

# City of Plantation General Employees Retirement System

Actuarial Valuation Report as of October 1, 2018

Annual Employer Contribution for the Fiscal Year  
Ending September 30, 2020





January 11, 2019

Board of Trustees  
Plantation General Employees Retirement System  
Plantation, Florida

**Re: Plantation General Employees Retirement System  
Actuarial Valuation as of October 1, 2018**

Dear Board Members:

The results of the October 1, 2018 Actuarial Valuation of the Plantation General Employees Retirement System are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2020, and to determine the actuarial information for GASB Statement No. 67 and No. 68 for the fiscal year ending September 30, 2018. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through September 30, 2018. The valuation was based upon information furnished by the Plan Administrator concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

This report was prepared using certain assumptions approved by the Board as authorized under Florida Statutes and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Methods. The investment return assumption was prescribed by the Board and the assumed mortality rates detailed in the Actuarial Assumptions and Methods section were prescribed by the Florida Statutes in accordance with Florida House Bill 1309 (codified in Chapter 2015-157). All actuarial assumptions used in this report are reasonable for purposes of this valuation.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

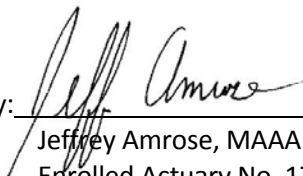
The signing actuaries are independent of the plan sponsor.


This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

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## SECTION A

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### DISCUSSION OF VALUATION RESULTS

## DISCUSSION OF VALUATION RESULTS

### Comparison of Required Employer Contributions

The following is a comparison of this year's required employer contribution as compared to last year's:

	Based on 10/1/2018 Valuation, for FYE 9/30/2020	Based on 10/1/2017 Valuation, for FYE 9/30/2019	Increase (Decrease)
Required Employer Contribution	\$ 7,636,773	\$ 7,396,717	\$ 240,056
As % of Covered Payroll	25.43 %	26.24 %	(0.81) %

The required contribution has been adjusted for interest such that payments would be made at the end of each quarter during the fiscal year. If the full contribution for the fiscal year ending September 30, 2020 is paid on October 1, 2019, the required employer contribution is \$7,303,433.

The actual employer contribution during the fiscal year ending September 30, 2018 was \$6,695,326 compared to the required contribution of \$6,695,326 based on an expedited payment schedule.

### Actuarial Experience

There was a net actuarial loss of \$604,578 (0.3% of the Actuarial Accrued Liability) for the year which means that actual experience was less favorable than expected. This loss is primarily due to fewer employment terminations than expected. The annual required contribution has increased by approximately \$55,000 or 0.18% of payroll as a result of the net actuarial loss.

### Revisions in Benefits

There have been no revisions in benefits since the last actuarial valuation.

### Revisions in Actuarial Assumptions and Methods

There have been no revisions in actuarial assumptions and methods since the last actuarial valuation.

### Funded Ratio

The funded ratio this year is 81.2% compared to 79.9% last year. The ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

## **Analysis of Change in Employer Contribution**

The components of the change in required contribution as a percent of payroll are as follows:

Contribution Rate Last Year	26.24 %
Experience (Gain)/Loss	0.18
Change in Assumptions and Methods	0.00
Amortization Payment on UAL	(0.72) *
Normal Cost Rate	(0.20)
Change in Administrative Expense	<u>(0.07)</u>
Contribution Rate This Year	25.43 %

*\*Due to 6.5% increase in covered payroll and actual 10-year average payroll growth increasing from 1.28% to 1.35%.*

## **Variability of Future Contribution Rates**

The Actuarial Cost Method is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year. Over time, if the year-to-year gains and losses offset each other, the contribution rate would be expected to return to the current level, but this does not always happen.

The Market Value of Assets exceeds the Actuarial Value of Assets by \$4,210,622 as of the valuation date (see Section C). This difference will be gradually recognized in the absence of offsetting losses. In turn, the computed employer contribution rate will gradually decrease by approximately 1.26% of covered payroll.

Another potential area of variability has to do with the annual payment on the unfunded accrued liability (UAL). This payment is computed as a level percent of covered payroll under the assumption that covered payroll will rise by 4.0% per year. According to the Florida Statutes, this payroll growth assumption may not exceed the average growth over the last ten years which was 1.35%. When the ten-year average falls below 4.0%, the amortization payments increase. For example, if the payroll growth assumption is lowered to 0%, the UAL payment would increase from \$4,533,025 to \$4,813,521.

## **Relationship to Market Value**

If Market Value had been the basis for the valuation, the City contribution rate would have been 24.2% and the funded ratio would have been 83.3%. In the absence of other gains and losses, the City contribution rate should decrease to that level over the next several years.

## **Recommendation**

Currently, the Plan's costs and liabilities are determined by anticipating that the pension fund will earn 7.50% per year net of investment expenses, or about 8% gross before investment expenses. Based on the plan's asset allocation, an assumed net rate of 6.5% to 7.0% would be more in line with projected expected returns over the next several years. We recommend that consideration be given to continue lowering the investment return assumption.



## **Conclusion**

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

## **RISKS ASSOCIATED WITH THE MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION**

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 1 may be considered as a minimum contribution rate that complies with the Board’s funding. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

## PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2018	2017
Ratio of the market value of assets to total payroll	5.8	5.7
Ratio of actuarial accrued liability to payroll	6.9	7.1
Ratio of actives to retirees and beneficiaries	1.1	1.1
Ratio of net cash flow to market value of assets	-1.9%	-1.3%

### RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

### RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

## **RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES**

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

## **RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS**

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

## **ADDITIONAL RISK ASSESSMENT**

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

**SECTION B**

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**VALUATION RESULTS**

<b>PARTICIPANT DATA</b>		
	<b>October 1, 2018</b>	<b>October 1, 2017</b>
<b>ACTIVE MEMBERS <sup>1</sup></b>		
Number	557	525
Covered Annual Payroll	\$ 28,875,543	\$ 27,104,526
Average Annual Payroll	\$ 51,841	\$ 51,628
Average Age	44.3	45.0
Average Past Service	9.1	9.6
Average Age at Hire	35.2	35.4
<b>RETIRES, BENEFICIARIES &amp; DROP</b>		
Number	429	410
Annual Benefits	\$ 10,949,954	\$ 10,240,621
Average Annual Benefit	\$ 25,524	\$ 24,977
Average Age	68.1	67.9
<b>DISABILITY RETIRES</b>		
Number	5	5
Annual Benefits	\$ 137,746	\$ 137,746
Average Annual Benefit	\$ 27,549	\$ 27,549
Average Age	48.7	47.7
<b>TERMINATED VESTED MEMBERS</b>		
Number	56	58
Annual Benefits	\$ 711,561	\$ 733,259
Average Annual Benefit	\$ 12,706	\$ 12,642
Average Age	46.5	47.0

<sup>1</sup> Does not include employees who transferred to the Police Officers' System.

<b>ACTUARIAL DETERMINED CONTRIBUTION (ADC)</b>		
A. Valuation Date	October 1, 2018	October 1, 2017
B. ADC to Be Paid During Fiscal Year End	9/30/2020	9/30/2019
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 4,533,025	\$ 4,396,203
E. Employer Normal Cost	2,490,807	2,405,297
F. ADC if Paid on the Valuation Date: D + E	7,023,832	6,801,500
G. ADC Adjusted for Frequency of Payments	7,344,049	7,111,580
H. ADC as % of Covered Payroll	25.43 %	26.24 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	4.00 %	4.00 %
J. Covered Payroll for Contribution Year	30,030,565	28,188,707
K. ADC for Contribution Year: H x J	7,636,773	7,396,717
L. ADC as % of Covered Payroll in Contribution Year: K ÷ J	25.43 %	26.24 %

**ACTUARIAL VALUE OF BENEFITS AND ASSETS**

A. Valuation Date	October 1, 2018	October 1, 2017
B. Actuarial Present Value of All Projected Benefits for		
1. Active Members		
a. Service Retirement Benefits	\$ 95,826,544	\$ 93,563,565
b. Vesting Benefits	6,857,648	6,713,720
c. Disability Benefits	6,701,935	6,426,786
d. Preretirement Death Benefits	2,297,716	2,252,204
e. Return of Member Contributions	<u>748,272</u>	<u>668,279</u>
f. Total	112,432,115	109,624,554
2. Inactive Members		
a. Service Retirees & Beneficiaries	110,468,902	103,227,883
b. Disability Retirees	1,358,589	1,362,917
c. Terminated Vested Members	<u>4,824,660</u>	<u>4,787,863</u>
d. Total	116,652,151	109,378,663
3. Total for All Members	229,084,266	219,003,217
C. Actuarial Accrued (Past Service) Liability	200,472,714	191,703,990
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	181,731,377	172,795,083
E. Plan Assets		
1. Market Value	166,960,563	153,967,618
2. Actuarial Value	162,749,941	153,121,268
F. Unfunded Actuarial Accrued Liability: C-E2	37,722,773	38,582,722
G. Actuarial Present Value of Projected Covered Payroll	212,423,992	195,607,053
H. Actuarial Present Value of Projected Member Contributions	13,281,021	12,862,417



**CALCULATION OF EMPLOYER NORMAL COST**

A. Valuation Date	October 1, 2018	October 1, 2017
B. Normal Cost for		
1. Service Retirement Benefits	\$ 2,991,424	\$ 2,900,821
2. Vesting Benefits	437,228	424,236
3. Disability Benefits	412,475	392,335
4. Preretirement Death Benefits	84,582	82,196
5. Return of Member Contributions	<u>315,891</u>	<u>309,092</u>
6. Total for Future Benefits	4,241,600	4,108,680
7. Assumed Amount for Administrative Expenses	<u>149,929</u>	<u>158,626</u>
8. Total Normal Cost	4,391,529	4,267,306
C. Expected Member Contribution	1,900,722	1,862,009
D. Employer Normal Cost: B8-C	2,490,807	2,405,297
E. Employer Normal Cost as a % of Covered Payroll	8.63%	8.87%

**LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY**

<b>A. Derivation of the Current UAAL</b>	
1. Last Year's UAAL	\$ 38,582,722
2. Last Year's Employer Normal Cost	2,405,297
3. Last Year's Contributions	6,695,326
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	3,074,101
b. 3 from dates paid	<u>248,599</u>
c. a - b	2,825,502
5. This Year's Expected UAAL Prior to Revision: 1 + 2 - 3 + 4c	37,118,195
6. Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions	0
7. This Year's Expected Revised UAAL: 5 + 6	37,118,195
8. This Year's Actual UAAL	37,722,773
9. This Year's Gain (Loss): 7 - 8	(604,578)
10. Gain (Loss) Due to Investments	289,742
11. Gain (Loss) Due to Other Causes	(894,320)

<b>B. UAAL Amortization Period and Payments</b>					
<b>Original UAAL</b>			<b>Current UAAL</b>		
<b>Years</b>	<b>Amortization Period (Years)</b>	<b>Amount</b>	<b>Years Remaining</b>	<b>Amount</b>	<b>Payment</b>
10/1/1992	30	\$ 1,186,913	4	\$ 245,337	\$ 66,856
10/1/1995	27	(251,209)	4	(145,956)	(39,774)
10/1/1996	26	358,810	4	243,225	66,280
10/1/1999	23	1,468,138	4	(147,045)	(40,071)
10/1/2000	22	1,834,941	4	1,510,012	411,487
10/1/2002	20	2,882,327	4	1,704,398	464,458
10/1/2003	30	3,259,722	12	3,221,393	363,609
10/1/2004	30	1,714,720	12	1,647,537	185,963
10/1/2004	30	(318,655)	12	(306,169)	(34,558)
10/1/2004	30	3,939,334	12	3,784,986	427,224
10/1/2005	30	(900,158)	12	(842,709)	(95,119)
10/1/2006	30	(188,490)	12	(175,995)	(19,865)
10/1/2007	30	359,256	12	329,301	37,169
10/1/2008	30	4,185,867	12	3,796,067	428,475
10/1/2009	30	4,143,171	12	3,662,218	413,367
10/1/2010	20	1,447,973	12	1,247,075	140,762
10/1/2010	20	(1,022,572)	12	(880,696)	(99,407)
10/1/2011	20	3,705,133	13	3,252,040	347,714
10/1/2011	20	2,515,858	13	2,208,198	236,104
10/1/2012	20	4,866,784	14	4,301,775	438,171
10/1/2012	20	2,716,797	14	2,401,391	244,601
10/1/2013	20	(1,370,010)	15	(1,219,813)	(118,937)
10/1/2013	20	2,885,263	15	2,568,949	250,484
10/1/2014	20	(2,934,233)	16	(2,681,438)	(251,325)
10/1/2014	20	3,077,265	16	2,812,147	263,576
10/1/2015	20	448,782	17	423,995	38,340
10/1/2016	20	(473,100)	18	(462,467)	(40,474)
10/1/2016	20	2,172,644	18	2,123,813	185,873
10/1/2017	20	2,507,795	19	2,496,623	212,073
10/1/2018	20	<u>604,578</u>	20	<u>604,578</u>	<u>49,969</u>
		\$44,823,644		\$37,722,770	\$4,533,025

**C. Amortization Schedule**

The UAAL is being amortized as a level percent of future covered payroll assuming such payroll will grow each year by the lesser of 4% and the average payroll growth over the last ten years, which was 1.35%. The expected amortization schedule is as follows:

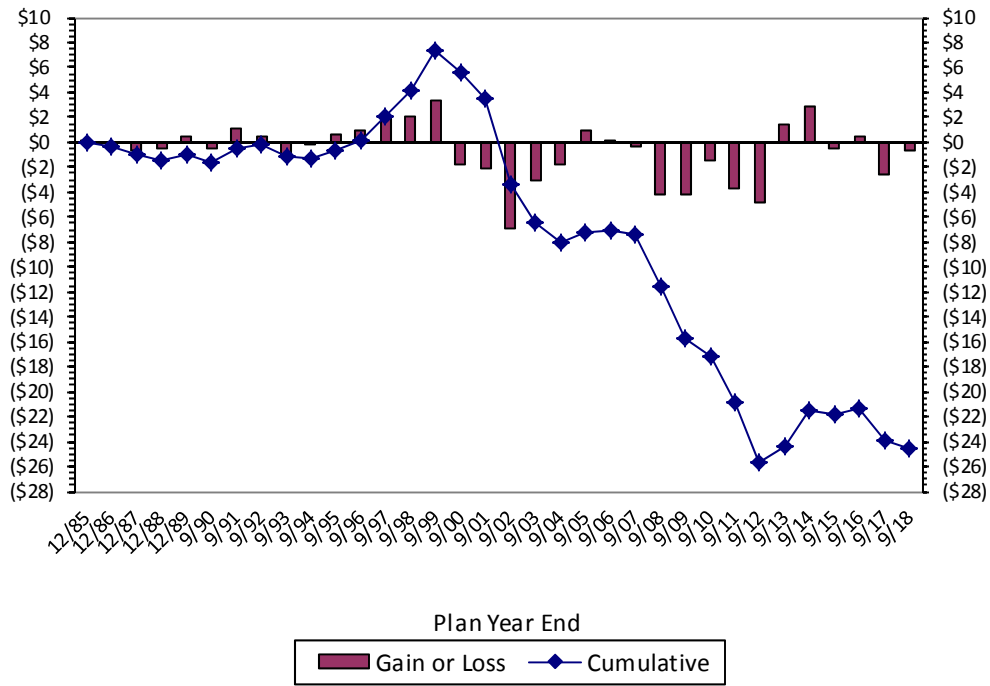
Amortization Schedule	
Year	Expected UAAL
2018	\$ 37,722,770
2019	35,678,985
2020	33,422,591
2021	30,936,851
2022	28,203,751
2028	12,921,887
2033	1,833,637
2038	0

## ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gains in previous years have been as follows:

Year Ended	Gain (Loss)
12/31/1985	\$ 181,199
12/31/1986	(336,412)
12/31/1987	(660,630)
12/31/1988	(451,052)
12/31/1989	382,086
9/30/1990	(539,869)
9/30/1991	1,078,459
9/30/1992	382,748
9/30/1993	(1,066,821)
9/30/1994	(93,091)
9/30/1995	583,263
9/30/1996	921,249
9/30/1997	1,828,716
9/30/1998	2,037,510
9/30/1999	3,346,772
9/30/2000	(1,805,911)
9/30/2001	(2,165,849)
9/30/2002	(6,863,232)
9/30/2003	(2,994,766)
9/30/2004	(1,714,720)
9/30/2005	900,158
9/30/2006	188,490
9/30/2007	(359,256)
9/30/2008	(4,185,867)
9/30/2009	(4,143,171)
9/30/2010	(1,447,973)
9/30/2011	(3,705,133)
9/30/2012	(4,866,784)
9/30/2013	1,370,010
9/30/2014	2,934,233
9/30/2015	(448,782)
9/30/2016	473,100
9/30/2017	(2,507,795)
9/30/2018	(604,578)

### Actuarial Gain (+) or Loss (-) (\$Mill)



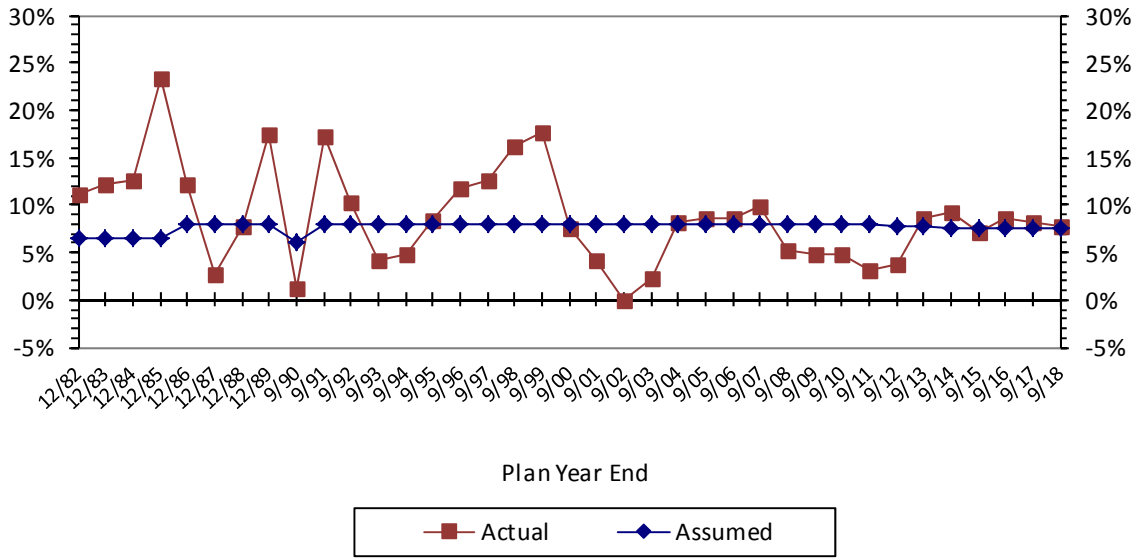
The fund earnings and salary increase assumptions have considerable impact on the cost of the plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
12/31/1982	11.1 %	6.5 %	10.9 %	6.0 %
12/31/1983	12.1	6.5	0.3	6.0
12/31/1984	12.7	6.5	9.2	6.0
12/31/1985	23.4	6.5	9.2	6.0
12/31/1986	12.1	8.0	9.3	8.0
12/31/1987	2.7	8.0	13.3	8.0
12/31/1988	7.8	8.0	10.5	8.0
12/31/1989	17.4	8.0	11.0	8.0
9/30/1990 (9 mos.)	1.2	6.0	4.4	6.0
9/30/1991	17.2	8.0	10.0	8.0
9/30/1992	10.3	8.0	2.7	8.0
9/30/1993	4.1	8.0	4.3	8.0
9/30/1994	4.9	8.0	6.5	8.0
9/30/1995	8.3	8.0	6.1	8.0
9/30/1996	11.7	8.0	3.7	7.0
9/30/1997	12.7	8.0	4.2	7.0
9/30/1998	16.1	8.0	4.4	7.0
9/30/1999	17.6	8.0	4.6	7.0
9/30/2000	7.5	8.0	5.4	6.0
9/30/2001	4.2	8.0	6.1	6.0
9/30/2002	(0.1)	8.0	5.6	6.0
9/30/2003	2.2	8.0	5.5	6.0
9/30/2004	8.1	8.0	5.6	6.0
9/30/2005	8.5	8.0	5.8	6.0
9/30/2006	8.7	8.0	5.8	6.0
9/30/2007	9.9	8.0	7.7	6.0
9/30/2008	5.3	8.0	7.1	6.0
9/30/2009	4.8	8.0	7.0	6.0
9/30/2010	4.8	8.0	0.6	6.0
9/30/2011	3.2	7.9	3.3	4.5
9/30/2012	3.8	7.8	0.6	4.5
9/30/2013	8.5	7.7	1.0	4.5
9/30/2014	9.3	7.6	0.4	4.5
9/30/2015	7.1	7.5	5.6	4.5
9/30/2016	8.5	7.5	5.8	4.5
9/30/2017	8.1	7.5	10.1	4.5
9/30/2018	7.7	7.5	3.8	4.5
Averages	8.7 %	---	5.9 %	---

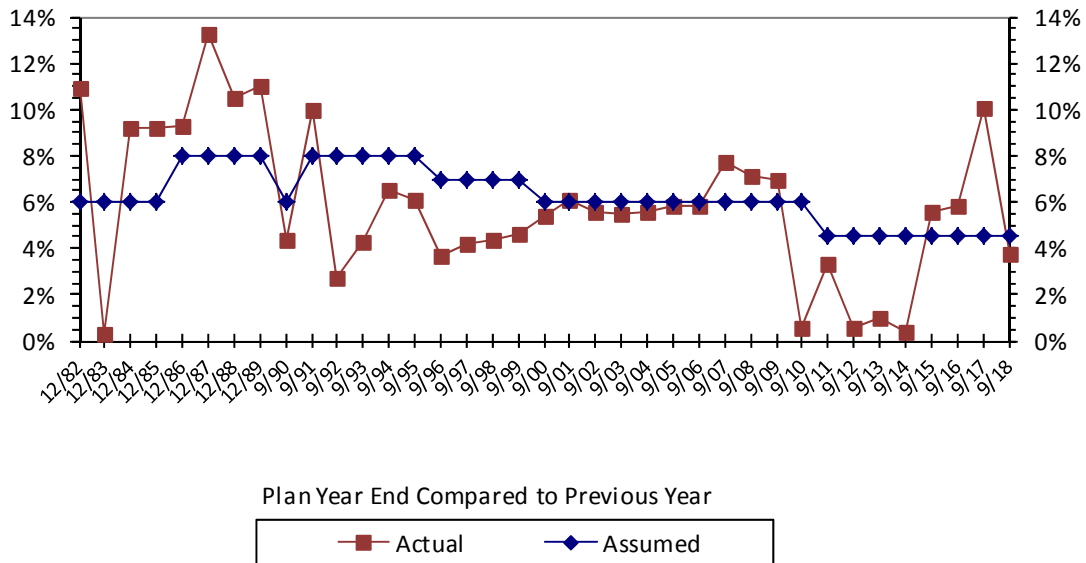
Total fund results prior to separation into General and Police in 1986.

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and end of each year.

History of Investment Return Based on Actuarial Value of Assets



History of Salary Increases





**Actual (A) Compared to Expected (E) Decrements  
Among Active Employees**

Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
									A	A	A	E	
9/30/2002	75	51	7	14	2	2	2	1	4	36	40	50	<b>558</b>
9/30/2003	62	52	7	16	0	2	1	1	3	41	44	50	<b>568</b>
9/30/2004	52	53	8	16	7	2	1	1	6	31	37	48	<b>567</b>
9/30/2005	62	60	6	22	2	2	0	1	6	46	52	48	<b>569</b>
9/30/2006	83	85	28	22	1	2	1	1	8	47	55	46	<b>567</b>
9/30/2007	78	70	17	18	0	2	0	1	2	51	53	49	<b>575</b>
9/30/2008	47	46	14	18	0	2	1	1	5	26	31	50	<b>576</b>
9/30/2009	33	45	16	23	0	2	3	1	3	23	26	48	<b>564</b>
9/30/2010	33	47	18	28	0	2	0	1	3	26	29	46	<b>550</b>
9/30/2011	34	60	33	27	0	2	0	1	4	23	27	43	<b>524</b>
9/30/2012	31	61	37	19	0	2	0	1	11	13	24	31	<b>494</b>
9/30/2013	52	49	19	13	0	2	0	1	5	25	30	30	<b>497</b>
9/30/2014	55	57	18	15	0	2	1	1	9	29	38	32	<b>495</b>
9/30/2015	49	49	12	18	1	2	1	1	3	32	35	33	<b>495</b>
9/30/2016	55	40	12	18	0	2	1	1	6	21	27	33	<b>510</b>
9/30/2017	59	44	13	20	0	2	0	1	9	22	31	35	<b>525</b>
9/30/2018	87	55	21	23	0	2	1	1	4	29	33	37	<b>557</b>
9/30/2019				23		2		1				42	
17 Yr Totals*	947	924	286	330	13	34	13	17	91	521	612	709	

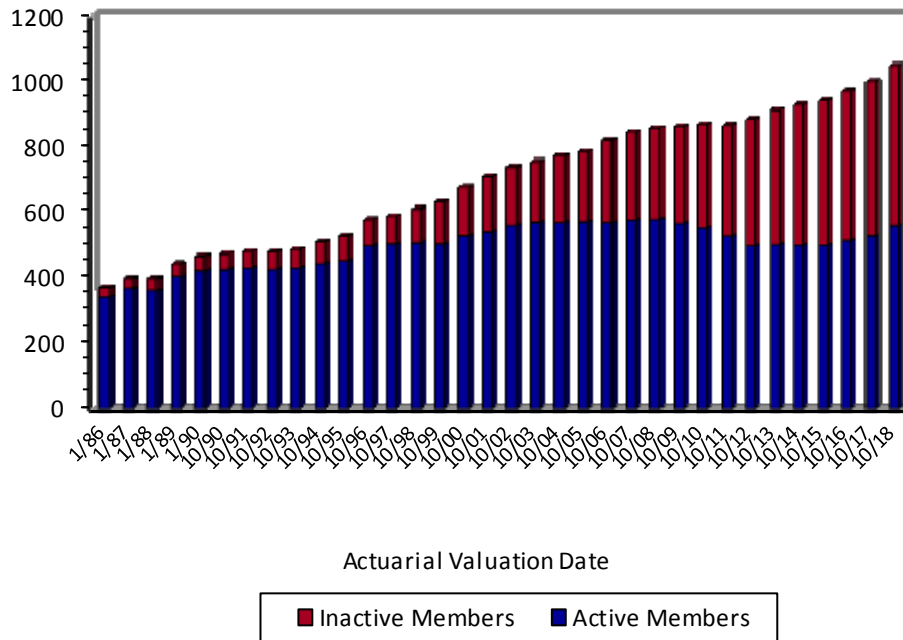
\* Totals are through current year.

## HISTORICAL VALUATION RESULTS

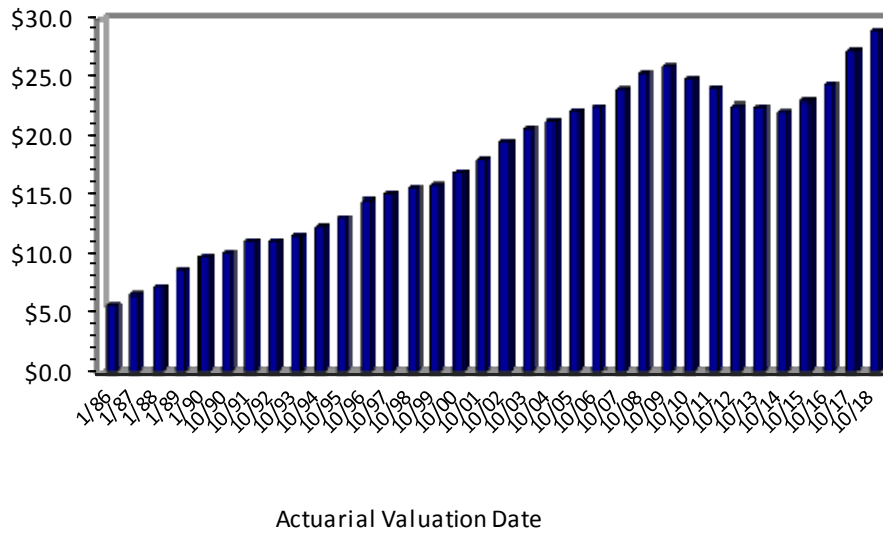
Val'n Date	Number of Members <sup>1</sup>		Covered Annual Payroll <sup>1</sup>	Actuarial Value of Assets	UFAAL	Employer Normal Cost	
	Active	Inactive				Amount	% of Pay
1/1/86	337	29	\$5,703,940	\$ 4,953,500	\$ 728,731	\$ 129,233	2.27 %
1/1/87	364	31	6,514,471	5,898,861	686,335	195,991	3.01
1/1/88	358	37	7,173,390	6,436,690	678,397	314,199	4.38
1/1/89	402	40	8,668,454	7,904,817	397,457	469,584	5.42
1/1/90	420	44	9,820,151	10,100,479	1,307,198	629,087	6.41
10/1/90	423	49	10,108,630	10,859,440	1,452,250	724,339	7.71
10/1/91	428	50	11,023,664	14,027,539	1,473,040	627,622	5.69
10/1/92	424	52	11,001,031	16,637,504	2,573,427	616,747	5.61
10/1/93	428	55	11,454,248	18,618,995	2,519,058	924,777	8.07
10/1/94	442	64	12,292,218	21,924,161	2,698,547	968,274	7.88
10/1/95	451	74	13,064,960	25,303,657	1,753,182	925,282	7.08
10/1/96	494	83	14,539,843	29,746,333	2,622,649	967,376	6.65
10/1/97	499	89	15,015,723	34,879,164	2,542,590	715,016	4.76
10/1/98	502	107	15,506,544	41,829,160	2,050,203	399,829	2.58
10/1/99	499	129	15,777,048	49,929,207	760,423	(57,421)	(0.36)
10/1/00	525	150	16,929,486	53,758,722	1,855,568	316,224	1.87
10/1/01	537	171	18,059,949	55,419,236	2,277,903	649,071	3.59
10/1/02	558	179	19,451,750	55,158,979	5,548,781	1,892,836	9.73
10/1/03	568	186	20,539,070	58,910,214	10,376,330	1,864,362	9.08
10/1/04	567	203	21,253,162	64,718,388	16,020,922	1,894,122	8.91
10/1/05	569	214	22,118,286	71,882,352	15,554,753	2,010,515	9.09
10/1/06	567	250	22,493,537	79,088,714	15,399,642	1,988,007	8.84
10/1/07	575	269	23,865,527	87,235,903	15,825,342	2,078,132	8.71
10/1/08	576	280	25,254,829	92,678,027	19,936,768	2,164,472	8.57
10/1/09	564	297	25,919,456	97,541,924	24,292,681	2,160,515	8.34
10/1/10	550	317	24,773,102	102,385,150	24,973,187	1,837,201	7.42
10/1/11	524	341	23,999,990	105,533,538	31,145,574	1,915,594	7.98
10/1/12	494	390	22,518,645	107,715,029	38,828,261	1,912,068	8.49
10/1/13	497	414	22,405,476	115,214,428	40,237,497	2,001,143	8.93
10/1/14	495	431	22,026,645	124,516,999	39,233,763	2,082,273	9.45
10/1/15	495	444	22,904,474	132,921,374	37,992,657	2,141,754	9.35
10/1/16	510	458	24,311,985	143,483,564	37,733,386	2,192,861	9.02
10/1/17	525	473	27,104,526	153,121,268	38,582,722	2,405,297	8.87
10/1/18	557	490	28,875,543	162,749,941	37,722,773	2,490,807	8.63

<sup>1</sup> Does not include employees who transferred to the Police Officers' System

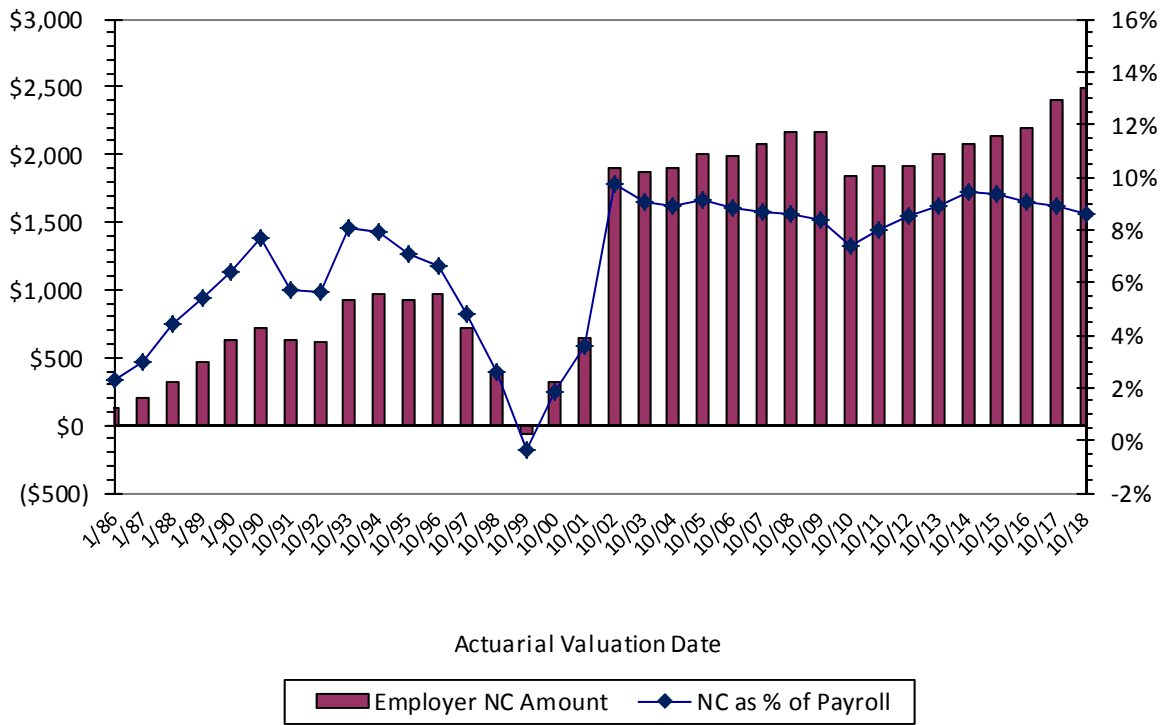
### Recent History of Number of Members



### Recent History of Covered Annual Payroll (\$Mill)



### Recent History of Employer Normal Cost (\$'000)



**RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS**

Valuation Date	Applies to Year Ending	Required Contributions		Actual Contributions
		Amount	% of Pay	
1/1/86	9/30/87	\$ 255,606	4.48 %	\$ 255,606
1/1/87	9/30/88	289,396	4.44	289,396
1/1/88	9/30/89	421,364	5.87	457,230
1/1/89	9/30/90	564,826	6.52	564,826
1/1/90	9/30/91	845,574	8.61	845,574
10/1/90	9/30/92	992,296	9.82	992,296
10/1/91	9/30/93	891,186	8.08	891,186
10/1/92	9/30/94	979,963	8.91	979,963
10/1/93	9/30/95	1,330,522	11.62	1,330,522
10/1/94	9/30/96	1,409,509	11.47	1,409,509
10/1/95	9/30/97	1,276,850	9.77	1,276,850
10/1/96	9/30/98	1,404,794	9.66	1,404,794
10/1/97	9/30/99	1,119,686	7.46	1,119,686
10/1/98	9/30/00	707,372	4.56	707,372
10/1/99	9/30/01	65,662	0.42	65,662
10/1/00	9/30/02	472,765	2.79	472,765
10/1/01	9/30/03	878,407	4.86	878,407
10/1/02	9/30/04	2,441,739	12.07	2,441,739
10/1/03	9/30/05	2,723,481	12.75	2,723,481
10/1/04	9/30/06	3,112,143	14.08	3,112,143
10/1/05	9/30/07	3,241,125	14.09	3,241,125
10/1/06	9/30/08	3,328,863	14.23	3,328,863
10/1/07	9/30/09	3,494,677	14.08	3,494,677
10/1/08	9/30/10	3,876,717	14.76	3,876,717
10/1/09	9/30/11	4,188,999	15.54	4,188,999
10/1/10	9/30/12	4,150,585	16.11	4,150,585
10/1/11	9/30/13	4,969,534	19.91	4,969,534
10/1/12	9/30/14	6,035,177	25.77	6,035,177
10/1/13	9/30/15	6,540,786	28.07	6,540,786
10/1/14	9/30/16	6,794,427	29.66	6,794,427
10/1/15	9/30/17	6,600,703	27.71	6,600,703
10/1/16	9/30/18	6,695,326	27.69	6,695,326
10/1/17	9/30/19	7,396,717	26.24	N/A
10/1/18	9/30/20	7,636,773	25.43	N/A

**SCHEDULE OF FUNDING PROGRESS**  
(Recent History of UAAL and Funded Ratio)

<b>Val'n Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Entry Age Actuarial Accrued Liability AAL: (b)</b>	<b>Unfunded AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL As % of Covered Payroll (b-a)/(c)</b>
10/1/91	\$14,027,539	\$14,366,577	\$339,038	97.6 %	\$11,023,664	3.1 %
10/1/92	16,637,504	16,647,429	9,925	99.9	11,001,031	0.1
10/1/93	18,618,995	21,046,362	2,427,367	88.5	11,454,248	21.2
10/1/94	21,924,161	24,684,374	2,760,213	88.8	12,292,218	22.5
10/1/95	25,303,657	26,779,370	1,475,713	94.5	13,064,960	11.3
10/1/96	29,746,333	30,904,897	1,158,564	96.3	14,539,843	8.0
10/1/97	34,879,164	34,284,547	(594,617)	101.7	15,015,723	(4.0)
10/1/98	41,829,160	38,656,225	(3,172,935)	108.2	15,506,544	(20.5)
10/1/99	49,929,207	42,611,083	(7,318,124)	117.2	15,777,048	(46.4)
10/1/00	53,758,722	46,385,838	(7,372,884)	115.9	16,929,486	(43.6)
10/1/01	55,419,236	55,018,316	(400,920)	100.7	18,059,949	(2.2)
10/1/02	55,158,979	64,111,663	8,952,684	86.0	19,451,750	46.0
10/1/03	58,910,214	69,286,544	10,376,330	85.0	20,539,070	50.5
10/1/04	64,718,388	80,739,310	16,020,922	80.2	21,253,162	75.4
10/1/05	71,882,352	87,437,105	15,554,753	82.2	22,118,286	70.3
10/1/06	79,088,714	94,488,356	15,399,642	83.7	22,493,537	68.5
10/1/07	87,235,903	103,061,245	15,825,342	84.6	23,865,527	66.3
10/1/08	92,678,027	112,614,795	19,936,768	82.3	25,254,829	78.9
10/1/09	97,541,924	121,834,605	24,292,681	80.1	25,919,456	93.7
10/1/10	102,385,150	127,358,337	24,973,187	80.4	24,773,102	100.8
10/1/11	105,533,538	136,679,112	31,145,574	77.2	23,999,990	129.8
10/1/12	107,715,029	146,543,290	38,828,261	73.5	22,518,645	172.4
10/1/13	115,214,428	155,451,925	40,237,497	74.1	22,405,476	179.6
10/1/14	124,516,999	163,750,762	39,233,763	76.0	22,026,645	178.1
10/1/15	132,921,374	170,914,031	37,992,657	77.8	22,904,474	165.9
10/1/16	143,483,564	181,216,950	37,733,386	79.2	24,311,985	155.2
10/1/17	153,121,268	191,703,990	38,582,722	79.9	27,104,526	142.3
10/1/18	162,749,941	200,472,714	37,722,773	81.2	28,875,543	130.6

## ACTUARIAL ASSUMPTIONS AND COST METHOD

### Valuation Methods

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) percent-of-payroll contributions over a reasonable period of future years.

**Actuarial Value of Assets** - The Actuarial Value of Assets phases in the difference between the expected return on the actuarial value of assets and the actual return on the market of assets at the rate of 20% per year. The Actuarial Value of Assets is further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

### Valuation Assumptions

**The actuarial assumptions used** in the valuation are shown in this Section. Both the economic and demographic assumptions were established following the Experience Study Report as of October 1, 2009.

### Economic Assumptions

**The investment return rate** assumed in the valuation is 7.5% per year, compounded annually (net after investment expenses).

The **Wage Inflation Rate** assumed in this valuation was 2.5% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macro-economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed wage inflation rate. Considering other economic assumptions, the 7.5% investment return rate translates to an assumed real rate of return over wage inflation of 5.0%.

The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at 4% per year. The most recent ten year average is 1.35%.

**Administrative Expenses** paid out of the fund are assumed to be the average of actual expenses over the previous two years.

**Pay increase assumptions** for individual active members are shown below. Part of the assumption for each age for merit and/or seniority increase, and the other 2.5% recognizes wage inflation, including price inflation, productivity increases, and other macro-economic forces.

**The rates of salary increase** used are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

Age	% Increase in Salary		
	Merit and Seniority	Base (Economic)	Total Increase
20	2.0%	2.5%	4.5%
25	2.0%	2.5%	4.5%
30	2.0%	2.5%	4.5%
35	2.0%	2.5%	4.5%
40	2.0%	2.5%	4.5%
45	2.0%	2.5%	4.5%
50	2.0%	2.5%	4.5%
55	2.0%	2.5%	4.5%

#### Demographic Assumptions

**The mortality table** is RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2016 Actuarial Valuation Report, as mandated by Florida House Bill 1309.

#### FRS Healthy Post-Retirement Mortality for Regular Class Members

Sample Attained Ages (in 2018)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.55 %	0.23 %	34.77	38.40
55	0.60	0.32	30.14	33.39
60	0.76	0.47	25.48	28.48
65	1.13	0.73	20.95	23.74
70	1.75	1.22	16.69	19.27
75	2.92	2.07	12.82	15.19
80	4.95	3.47	9.47	11.56

This assumption is used to measure the probabilities of each benefit payment being made after retirement.



### FRS Pre-Retirement Mortality for Regular Class Members

Sample Attained Ages (in 2018)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.21 %	0.15 %	35.69	38.75
55	0.36	0.24	30.57	33.61
60	0.61	0.39	25.64	28.59
65	1.07	0.70	20.99	23.76
70	1.75	1.22	16.69	19.27
75	2.92	2.07	12.82	15.19
80	4.95	3.47	9.47	11.56

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table used was 60% of the RP-2000 for Disabled Annuitants and 40% of the RP2000 Annuitant Mortality Table with a White Collar adjustment, set back 4 years for males and set forward 2 years for females, with no provision being made for future mortality improvements. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2016 Actuarial Valuation Report, as mandated by Florida House Bill 1309.

### FRS Disabled Mortality for Regular Class Members

Sample Attained Ages (in 2018)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	2.38 %	1.35 %	20.25	23.74
55	3.03	1.87	17.78	20.46
60	3.67	2.41	15.55	17.43
65	4.35	3.13	13.44	14.58
70	5.22	4.29	11.39	11.96
75	6.58	5.95	9.43	9.65
80	8.70	8.23	7.65	7.66

**The rates of retirement** used to measure the probability of eligible members retiring during the next year were as follows:

<b>Number of Years After First Eligibility for Normal Retirement</b>	<b>Probability of Normal Retirement</b>
0 - 1	30 %
1 - 2	15
2 - 3	15
3 - 4	15
4 - 5	20
5 - 6	20
6 - 7	30
7 - 8	30
8 - 9	30
9 - 10	30
10+	100

The rate of retirement is 7% for each year of eligibility for early retirement (and is 5% for transfers in Tier I).

**Rates of separation from active membership** were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

<b>Members with less than 5 Years of Service</b>	
<b>Years of Service</b>	<b>Turnover</b>
0 - 1	20.0%
1 - 2	17.0%
2 - 3	12.0%
3 - 4	10.0%
4 - 5	7.0%

<b>Members with more than 5 Years of Service</b>	
<b>Sample Ages</b>	<b>Turnover</b>
25	10.0%
30	8.8%
35	6.8%
40	5.4%
45	4.4%
50	3.4%
55	2.4%
60	2.0%

**Rates of disability** among active members (25% of disabilities are assumed to be service-connected).

<b>Sample Ages</b>	<b>% Becoming Disabled Within Next Year</b>
20	0.07 %
30	0.11
40	0.19
50	0.51
60	1.66

***Changes from Previous Valuation***

None.

## Miscellaneous and Technical Assumptions

<b><i>Administrative &amp; Investment Expenses</i></b>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost.
<b><i>Benefit Service</i></b>	Service calculated based on completed months is used to determine the amount of benefit payable.
<b><i>Decrement Operation</i></b>	Disability and mortality decrements operate during retirement eligibility.
<b><i>Decrement Timing</i></b>	Decrements of all types are assumed to occur at the beginning of the year.
<b><i>Eligibility Testing</i></b>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<b><i>Forfeitures</i></b>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<b><i>Incidence of Contributions</i></b>	Employer contributions are assumed to be made at the end of each biweekly pay period. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
<b><i>Marriage Assumption</i></b>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<b><i>Normal Form of Benefit</i></b>	A life annuity is the normal form of benefit.
<b><i>Pay Increase Timing</i></b>	End of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year following the valuation date.
<b><i>Service Credit Accruals</i></b>	It is assumed that members accrue one year of service credit per year.

## GLOSSARY

<b><i>Actuarial Accrued Liability (AAL)</i></b>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<b><i>Actuarial Assumptions</i></b>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<b><i>Actuarial Cost Method</i></b>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<b><i>Actuarial Equivalent</i></b>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<b><i>Actuarial Present Value (APV)</i></b>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<b><i>Actuarial Present Value of Future Benefits (APVFB)</i></b>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<b><i>Actuarial Valuation</i></b>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.
<b><i>Actuarial Value of Assets</i></b>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).

<b><i>Actuarially Determined Contribution (ADC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and Amortization Payment.
<b><i>Amortization Method</i></b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Closed Amortization Period</i></b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between the normal cost rate from last year and the normal cost rate from this year.
<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.
<b><i>GASB No. 67 and GASB No. 68</i></b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

<b><i>Normal Cost</i></b>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<b><i>Open Amortization Period</i></b>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<b><i>Unfunded Actuarial Accrued Liability</i></b>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<b><i>Valuation Date</i></b>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

## SECTION C

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### PENSION FUND INFORMATION



## Statement of Plan Assets

Item	September 30	
	2018	2017
A. Cash and Cash Equivalents (Operating Cash)	\$ 7,622	\$ 6,803
B. Receivables		
1. Member Contributions	\$ -	\$ -
2. Employer Contributions	-	-
3. State Contributions	-	-
4. Investment Income and Other Receivables	1,864,019	2,157,879
5. Total Receivables	\$ 1,864,019	\$ 2,157,879
C. Investments		
1. Short Term Investments	\$ 3,837,145	\$ 4,769,115
2. Domestic Equities	101,771,156	85,122,128
3. International Equities	22,687,846	21,432,295
4. Domestic Fixed Income	46,823,960	44,815,883
5. International Fixed Income	-	-
6. Real Estate	-	6,851,471
7. Private Equity	-	-
8. Total Investments	\$ 175,120,107	\$ 162,990,892
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	(1,925,255)	(2,716,774)
3. Total Liabilities	\$ (1,925,255)	\$ (2,716,774)
E. Total Market Value of Assets Available for Benefits	\$ 175,066,493	\$ 162,438,800
F. Reserves		
1. State Contribution Reserve	\$ -	\$ -
2. DROP Accounts	8,105,930	8,471,182
3. Total Reserves	\$ 8,105,930	\$ 8,471,182
G. Total Market Value of Assets Available for Benefits	\$ 166,960,563	\$ 153,967,618
H. Allocation of Investments		
1. Short Term Investments	2.19%	2.93%
2. Domestic Equities	58.11%	52.22%
3. International Equities	12.96%	13.15%
4. Domestic Fixed Income	26.74%	27.50%
5. International Fixed Income	0.00%	0.00%
6. Real Estate	0.00%	4.20%
7. Private Equity	0.00%	0.00%
8. Total Investments	100.00%	100.00%

## Statement of Net Changes in Plan Assets

Item	September 30	
	2018	2017
A. Market Value of Assets at Beginning of Year	\$ 162,438,800	\$ 147,949,787
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 1,906,695	\$ 1,897,009
b. Employer Contributions	6,695,326	6,600,703
c. State Contributions	-	-
d. Purchased Service Credit	-	-
e. Total	<u>\$ 8,602,021</u>	<u>\$ 8,497,712</u>
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 4,784,039	\$ 3,886,711
b. Net Realized Gains/(Losses)	7,729,717	3,655,163
c. Net Unrealized Gains/(Losses)	3,892,413	9,534,367
d. Investment Expenses	<u>(746,423)</u>	<u>(727,291)</u>
e. Net Investment Income	\$ 15,659,746	\$ 16,348,950
3. Benefits and Refunds		
a. Refunds	\$ (56,152)	\$ (370,114)
b. Regular Benefits Paid	(8,699,676)	(8,396,891)
c. DROP Distributions	<u>(2,724,802)</u>	<u>(1,444,230)</u>
e. Total	\$ (11,480,630)	\$ (10,211,235)
4. Administrative and Miscellaneous Expenses	\$ (153,444)	\$ (146,414)
5. Transfers	\$ -	\$ -
C. Market Value of Assets at End of Year		
1. Market Value at End of Year	\$ 175,066,493	\$ 162,438,800
2. Less DROP Account Balances	8,105,930	8,471,182
3. Final Market Value at End of Year	\$ 166,960,563	\$ 153,967,618

**Reconciliation of DROP Accounts**

<b>Year Ended 9/30</b>	<b>Balance at Beginning of Year</b>	<b>Adjustments</b>	<b>Credits</b>	<b>Interest</b>	<b>Distributions</b>	<b>Balance at End of Year</b>
2010	\$1,007,046		\$ 656,203	\$ 118,624	\$ (143,027)	\$1,638,846
2011	\$1,638,846		\$ 1,060,899	\$ (55,396)	\$ (246,362)	\$2,397,987
2012	\$2,397,987		\$ 1,517,244	\$ 466,760	\$ (777,807)	\$3,604,184
2013	\$3,604,184		\$ 1,672,568	\$ 496,921	\$ (1,576,230)	\$4,197,443
2014	\$4,197,443		\$ 1,574,322	\$ 418,867	\$ (1,026,635)	\$5,163,997
2015	\$5,163,997		\$ 1,736,367	\$ (137,703)	\$ (615,667)	\$6,146,995
2016	\$6,146,995	\$ 5,827	\$ 1,695,167	\$ 524,075	\$ (537,467)	\$7,834,597
2017	\$7,834,597		\$ 1,403,514	\$ 677,301	\$ (1,444,230)	\$8,471,182
2018	\$8,471,182		\$ 1,712,209	\$ 647,341	\$ (2,724,802)	\$8,105,930

## Actuarial Value of Assets

Year Ended September 30:	2018	2017
A. Funding Value Beginning of Year	\$161,592,450	\$151,318,161
B. Market Value End of Year	175,066,493	162,438,800
C. Market Value Beginning of Year	162,438,800	147,949,787
D. Non-Investment Net Cash Flow	(3,032,053)	(1,859,937)
E. Investment Income		
E1. Market Total: B - C - D	15,659,746	16,348,950
E2. Amount for Immediate Recognition	12,005,732	11,279,114
E3. Amount for Phased-In Recognition: E1-E2	3,654,014	5,069,836
F. Phased-In Recognition of Investment Income		
F1. Current Year: 0.20 x E3	730,803	1,013,967
F2. First Prior Year	1,013,967	366,862
F3. Second Prior Year	366,862	(2,488,216)
F4. Third Prior Year	(2,488,216)	666,326
F5. Fourth Prior Year	666,326	1,296,173
F6. Total Recognized Investment Gain/(loss)	289,742	855,112
G. Funding Value End of Year		
G1. Preliminary Funding Value: A + D + E2 + F6	170,855,871	161,592,450
G2. Upper Corridor Limit: 120% x B	210,079,792	194,926,560
G3. Lower Corridor Limit: 80% x B	140,053,194	129,951,040
G4. Funding Value	170,855,871	161,592,450
G5. Reserved for DROP Balances	8,105,930	8,471,182
G6. Adjusted Funding Value	162,749,941	153,121,268
H. Difference between Market & Funding Value	4,210,622	846,350
I. Recognized Net Rate of Return	7.68%	8.07%
J. Net Market Value Rate of Return	9.73%	11.12%
K. Ratio of Funding Value to Market Value	97.59%	99.48%

Year Ending	Investment Rate of Return	
	Market Value	Actuarial Value
12/31/1974	(2.4) %	NA
12/31/1975	12.5	NA
12/31/1976	18.0	NA
12/31/1977	0.7	7.7 %
12/31/1978	2.4	6.5
12/31/1979	8.7	8.5
12/31/1980	4.8	9.9
12/31/1981	10.4	10.2
12/31/1982	24.1	11.1
12/31/1983	12.2	12.1
12/31/1984	12.2	12.7
12/31/1985	25.4	23.4
12/31/1986	18.5	12.1
12/31/1987	8.5	2.7
12/31/1988	8.0	7.8
12/31/1989	18.4	17.4
9/30/1990 (9 mos.)	0.6	1.2
9/30/1991	20.1	17.2
9/30/1992	11.8	10.3
9/30/1993	12.2	4.1
9/30/1994	0.1	4.9
9/30/1995	17.4	8.3
9/30/1996	13.8	11.7
9/30/1997	24.7	12.7
9/30/1998	4.3	16.1
9/30/1999	12.4	17.6
9/30/2000	8.7	7.5
9/30/2001	(4.8)	4.2
9/30/2002	(3.1)	(0.1)
9/30/2003	10.5	2.2
9/30/2004	8.9	8.1
9/30/2005	10.6	8.5
9/30/2006	9.0	8.7
9/30/2007	13.9	9.9
9/30/2008	(13.4)	5.3
9/30/2009	5.8	4.8
9/30/2010	9.9	4.8
9/30/2011	0.2	3.2
9/30/2012	16.9	3.8
9/30/2013	13.4	8.5
9/30/2014	9.8	9.3
9/30/2015	(2.0)	7.1
9/30/2016	9.1	8.5
9/30/2017	11.1	8.1
9/30/2018	9.7	7.7
<b>Average Returns:</b>		
Last 5 Years	7.4 %	8.1 %
Last 10 Years	8.3	6.5

The above rates are based on the retirement system's financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows. Results up to 1987 are prior to separation of Fund into General and Police Funds. Market Value is net of investment expenses starting in 2006.

## **SECTION D**

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### **FINANCIAL ACCOUNTING INFORMATION**

**FASB NO. 35 INFORMATION**

A. Valuation Date	October 1, 2018	October 1, 2017
<b>B. Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 111,827,491	\$ 104,590,800
b. Terminated Vested Members	4,824,660	4,787,863
c. Other Members	<u>60,971,112</u>	<u>59,027,864</u>
d. Total	177,623,263	168,406,527
2. Non-Vested Benefits	4,108,114	4,388,556
3. Total: 1d + 2	181,731,377	172,795,083
4. Accumulated Contributions of Active Members	17,389,010	17,244,867
<b>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Total Value at Beginning of Year	172,795,083	165,929,459
2. Changes During the Period Attributable to:		
a. Plan Amendment	0	0
b. Change in Actuarial Assumptions	0	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	19,404,331	17,036,143
d. Benefits Paid	<u>(10,468,037)</u>	<u>(10,170,519)</u>
e. Net Increase	8,936,294	6,865,624
3. Total Value at End of Period	181,731,377	172,795,083
<b>D. Market Value of Assets</b>	166,960,563	153,967,618

**SCHEDULE OF CHANGES IN THE EMPLOYER'S  
NET PENSION LIABILITY AND RELATED RATIOS  
GASB Statement No. 67**

Fiscal year ending September 30,	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Total Pension Liability</b>					
Service Cost	\$ 4,108,680	\$ 3,804,107	\$ 3,690,698	\$ 3,516,147	\$ 3,620,576
Interest	14,628,265	13,825,887	13,259,986	12,653,489	12,085,438
Benefit Changes	-	-	-	-	-
Difference between actual & expected experience	3,762,505	1,324,657	(238,951)	(1,178,088)	79,049
Assumption Changes	-	2,285,087	-	3,269,881	-
Benefit Payments	(11,424,478)	(9,841,121)	(8,156,267)	(7,691,097)	(7,935,805)
Refunds	(56,152)	(370,114)	(192,108)	(219,397)	(566,255)
<b>Net Change in Total Pension Liability</b>	<b>11,018,820</b>	<b>11,028,503</b>	<b>8,363,358</b>	<b>10,350,935</b>	<b>7,283,003</b>
<b>Total Pension Liability - Beginning</b>	<b>196,675,167</b>	<b>185,646,664</b>	<b>177,283,306</b>	<b>166,932,371</b>	<b>159,649,368</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 207,693,987</b>	<b>\$ 196,675,167</b>	<b>\$ 185,646,664</b>	<b>\$ 177,283,306</b>	<b>\$ 166,932,371</b>
<b>Plan Fiduciary Net Position</b>					
Contributions - Employer	\$ 6,695,326	\$ 6,600,703	\$ 6,794,427	\$ 6,540,786	\$ 6,035,177
Contributions - Employer (From State)	-	-	-	-	-
Contributions - Non-Employer Contributing Entity	-	-	-	-	-
Contributions - Member	1,906,695	1,897,009	2,105,922	1,708,924	1,758,587
Net Investment Income	15,659,746	16,348,950	12,278,732	(2,707,473)	12,374,616
Benefit Payments	(11,424,478)	(9,841,121)	(8,156,267)	(7,691,097)	(7,935,805)
Refunds	(56,152)	(370,114)	(192,108)	(219,397)	(566,255)
Administrative Expense	(153,444)	(146,414)	(170,838)	(138,326)	(142,190)
Other	-	-	-	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>12,627,693</b>	<b>14,489,013</b>	<b>12,659,868</b>	<b>(2,506,583)</b>	<b>11,524,130</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>162,438,800</b>	<b>147,949,787</b>	<b>135,289,919</b>	<b>137,796,502</b>	<b>126,272,372</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 175,066,493</b>	<b>\$ 162,438,800</b>	<b>\$ 147,949,787</b>	<b>\$ 135,289,919</b>	<b>\$ 137,796,502</b>
<b>Net Pension Liability - Ending (a) - (b)</b>	<b>32,627,494</b>	<b>34,236,367</b>	<b>37,696,877</b>	<b>41,993,387</b>	<b>29,135,869</b>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>84.29 %</b>	<b>82.59 %</b>	<b>79.69 %</b>	<b>76.31 %</b>	<b>82.55 %</b>
<b>Covered Payroll*</b>	<b>\$ 27,104,526</b>	<b>\$ 24,311,985</b>	<b>\$ 22,904,474</b>	<b>\$ 22,026,645</b>	<b>\$ 22,405,476</b>
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	<b>120.38 %</b>	<b>140.82 %</b>	<b>164.58 %</b>	<b>190.65 %</b>	<b>130.04 %</b>

\* Expected covered payroll



**SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY**  
**GASB Statement No. 67**

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll*	Net Pension Liability as a % of Covered Payroll
2014	\$ 166,932,371	\$ 137,796,502	\$ 29,135,869	82.55%	\$ 22,405,476	130.04%
2015	177,283,306	135,289,919	41,993,387	76.31%	22,026,645	190.65%
2016	185,646,664	147,949,787	37,696,877	79.69%	22,904,474	164.58%
2017	196,675,167	162,438,800	34,236,367	82.59%	24,311,985	140.82%
2018	207,693,987	175,066,493	32,627,494	84.29%	27,104,526	120.38%

\* Expected covered payroll

**NOTES TO EMPLOYER'S NET PENSION LIABILITY**  
**GASB Statement No. 67**

**Valuation Date:** October 1, 2017  
**Measurement Date:** September 30, 2018

**Methods and Assumptions Used to Determine Net Pension Liability:**

Actuarial Cost Method	Entry Age Normal
Inflation	2.5%
Salary Increases	4.5%
Investment Rate of Return	7.50%
Retirement Age	Experience-based table of rates based on number of years after first eligibility for normal retirement
Mortality	The healthy post-retirement mortality table is the RP-2000 Mortality Table for annuitants with future improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2016 FRS actuarial valuation.

**Other Information:**

Notes See Discussion of Valuation Results from the October 1, 2017 Actuarial Valuation Report.

**SCHEDULE OF CONTRIBUTIONS**  
**GASB Statement No. 67**

<u>FY Ending</u> <u>September 30,</u>	<u>Actuarially</u> <u>Determined</u> <u>Contribution</u>	<u>Actual</u> <u>Contribution</u>	<u>Contribution</u> <u>Deficiency</u> <u>(Excess)</u>	<u>Covered</u> <u>Payroll*</u>	<u>Actual Contribution</u> <u>as a % of</u> <u>Covered Payroll</u>
2014	\$ 6,035,177	\$ 6,035,177	\$ -	\$ 22,405,476	26.94%
2015	6,540,786	6,540,786	-	22,026,645	29.69%
2016	6,794,427	6,794,427	-	22,904,474	29.66%
2017	6,600,703	6,600,703	-	24,311,985	27.15%
2018	6,695,326	6,695,326	-	27,104,526	24.70%

\* Expected covered payroll

**NOTES TO SCHEDULE OF CONTRIBUTIONS**  
**GASB Statement No. 67**

**Valuation Date:** October 1, 2016  
**Notes** Actuarially determined contributions are calculated as of October 1, which is two year(s) prior to the end of the fiscal year in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	20 years
Asset Valuation Method	5-year smoothed market
Inflation	2.5%
Salary Increases	4.5%
Investment Rate of Return	7.5%
Retirement Age	Experience-based table of rates based on number of years after first eligibility for normal retirement

**Mortality** The healthy post-retirement mortality table is the RP-2000 Mortality Table for annuitants with future improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2016 FRS actuarial valuation.

**Other Information:**

**Notes** See Discussion of Valuation Results from October 1, 2016 Actuarial Valuation Report.

**SINGLE DISCOUNT RATE**  
**GASB Statement No. 67**

A single discount rate of 7.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan’s net pension liability, calculated using a single discount rate of 7.50%, as well as what the plan’s net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

<b>1% Decrease</b>	<b>Current Single Discount Rate Assumption</b>	<b>1% Increase</b>
<b>6.50%</b>	<b>7.50%</b>	<b>8.50%</b>
\$55,365,347	\$32,627,494	\$13,507,085

**SECTION E**

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**MISCELLANEOUS INFORMATION**

RECONCILIATION OF MEMBERSHIP DATA		
	From 10/1/17 To 10/1/18	From 10/1/16 To 10/1/17
<b>A. Active Members</b>		
1. Number Included in Last Valuation	525	510
2. New Members Included in Current Valuation	87	58
3. Non-Vested Employment Terminations	(29)	(22)
4. Vested Employment Terminations	(1)	(7)
5. DROP Participation	(14)	(8)
6. Service Retirements	(7)	(5)
7. Disability Retirements	0	0
8. Deaths	(1)	0
9. Data Correction (Rehire)	0	1
10. Transfer to Police	<u>(3)</u>	<u>(2)</u>
11. Number Included in This Valuation	557	525
<b>B. Transfers to Police Plan</b>		
1. Number Included in Last Valuation	37	38
2. Additions from Active Members	3	2
3. Payments Commenced	0	0
4. Reclassification of DROP members to Vested Termination Status	(2)	(1)
5. Vested Termination	(2)	(1)
6. Non-Vested Termination	(2)	(1)
7. Other (Police Rehire)	<u>0</u>	<u>0</u>
8. Number Included in This Valuation	34	37
<b>C. Vested Terminated Members</b>		
1. Number Included in Last Valuation	58	57
2. Additions from Active Members	1	7
3. Additions from Transfers	4	2
4. Lump Sum Payments/Refund of Contributions	(1)	(2)
5. Payments Commenced	(6)	(6)
6. Deaths	0	0
7. Other: Returned to Work Vesting Tier 1 Benefit	<u>0</u>	<u>0</u>
8. Number Included in This Valuation	56	58
<b>D. DROP Plan Members</b>		
1. Number Included in Last Valuation	49	55
2. Additions from Active Members	14	8
3. Retirements	(21)	(13)
4. Deaths	0	(1)
5. Other (Data adjustment)	<u>0</u>	<u>0</u>
5. Number Included in This Valuation	42	49
<b>E. Service Retirees, Disability Retirees and Beneficiaries</b>		
1. Number Included in Last Valuation	366	346
2. Additions from Active Members	7	5
3. Additions from Terminated Vested Members	6	6
4. Additions from DROP Plan	21	14
5. Deaths Resulting in No Further Payments	(8)	(5)
6. End of Certain Period, No Further Payments	0	0
7. Other: (Data adjustment)	<u>0</u>	<u>0</u>
8. Number Included in This Valuation	392	366

**City of Plantation General Employees Retirement Plan - Active Members as of October 1, 2018**

Ages	Years of Service to Valuation Date											Totals	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30+		
15-19 No.	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pay	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg Pay	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24 No.	8	2	5	2	1	2	0	0	0	0	0	0	20
Total Pay	243,828	64,712	157,554	60,342	30,171	70,927	0	0	0	0	0	0	627,534
Avg Pay	30,478	32,356	31,511	30,171	30,171	35,464	0	0	0	0	0	0	31,377
25-29 No.	19	9	7	4	8	8	1	0	0	0	0	0	56
Total Pay	766,832	340,856	232,261	137,217	301,534	302,519	35,299	0	0	0	0	0	2,116,518
Avg Pay	40,360	37,873	33,180	34,304	37,692	37,815	35,299	0	0	0	0	0	37,795
30-34 No.	25	11	6	5	2	10	5	0	0	0	0	0	64
Total Pay	996,342	440,989	273,543	159,092	68,715	532,567	235,191	0	0	0	0	0	2,706,439
Avg Pay	39,854	40,090	45,590	31,818	34,358	53,257	47,038	0	0	0	0	0	42,288
35-39 No.	11	7	7	2	5	16	22	8	0	0	0	0	78
Total Pay	480,209	245,473	308,437	107,034	216,566	756,396	237,128	427,879	0	0	0	0	2,779,122
Avg Pay	43,655	35,068	44,062	53,517	43,313	47,275	56,233	53,485	0	0	0	0	35,630
40-44 No.	4	7	3	0	4	8	16	12	4	0	0	0	58
Total Pay	140,789	344,689	103,421	0	161,441	500,315	877,744	759,001	270,467	0	0	0	3,157,867
Avg Pay	35,197	49,241	34,474	0	40,360	62,539	54,859	63,250	67,617	0	0	0	54,446
45-49 No.	6	1	6	1	5	10	17	16	11	1	0	0	74
Total Pay	248,766	38,777	213,966	56,638	207,777	527,174	51,548	1,308,674	1,014,387	54,071	0	0	3,721,778
Avg Pay	41,461	38,777	35,661	56,638	41,555	52,717	61,856	81,792	92,217	54,071	0	0	50,294
50-54 No.	4	6	5	2	1	15	17	7	10	2	3	0	72
Total Pay	143,410	257,579	274,520	96,294	32,677	775,173	4,449	394,250	713,681	143,846	199,243	0	3,035,122
Avg Pay	35,852	42,930	54,904	48,147	32,677	51,678	59,085	56,321	71,368	71,923	66,414	0	42,154
55-59 No.	4	0	0	3	4	6	19	17	11	5	1	0	70
Total Pay	216,914	0	0	103,663	167,182	402,066	893,624	1,071,164	736,788	355,592	67,038	0	4,014,031
Avg Pay	54,228	0	0	34,554	41,796	67,011	47,033	63,010	66,981	71,118	67,038	0	57,343
60-64 No.	2	2	0	2	1	6	16	8	4	1	2	0	44
Total Pay	83,158	104,188	0	59,572	58,421	213,800	889,293	566,964	262,295	134,070	109,270	0	2,481,031
Avg Pay	41,579	52,094	0	29,786	58,421	35,633	55,581	70,870	65,574	134,070	54,635	0	56,387
65-99 No.	1	2	2	1	0	2	10	2	1	0	0	0	21
Total Pay	54,856	140,535	194,240	65,882	0	92,048	537,303	91,067	60,170	0	0	0	1,236,101
Avg Pay	54,856	70,268	97,120	65,882	0	46,024	53,730	45,534	60,170	0	0	0	58,862
<b>Total No.</b>	<b>84</b>	<b>47</b>	<b>41</b>	<b>22</b>	<b>31</b>	<b>83</b>	<b>123</b>	<b>70</b>	<b>41</b>	<b>9</b>	<b>6</b>	<b>0</b>	<b>557</b>
<b>Total Pay</b>	<b>3,375,104</b>	<b>1,977,798</b>	<b>1,757,942</b>	<b>845,734</b>	<b>1,244,484</b>	<b>4,172,985</b>	<b>3,761,579</b>	<b>4,618,999</b>	<b>3,057,788</b>	<b>687,579</b>	<b>375,551</b>	<b>0</b>	<b>25,875,543</b>
<b>Avg Pay</b>	<b>40,180</b>	<b>42,081</b>	<b>42,877</b>	<b>38,442</b>	<b>40,145</b>	<b>50,277</b>	<b>30,582</b>	<b>65,986</b>	<b>74,580</b>	<b>76,398</b>	<b>62,592</b>	<b>0</b>	<b>46,455</b>



**City of Plantation General Employees Retirement Plan - Inactive Members as of October 1, 2018**

Age	Terminated			Survivor	Grand Total
	Vested	Disabled	Retired	Beneficiaries	
	Total Number	Total Number	Total Number	Number	
Under 20	0	0	0	0	0
20 - 24	1	0	0	0	1
25 - 29	1	0	0	0	1
30 - 34	5	0	0	2	7
35 - 39	5	0	0	3	8
40 - 44	3	1	0	0	4
45 - 49	21	2	0	1	24
50 - 54	19	2	15	2	38
55 - 59	0	0	63	2	65
60 - 64	1	0	86	3	90
65 - 69	0	0	68	7	75
70 - 74	0	0	66	4	70
75 - 79	0	0	52	5	57
80 - 84	0	0	25	6	31
85 - 89	0	0	8	5	13
90 - 94	0	0	4	0	4
95 - 99	0	0	1	0	1
100 & Over	0	0	0	1	1
<b>Total</b>	<b>56</b>	<b>5</b>	<b>388</b>	<b>41</b>	<b>490</b>
Avg Age	46	48	68	68	65

**SECTION F**

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**SUMMARY OF PLAN PROVISIONS**

## SUMMARY OF PLAN PROVISIONS

### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Plantation, Florida, Part II, Chapter 18, and was most recently amended under Ordinance No. 2556 passed and adopted on April 26, 2017. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

### B. Effective Date

July 1, 1967

### C. Plan Year

October 1 through September 30

### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

### E. Eligibility Requirements

All full-time, General Employees with one year of continuous employment prior to 9/1/73; after 9/1/73 all full-time general employees. Tier Two members are employees hired on or after 10/1/2010 as well as employees hired before that date who elected by 4/1/2011 to be covered by Tier Two benefits.

### F. Credited Service

Service for all years for which an employee contributed to the Plan. If contributions have been made for service back to 7/1/67, all service prior to 7/1/67 is credited. No credit is allowed for service in excess of 30 years.

### G. Compensation

Base pay for services rendered to the City as a General Employee excluding extra time, holiday or other incentive pay. Lump sum payments of unused leave not included.

### H. Final Average Compensation (FAC)

The average of Compensation during the highest 3 years of the 10 years immediately preceding retirement; lump sum payments of unused leave not included. The average for Tier Two members is 5 years.

## I. Normal Retirement

Eligibility:	A member may retire on the first day of the month coincident with or next following the earlier of age 55 and 10 years of Credited Service; age 59 and 10 years for Tier Two members.
Benefit:	2.75% of FAC times Credited Service for employees with less than 15 years of service. 3.00% of FAC times Credited Service for employees with at least 15 years of service with a limit of 82.5% of FAC. Also, retirees receive an annual payment of \$120 per year of service and a monthly supplement of \$300. Tier Two: 2.25% of FAC times Credited Service with a limit of 82.5% of FAC; Tier Two members also receive the annual payment of \$120 per year of service but not the monthly supplement of \$300.
Normal Form of Benefit:	Single life annuity, with guaranteed return of accumulated contribution (other options are also available).
COLA:	None

## J. Early Retirement

Eligibility:	A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 15 years of Credited Service <u>or</u> 25 years of Credited Service at any age.
Benefit:	Accrued benefit payable at Normal Retirement Date, <u>or</u> accrued benefit, reduced by 2% for each year early, payable immediately. For Tier Two members, the reduction is 3% for each year early.
Normal Form of Benefit:	Single life annuity, with guaranteed return of accumulated contribution (other options are also available).
COLA:	None

## K. Delayed Retirement

Benefit continues to accrue; however, see the previous limitation on Credited Service.

## L. Service Connected Disability

Eligibility:	Permanent incapacity to perform the Member's regular duties.
Benefit:	70% of compensation at time of disability, offset by any amounts paid under Social Security and, in certain cases, earnings from other sources such as salaries and self-employed income.

Normal Form: Single life annuity, with guaranteed return of accumulated contribution (other options are also available).

COLA: None

#### **M. Non-Service Connected Disability**

Eligibility: Any member with 5 or more years of Credited Service and permanent incapacity to perform the Member's regular duties.

Benefit: Same as Service Connected Disability benefit if the member is 100% disabled and unable to be gainfully employed; for others, the disability benefit is equal to the accrued pension.

Normal Form: Single life annuity, with guaranteed return of accumulated contribution (other options are also available).

COLA: None

#### **N. Death in the Line of Duty**

Eligibility: Members are eligible for survivor benefits after the completion of 10 years of Credit Service and is payable to the Beneficiary beginning at what would have been the Member's 55<sup>th</sup> birthday.

Benefit: The survivor benefit payable to the designated beneficiary is the member's accrued Normal Retirement Benefit as of the date of death. In lieu of this deferred benefit, a beneficiary may elect an immediate benefit equal to 1.5 to 2.0 times the Member's Accumulated Contributions, depending on length of service.

Normal Form of Benefit: Ten Years Certain; an immediate benefit equal to 1.5 to 2.0 times the Member's Accumulated Contributions, depending on length of service.

COLA: None

#### **O. Other Pre-Retirement Death**

Eligibility: If the Member is eligible for Early or Normal Retirement and the Option has not been selected, benefit is payable as though retirement occurred on date of death.

Benefit: The survivor benefit payable to the designated beneficiary is the member's accrued Normal Retirement Benefit as of the date of death.

Normal Form of Benefit: Life and Ten Years Certain.

COLA: None

**P. Post Retirement Death**

Benefit determined by the form of benefit elected upon retirement.

**Q. Optional Forms**

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are the 5 and 10 Year Certain and Life option or the 50%, 75% or 100% Joint and Survivor options. A Social Security option is also available for members retiring prior to the time they are eligible for Social Security retirement benefits.

**R. Vested Termination**

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10 years of Credited Service.

Benefit: The benefit is either the return of Accumulated Contributions or the member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Early or Normal Retirement date. The benefit will be reduced for Early Retirement, if applicable.

Normal Form of Benefit: Single life annuity, with guaranteed return of accumulated contribution (other options are also available).

COLA: None

**S. Refunds**

Return of Accumulated Contributions.

**T. Member Contributions**

Members, except for Tier Two members, are required to make contributions to the fund at the rate of 8.5% of their compensation. Tier Two members contribute 4% of Compensation.

**U. Employer Contributions**

The amount determined by the actuary needed to fund the plan properly according to State laws.

**V. Cost of Living Increases**

Not Applicable

**W. 13<sup>th</sup> Check**

Not Applicable

## **X. Deferred Retirement Option Plan**

**Eligibility:** A member may enter the DROP on the first day of the month coincident with or next following the earlier of age 55 and 10 years of Credited Service.

**Benefit:** The member's Credited Service and FAC are frozen upon entry into the DROP. The monthly retirement benefit as described under Normal Retirement is calculated based upon the frozen Credited Service and FAC.

**Maximum  
DROP Period:** 60 months

**Interest  
Credited:** Earnings shall be credited quarterly in the same manner as the investment returns on assets of the Retirement System.

**Normal Form  
of Benefit:** LumpSum.

**COLA:** None

## **Y. Other Ancillary Benefits**

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Plantation General Employees' liability if continued beyond the availability of funding by the current funding source.

## **Z. Changes from Previous Valuation**

None