
Thereafter		0		0



## **SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION**

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan’s financial statements:

**Paragraphs 46(a) and (b):** The required tables are provided in Schedule A and the information is as of the Measurement dates.

**Paragraph 46(c):** The required table is provided in Schedule A and the information is as of the Employer’s Fiscal Year Ends.

**Paragraph 47:** In addition the following should be noted regarding the RSI:

*Changes of benefit terms:* None

*Changes of assumption:* None.

***Method and assumptions used in calculations of actuarially determined contributions.*** The actuarially determined contribution rates are determined on an annual basis payable in the fiscal year one year following the valuation date. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial cost method	Individual Entry age Normal
Amortization method	Level dollar, closed
Remaining amortization period	8 years
Asset valuation method	5-year smoothed market
Inflation	2.25 percent
Salary increase	3.5% percent, including inflation
Investment rate of return	7.75 percent, net of pension plan investment expense, including inflation



## SECTION V – PENSION EXPENSE

As noted earlier, the Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. To this is added interest on the TPL at the rate of return in effect as of the prior measurement date.

The next three items refer to any changes that occurred in the TPL (i.e., actuarial accrued liability (AAL) under EAN) due to:

1. Benefit changes,
2. Actual versus expected experience or
3. Changes in actuarial assumptions.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit improvement for existing System members, or negative if there is a benefit reduction. For the year ended December 31, 2016 there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership.

The remaining service life of active members is the average number of years the active members are expected to remain active, while the remaining service life of the inactive members is zero.

The development of the average remaining service life is shown in the following table.

Category	Number (1)	Average Years of Working Lifetime (2)
a. Active Members	462	8.73
b. Inactive Members	372	0.00
c. Total	834	
Weighted Average Years of Working Lifetime [(a1 * a2) + (b1 * b2)]/c1		4.84

As of December 31, 2016, there is a portion of the current year change in TPL attributed to actual versus expected experience for the year. The total amount to be recognized due to actual versus expected experience is (\$1,068,658). Of this amount, (\$220,797) is recognized in pension expense



for the year ended June 30, 2017, while the remaining amount of (\$847,861) is a deferred inflow of resources that will be recognized in the following fiscal years (See Schedule D).

For the fiscal year ended June 30, 2017 there are no changes in TPL attributed to changes in actuarial assumptions. Therefore, there is no recognition for this in pension expense.

Member contributions for the year and projected earnings on the FNP at the discount rate serve to reduce the expense.

<b>Investment Earnings (Gain)/Loss as of December 31, 2016</b>		
a	Expected asset return rate	7.75%
b	Beginning of year market value assets (BOY)	\$ 80,569,741
c	End of year market value assets (EOY)	\$ 89,921,618
d	Expected return on BOY for plan year (a x b)	\$ 6,244,155
External Cash Flow		
	Contributions - employer	\$ 8,674,036
	Contributions - member	1,356,521
	Refunds of contributions	(689,950)
	Benefits paid	(7,948,806)
	Admin expenses	(250,881)
e	Total net external cash flow	\$ 1,140,920
f	Expected return on net cash flow (a x 0.5 x e)	\$ 44,211
g	Projected earnings for plan year (d + f)	\$ 6,288,366
h	Net investment income (c - b - d)	\$ 8,210,957
	<b>Investment earnings (gain)/loss (g - h)</b>	<b>(1,922,591)</b>

One-fifth of current-period difference between actual and projected earning based on the assumed investment rate of return on the FNP are recognized in the pension expense. As of December 31, 2016 the actual investment return for the year was \$8,210,957. The projected earnings for the year were \$6,288,366. The total investment gain for the year was \$1,922,591. One-fifth of this amount or \$384,518 is recognized in pension expense for the fiscal year ended June 30, 2017. The remaining \$1,538,073 is a deferred inflow of resources that will be recognized over the following four fiscal years.

The current year portions of previously determined experience, assumption, and earnings amounts, recognized as deferred inflows and outflows are included. Deferred outflows are added to the PE



and deferred inflows are subtracted from the PE. Finally administrative expenses and other miscellaneous items are included.

The calculation of the Pension Expense as of December 31, 2016 for the Plan is shown in the following table.

Pension Expense Determined as of the Measurement Date	
Service Cost	\$ 2,385,490
Interest on the TPL and Cash Flow	\$ 9,085,741
Current-period benefit changes	\$ 0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	\$ (220,797)
Expensed portion of current-period changes of assumptions	\$ 0
Member contributions	\$ (1,356,521)
Projected earnings on plan investments	\$ (6,288,366)
Expensed portion of current-period differences between actual and projected earnings on plan investments	\$ (384,518)
Administrative expense	\$ 250,881
Other	\$ 0
Recognition of beginning deferred outflows of resources as pension expense	\$ 1,436,327
Recognition of beginning deferred inflows of resources as pension expense	\$ (326,720)
Pension Expense	<u>\$ 4,581,517</u>





## Schedule of Changes in the Net Pension Liability

	2016	2015	2014
<b>Total pension liability</b>			
Service Cost	2,385,490	2,154,952	2,121,348
Interest	9,085,741	8,977,933	8,790,749
Benefit changes	0	0	0
Difference between expected and actual experience	(1,068,659)	(1,486,574)	0
Changes of assumptions	0	0	0
Benefit payments	(7,948,806)	(7,818,041)	(7,653,160)
Refunds of contributions	(689,950)	(514,762)	(1,074,881)
<b>Net change in total pension liability</b>	<b>1,763,816</b>	<b>1,313,508</b>	<b>2,184,056</b>
<b>Total pension liability - beginning</b>	<b>119,169,260</b>	<b>117,855,752</b>	<b>115,671,696</b>
<b>Total pension liability - ending (a)</b>	<b>120,933,076</b>	<b>119,169,260</b>	<b>117,855,752</b>
<b>Plan net position</b>			
Contributions - employer	8,674,036	9,504,258	9,178,327
Contributions - member	1,356,521	1,126,534	1,056,133
Net investment income	8,210,957	(471,734)	5,165,762
Benefit payments	-7,948,806	(7,818,041)	(7,653,160)
Administrative expense	-250,881	(257,170)	(263,307)
Refunds of contributions	-689,950	(514,762)	(1,074,881)
Other	0	0	0
<b>Net change in plan net position</b>	<b>9,351,877</b>	<b>1,569,085</b>	<b>6,408,874</b>
<b>Plan net position - beginning</b>	<b>80,569,741</b>	<b>79,000,656</b>	<b>72,591,782</b>
<b>Plan net position - ending (b)</b>	<b>89,921,618</b>	<b>80,569,741</b>	<b>79,000,656</b>
<b>Net pension liability - ending (a) - (b)</b>	<b>31,011,458</b>	<b>38,599,519</b>	<b>38,855,096</b>

# Schedule A – Required Supplementary Information



## Schedule of Employer Contributions

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined employer contribution	8,674,036	9,504,258	9,178,327	9,585,811	8,106,711	6,884,678	6,334,711	5,087,644	5,518,269	5,341,388
Actual employer contributions	<u>8,674,036</u>	<u>9,504,258</u>	<u>9,178,327</u>	<u>9,585,811</u>	<u>8,106,711</u>	<u>6,884,678</u>	<u>6,334,711</u>	<u>5,087,644</u>	<u>5,518,269</u>	<u>5,341,388</u>
Annual contribution deficiency (excess)	0	0	0	0	0	0	0	0	0	0
Covered-employee payroll	19,171,323	17,949,686	17,920,581	17,732,754	18,920,699	18,471,549	18,141,948	17,248,956	21,146,659	21,163,964
Actual contributions as a percentage of covered-employee payroll	45.24%	52.95%	51.22%	54.06%	42.85%	37.27%	34.92%	29.50%	26.10%	25.24%



## Schedule B – 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.



## Schedule B – 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 55 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



## Schedule B – Plan Provisions

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### 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:

<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.



## Schedule B – 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.



## Schedule C – 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. 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	0.03%	0.02%
30	0.04	0.02
35	0.07	0.04
40	0.10	0.06
45	0.13	0.09
50	0.17	0.13
55	0.28	0.25
60	0.55	0.47
65	1.06	0.91
70	1.82	1.57
75	3.15	2.53
80	5.65	4.19
85	10.11	7.16



## Schedule C – Actuarial Assumptions & Methods

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### E. 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

### F. 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





## Schedule C – Actuarial Assumptions & Methods

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

**G. Market Value of Assets:**

Used for GASB 68 accounting purposes.

**H. Actuarial Value of Assets:**

Used for funding purposes. 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.



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### SCHEDULE OF DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Year	Difference Between Expected and Actual Experience	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of the Differences Between Expected and Actual Experience					
			2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	Thereafter
2014-2015	\$0	0	\$0	\$0	\$0	\$0	\$0	\$0
2015-2016	(\$1,486,574)	4.55	(\$326,720)	(\$326,720)	(\$326,720)	(\$179,694)	\$0	\$0
2016-2017	(\$1,068,659)	4.84	(\$220,797)	(\$220,797)	(\$220,797)	(\$220,797)	(\$185,471)	\$0
			(\$547,517)	(\$547,517)	(\$547,517)	(\$400,491)	(\$185,471)	\$0



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES ARISING FROM DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2017 (c)	Deferred Outflows of Resources (a) – (c)	Deferred Inflows of Resources (b) – (c)
2014-2015	\$0	\$0	\$0	\$0	\$0
2015-2016	\$0	\$1,486,574	\$653,440	\$0	\$833,134
2016-2017	\$0	\$1,068,659	\$220,797	\$0	\$847,862
			\$874,237	\$0	\$1,680,996



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### SCHEDULE OF DIFFERENCES BETWEEN PROJECTED AND ACTUAL EARNINGS ON PENSION PLAN INVESTMENTS

Year	Difference Between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of the Differences Between Projected and Actual Earnings on Pension Plan Investments					
			2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	Thereafter
2014-2015	\$508,272	5.0	\$101,654	\$101,654	\$101,656	\$0	\$0	\$0
2015-2016	\$6,673,367	5.0	\$1,334,673	\$1,334,673	\$1,334,673	\$1,334,675	\$0	\$0
2016-2017	(\$1,922,591)	5.0	(\$384,518)	(\$384,518)	(\$384,518)	(\$384,518)	(\$384,519)	\$0
			\$1,051,809	\$1,051,809	\$1,051,811	\$950,157	(\$384,519)	\$0



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES ARISING FROM DIFFERENCES BETWEEN EXPECTED AND ACTUAL INVESTMENT EARNINGS

Year	Difference Between Projected and Actual Earnings on Pension Plan Investments (a)	Amounts Recognized in Pension Expense Through June 30, 2017 (b)	Amounts of Deferred Resources (Inflows)/Outflows (a) – (b)
2014-2015	\$508,272	\$304,962	\$203,310
2015-2016	\$6,673,367	\$2,669,346	\$4,004,021
2016-2017	(\$1,922,591)	(\$384,518)	(\$1,538,073)
		\$2,589,790	\$2,669,258



# Schedule D – Deferred Outflows and Deferred Inflows of Resources

## SCHEDULE OF ASSUMPTION CHANGES

Year	Assumption Changes	Recognition Period (Years)	Increase/(Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes					
			2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	Thereafter
2014-2015	\$0	0.0	\$0	\$0	\$0	\$0	\$0	\$0
2015-2016	\$0	4.55	\$0	\$0	\$0	\$0	\$0	\$0
2016-2017	\$0	4.84	\$0	\$0	\$0	\$0	\$0	\$0
			\$0	\$0	\$0	\$0	\$0	\$0



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### DEFERRED OUTFLOWS AND DEFERRED INFLOWS ARISING FROM ASSUMPTION CHANGES

Year	Changes Due to Changes in Assumptions (Decreases) / Increases (a)	Amounts Recognized in Pension Expense Through June 30, 2017 (b)	Amounts of Deferred Resources (Inflows)/Outflows (a) – (b)
2014-2015	\$0	\$0	\$0
2015-2016	\$0	\$0	\$0
2016-2017	\$0	\$0	\$0
		\$0	\$0



## Schedule D – Deferred Outflows and Deferred Inflows of Resources

### SUMMARY OF RECOGNIZED OUTFLOWS AND INFLOWS OF RESOURCES

	Net Increase/(Decrease) in Pension Expense					
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	Thereafter
Differences between Expected and Actual Experience	(\$547,517)	(\$547,517)	(\$547,517)	(\$400,491)	(\$185,471)	\$0
Changes of Assumptions	\$0	\$0	\$0	\$0	\$0	\$0
Differences between Projected and Actual Earnings on Pension Plan Investments	\$1,051,809	\$1,051,809	\$1,051,811	\$950,157	(\$384,519)	\$0
Grand Total	\$504,292	\$504,292	\$504,294	\$549,666	(\$569,990)	\$0