

DANIA BEACH POLICE AND FIREFIGHTERS RETIREMENT SYSTEM

REVISED ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2019

ANNUAL EMPLOYER CONTRIBUTION IS DETERMINED BY THIS
VALUATION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2021





June 29, 2020

Board of Trustees
Dania Beach Police and Firefighters Retirement System
Dania Beach, Florida

**Re: REVISED Dania Beach Police and Firefighters Retirement System Actuarial Valuation
as of October 1, 2019**

Dear Board Members:

The results of the revised October 1, 2019 Annual Actuarial Valuation of the Dania Beach Police and Firefighters Retirement System (Plan) are presented in this report. This report has been revised since the previous version, dated March 13, 2020, to reflect updated FRS mortality tables.

This report was prepared at the request of the Board and is intended for use by the Retirement Plan 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, 2021, and to report the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67. 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 robust assessment of the risks of future experience not meeting the actuarial assumptions. A robust 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 or other information through September 30, 2019. The valuation was based upon information furnished by the Plan Administrator and the Plan's Auditor concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability 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 or the Plan's Auditor.

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 Statutes Chapter 112.63. 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 Plan 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.

Dina Lerner and Travis Robinson 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 (GRS) 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 & COMPANY

By 
Dina Lerner, ASA, MAAA, FCA
Enrolled Actuary No. 20-08236


By 
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Enrolled Actuary No. 20-08351



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SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Closed Plan

In reviewing this Report, the reader should keep in mind that this System was fully closed to new members in January 2011. One consequence of this closure is that the annual payment on the unfunded accrued liability for the City will continue to increase as a percentage of covered payroll as such payroll decreases from year to year. Therefore, in general, the overall cost as a percentage of covered payroll will be increasing each year in the absence of actuarial gains.

Comparison of Required Employer Contributions

The table below compares the required employer contributions developed in this year's and the previous actuarial valuations.

	For FYE 9/30/2021 Based on 10/1/2019 Valuation	For FYE 9/30/2020 Based on 10/1/2018 Valuation	Increase (Decrease)
Police Officers	\$ 785,522	\$ 819,774	\$ (34,252)
As % of Payroll	N/A %	N/A %	N/A %
Firefighters	\$ 5,613,418	\$ 5,978,379	\$ (364,961)
As % of Payroll	351.83 %	352.85 %	(1.02) %
Total (Excluding Pick-Up Contributions for Firefighters)	\$ 6,398,940	\$ 6,798,153	\$ (399,213)
As % of Payroll	N/A %	N/A %	N/A %
Total (Excluding Pick-Ups) if Contributed October 1st	\$ 6,146,030	\$ 6,529,466	\$ (383,436) %

The contributions in the top three rows of the table above have been adjusted for interest on the basis that payments are made in equal installments at the end of each quarter. The bottom row shows the required contribution amount if made in full on October 1. For example, if the full employer contribution for the fiscal year ending September 30, 2021 is paid on October 1, 2020, the amount required is reduced from \$6,398,940 to \$6,146,030 (\$754,475 for police officers and \$5,391,555 for firefighters).

The required employer contribution has been computed under the assumption that the amount to be received from the State on behalf of members in 2020 and 2021 will be \$67,890 for police officers and \$124,055 for firefighters. These amounts are equal to the 1998 revenue plus the cost of minimum Chapter benefits and additional benefits that have been enacted since March, 1999. If the next payment from the State falls below this amount, then the employer must raise its contribution by the difference.



The actual Employer and State contributions for police officers during the year ending September 30, 2019 were \$780,609 and \$67,890, respectively, for a total of \$848,499, which is equal to the required contribution. The actual Employer and State contributions for firefighters during the year ending September 30, 2019 were \$5,956,302 and \$124,055, respectively, for a total of \$6,080,357, which is equal to the required contribution.

Revisions in Benefits

Since the previous valuation, the Plan was amended by Ordinance 2020-001 to incorporate changes required as a result of recent amendments to the Florida Statutes (Senate Bill 426). A summary of the changes is as follows:

- As provided and subject to the limitations in section 112.1816, Florida Statutes, effective July 1, 2019, a firefighter member shall be considered to be totally and permanently disabled in the line of duty if he or she meets the Plan's definition of Totally and Permanently Disabled due to a diagnosis of cancer or circumstances that arise out of the treatment of such cancer.
- As provided and subject to the limitations in section 112.1816, Florida Statutes, effective July 1, 2019, a firefighter member shall be considered to have died in the line of duty if he or she dies as a result of cancer or circumstances that arise out of the treatment of such cancer.

In conjunction with this Ordinance, the proportion of firefighter disabilities that are assumed to be service-connected (versus non-service connected) was increased from 75% to 85%, and the proportion of firefighter deaths that are assumed to be incurred in the line of duty was increased from 50% to 75%.

As a result of the Plan changes, the required employer contribution amount for Firefighters for the fiscal year ending September 30, 2021 increased by \$361, from \$5,945,410, to \$5,945,771 (assuming quarterly contribution timing). The required contribution for Police Officers is unchanged.

Revisions in Actuarial Assumptions and Methods

The mortality tables and improvement scales were updated from those used by the Florida Retirement System (FRS) for Special Risk Class members in the July 1, 2018 FRS Actuarial Valuation to those used in the July 1, 2019 FRS Actuarial Valuation. Florida Statutes Chapter 112.63(1)(f) mandates the use of mortality assumptions from either of the two most recently published actuarial valuation reports of the FRS. Refer to the Actuarial Assumptions and Cost Method section of this report for further details.

The net effect of this assumption change was a decrease in the required employer contribution of \$70,603 for Police Officers and \$332,353 for firefighters (assuming quarterly contribution timing).

Actuarial Experience

There was a net actuarial loss of \$93,373 for the year which means that actual experience was less favorable than expected. The loss is primarily due to a recognized investment return below the assumed rate of 6.75%. The investment return was 6.4% based on actuarial value of assets and 3.5% based on market value of assets. This loss was partially offset by net demographic gains resulting from lower than expected salary increases for continuing active members (1.7% actual versus 6.0% assumed), offset by lower than expected mortality experience among inactive members. The net loss increased the required employer contribution by about \$22,000.



Cost of Living Adjustment (COLA)

The Plan provides that a COLA may be provided on April 1st if there is an actuarial gain for the previous year. The COLA is limited to the change in the Consumer Price Index for the previous calendar year. Additionally, cumulative adjustments cannot have a value greater than net cumulative experience gains or losses from all sources.

Since the Plan had losses during the year and cumulative losses since this provision was established in 1995, there is no COLA available at April 1, 2020.

Future Benefit Reserve and Health Insurance Subsidy

This Reserve and Subsidy was created by Ordinance No. 21-98 and applies only to firefighters. The total of 75% of each year's actuarial gain allocable to firefighters remaining after application of the COLA provision plus 75% of any increase in Chapter 175 revenue as a percent of payroll as compared to the 1997 revenue is used for the Reserve and Subsidy.

This year's actuarial gain (loss) allocable to firefighters is \$(12,597). The portion used for this year's COLA is \$0. The balance multiplied by 75% is \$0. Cumulative adjustments from actuarial gains cannot have a value greater than net cumulative experience gains or losses from all sources.

Chapter 175 revenue of \$136,975 as a percent of payroll this year (7.34%) is greater than the percent in 1997 (2.77%). Based on the formula set forth in the ordinance, the addition to the subsidy this year would be \$63,975. However, after reflecting the \$124,055 that was used as an offset to the required contribution, only \$12,920 (\$136,975 - \$124,055) of excess Chapter 175 revenue is available. This resulted in an addition to the subsidy of \$12,920. After offsetting for \$22,568 distributed to retirees during the year, the balance of the subsidy this year is \$12,920 compared to last year's balance of \$22,568.

Funded Ratio

The funded ratio this year is 85.8% compared to 76.7% last year. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio was 83.9% before plan and assumption changes.

Variability of Future Contribution Rates

The Market Value of Assets exceeds the Actuarial Value of Assets by \$164,344 as of the valuation date (see Section C). This difference will be gradually recognized over the next several years, causing the contribution requirement to decrease, in absence of offsetting losses.

Relationship to Market Value

If Market Value had been the basis for the valuation, the employer contribution rate would have been about \$6.36 million instead of \$6.40 million, and the funded ratio would have been 86.0% instead of 85.8%. In the absence of other gains and losses, the employer contribution rate should decrease to this value over the next several years.



Conclusion

The Plan's funded status has improved significantly over the past several years. The funded ratio was 57.5% in 2013 but has since increased to its current level of 85.8%. This funded status improvement can be attributed to several steps the Board has taken in recent years, such as: lowering the investment return assumption, updating the mortality table, and shortening the period for paying off the unfunded liability. The required employer contributions of \$6.8 million for fiscal year ending 2020 and \$6.4 million for fiscal year ending 2021 are expected to bring the Plan's funded ratio near 100%.

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. 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;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. 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 policy. 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:

	<u>2019</u>	<u>2018</u>
Ratio of the market value of assets to total payroll	40.4	35.4
Ratio of actuarial accrued liability to payroll	47.0	44.8
Ratio of actives to retirees and beneficiaries	0.2	0.2
Ratio of net cash flow to market value of assets	6.7%	5.2%

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.



CHAPTER REVENUE

The City and the Members have mutually consented to using the Chapter 175 revenue similar to the previous years. Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. As of the valuation date, all minimum benefit requirements have been met.

Actuarial Confirmation of the Use of State Chapter Money			
	Police	Fire	Total
1. Base Amount Previous Plan Year	\$ 67,890	\$ 124,055	\$ 191,945
2. Amount Received for Previous Plan Year	292,261	136,975	429,236
3. Benefit Improvements Made in Previous Plan Year	0	0	0
4. Excess Funds for Previous Plan Year: (2) - (1) - (3)	224,371	12,920	237,291
5. Accumulated Excess at Beginning of Previous Year	182,161	0	182,161
6. Prior Excess Used in Previous Plan Year	182,161	12,920 *	195,081
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) + (5) - (6)	224,371 **	0	224,371
8. Base Amount This Plan Year: (1) + (3)	67,890	124,055	191,945

* The development of the addition to the Health Insurance Subsidy is shown on the following page.

** This amount will be distributed to police retirees in fiscal year ending September 30, 2020.

The Accumulated Excess shown in line 7 (if any) is being held in reserve and is subtracted from Plan assets (see Section C of this Report). The Base Amount in line 8 is the amount the employer is taking as a credit against its required contribution; however, in no event may the employer take credit for more than the actual amount of Chapter revenue received.



HEALTH INSURANCE SUBSIDY FOR FIREFIGHTERS

History of the Portion of City Code Section 18-42(10) Relating to Chapter 175 Revenue (Effective 12/8/98)

Year Ending Sept. 30	Chapter 175 Revenue	Firefighter Payroll	175 Revenue Divided by Payroll	[% for Year minus 2.77%] times Payroll	Amount Previously Added to Benefit Reserve	Amount Paid to Retirees
1997	\$58,190	\$2,099,847	2.77%	\$-----	\$-----	\$-----
1998	77,806	2,235,604	3.48%	11,905	11,905	0
1999	202,990	2,468,990	8.22%	100,920	100,920	0
2000	0	2,917,644	0.00%	0	0	0
2001	91,745	2,883,886	3.18%	8,868	0	0
2002	100,692	2,958,463	3.40%	13,979	0	0
2003	131,154	2,859,669	4.59%	39,034	0	0
2004	140,540	3,121,693	4.50%	40,504	0	0
2005	151,689	3,187,077	4.76%	47,567	0	0
2006	171,338	3,393,551	5.05%	58,030	0	0
2007	256,225	3,580,997	7.16%	117,904	0	63,320
2008	274,373	4,034,189	6.80%	121,933	0	76,099
2009	233,143	4,319,827	5.40%	85,209	0	244,210
2010	256,727	4,130,039	6.22%	106,865	0	107,848
2011	269,865	3,565,219	7.57%	128,348	0	151,870
2012	285,657	3,411,178	8.37%	143,269	0	124,596
2013	257,244	3,500,243	7.35%	120,233	0	141,120
2014	252,506	3,565,281	7.08%	115,248	0	120,478
2015	236,792	3,439,413	6.88%	106,020	0	116,445
2016	219,789	2,579,079	8.52%	111,223	0	106,632
2017	204,747	2,299,175	8.91%	94,745	0	111,223
2018	145,940	1,984,420	7.35%	21,885*	0	94,455
2019	136,975	1,866,512	7.34%	12,920*	0	22,568
				1,606,609	112,825	1,480,864
Benefit Reserve:						
		1,606,609	-	112,825	=	1,493,784
Subsidy paid to Retirees						<u>(1,480,864)</u>
Remaining Benefit Reserve at 10/1/2019						12,920
Chapter 175 Revenue for 2019						136,975
Amount Used for Benefit Reserve						<u>(12,920)</u>
Remaining 175 Revenue						124,055
Baseline 175 Revenue						<u>(124,055)</u>
Addition/(Decrease) to Reserve of Unused 175 Revenue						0

* Calculated amount cannot exceed the actual Chapter 175 Revenue received minus the Baseline 175 Revenue of \$124,055.



SECTION B

VALUATION RESULTS

PARTICIPANT DATA		
	October 1, 2019	October 1, 2018
ACTIVE MEMBERS--POLICE		
Number	0	0
Covered Annual Payroll	\$ 0	\$ 0
Average Annual Payroll	\$ 0	\$ 0
Average Age	0.0	0.0
Average Past Service	0.0	0.0
Average Age at Entry	0.0	0.0
ACTIVE MEMBERS--FIRE		
Number	14	15
Covered Annual Payroll	\$ 1,595,501 *	\$ 1,694,308 *
Average Annual Payroll	\$ 113,964	\$ 112,954
Average Age	47.1	46.5
Average Past Service	21.4	20.7
Average Age at Entry	25.7	25.8
RETIREES, BENEFICIARIES & DROP		
Number	65	65
Annual Benefits	\$ 4,587,880	\$ 4,502,811
Average Annual Benefit	\$ 70,583	\$ 69,274
Average Age	62.8	62.3
DISABILITY RETIREES		
Number	10	10
Annual Benefits	\$ 307,731	\$ 307,731
Average Annual Benefit	\$ 30,773	\$ 30,773
Average Age	70.2	69.2
TERMINATED VESTED MEMBERS		
Number	0	0
Annual Benefits	\$ 0	\$ 0
Average Annual Benefit	\$ 0	\$ 0
Average Age	0.0	0.0

* Excludes picked-up member contributions.



**ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)
POLICE AND FIRE COMBINED**

	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
A. Valuation Date				
B. ADEC to Be Paid During Fiscal Year Ending (Contribution Year)	9/30/2021	9/30/2021	9/30/2021	9/30/2020
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,852,121	\$ 6,234,123	\$ 6,234,765	\$ 6,211,566
E. Employer Normal Cost	478,268	483,297	482,308	502,258
F. ADEC if Paid on the Valuation Date: D+E	6,330,389	6,717,420	6,717,073	6,713,824
G. ADEC Adjusted for Frequency of Payments	6,590,885	6,993,841	6,993,480	6,990,098
H. ADEC as % of Covered Payroll	N/A %	N/A %	N/A %	N/A %
I. Expected Covered Payroll for Contribution Year	1,595,501 *	1,595,501 *	1,595,501 *	1,694,308 *
J. ADEC for Contribution Year	6,590,885	6,993,841	6,993,480	6,990,098
K. Estimated Chapter 175/185 Credit in Contribution Year	191,945	191,945	191,945	191,945
L. Required BSO/City Contribution in Contribution Year: J - K	6,398,940 **	6,801,896 **	6,801,535 **	6,798,153 **
M. Required BSO/City Contribution as % of Covered Payroll in Contribution Year: L ÷ I	N/A %	N/A %	N/A %	N/A %
N. Required BSO/City Contribution if Contributed October 1st	6,146,030 **	6,533,061 **	6,532,714 **	6,529,466 **

* Excludes picked-up member contributions

** To be allocated between BSO and the city in accordance with the current agreement



ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC) -- POLICE

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. ADEC to Be Paid During Fiscal Year Ending (Contribution Year)	9/30/2021	9/30/2021	9/30/2021	9/30/2020
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 819,682	\$ 887,495	\$ 887,495	\$ 852,580
E. Employer Normal Cost	0	0	0	0
F. ADEC if Paid on the Valuation Date: D+E	819,682	887,495	887,495	852,580
G. ADEC Adjusted for Frequency of Payments	853,412	924,015	924,015	887,664
H. ADEC as % of Covered Payroll	N/A %	N/A %	N/A %	N/A %
I. Expected Covered Payroll for Contribution Year	0	0	0	0
J. ADEC for Contribution Year	853,412	924,015	924,015	887,664
K. Estimated Chapter 185 Credit in Contribution Year	67,890	67,890	67,890	67,890
L. Required City Contribution in Contribution Year: J - K	785,522	856,125	856,125	819,774
M. Required City Contribution as % of Covered Payroll in Contribution Year: L ÷ I	N/A %	N/A %	N/A %	N/A %
N. Required City Contribution if Contributed October 1st	754,475	822,288	822,288	787,374



ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC) -- FIRE

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. ADEC to Be Paid During Fiscal Year Ending (Contribution Year)	9/30/2021	9/30/2021	9/30/2021	9/30/2020
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 5,032,439	\$ 5,346,628	\$ 5,347,270	\$ 5,358,986
E. Employer Normal Cost	478,268	483,297	482,308	502,258
F. ADEC if Paid on the Valuation Date: D+E	5,510,707	5,829,925	5,829,578	5,861,244
G. ADEC Adjusted for Frequency of Payments	5,737,473	6,069,826	6,069,465	6,102,434
H. ADEC as % of Covered Payroll	359.60 %	380.43 %	380.41 %	360.17 %
I. Expected Covered Payroll for Contribution Year	1,595,501 *	1,595,501 *	1,595,501 *	1,694,308 *
J. ADEC for Contribution Year	5,737,473	6,069,826	6,069,465	6,102,434
K. Estimated Chapter 175 Credit in Contribution Year	124,055	124,055	124,055	124,055
L. Required BSO/City Contribution in Contribution Year: J - K	5,613,418 **	5,945,771 **	5,945,410 **	5,978,379 **
M. Required BSO/City Contribution as % of Covered Payroll in Contribution Year: L ÷ I	351.83 %	372.66 %	372.64 %	352.85 %
N. Required BSO/City Contribution if Contributed October 1st	5,391,555 **	5,710,773 **	5,710,426 **	5,742,092 **

* Excludes picked-up member contributions.

** To be allocated between BSO and the city in accordance with the current agreement.



**ACTUARIAL VALUE OF BENEFITS AND ASSETS
POLICE AND FIRE COMBINED**

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for				
1. Active Members				
a. Service Retirement Benefits	\$ 18,423,464	\$ 18,610,883	\$ 18,610,883	\$ 19,353,526
b. Vesting Benefits	7,192	7,211	7,211	16,558
c. Disability Benefits	520,064	514,964	514,460	579,903
d. Preretirement Death Benefits	112,753	157,986	157,986	180,061
e. Return of Member Contributions	-	-	-	-
f. Total	19,063,473	19,291,044	19,290,540	20,130,048
2. Inactive Members				
a. Service Retirees & Beneficiaries	55,650,499	57,080,340	57,080,340	55,922,343
b. Disability Retirees	2,670,913	2,710,140	2,710,140	2,766,097
c. Terminated Vested Members	-	-	-	-
d. Total	58,321,412	59,790,480	59,790,480	58,688,440
3. Total for All Members	77,384,885	79,081,524	79,081,020	78,818,488
C. Actuarial Accrued (Past Service) Liability (Entry Age Normal Method)	74,937,238	76,620,498	76,623,329	75,863,314
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	73,310,257	74,962,787	74,961,963	73,391,617
E. Plan Assets				
1. Market Value	64,444,982	64,444,982	64,444,982	59,904,889
2. Actuarial Value	64,280,638	64,280,638	64,280,638	58,181,007
F. Unfunded Actuarial Accrued Liability (Entry Age Normal): C - E2	10,656,600	12,339,860	12,342,691	17,682,307
G. Funded Ratio: E2 / C	85.8%	83.9%	83.9%	76.7%
H. Actuarial Present Value of Projected Covered Payroll	5,819,627	5,811,496	5,811,496	6,972,890
I. Actuarial Present Value of Projected Member Contributions	1,431,628	1,429,628	1,429,628	1,715,331
J. Accumulated Contributions of Active Members	4,607,834	4,607,834	4,607,834	4,605,379



ACTUARIAL VALUE OF BENEFITS AND ASSETS -- POLICE

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for				
1. Active Members				
a. Service Retirement Benefits	\$ -	\$ -	\$ -	\$ -
b. Vesting Benefits	-	-	-	-
c. Disability Benefits	-	-	-	-
d. Preretirement Death Benefits	-	-	-	-
e. Return of Member Contributions	-	-	-	-
f. Total	-	-	-	-
2. Inactive Members				
a. Service Retirees & Beneficiaries	6,344,426	6,633,248	6,633,248	6,778,732
b. Disability Retirees	440,386	450,375	450,375	464,305
c. Terminated Vested Members	-	-	-	-
d. Total	6,784,812	7,083,623	7,083,623	7,243,037
3. Total for All Members	6,784,812	7,083,623	7,083,623	7,243,037
C. Actuarial Accrued (Past Service) Liability (Entry Age Normal Method)	6,784,812	7,083,623	7,083,623	7,243,037
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	6,784,812	7,083,623	7,083,623	7,243,037
E. Plan Assets				
1. Market Value	5,287,966	5,287,966	5,287,966	4,958,643
2. Actuarial Value	5,273,543	5,273,543	5,273,543	4,801,407
F. Unfunded Actuarial Accrued Liability (Entry Age Normal): C - E2	1,511,269	1,810,080	1,810,080	2,441,630
G. Funded Ratio: E2 / C	77.7%	74.4%	74.4%	66.3%
H. Actuarial Present Value of Projected Covered Payroll	0	0	0	0
I. Actuarial Present Value of Projected Member Contributions	0	0	0	0
J. Accumulated Contributions of Active Members	0	0	0	0



ACTUARIAL VALUE OF BENEFITS AND ASSETS -- FIRE

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for				
1. Active Members				
a. Service Retirement Benefits	\$ 18,423,464	\$ 18,610,883	\$ 18,610,883	\$ 19,353,526
b. Vesting Benefits	7,192	7,211	7,211	16,558
c. Disability Benefits	520,064	514,964	514,460	579,903
d. Preretirement Death Benefits	112,753	157,986	157,986	180,061
e. Return of Member Contributions	-	-	-	-
f. Total	19,063,473	19,291,044	19,290,540	20,130,048
2. Inactive Members				
a. Service Retirees & Beneficiaries	49,306,073	50,447,092	50,447,092	49,143,611
b. Disability Retirees	2,230,527	2,259,765	2,259,765	2,301,792
c. Terminated Vested Members	-	-	-	-
d. Total	51,536,600	52,706,857	52,706,857	51,445,403
3. Total for All Members	70,600,073	71,997,901	71,997,397	71,575,451
C. Actuarial Accrued (Past Service) Liability (Entry Age Normal Method)	68,152,426	69,536,875	69,539,706	68,620,277
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	66,525,445	67,879,164	67,878,340	66,148,580
E. Plan Assets				
1. Market Value	59,157,016	59,157,016	59,157,016	54,946,246
2. Actuarial Value	59,007,095	59,007,095	59,007,095	53,379,600
F. Unfunded Actuarial Accrued Liability (Entry Age Normal): C - E2	9,145,331	10,529,780	10,532,611	15,240,677
G. Funded Ratio: E2 / C	86.6%	84.9%	84.9%	77.8%
H. Actuarial Present Value of Projected Covered Payroll	5,819,627	5,811,496	5,811,496	6,972,890
I. Actuarial Present Value of Projected Member Contributions	1,431,628	1,429,628	1,429,628	1,715,331
J. Accumulated Contributions of Active Members	4,607,834	4,607,834	4,607,834	4,605,379



**CALCULATION OF EMPLOYER NORMAL COST
POLICE AND FIRE COMBINED**

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. Normal Cost for				
1. Service Retirement Benefits	\$ 562,664	\$ 566,919	\$ 566,919	\$ 604,958
2. Vesting Benefits	32,479	32,594	32,594	34,417
3. Disability Benefits	56,606	55,019	54,269	58,197
4. Preretirement Death Benefits	12,352	14,593	14,354	15,500
5. Return of Member Contributions	<u>11,249</u>	<u>11,254</u>	<u>11,254</u>	<u>11,731</u>
6. Total for Future Benefits	675,350	680,379	679,390	724,803
7. Assumed Amount for Administrative Expenses*	<u>195,411</u>	<u>195,411</u>	<u>195,411</u>	<u>194,255</u>
8. Total Normal Cost	870,761	875,790	874,801	919,058
9. Total as % of Covered Payroll	54.58 %	54.89 %	54.83 %	54.24 %
C. Expected Member Contribution	392,493	392,493	392,493	416,800
D. Employer Normal Cost: B8-C	478,268	483,297	482,308	502,258
E. Employer Normal Cost as a % of Covered Payroll	29.98 %	30.29 %	30.23 %	29.64 %

* Average of actual administrative expenses over the previous two years, including attorney fees, actuarial fees, auditor fees and all other administrative fees.

CALCULATION OF EMPLOYER NORMAL COST - POLICE		
A. Valuation Date	October 1, 2019	October 1, 2018
B. Normal Cost for		
1. Service Retirement Benefits	\$ -	\$ -
2. Vesting Benefits	-	-
3. Disability Benefits	-	-
4. Preretirement Death Benefits	-	-
5. Return of Member Contributions	-	-
6. Total for Future Benefits	<u>-</u>	<u>-</u>
7. Assumed Amount for Administrative Expenses	-	-
8. Total Normal Cost	<u>-</u>	<u>-</u>
9. Total as % of Covered Payroll	N/A %	N/A %
C. Expected Member Contribution	-	-
D. Employer Normal Cost: B8-C	-	-
E. Employer Normal Cost as a % of Covered Payroll	N/A %	N/A %

CALCULATION OF EMPLOYER NORMAL COST - FIRE

A. Valuation Date	October 1, 2019 <i>After Plan and Assumption Changes</i>	October 1, 2019 <i>After Plan Change</i>	October 1, 2019 <i>Before Changes</i>	October 1, 2018
B. Normal Cost for				
1. Service Retirement Benefits	\$ 562,664	\$ 566,919	\$ 566,919	\$ 604,958
2. Vesting Benefits	32,479	32,594	32,594	34,417
3. Disability Benefits	56,606	55,019	54,269	58,197
4. Preretirement Death Benefits	12,352	14,593	14,354	15,500
5. Return of Member Contributions	<u>11,249</u>	<u>11,254</u>	<u>11,254</u>	<u>11,731</u>
6. Total for Future Benefits	675,350	680,379	679,390	724,803
7. Assumed Amount for Administrative Expenses*	<u>195,411</u>	<u>195,411</u>	<u>195,411</u>	<u>194,255</u>
8. Total Normal Cost	870,761	875,790	874,801	919,058
9. Total as % of Covered Payroll	54.58 %	54.89 %	54.83 %	54.24 %
C. Expected Member Contribution	392,493	392,493	392,493	416,800
D. Employer Normal Cost: B8-C	478,268	483,297	482,308	502,258
E. Employer Normal Cost as a % of Covered Payroll	29.98 %	30.29 %	30.23 %	29.64 %

* Average of actual administrative expenses over the previous two years, including attorney fees, actuarial fees, auditor fees and all other administrative fees.

LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

A. UAAL Amortization Period and Payments

Current UAAL -- POLICE OFFICERS					
Original UAAL			Current UAAL		
Date	Source	Amount	Years Remaining	Amount	Payment
10/1/2016	Fresh Start	\$ 3,312,276	2	\$ 1,611,795	\$ 832,209
10/1/2017	(Gain)/Loss	86,426	3	57,757	20,523
10/1/2018	(Gain)/Loss	71,024	4	59,752	16,432
10/1/2019	(Gain)/Loss	80,776	5	80,776	18,331
10/1/2019	Assumption Change	(298,811)	5	(298,811)	(67,813)
		<u>3,251,691</u>		<u>1,511,269</u>	<u>819,682</u>

Current UAAL -- FIREFIGHTERS					
Original UAAL			Current UAAL		
Date	Source	Amount	Years Remaining	Amount	Payment
10/1/2016	Fresh Start	\$ 23,545,224	2	\$ 10,132,651	\$ 5,231,732
10/1/2017	(Gain)/Loss	121,164	3	76,605	27,220
10/1/2018	(Gain)/Loss	377,595	4	310,758	85,459
10/1/2019	(Gain)/Loss	12,597	5	12,597	2,859
10/1/2019	Plan Change	(2,831)	5	(2,831)	(642)
10/1/2019	Assumption Change	(1,384,449)	5	(1,384,449)	(314,189)
		<u>22,669,300</u>		<u>9,145,331</u>	<u>5,032,439</u>

B. Amortization Schedule

The UAAL is being amortized as a level dollar amount over the number of years remaining in the amortization period. The expected amortization schedules are as follows:

Amortization Schedule - Police	
Year	Expected UAAL
2019	\$ 1,511,269
2020	738,268
2021	-

Amortization Schedule - Fire	
Year	Expected UAAL
2019	\$ 9,145,331
2020	4,390,519
2021	-

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 gain (loss) for the past year is computed as follows:

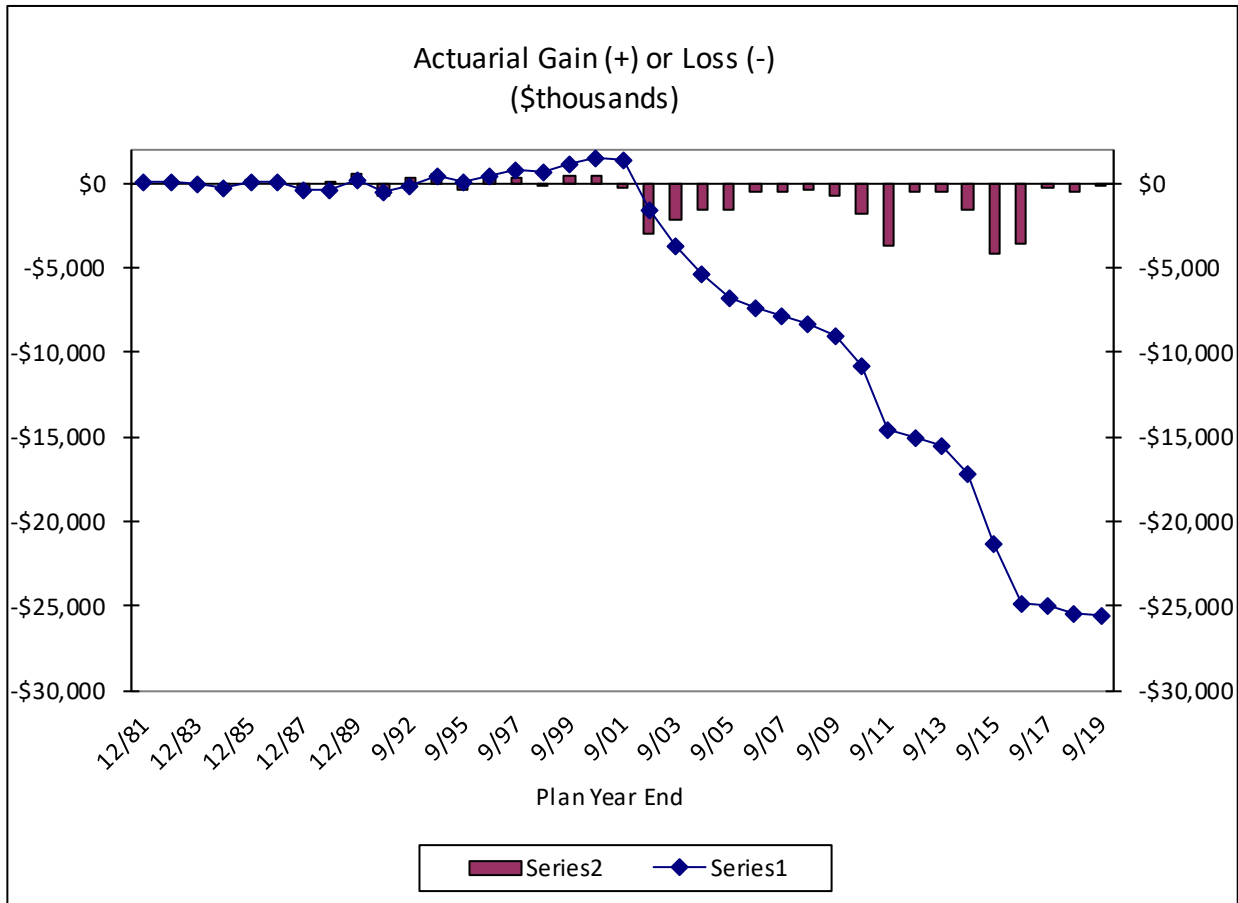
Derivation of Current UAAL	Police	Fire	Total
1. Last Year's UAAL	\$ 2,441,630	\$ 15,240,677	\$ 17,682,307
2. Last Year's Employer Normal Cost	-	502,258	502,258
3. Last Year's Contributions	848,499	6,080,357	6,928,856
4. Interest at the Assumed Rate on:			
a. 1 and 2 for one year	164,810	1,062,648	1,227,458
b. 3 from dates paid	<u>28,637</u>	<u>205,212</u>	<u>233,849</u>
c. a - b	136,173	857,436	993,609
5. This Year's Expected UAAL 1 + 2 - 3 + 4c	1,729,304	10,520,014	12,249,318
6. This Year's Actual UAAL (Before Changes)	1,810,080	10,532,611	12,342,691
7. Net Actuarial Gain (Loss) under Entry Age Normal Method: (5) - (6)	(80,776)	(12,597)	(93,373)
8. Gain (Loss) Due to Investments			(206,302)
9. Gain (Loss) Due to Other Sources			112,929

Net actuarial gains in previous years have been as follows:

Year Ended	Change in Employer Normal Cost Rate	Net Gain (Loss)
12/31/1981	0.28 %	\$ 50,893
12/31/1982	0.43	90,718
12/31/1983	(0.64)	(145,917)
12/31/1984	(0.85)	(203,924)
12/31/1985	1.05	256,937
12/31/1986	0.19	55,489
12/31/1987	(1.52)	(502,127)
12/31/1988	0.12	31,024
12/31/1989	2.26	567,633
9/30/1991	(6.21) P	(415,194) P
	(1.37) F	(262,391) F
9/30/1992	(0.24) P	(12,743) P
	2.68 F	397,305 F
9/30/1993	5.55 P	279,953 P
	1.92 F	270,897 F
9/30/1995	3.69 P	174,873 P
	(2.61) F	(518,247) F
9/30/1996	3.21 P	159,177 P
	1.03 F	210,939 F
9/30/1997	7.49 P	224,895 P
	0.61 F	122,570 F
9/30/1998	(5.91) P	(154,056) P
	0.14 F	29,640 F
9/30/1999	2.59 P	42,313 P
	1.63 F	387,678 F
9/30/2000	20.16 P	185,490 P
	0.83 F	219,335 F
9/30/2001	(1.28) P	(5,211) P
	(0.78) F	(205,024) F
9/30/2002	(376.24) P	(810,176) P
	(7.81) F	(2,117,400) F
9/30/2003	N/A	(415,165) P
	N/A	(1,682,613) F
9/30/2004	N/A	(396,193) P
	N/A	(1,207,316) F
9/30/2005	N/A	(366,208) P
	N/A	(1,139,627) F
9/30/2006	N/A	1,871 P
	N/A	(542,080) F
9/30/2007	N/A	146,849 P
	N/A	(657,839) F
9/30/2008	N/A	(395,040) P
	N/A	(19,751) F
9/30/2009	N/A	25,061 P
	N/A	(709,828) F
9/30/2010	N/A	(399,625) P
	N/A	(1,421,865) F
9/30/2011	N/A	(495,947) P
	N/A	(3,246,710) F
9/30/2012	N/A	(277,272) P
	N/A	(204,448) F
9/30/2013	N/A	(159,860) P
	N/A	(349,791) F
9/30/2014	N/A	(33,450) P
	N/A	(1,581,625) F
9/30/2015	N/A	34,524 P
	N/A	(4,178,413) F
9/30/2016	N/A	(56,157) P
	N/A	(3,460,736) F
9/30/2017	N/A	(86,426) P
	N/A	(121,164) F
9/30/2018	N/A	(71,024) P
	N/A	(377,595) F
9/30/2019	N/A	(80,776) P
	N/A	(12,597) F



The following table shows the figures from the previous table in graphic form.



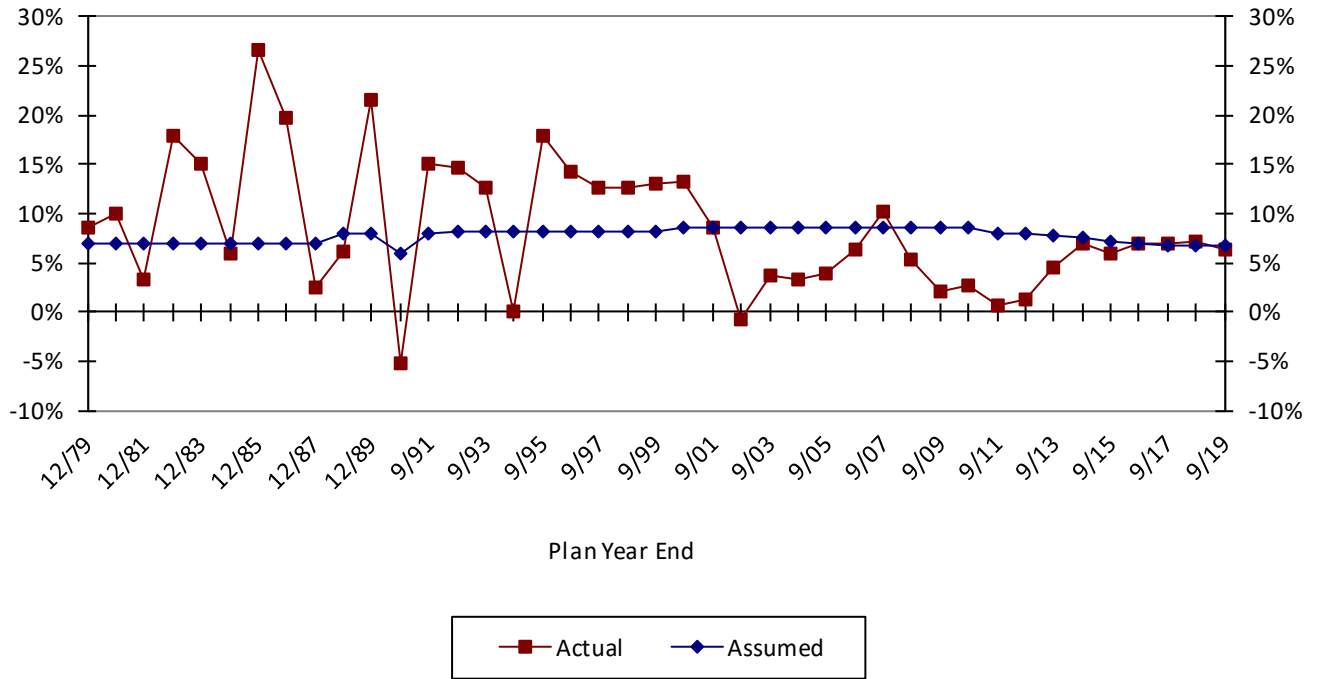
The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for prior years:

Year Ending	Investment Return		Salary Increases		
	Actual	Assumed	Police	Fire	Assumed
12/31/1979	8.6 %	7.00 %	NA	NA	NA
12/31/1980	10.0	7.00	NA	NA	NA
12/31/1981	3.2	7.00	NA	NA	NA
12/31/1982	17.8	7.00	NA	NA	NA
12/31/1983	15.1	7.00	NA	NA	NA
12/31/1984	5.9	7.00	NA	NA	NA
12/31/1985	26.6	7.00	NA	NA	NA
12/31/1986	19.7	7.00	13.2 %	14.5 %	7.0 %
12/31/1987	2.5	7.00	11.2	10.8	7.0
12/31/1988	6.1	8.00	5.1	5.9	7.5
12/31/1989	21.5	8.00	4.7	1.9	7.5
9/30/1990 (9 mos.)	(5.2)	6.00	12.9	7.5	5.6
9/30/1991	15.0	8.00	(3.1)	5.2	7.5
9/30/1992	14.6	8.25	6.9	6.8	7.0
9/30/1993	12.6	8.25	1.5	5.0	7.0
9/30/1994	0.1	8.25	3.1	10.0	7.0
9/30/1995	17.8	8.25	6.8	5.0	7.0
9/30/1996	14.2	8.25	5.9	12.5	6.0
9/30/1997	12.7	8.25	0.5	3.4	6.0
9/30/1998	12.6	8.25	14.3	8.3	6.0
9/30/1999	13.1	8.25	6.9	5.5	6.0
9/30/2000	13.2	8.50	6.0	5.7	6.0
9/30/2001	8.6	8.50	3.0	6.8	6.0
9/30/2002	(0.8)	8.50	2.7	11.5	6.0
9/30/2003	3.7	8.50	4.0	9.6	6.0
9/30/2004	3.2	8.50	---	7.6	6.0
9/30/2005	4.0	8.50	---	4.6	6.0
9/30/2006	6.4	8.50	---	5.9	6.0
9/30/2007	10.2	8.50	---	6.7	6.0
9/30/2008	5.3	8.50	---	5.2	6.0
9/30/2009	2.0	8.50	---	6.0	6.0
9/30/2010	2.7	8.50	---	3.2	6.0
9/30/2011	0.8	8.00	---	17.8	6.0
9/30/2012	1.3	8.00	---	(1.0)	6.0
9/30/2013	4.4	7.75	---	3.9	6.0
9/30/2014	6.9	7.50	---	6.4	6.0
9/30/2015	5.9	7.25	---	2.4	6.0
9/30/2016	6.9	7.00	---	6.8	6.0
9/30/2017	7.0	6.75	---	3.9	6.0
9/30/2018	7.1	6.75	---	4.7	6.0
9/30/2019	6.4	6.75	---	1.7	6.0
Averages	8.4 %	---	---	6.5 %	---

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 valuation both at the beginning and the end of each period.



History of Investment Return Based on Actuarial Value of Assets



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

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	E	A	E	A	E	A	E	A	A	A	E		
9/30/2002	2	4	2	2	0	0	0	0	0	2	2	1	42	
9/30/2003	4	6	5	2	0	0	0	0	0	1	1	1	40	
9/30/2004	1	0	0	1	0	0	0	0	0	0	0	1	41	
9/30/2005	2	2	2	2	0	0	0	0	0	0	0	1	41	
9/30/2006	6	2	0	1	0	0	0	0	0	2	2	1	45	
9/30/2007	6	6	3	1	0	0	0	0	0	3	3	1	45	
9/30/2008	4	0	0	1	0	0	0	0	0	0	0	1	49	
9/30/2009	1	0	0	1	0	0	0	0	0	0	0	1	50	
9/30/2010	1	16	3	2	0	0	0	0	0	13	*	13	1	35
9/30/2011	0	0	2	1	0	0	0	0	0	0	0	0	33	
9/30/2012	0	0	1	1	0	0	0	0	0	0	0	0	32	
9/30/2013	0	0	0	1	0	0	0	0	0	0	0	0	32	
9/30/2014	0	0	2	2	0	0	0	0	0	0	0	0	30	
9/30/2015	0	0	2	2	0	0	0	0	0	0	0	0	28	
9/30/2016	0	0	7	5	0	0	0	0	0	0	0	0	21	
9/30/2017	0	0	3	1	0	0	0	0	0	0	0	0	18	
9/30/2018	0	0	3	1	0	0	0	0	0	0	0	0	15	
9/30/2019	0	0	1	2	0	0	0	0	0	0	0	0	14	
9/30/2020		0		2		0		0				0		
18 Yr Totals **	27	36	36	29	0	0	0	0	0	21	21	9		

* Includes 12 transfers to the Florida Retirement System due to the BSO merger.

** Totals are through current Plan Year only.



CUMULATIVE EXPERIENCE GAINS (LOSSES)						
POLICE OFFICERS						
Year Ended	Balance at Beginning of Year	Interest	Experience Gain (Loss)	COLA	Ben. Res & Health Subsidy	Balance at End of Year
9/30/1995	\$ 0	\$ 0	\$ 387,634	\$ 33,888	---	\$ 353,746
9/30/1996	353,746	29,184	159,177	37,335	---	504,772
9/30/1997	504,772	41,644	224,895	25,306	---	746,005
9/30/1998	746,005	61,545	(154,056)	0	NA	653,494
9/30/1999	653,494	53,913	42,313	96,332	NA	653,388
9/30/2000	653,388	55,538	185,490	157,686	NA	736,730
9/30/2001	736,730	62,622	(5,211)	6,016	NA	788,125
9/30/2002	788,125	66,991	(810,176)	0	NA	44,940
9/30/2003	44,940	3,820	(415,165)	0	NA	(366,405)
9/30/2004	(366,405)	(31,144)	(396,193)	0	NA	(793,742)
9/30/2005	(793,742)	(67,468)	(366,208)	0	NA	(1,227,418)
9/30/2006	(1,227,418)	(104,331)	1,871	0	NA	(1,329,878)
9/30/2007	(1,329,878)	(113,040)	146,849	0	NA	(1,296,069)
9/30/2008	(1,296,069)	(110,166)	(395,040)	0	NA	(1,801,275)
9/30/2009	(1,801,275)	(153,108)	25,061	0	NA	(1,929,322)
9/30/2010	(1,929,322)	(163,992)	(399,625)	0	NA	(2,492,939)
9/30/2011	(2,492,939)	(199,435)	(495,947)	0	NA	(3,188,321)
9/30/2012	(3,188,321)	(255,066)	(277,272)	0	NA	(3,720,659)
9/30/2013	(3,720,659)	(288,351)	(159,860)	0	NA	(4,168,870)
9/30/2014	(4,168,870)	(312,665)	(33,450)	0	NA	(4,514,985)
9/30/2015	(4,514,985)	(327,336)	34,524	0	NA	(4,807,797)
9/30/2016	(4,807,797)	(336,546)	(56,157)	0	NA	(5,200,500)
9/30/2017	(5,200,500)	(351,034)	(86,426)	0	NA	(5,637,960)
9/30/2018	(5,637,960)	(380,562)	(71,024)	0	NA	(6,089,546)
9/30/2019	(6,089,546)	(411,044)	(80,776)	0	NA	(6,581,366)
FIREFIGHTERS						
9/30/1995	\$ 0	\$ 0	\$ 490,983	\$ 85,586	---	\$ 405,397
9/30/1996	405,397	33,445	210,939	113,347	---	536,434
9/30/1997	536,434	44,256	122,570	74,494	---	628,766
9/30/1998	628,766	51,873	29,640	0	\$ 34,135	676,144
9/30/1999	676,144	55,782	387,678	176,925	258,985	683,694
9/30/2000	683,694	58,114	219,335	206,128	9,905	745,110
9/30/2001	745,110	63,334	(205,024)	8,562	0	594,858
9/30/2002	594,858	50,563	(2,117,400)	0	43,867	(1,515,846)
9/30/2003	(1,515,846)	(128,847)	(1,682,613)	0	0	(3,327,306)
9/30/2004	(3,327,306)	(282,821)	(1,207,316)	0	0	(4,817,443)
9/30/2005	(4,817,443)	(409,483)	(1,139,627)	0	0	(6,366,553)
9/30/2006	(6,366,553)	(541,157)	(542,080)	0	0	(7,449,789)
9/30/2007	(7,449,789)	(633,232)	(657,839)	0	0	(8,740,860)
9/30/2008	(8,740,860)	(742,973)	(19,751)	0	0	(9,503,584)
9/30/2009	(9,503,584)	(807,805)	(709,828)	0	0	(11,021,217)
9/30/2010	(11,021,217)	(936,803)	(1,421,865)	0	0	(13,379,885)
9/30/2011	(13,379,885)	(1,070,391)	(3,246,710)	0	0	(17,696,986)
9/30/2012	(17,696,986)	(1,415,759)	(204,448)	0	0	(19,317,193)
9/30/2013	(19,317,193)	(1,497,082)	(349,791)	0	0	(21,164,066)
9/30/2014	(21,164,066)	(1,587,305)	(1,581,625)	0	0	(24,332,996)
9/30/2015	(24,332,996)	(1,764,142)	(4,178,413)	0	0	(30,275,551)
9/30/2016	(30,275,551)	(2,119,289)	(3,460,736)	0	0	(35,855,576)
9/30/2017	(35,855,576)	(2,420,251)	(121,164)	0	0	(38,396,991)
9/30/2018	(38,396,991)	(2,591,797)	(377,595)	0	0	(41,366,383)
9/30/2019	(41,366,383)	(2,792,231)	(12,597)	0	0	(44,171,211)



RECENT HISTORY OF VALUATION RESULTS							
Valuation Date	Number of		Covered Annual Payroll	Actuarial Value of Assets	UAAL	Employer Normal Cost	
	Active Members	Inactive Members				Amount	% of Payroll
1/1/1979	53	4	\$ 838,240	\$ 609,925	\$ 424,966	\$ 102,824	12.27 %
1/1/1980	57	5	968,772	817,153	415,748	125,067	12.91
1/1/1981	60	6	1,106,595	1,077,371	412,732	145,166	13.12
1/1/1982	63	7	1,386,614	1,285,180	422,762	178,750	12.89
1/1/1983	69	7	1,591,975	1,744,343	436,320	201,862	12.68
1/1/1984	69	10	1,711,876	2,309,772	402,979	228,022	13.32
1/1/1985	69	12	1,815,951	2,897,560	313,642	247,176	13.61
1/1/1986	66	14	1,852,160	3,961,789	299,448	256,818	13.87
1/1/1987	74	13	2,282,143	5,002,312	315,130	327,309	14.34
1/1/1988	51	16	1,852,118	5,397,247	0	254,961	13.77
1/1/1989	51	14	1,896,546	5,882,508	0	258,880	13.65
1/1/1990	50	16	1,888,462	7,221,821	0	215,598	11.42
10/1/1991	48	17	2,027,879	7,980,774	0	320,508	15.81
10/1/1992	48	19	2,141,284	9,298,556	0	306,599	14.32
10/1/1993	47	19	2,192,568	10,810,024	0	259,994	11.86
10/1/1995	55	25	2,553,245	12,953,585	0	255,462	10.01
10/1/1996	55	26	2,792,827	15,010,485	364,227	257,716	9.23
10/1/1997	53	29	2,736,017	16,956,798	350,200	213,243	7.79
10/1/1998	53	32	2,894,949	19,192,404	1,100,080	198,760 *	6.86 *
10/1/1999	52	38	2,906,922	21,352,112	927,429	145,705 *	5.01 *
10/1/2000	52	40	3,245,613	23,604,755	851,734	154,739 *	4.77 *
10/1/2001	47	44	3,098,567	25,169,872	714,052	168,650 *	5.44 *
10/1/2002	44	47	3,115,724	24,400,019	4,014,522	117,768 *	3.78 *
10/1/2003	41	53	2,925,614	24,338,448	6,276,159	112,298 *	3.84 *
10/1/2004	41	54	3,121,693	24,040,255	7,987,382	87,072 *	2.79 *
10/1/2005	41	56	3,187,077	24,464,687	9,509,775	89,545 *	2.81 *
10/1/2006	45	55	3,393,551	25,449,912	10,028,265	102,967 *	3.03 *
10/1/2007	45	58	3,688,427	27,465,062	10,420,612	109,737 *	2.98 *
10/1/2008	49	58	4,155,215	28,645,419	10,676,217	112,820 *	2.72 *
10/1/2009	50	56	4,449,422	29,499,135	11,165,211	105,842 *	2.38 *
10/1/2010	35	59	2,777,071	29,305,856	14,838,176	336,269 *	12.11 *
10/1/2011	33	61	3,019,514	29,254,879	18,875,153	356,087 *	11.79 *
10/1/2012	32	61	2,890,789	29,812,371	21,419,898	1,356,954 *	46.94 *
10/1/2013	32	60	3,002,671	32,507,572	23,988,787	2,826,595 *	94.14 *
10/1/2014	30	61	3,020,808	35,664,512	26,462,508	5,524,625 *	182.89 *
10/1/2015	28	62	2,912,763	39,524,617	28,376,899	6,632,749 *	227.71 *
10/1/2016	21	69	2,191,815	45,107,303	26,857,500	551,815 *	25.18 *
10/1/2017	18	72	1,957,647	51,685,066	22,318,133	527,467 *	26.94 *
10/1/2018	15	75	1,694,308	58,181,007	17,682,307	502,258 *	29.64 *
10/1/2019	14	75	1,595,501	64,280,638	10,656,600	478,268 *	29.98 *

* Before effect of Benefit Reserve and Health Insurance Subsidy



RECENT HISTORY OF UAAL AND FUNDED RATIO UNDER ENTRY AGE NORMAL METHOD

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) - Entry Age (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL As % of Covered Payroll (b - a) / c
10/1/1990	\$ 7,221,821	\$ 6,207,380	\$ (1,014,441)	116.3 %	\$ 1,888,462	(53.7) %
10/1/1991	7,980,774	9,111,541	1,130,767	87.6	2,027,879	55.8
10/1/1992	9,298,557	9,638,195	339,638	96.5	2,141,284	15.9
10/1/1993	10,810,024	10,655,089	(154,935)	101.5	2,192,568	(7.1)
10/1/1995	12,953,585	12,832,087	(121,498)	100.9	2,553,245	(4.8)
10/1/1996	15,010,485	15,374,712	364,227	97.6	2,792,827	13.0
10/1/1997	16,956,798	17,043,326	86,528	99.5	2,736,017	3.2
10/1/1998	19,192,404	20,200,273	1,007,869	95.0	2,894,949	34.8
10/1/1999	21,352,112	22,759,255	1,407,143	93.8	2,906,922	48.4
10/1/2000	23,604,755	24,735,752	1,130,997	95.4	3,245,613	34.8
10/1/2001	25,169,872	26,375,800	1,205,928	95.4	3,098,567	38.9
10/1/2002	24,400,019	28,414,541	4,014,522	85.9	3,115,724	128.8
10/1/2003	24,338,448	30,614,607	6,276,159	79.5	2,925,614	214.5
10/1/2004	24,040,255	32,027,637	7,987,382	75.1	3,121,693	255.9
10/1/2005	24,464,687	33,974,462	9,509,775	72.0	3,187,077	298.4
10/1/2006	25,449,912	35,478,177	10,028,265	71.7	3,393,551	295.5
10/1/2007	27,465,062	37,885,674	10,420,612	72.5	3,688,427	282.5
10/1/2008	28,645,419	39,321,636	10,676,217	72.8	4,155,215	256.9
10/1/2009	29,499,135	40,664,346	11,165,211	72.5	4,449,422	250.9
10/1/2010	29,305,856	44,144,032	14,838,176	66.4	2,777,071	534.3
10/1/2011	29,254,879	48,130,032	18,875,153	60.8	3,019,514	625.1
10/1/2012	29,812,371	51,232,269	21,419,898	58.2	2,890,789	741.0
10/1/2013	32,507,572	56,496,359	23,988,787	57.5	3,002,671	798.9
10/1/2014	35,664,512	62,127,020	26,462,508	57.4	3,020,808	876.0
10/1/2015	39,524,617	67,901,516	28,376,899	58.2	2,912,763	974.2
10/1/2016	45,107,303	71,964,803	26,857,500	62.7	2,191,815	1,225.4
10/1/2017	51,685,066	74,003,199	22,318,133	69.8	1,957,647	1,140.0
10/1/2018	58,181,007	75,863,314	17,682,307	76.7	1,694,308	1,043.6
10/1/2019	64,280,638	74,937,238	10,656,600	85.8	1,595,501	667.9



RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS										
Valuation	End of Year To Which Valuation Applies	Required Contributions*								
		Employer & State		Estimated State		Net Employer		Actual Contributions*		
		Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Employer	State	Total
1/1/1979	9/30/1980	\$ 145,514	17.36 %	\$ 35,836	4.28 %	\$ 109,678	13.08	\$ 105,070	\$ 49,099	\$ 154,169
1/1/1980	9/30/1981	169,841	17.53	44,491	4.59	125,350	12.94	125,350	43,014	168,364
1/1/1981	9/30/1982	191,929	17.34	49,099	4.44	142,830	12.91	142,830	42,250	185,080
1/1/1982	9/30/1983	229,886	16.58	43,014	3.10	186,872	13.48	221,808	45,244	267,052
1/1/1983	9/30/1984	256,604	16.12	42,250	2.65	214,354	13.46	211,360	42,121	253,481
1/1/1984	9/30/1985	282,904	16.53	45,244	2.64	237,660	13.88	243,067	46,964	290,031
1/1/1985	9/30/1986	297,166	16.36	42,121	2.32	255,045	14.04	250,203	57,162	307,365
1/1/1986	9/30/1987	318,828	17.21	46,964	2.54	271,864	14.68	261,666	71,555	333,221
1/1/1987	9/30/1988	376,185	16.48	57,162	2.50	319,023	13.98	304,630	71,351	375,981
1/1/1988	9/30/1989	288,151	15.56	71,555	3.86	216,596	11.69	240,340	75,313	315,653
1/1/1989	9/30/1990	279,590	14.74	71,351	3.76	208,239	10.98	221,190	96,623	317,813
1/1/1990	9/30/1991	232,846	12.33	75,313	3.99	157,533	8.34	150,335	85,744	236,079
1/1/1990	9/30/1992	250,616	12.28	96,623	4.73	153,993	7.54	174,109	83,319	257,428
10/1/1991	9/30/1993	364,302	17.96	85,744	4.23	278,558	13.74	292,408	84,956	377,364
10/1/1992	9/30/1994	347,201	16.21	83,319	3.89	263,882	12.32	275,783	92,128	367,911
10/1/1993	9/30/1995	295,520	13.48	84,956	3.87	210,564	9.60	218,998	101,410	320,408
10/1/1994	9/30/1996	287,268	13.42	92,128	4.30	195,140	9.12	223,631	106,703	330,334
10/1/1995	9/30/1997	290,369	11.37	101,410	3.97	188,959	7.40	194,110	122,184	316,294
10/1/1996	9/30/1998	327,707	11.73	106,703	3.82	221,004	7.91	221,004	143,674	364,678
10/1/1997	9/30/1999	276,103	10.09	122,184	4.47	153,919	5.63	153,919	143,674	297,593
10/1/1998	9/30/2000	255,574	8.83	143,674	4.96	111,900	3.87	202,379	67,890	270,269
10/1/1999	9/30/2001	279,871	9.63	66,904	2.30	212,967	7.33	212,967	155,716	368,683
10/1/2000	9/30/2002	260,254	8.02	167,824	5.17	92,430	2.85	92,430	168,582	261,012
10/1/2001	9/30/2003	259,050	8.36	155,716	5.03	108,543	3.50	108,543	191,945	300,488
10/1/2002	9/30/2004	517,498	16.00	168,582	5.21	348,916	10.79	348,916	191,945	540,861
10/1/2003	9/30/2005	738,780	24.30	191,945	6.31	546,835	17.99	546,835	191,945	738,780
10/1/2004	9/30/2006	890,422	N/A	191,945	N/A	698,477	N/A	698,477	191,945	890,422
10/1/2005	9/30/2007	1,055,904	N/A	191,945	N/A	863,959	N/A	863,959	191,945	1,055,904
10/1/2006	9/30/2008	1,134,502	N/A	191,945	N/A	942,557	N/A	942,557	191,945	1,134,502
10/1/2007	9/30/2009	1,191,837	N/A	191,945	N/A	999,892	N/A	999,892	191,945	1,191,837
10/1/2008	9/30/2010	1,246,516	N/A	191,945	N/A	1,054,571	N/A	1,054,570	191,945	1,246,515
10/1/2009	9/30/2011	1,330,774	N/A	191,945	N/A	1,138,829	N/A	1,033,428	191,945	1,225,373
10/1/2010	9/30/2012	1,876,964	N/A	191,945	N/A	1,652,436	N/A	1,685,020	191,945	1,876,965
10/1/2011	9/30/2013	2,283,943	N/A	191,945	N/A	2,091,998	N/A	2,091,998	191,945	2,283,943
10/1/2012	9/30/2014	2,987,487	N/A	191,945	N/A	2,795,542	N/A	2,795,542	191,945	2,987,487
10/1/2013	9/30/2015	3,967,948	N/A	191,945	N/A	3,776,003	N/A	3,776,003	191,945	3,967,948
10/1/2014	9/30/2016	5,729,245	N/A	191,945	N/A	5,537,300	N/A	5,537,300	191,945	5,729,245
10/1/2015	9/30/2017	6,915,503	N/A	191,945	N/A	6,723,558	N/A	6,723,558	191,945	6,915,503
10/1/2016	9/30/2018	6,920,425	N/A	191,945	N/A	6,728,480	N/A	6,728,480	191,945	6,920,425
10/1/2017	9/30/2019	6,928,856	N/A	191,945	N/A	6,736,911	N/A	6,736,911	191,945	6,928,856
10/1/2018	9/30/2020	6,990,098	N/A	191,945	N/A	6,798,153	N/A	---	---	---
10/1/2019	9/30/2021	6,590,885	N/A	191,945	N/A	6,398,940	N/A	---	---	---

* Excluding pick-up contributions



ACTUARIAL ASSUMPTIONS AND METHODS

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) dollar contributions over a reasonable period of future years.

Actuarial Value of Assets - The Actuarial Value of Assets phases in the difference between the actual and expected investment return at the rate of 20% per year. The Actuarial Value of Assets will be 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. The active group is too small to provide statistically significant experience on which to base certain demographic assumptions. Mortality is based on a commonly used fully generational mortality table and projection scale that is mandated by Florida Statutes. The investment return assumption was updated in years 2012 through 2016.

Economic Assumptions

The investment return rate assumed in the valuation was 6.75% per year, compounded annually (net after investment expenses).

The Inflation Rate assumed in this valuation is 2.50% per year. The Inflation Rate is defined to be the long-term rate of annual increases in goods and services. This rate was 2.75% in the previous valuation.

The assumed **real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 6.75% investment return rate translates to an assumed real rate of return over inflation of 4.25%.



The rate of salary increase used for individual firefighter members is 6.0% per year. The assumption reflects merit and/or seniority increases as well as inflation, productivity increases, and other macroeconomic forces. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

To allow for the inclusion of the lump sum payment of unused leave pay in average final compensation for firefighters at retirement, projected benefits are increased by the calculated percentage based on each member's accrued unused vacation hours as of November 26, 2010 (up to 500 hours) divided by 4,992 hours (equal to 2,496 hours for each year in the 2-year averaging period).

Demographic Assumptions

The mortality tables used in the valuation are based on the Pub-2010 Headcount Weighted Mortality Tables described below, with mortality improvements projected for healthy lives to all future years after 2010 using Scale MP-2018. No mortality improvement is projected for disabled lives.

	Pre-Retirement Pub-2010 Table	Post-Retirement Pub-2010 Table
Female Healthy	Headcount Weighted Safety Employee Female Table, set forward 1 year	Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year
Male Healthy	Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year	Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year
Female Disabled	N/A	80% Headcount Weighted General Disabled Retiree Female Table; 20% Headcount Weighted Safety Disabled Retiree Female Table
Male Disabled	N/A	80% Headcount Weighted General Disabled Retiree Male Table; 20% Headcount Weighted Safety Disabled Retiree Male Table

These are the same rates as used by the Florida Retirement System (FRS) in their July 1, 2019 Actuarial Valuation Report for Special Risk class members. The previous valuation used mortality rates from the July 1, 2018 FRS Actuarial Valuation Report. Florida Statutes Chapter 112.63(1)(f) mandates the use of the mortality tables used in either of the two most recently published actuarial valuation reports of FRS.

The following table presents post-retirement mortality rates and life expectancies at illustrative ages. These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.42 %	0.20 %	32.31
55	0.56	0.36	27.54	31.12
60	0.93	0.61	22.97	26.35
65	1.32	0.92	18.73	21.86
70	2.10	1.46	14.74	17.61
75	3.58	2.47	11.15	13.69
80	6.41	4.23	8.09	10.25

The following table presents pre-retirement mortality rates and life expectancies at illustrative ages. These assumptions are used to measure the probabilities of active members dying prior to retirement (75% of deaths are assumed to be service-connected, up from 50% in the prior valuation).

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.17 %	0.11 %	35.50
55	0.26	0.16	30.41	34.29
60	0.43	0.22	25.47	29.23
65	0.69	0.30	20.73	24.22
70	1.18	0.55	16.22	19.32
75	2.11	1.09	11.99	14.63
80	6.41	4.23	8.09	10.25

The following table presents disabled post-retirement mortality rates and life expectancies at illustrative ages.

FRS Disabled Mortality for Special Risk Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	1.45 %	1.25 %	24.04
55	1.91	1.50	20.88	23.54
60	2.37	1.81	17.92	20.32
65	3.00	2.22	15.07	17.17
70	3.91	2.90	12.39	14.10
75	5.30	4.13	9.87	11.22
80	7.66	6.21	7.60	8.67

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

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	80 %
1	40
2	40
3	40
4	40
5	100

The rate of retirement is 5% for each year of eligibility for early retirement.

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 firefighter members remaining in employment.

Sample Ages	% of Active Members Separating Within Next Year
20	3.0 %
25	2.9
30	2.5
35	2.0
40	1.3
45	0.9
50	0.5

Rates of disability among active firefighter members. (85% of future disability retirements are assumed to be service-connected, up from 75% in the prior valuation)

Sample Ages	% Becoming Disabled Within Next Year
20	0.14 %
25	0.15
30	0.18
35	0.23
40	0.30
45	0.51
50	1.00

Miscellaneous and Technical Assumptions

<i>Administrative & Investment Expenses</i>	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 expenses over the previous 2 years. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Exact fractional service is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	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.
<i>Forfeitures</i>	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.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made in equal installments at the end of each quarter. 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.
<i>Marriage Assumption</i>	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.
<i>Assumed Form of Benefit</i>	The normal form (ten-year certain and life) is the assumed form of benefit for Firefighters.
<i>Pay Increase Timing</i>	Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.

GLOSSARY

<i>Actuarial Accrued Liability (AAL)</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Present Value of Future Benefits (APVFB)</i>	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.
<i>Actuarial Valuation</i>	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 actuarial calculations of items needed for compliance with GASB No. 67.
<i>Actuarial Value of Assets</i>	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 employer contribution (ADEC).

<i>Actuarially Determined Employer Contribution (ADEC)</i>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADEC consists of the Employer Normal Cost and Amortization Payment.
<i>Amortization Method</i>	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.
<i>Amortization Payment</i>	That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Closed Amortization Period</i>	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.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	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.
<i>Experience Gain/Loss</i>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 67 and GASB No. 68</i>	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.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	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

PENSION FUND INFORMATION

Statement of Plan Assets at Market Value

Item	September 30	
	2019	2018
A. Cash and Cash Equivalents (Operating Cash)	\$ 6,179	\$ 3,692
B. Receivables		
1. Member Contributions	\$ -	\$ -
2. Employer Contributions	-	1,557,638
3. State Contributions	429,236	395,992
4. Investment Income and Other Receivables	1,018,592	534,123
5. Total Receivables	\$ 1,447,828	\$ 2,487,753
C. Investments		
1. Short Term Investments	\$ 2,911,710	\$ 2,392,688
2. Domestic and International Equities	38,072,386	35,175,322
3. Domestic and International Fixed Income	11,864,157	9,867,158
4. Real Estate	8,472,260	6,469,934
5. Other - ICMA DROP Accounts	-	-
6. Total Investments	\$ 61,320,513	\$ 53,905,102
D. Liabilities		
1. Benefits/Refunds Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	(33,619)	(39,657)
3. Total Liabilities	\$ (33,619)	\$ (39,657)
E. Total Market Value of Assets Available for Benefits	\$ 62,740,901	\$ 56,356,890
F. State Contribution Reserve	\$ (224,371)	\$ (182,161)
G. Health Insurance Subsidy Reserve	\$ (12,920)	\$ (22,568)
H. DROP Accounts	\$ (1,072,209)	\$ (273,842)
I. Present Value of Future Buybacks (Active Members)	\$ 3,013,581	\$ 4,026,570
J. Market Value Net of Reserves and Payables	\$ 64,444,982	\$ 59,904,889
K. Allocation of Investments		
1. Short Term Investments	4.7%	4.4%
2. Domestic and International Equities	62.1%	65.3%
3. Domestic and International Fixed Income	19.4%	18.3%
4. Real Estate	13.8%	12.0%
5. Other - ICMA DROP Accounts	0.0%	0.0%
6. Total Investments	100.0%	100.0%



Pension Fund Income and Disbursements

Item	September 30	
	2019	2018
A. Market Value of Assets at Beginning of Year	\$ 56,356,890	\$ 48,689,459
B. Adjustment*	\$ -	\$ (57,894)
C. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 412,395	\$ 495,099
b. Employer Contributions	6,736,911	6,728,480
c. State Contributions	429,236	395,992
d. Other (Buyback Balances for New DROP Members)	1,210,895	243,789
e. Total	\$ 8,789,437	\$ 7,863,360
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 1,458,590	\$ 1,254,136
b. Realized and Unrealized Gains/(Losses)**	849,450	3,562,671
c. Investment Expenses	(240,472)	(247,873)
d. Net Investment Income	\$ 2,067,568	\$ 4,568,934
3. Benefits and Refunds		
a. Refunds	\$ -	\$ -
b. Regular Monthly Benefits	(3,265,381)	(3,199,268)
c. DROP Distributions (Including Decrease in Buyback Obligation Balances)	(821,399)	(1,027,666)
d. Health Insurance Subsidy Payments	(204,729)	(270,698)
e. Total	\$ (4,291,509)	\$ (4,497,632)
4. Administrative and Miscellaneous Expenses	\$ (181,485)	\$ (209,337)
D. Total Market Value of Assets Available for Benefits	\$ 62,740,901	\$ 56,356,890
E. State Contribution Reserve (Police Officers)	\$ (224,371)	\$ (182,161)
F. Health Subsidy Insurance Reserve (Firefighters)	\$ (12,920)	\$ (22,568)
G. DROP Accounts	\$ (1,072,209)	\$ (273,842)
H. Present Value of Future Buybacks for Active Members	\$ 3,013,581	\$ 4,026,570
I. Market Value Net of Reserves and Payables	\$ 64,444,982	\$ 59,904,889

* Adjustment to match Total Market Value of Assets Available for Benefits with the Net Plan Position.

** The breakdown between realized gains/(losses) and unrealized gains/(losses) was not provided.



Approximate Allocation of Assets by Group

Item	Police Officers	Firefighters	Total
A. Fund Value on 9/30/2018	\$ 5,140,804	\$ 51,216,086	\$ 56,356,890
Percent of Total	9.1219 %	90.8781 %	100.0000 %
B. Revenues and Expenditures			
1. Contributions			
a. Employee Contributions	0	412,395	412,395
b. Employer Contributions	780,609	5,956,302	6,736,911
c. State Contributions	292,261	136,975	429,236
d. Other	0	1,210,895	1,210,895
e. Total	<u>1,072,870</u>	<u>7,716,567</u>	<u>8,789,437</u>
2. Investment Income			
a. Investment Earnings	206,451	2,101,589	2,308,040
b. Investment Expenses	<u>(21,510)</u>	<u>(218,962)</u>	<u>(240,472)</u>
c. Net Investment Income	184,941	1,882,627	2,067,568
3. Benefits and Refunds			
a. Refunds	0	0	0
b. Regular Monthly Benefits	(704,117)	(2,561,264)	(3,265,381)
c. DROP Distributions (Including Decrease in Buyback Obligation Balances)	0	(821,399)	(821,399)
d. Health Insurance Subsidy Payments	<u>(182,161)</u>	<u>(22,568)</u>	<u>(204,729)</u>
e. Total	<u>(886,278)</u>	<u>(3,405,231)</u>	<u>(4,291,509)</u>
4. Administrative and Miscellaneous Expenses	0	(181,485)	(181,485)
C. Fund Value on 9/30/2019	5,512,337	57,228,564	62,740,901
Allocation Percentage Used for Actuarial Value of Assets	8.7859 %	91.2141 %	100.0000 %
D. State Contribution Reserve	(224,371)	0	(224,371)
E. Health Subsidy Insurance Reserve	0	(12,920)	(12,920)
F. DROP Accounts	0	(1,072,209)	(1,072,209)
G. Present Value of Future Buybacks	0	3,013,581	3,013,581
H. Final Fund Value on 9/30/2019	5,287,966	59,157,016	64,444,982

Note: 1. This allocation has been performed on an approximate basis in order to derive costs by group. These figures should not be considered to be an exact accounting by group.

2. The Actuarial Value of Assets is allocated in the same ratio as the ending balance shown above.



Development of Actuarial Value of Assets

Valuation Date – September 30	2018	2019	2020	2021	2022	2023
A. Actuarial Value of Assets Beginning of Year	\$ 47,998,658	\$ 54,633,008				
B. Market Value End of Year	56,356,890	62,740,901				
C. Market Value Beginning of Year	48,689,459	56,356,890				
D. Non-Investment/Administrative Net Cash Flow	3,098,497	4,316,443				
E. Investment Income						
E1. Actual Market Total	4,568,934	2,067,568				
E2. Assumed Rate of Return	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%
E3. Assumed Amount of Return	3,344,484	3,833,408				
E4. Amount Subject to Phase-In: E1–E3	1,224,450	(1,765,840)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20 x E4	244,890	(353,168)				
F2. First Prior Year	427,374	244,890	(353,168)			
F3. Second Prior Year	(12,403)	427,374	244,890	(353,168)		
F4. Third Prior Year	(512,997)	(12,403)	427,374	244,890	(353,168)	
F5. Fourth Prior Year	44,505	(512,995)	(12,402)	427,374	244,890	(353,168)
F6. Total Phase-Ins	191,369	(206,302)	306,694	319,096	(108,278)	(353,168)
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets End of Year:						
A+D+E3+F6	54,633,008	62,576,557				
G2. Upper Corridor Limit: 120% x B	67,628,268	75,289,081				
G3. Lower Corridor Limit: 80% x B	45,085,512	50,192,721				
G4. Final Actuarial Value of Assets End of Year*	54,633,008	62,576,557				
H. Difference between Market and Actuarial Value of Assets	1,723,882	164,344				
I. Actuarial Rate of Return	7.14%	6.39%				
J. Market Value Rate of Return	9.09%	3.53%				
K. Ratio of Actuarial Value of Assets to Market Value	96.94%	99.74%				

* See following page for adjustments to Actuarial Value of Assets



Reconciliation of DROP Accounts			
	Police Officers	Firefighters	Total
Balance at Beginning of Period	\$ 0	\$ 273,842	\$ 273,842
Payments Credited to Accounts	0	764,654	764,654
Interest Credited	0	39,079	39,079
Withdrawals from Accounts	0	(5,366)	(5,366)
Balance/(Obligation) at End of Period	0	1,072,209	1,072,209

Adjustments to Actuarial Value of Assets			
	Police Officers	Firefighters	Total
Actuarial Value, from prior page, allocated	\$ 5,497,914	\$ 57,078,643	\$ 62,576,557
Present Value of Future Buybacks	0	3,013,581	3,013,581
Adjusted Actuarial Value of Assets	5,497,914	60,092,224	65,590,138
Less: State Contribution Reserve	(224,371)	0	(224,371)
Less: Health Insurance Subsidy Reserve	0	(12,920)	(12,920)
Less: DROP Accounts	0	(1,072,209)	(1,072,209)
Final Actuarial Value of Assets	5,273,543	59,007,095	64,280,638

Investment Rate of Return		
Year Ended	Market Value*	Actuarial Value
12/31/81	3.2 %	3.2 %
12/31/82	17.8	17.8
12/31/83	15.1	15.1
12/31/84	5.9	5.9
12/31/85	26.6	26.6
12/31/86	19.7	19.7
12/31/87	2.5	2.5
12/31/88	6.1	6.1
12/31/89	21.5	21.5
9/30/90 (9 mos.)	(5.2)	(5.2)
9/30/91	15.0	15.0
9/30/92	14.6	14.6
9/30/93	12.6	12.6
9/30/94	0.7	0.1
9/30/95	18.5	17.8
9/30/96	15.0	14.2
9/30/97	24.4	12.7
9/30/98	9.4	12.6
9/30/99	12.3	13.1
9/30/00	9.8	13.2
9/30/01	(7.4)	8.6
9/30/02	(5.7)	(0.8)
9/30/03	13.4	3.7
9/30/04	9.4	3.2
9/30/05	14.4	4.0
9/30/06	5.9	6.4
9/30/07	13.8	10.2
9/30/08	(13.0)	5.3
9/30/09	(3.5)	2.0
9/30/10	5.1	2.7
9/30/11	0.9	0.8
9/30/12	16.1	1.3
9/30/13	11.3	4.4
9/30/14	8.1	6.9
9/30/15	(0.6)	5.9
9/30/16	7.1	6.9
9/30/17	12.0	7.0
9/30/18	9.1	7.1
9/30/19	3.5	6.4

Average Returns:

Last 5 Years	6.1 %	6.7 %
Last 10 Years	7.1 %	4.9 %
All Years	8.6 %	8.3 %

* Net of investment expenses after 2006

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.



SECTION D

FINANCIAL ACCOUNTING INFORMATION

FASB NO. 35 INFORMATION

A. Valuation Date	October 1, 2019		
	POLICE	FIRE	TOTAL
B. Actuarial Present Value of Accumulated Plan Benefits			
1. Vested Benefits			
a. Members Currently Receiving Payments	\$ 6,784,812	\$ 51,536,600	\$ 58,321,412
b. Terminated Vested Members	0	0	0
c. Other Members	0	14,988,845	14,988,845
d. Total	<u>6,784,812</u>	<u>66,525,445</u>	<u>73,310,257</u>
2. Non-Vested Benefits	0	0	0
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	6,784,812	66,525,445	73,310,257
4. Accumulated Contributions of Active Members	0	4,607,834	4,607,834
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits			
1. Total Value at Beginning of Year	7,243,037	66,148,580	73,391,617
2. Increase (Decrease) During the Period Attributable to:			
a. Plan Amendment	0	824	824
b. Change in Actuarial Assumptions	(298,811)	(1,353,719)	(1,652,530)
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	544,703	5,871,711	6,416,414
d. Benefits Paid, Excluding DROP Distributions	<u>(704,117)</u>	<u>(4,141,951)</u>	<u>(4,846,068)</u>
e. Net Increase	(458,225)	376,865	(81,360)
3. Total Value at End of Period	6,784,812	66,525,445	73,310,257
D. Market Value of Assets	5,287,966	59,157,016	64,444,982
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods			



SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

GASB Statement No. 67

Fiscal year ending September 30,	2019	2018	2017	2016	2015	2014
Total Pension Liability						
Service Cost	\$ 724,803	\$ 839,069	\$ 891,121	\$ 1,226,373	\$ 1,145,724	\$ 1,067,760
Interest	4,747,703	4,709,586	4,574,753	4,337,463	4,171,246	3,944,144
Benefit Changes	-	-	-	-	-	-
Difference between actual & expected experience	595,694	(922,961)	506,187	1,314,433	392,918	(23,067)
Assumption Changes	-	-	1,869,158	(1,436,329)	1,666,373	2,894,544
Benefit Payments	(4,291,509)	(4,497,632)	(4,299,948)	(3,122,665)	(3,803,361)	(2,922,426)
Refunds	-	-	-	-	-	-
Other (Increase in State and Health Insurance Reserves and Present Value of Buybacks)	1,448,186	447,835	1,027,652	1,994,483	435,428	210,585
Net Change in Total Pension Liability	3,224,877	575,897	4,568,923	4,313,758	4,008,328	5,171,540
Total Pension Liability - Beginning	71,757,288	71,181,391	66,612,468	62,298,710	58,290,382	53,118,842
Total Pension Liability - Ending (a)	\$ 74,982,165	\$ 71,757,288	\$ 71,181,391	\$ 66,612,468	\$ 62,298,710	\$ 58,290,382
Plan Fiduciary Net Position						
Contributions - Employer	\$ 6,736,911	\$ 6,728,480	\$ 6,723,558	\$ 5,537,300	\$ 3,776,003	\$ 2,795,542
Contributions - Employer (from State)	429,236	395,992	448,880	446,780	441,891	466,381
Contributions - Non-Employer Contributing Entity	-	-	-	-	-	-
Contributions - Member	412,395	495,099	526,594	644,675	730,772	745,561
Net Investment Income	2,067,568	4,568,934	5,074,159	2,582,275	(197,718)	2,435,693
Benefit Payments	(4,291,509)	(4,497,632)	(4,299,948)	(3,122,665)	(3,803,361)	(2,922,426)
Refunds	-	-	-	-	-	-
Administrative Expense	(181,485)	(209,337)	(179,172)	(160,786)	(141,008)	(135,697)
Other (Buybacks)	1,210,895	185,895	(357,645)	966,824	58,192	173,969
Net Change in Plan Fiduciary Net Position	6,384,011	7,667,431	7,936,426	6,894,403	864,771	3,559,023
Plan Fiduciary Net Position - Beginning	56,356,890	48,689,459	40,753,033	33,858,630	32,993,859	29,434,836
Plan Fiduciary Net Position - Ending (b)	\$ 62,740,901	\$ 56,356,890	\$ 48,689,459	\$ 40,753,033	\$ 33,858,630	\$ 32,993,859
Net Pension Liability - Ending (a) - (b)	12,241,264	15,400,398	22,491,932	25,859,435	28,440,080	25,296,523
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	83.67 %	78.54 %	68.40 %	61.18 %	54.35 %	56.60 %
Covered Payroll	\$ 1,676,402	\$ 2,012,598	\$ 2,140,626	\$ 2,620,630	\$ 2,970,618	\$ 3,030,736
Net Pension Liability as a Percentage of Covered Payroll	730.21 %	765.20 %	1,050.72 %	986.76 %	957.38 %	834.67 %

Note: Covered payroll was calculated by dividing the total member contributions for the fiscal year by the total member contribution rate of 24.6%.



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	\$ 58,290,382	\$ 32,993,859	\$ 25,296,523	56.60%	\$ 3,030,736	834.67%
2015	62,298,710	33,858,630	28,440,080	54.35%	2,970,618	957.38%
2016	66,612,468	40,753,033	25,859,435	61.18%	2,620,630	986.76%
2017	71,181,391	48,689,459	22,491,932	68.40%	2,140,626	1050.72%
2018	71,757,288	56,356,890	15,400,398	78.54%	2,012,598	765.20%
2019	74,982,165	62,740,901	12,241,264	83.67%	1,676,402	730.21%

Note: Covered payroll was calculated by dividing the total member contributions for the fiscal year by the total member contribution rate of 24.6%.



NOTES TO SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

GASB Statement No. 67

Valuation Date: October 1, 2018
Measurement Date: September 30, 2019

Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method	Entry Age Normal
Inflation	2.75%
Salary Increases	6.00%
Investment Rate of Return	6.75%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	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 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. For disabled retirees, the mortality table used was 60% of the RP-2000 Mortality Table for Disabled Annuitants and 40% of the RP-2000 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 as used for Special Risk Class members of the Florida Retirement System (FRS) in the actuarial valuation as of July 1, 2017, as mandated by Chapter 112.63, Florida Statutes.

Other Information:

Notes See Discussion of Valuation Results in the October 1, 2018 Actuarial Valuation Report dated March 4, 2019.



SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 2,987,487	\$ 2,987,487	\$ -	\$ 3,030,736	98.57%
2015	3,967,948	3,967,948	-	2,970,618	133.57%
2016	5,729,245	5,729,245	-	2,620,630	218.62%
2017	6,915,503	6,915,503	-	2,140,626	323.06%
2018	6,920,425	6,920,425	-	2,012,598	343.86%
2019	6,928,856	6,928,856	-	1,676,402	413.32%

Note: Covered payroll was calculated by dividing the total member contributions for the fiscal year by the total member contribution rate of 24.6%.



NOTES TO SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

Valuation Date: October 1, 2017
Notes Actuarially determined contributions are calculated as of October 1, which is two years 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 Dollar, Closed
Remaining Amortization Period	5 years
Asset Valuation Method	5-year smoothed market
Inflation	2.75%
Salary Increases	6.0%
Investment Rate of Return	6.75%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	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 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. For disabled retirees, the mortality table used was 60% of the RP-2000 Mortality Table for Disabled Annuitants and 40% of the RP-2000 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 as used for Special Risk Class members of the Florida Retirement System (FRS) in the actuarial valuation as of July 1, 2016, as mandated by Chapter 112.63, Florida Statutes.

Other Information:
Notes See Discussion of Valuation Results in the October 1, 2017 Actuarial Valuation Report dated February 23, 2018.



SINGLE DISCOUNT RATE

GASB Statement No. 67

A single discount rate of 6.75% 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 6.75%. 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 the total 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 (6.75%) 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 6.75%, 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:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

1% Decrease 5.75%	Current Single Discount Rate Assumption 6.75%	1% Increase 7.75%
\$20,760,791	\$12,241,264	\$5,120,715

SECTION E

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA			
	From 10/1/18 To 10/1/19		
	Police	Fire	Total
A. Active Members			
1. Number Included in Last Valuation	0	15	15
2. New Members Included in Current Valuation	0	0	0
3. Non-Vested Employment Terminations	0	0	0
4. Vested Employment Terminations	0	0	0
5. Service Retirements	0	0	0
6. Disability Retirements	0	0	0
7. Deaths	0	0	0
8. DROP Participation	0	(1)	(1)
9. Transfers to FRS due to BSO Merger	<u>0</u>	<u>0</u>	<u>0</u>
10. Number Included in This Valuation	0	14	14
B. Terminated Vested Members			
1. Number Included in Last Valuation	0	0	0
2. Additions from Active Members	0	0	0
3. Lump Sum Payments/Refund of Contributions	0	0	0
4. Payments Commenced	0	0	0
5. Deaths	0	0	0
6. Other	<u>0</u>	<u>0</u>	<u>0</u>
7. Number Included in This Valuation	0	0	0
C. DROP Participants			
1. Number Included in Last Valuation	0	13	13
2. Additions from Active Members	0	1	1
3. Payments Commenced	0	(1)	(1)
4. Deaths Resulting in No Further Payments	0	0	0
5. Other	<u>0</u>	<u>0</u>	<u>0</u>
6. Number Included in This Valuation	0	13	13
D. Service Retirees, Disability Retirees and Beneficiaries			
1. Number Included in Last Valuation	21	41	62
2. Additions from Active Members	0	0	0
3. Additions from Terminated Vested Members	0	0	0
4. Additions from DROP Participation	0	1	1
5. Deaths Resulting in No Further Payments	(1)	0	(1)
6. Active Deaths Resulting in New Survivor Benefits	0	0	0
7. End of Certain Period - No Further Payments	0	0	0
8. Other	<u>0</u>	<u>0</u>	<u>0</u>
9. Number Included in This Valuation	20	42	62

Active Firefighters on October 1, 2019

Age Group	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	30-34	35 & Up	
20-24 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT 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
25-29 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT 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
30-34 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT 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
35-39 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT 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
40-44 NO.	0	0	0	0	0	0	0	1	3	0	0	0	4
TOT PAY	0	0	0	0	0	0	0	90,508	327,592	0	0	0	418,100
AVG PAY	0	0	0	0	0	0	0	90,508	109,197	0	0	0	104,525
45-49 NO.	0	0	0	0	0	0	0	0	6	0	0	0	6
TOT PAY	0	0	0	0	0	0	0	0	691,059	0	0	0	691,059
AVG PAY	0	0	0	0	0	0	0	0	115,176	0	0	0	115,177
50-54 NO.	0	0	0	0	0	0	0	0	3	0	0	0	3
TOT PAY	0	0	0	0	0	0	0	0	332,067	0	0	0	332,067
AVG PAY	0	0	0	0	0	0	0	0	110,689	0	0	0	110,689
55-59 NO.	0	0	0	0	0	0	1	0	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	107,804	0	0	0	0	0	107,804
AVG PAY	0	0	0	0	0	0	107,804	0	0	0	0	0	0
60-64 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT 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
TOT NO.	0	0	0	0	0	0	1	1	12	0	0	0	14
TOT AMT	0	0	0	0	0	0	107,804	90,508	1,350,718	0	0	0	1,549,030
AVG AMT	0	0	0	0	0	0	107,804	90,508	112,560	0	0	0	110,645



Inactive Police Officers on October 1, 2019

Age	<u>Terminated Vested</u>		<u>Disabled</u>		<u>Retired</u>		<u>Beneficiaries</u>		<u>Grand Total</u>	
	Total		Total		Total		Total		Total	
	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 20	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	0	0	0	0
40 - 44	0	0	0	0	0	0	0	0	0	0
45 - 49	0	0	0	0	0	0	0	0	0	0
50 - 54	0	0	0	0	0	0	0	0	0	0
55 - 59	0	0	1	16,807	0	0	0	0	1	16,807
60 - 64	0	0	0	0	7	327,084	0	0	7	327,084
65 - 69	0	0	0	0	4	164,416	0	0	4	164,416
70 - 74	0	0	0	0	1	30,769	1	14,264	2	45,033
75 - 79	0	0	1	27,639	2	47,048	0	0	3	74,687
80 - 84	0	0	0	0	0	0	1	30,234	1	30,234
85 - 89	0	0	0	0	0	0	1	18,003	1	18,003
90 - 94	0	0	1	25,207	0	0	0	0	1	25,207
95 - 99	0	0	0	0	0	0	0	0	0	0
100 & Over	0	0	0	0	0	0	0	0	0	0
Total	0	0	3	69,653	14	569,317	3	62,501	20	701,471
Average Age		N/A		76		67		81		70



Inactive Firefighters on October 1, 2019

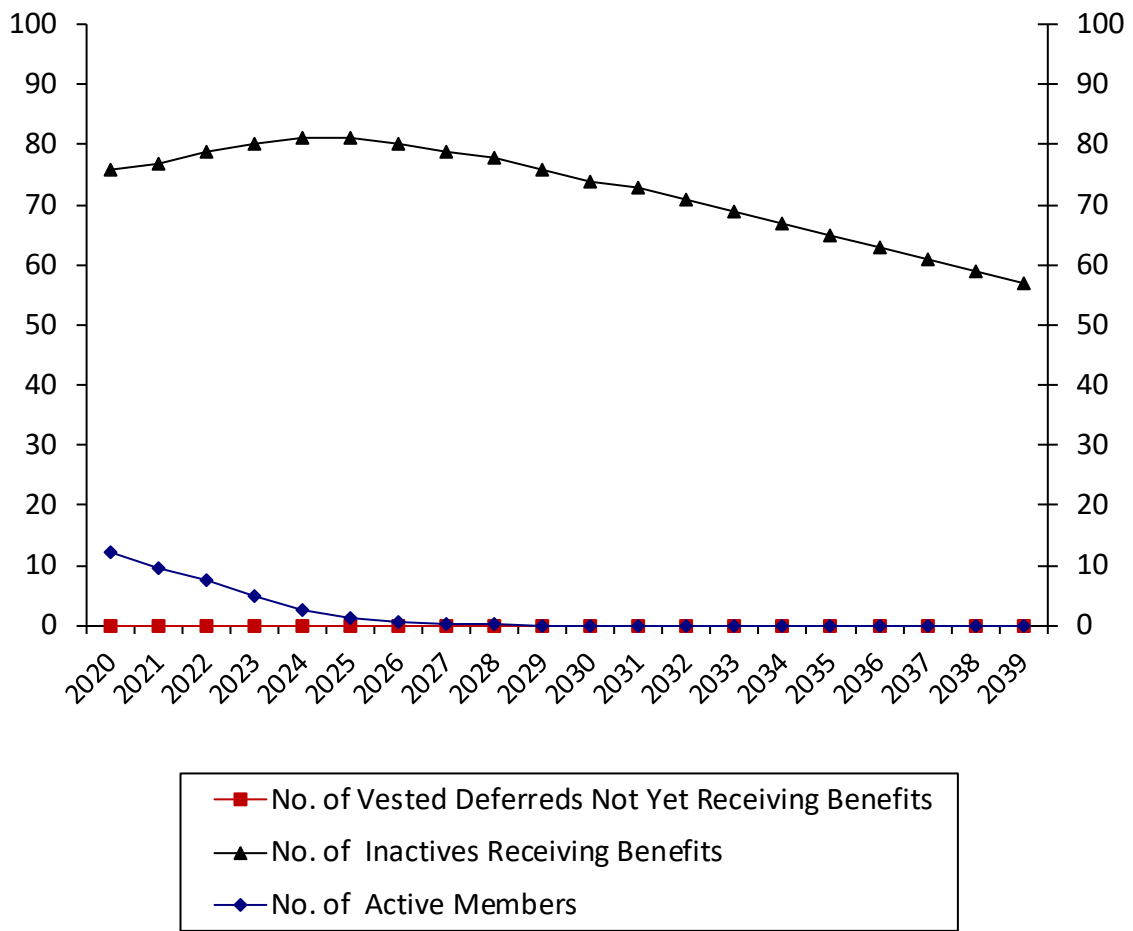
Age	<u>Terminated Vested</u>		<u>Disabled</u>		<u>Retired</u>		<u>Beneficiaries</u>		<u>Grand Total</u>	
	Total		Total		Total		Total		Total	
	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 20	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	0	0	0	0
40 - 44	0	0	0	0	2	246,782	0	0	2	246,782
45 - 49	0	0	0	0	4	535,163	0	0	4	535,163
50 - 54	0	0	1	33,972	9	991,511	0	0	10	1,025,483
55 - 59	0	0	0	0	9	818,177	1	74,991	10	893,168
60 - 64	0	0	1	58,991	6	461,562	0	0	7	520,553
65 - 69	0	0	1	30,753	9	537,456	1	38,715	11	606,924
70 - 74	0	0	3	95,711	6	248,487	0	0	9	344,198
75 - 79	0	0	1	18,651	0	0	0	0	1	18,651
80 - 84	0	0	0	0	0	0	1	3,218	1	3,218
85 - 89	0	0	0	0	0	0	0	0	0	0
90 - 94	0	0	0	0	0	0	0	0	0	0
95 - 99	0	0	0	0	0	0	0	0	0	0
100 & Over	0	0	0	0	0	0	0	0	0	0
Total	0	0	7	238,078	45	3,839,138	3	116,924	55	4,194,140
Average Age	N/A		68		60		69		61	



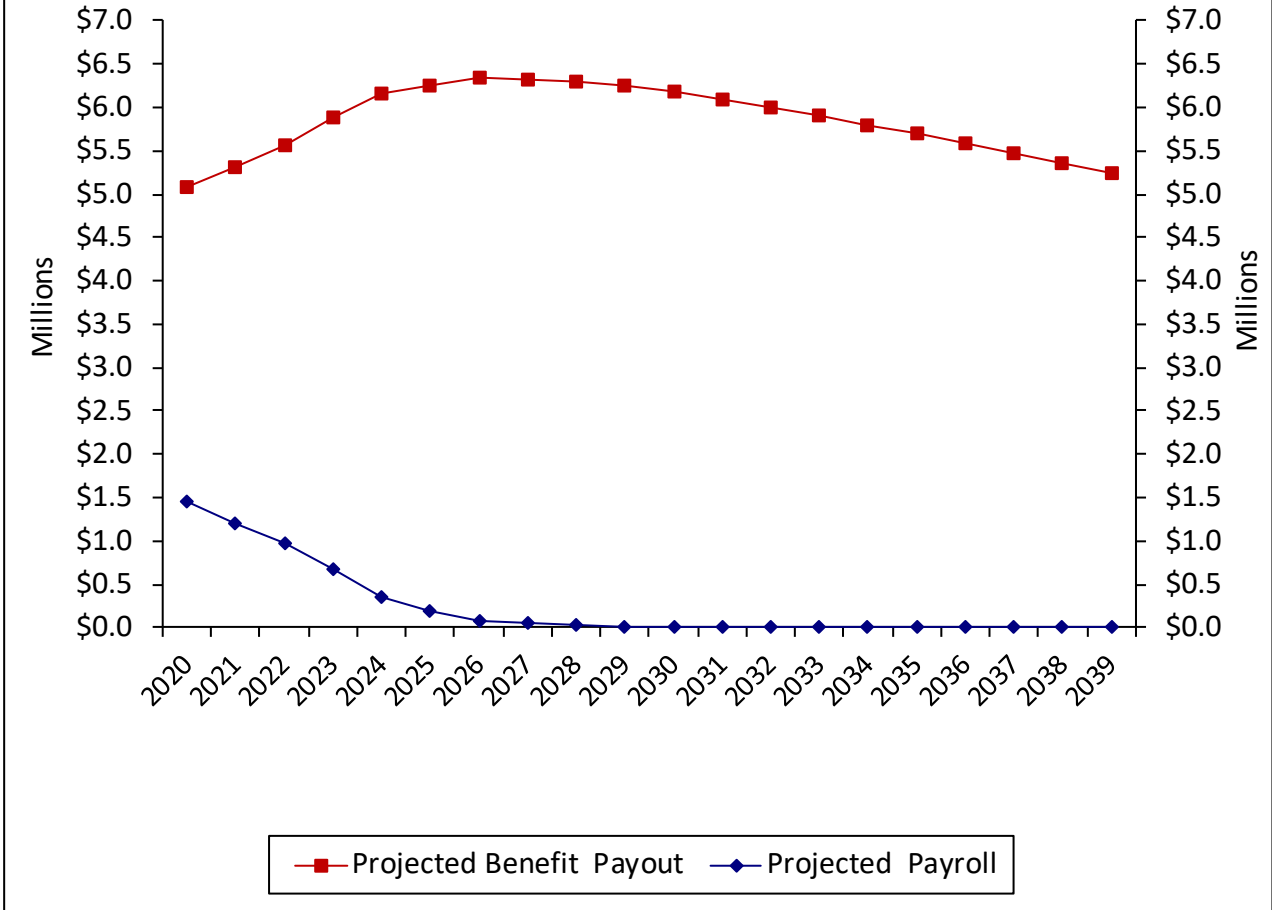
PROJECTED PAYROLL AND RETIREMENT BENEFITS					
Fiscal Year End	No. of Active Members	Projected Payroll	No. of Vested Deferreds Not Yet Receiving Benefits	No. of Inactives Receiving Benefits	Projected Benefit Payout
2020	12	\$1,448,676	0	76	\$5,080,531
2021	10	1,214,522	0	77	5,321,431
2022	8	978,661	0	79	5,564,430
2023	5	665,140	0	80	5,872,876
2024	2	346,214	0	81	6,148,628
2025	1	203,999	0	81	6,254,918
2026	1	81,443	0	80	6,332,706
2027	0	46,211	0	79	6,319,747
2028	0	22,492	0	78	6,291,120
2029	0	7,752	0	76	6,249,306
2030	0	3,013	0	74	6,178,086
2031	0	0	0	73	6,089,393
2032	0	0	0	71	5,999,197
2033	0	0	0	69	5,898,400
2034	0	0	0	67	5,794,529
2035	0	0	0	65	5,689,585
2036	0	0	0	63	5,582,516
2037	0	0	0	61	5,473,773
2038	0	0	0	59	5,360,167
2039	0	0	0	57	5,241,705

These projections are based on assumptions involving all decrements. Actual payroll and benefit payouts may differ from the above estimates depending upon actual experience of the plan. However, since the projections are recomputed each valuation date, there is an automatic correction to the extent actual experience varies from expected experience.

Population Projection



Benefit Payment and Payroll Projection



SECTION F

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

The Plan was established under the Code of Ordinances for the City of Dania Beach, Florida, Chapter 18, Article IV, and was most recently amended under Ordinance No. 2020-001 passed and adopted on January 14, 2020. The Plan is also governed by certain provisions of Chapters 175 and 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

B. Effective Date

March 1, 1977

C. Plan Year

October 1 through September 30

D. Type of Plan

Qualified, governmental defined benefit retirement plan.

E. Eligibility Requirements

Those firefighters and police officers who elected to remain in the Plan prior to the takeover of the police and fire departments by the Broward Sheriff's Office.

F. Credited Service

Credited Service is measured as the total number of years and completed months. For those who were members of the previous plan during the entire period in which they were eligible, credit is allowed for service back to date of employment. For those who were not members of the previous plan during the entire time they were eligible, credit for service prior to the Effective Date will be excluded for the period during which contributions were not made. Those hired on or after the Effective Date receive credit from date of employment. Members may buy back service which has not been credited. No service is credited for any periods of employment for which the member received a refund of employee contributions.

G. Earnings

Total cash compensation paid as base salary, including incentive and longevity pay. Earnings for firefighters include payments for the lesser of accumulated unused vacation leave hours as of November 26, 2010 and accumulated unused vacation leave hours as of retirement (up to a maximum of 500 hours).



H. Average Monthly Earnings (AME)

One twenty-fourth (1/24) of the arithmetic average of earnings for the highest consecutive twenty-four-month period preceding the member's date of termination or the date when the member accrues the benefit level of 75% for police officers and 85% for firefighters.

I. Normal Retirement

- Eligibility:** A member may retire on the first day of the month coincident with or next following the earlier of:
- Police - (1) age 55 with 10 years of Credited Service, or
(2) 25 years of Credited Service regardless of age.
 - Fire - (1) age 55 with 8 years of Credited Service, or
(2) 25 years of Credited Service regardless of age.
- Benefit:** Police - 3% of AME multiplied by years of Credited Service with a maximum equal to 75% of AME. Special minimum benefits apply to those who were members of the previous plan.
- Fire - 3% of AME multiplied by each of the first 15 years of Credited Service plus 4% of AME multiplied by each of the next 10 years of Credited Service with a maximum equal to 85% of AME. Special minimum benefits apply to those who were members of the previous plan.
- Normal Form of Benefit:** Police - Life Annuity with other options available.
- Fire - Ten Year Certain and Life annuity with other options available.
- COLA:** On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

J. Early Retirement

- Eligibility:** A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 8 years of Credited Service or 20 years of Credited Service regardless of age.
- Benefit:** The Normal Retirement Benefit is reduced by 3% for each year by which the Early Retirement date precedes what would have been the member's Normal Retirement date.

Normal Form
of Benefit: Police - Life Annuity with other options available.

Fire - Ten Year Certain and Life annuity with other options available.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

K. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.

L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled being incapacitated from rendering regular and continuous duties as a police officer as a result of an act occurring in the performance of service for the City is immediately eligible for a disability benefit.

Benefit: Police - Accrued Normal Retirement Benefit taking into account Earnings and service credited until the date of disability with a minimum benefit of 60% of AME.

Fire - Accrued Normal Retirement Benefit taking into account Earnings and service credited until the date of disability with a minimum benefit of 68% of AME.

Normal Form
of Benefit: Payable until death or recovery from disability; other options are also available.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

M. Non-Service Connected Disability

Eligibility: Any member with 1 or more years of Credited Service who becomes totally and permanently disabled and incapacitated from gainful employment is immediately eligible for a disability benefit.



Benefit: A percentage of the member's AME as of the date of disability based upon the following table:

Years of Credited Service	% of Average Monthly Earnings
1	40%
2	45
3	50
4	55
5 or more	60

Benefit is guaranteed to be no less than the member's accrued Normal Retirement Benefit taking into account Earnings and service credited until the date of disability.

Normal Form of Benefit: Payable until death or recovery from disability; other options are also available.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

N. Death in the Line of Duty

Eligibility: Members who die as a direct result of an occurrence arising in the performance of service are eligible for survivor benefits.

Benefit: Beneficiary receives 40% of the member's AME. Benefit is guaranteed to be not less than member's accrued Normal Retirement Benefit as of the date of death. Additionally, 7.5% of AME is payable to each eligible child. Maximum total benefit is 75% of AME.

Normal Form of Benefit: Payable for the life of the beneficiary. Children's benefits are payable until age 18 (age 22 if a full-time student), marriage or death.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

O. Other Pre-Retirement Death

- Eligibility:** Members who die while in active service as a police officer, but not from causes attributable to active duty or service, are eligible for survivor benefits after the completion of 1 or more years of Credited Service.
- Benefit:** Beneficiary receives 35% of the member's AME. Benefit is guaranteed to be not less than member's accrued Normal Retirement Benefit as of the date of death. Additionally, 7.5% of AME is payable to each eligible child. Maximum total benefit is 50% of AME.
- Normal Form of Benefit:** Payable for the life of the beneficiary. Children's benefits are payable until age 18 (age 22 if a full-time student), marriage or death.
- COLA:** On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

The beneficiary of a member with less than 1 year of Credited Service at the time of death will receive a refund of the member's accumulated contributions with interest.

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 a Single Life Annuity option, the 15-Year or 20-Year Certain and Life annuity option, the 50%, 66 2/3%, 75% or 100% Joint and Survivor options, and the 50%, 66 2/3%, 75%, or 100% Joint and Survivor options with a pop-up feature.

R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 8 years of Credited Service (See vesting table below).

Vesting is determined in accordance with the following table.

Years of Credited Service	% of Normal Retirement Benefits
Less Than 8	0%
8 or more	100%

Benefit: The member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Retirement date. Alternatively, members may elect to receive a reduced Early Retirement Benefit any time after age 50.

Plan members with less than 8 years of Credited Service will receive a refund of the member's accumulated contributions with interest.

Normal Form of Benefit: Police - Life Annuity with other options available.

Fire - Ten Year Certain and Life annuity with other options available.

COLA: After the member retires, a cost of living increase is given on April 1 of each year based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

S. Refunds

Eligibility: All members terminating employment with less than 8 years of Credited Service are eligible. Optionally, vested members (those with 8 or more years of credited service) may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's contributions with interest. Interest is currently credited at a rate of 4.0% per annum.

T. Member Contributions

7% of Earnings for police officers; 24.6% of Earnings for firefighters. For firefighters hired prior to October 1, 2001, 2% of Earnings shall be deducted; for firefighters hired after September 30, 2001, this amount shall be 6.46%. The remainder of the firefighter member contributions shall be paid by the Employer in lieu of payroll deductions from Earnings. All such employee contributions picked up by the Employer shall be considered as part of the members' accumulated contributions and as Earnings for the purposes of calculating AME.

U. State Contributions

Chapters 175 and 185 Premium Tax Refunds.

V. Employer Contributions

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



W. Cost of Living Increases

On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

X. Supplemental Benefit

Benefit Reserve & Health Insurance Subsidy:

75% of each year's actuarial gain in excess of that used for COLA plus 75% of the increase in percent of payroll received in Chapter 175 revenue over the amount received in 1997. The money would be used first to pay one-third of health insurance premiums for those whose benefits are in pay status. If any money remains after the first use, it would be used to pay the remaining two-thirds of health insurance premiums for those whose benefits are in pay status. If there is still money remaining, it will be accrued in a "future benefit reserve account" to be used to provide future benefits for retirees and survivors.

Y. Deferred Retirement Option Plan

Eligibility: Plan members who have at least 25 years, but less than 30 years, of Credited Service are eligible for the DROP.

Members who meet eligibility must submit a written election to participate in the DROP.

Benefit: The member's Credited Service and AME 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 AME.

Maximum

DROP Period: Maximum DROP participation is 7 years or 7 ½ years for a department head. However, members may not participate beyond the period in which combined Credited Service and DROP participation exceeds 32 years (32 ½ years for department heads).

Interest

Credited: The member's DROP account is credited quarterly at an interest rate based upon the option chosen by the member. Members must elect from one of the two following options:

1. The net rate of investment return for the year earned by the Plan, or
2. The rate earned by a self-directed investment account selected by the member.



Normal Form

of Benefit: Options include a lump sum, an annuity based upon the member's account balance or any other method of payment if approved by the Board of Trustees.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

Z. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Dania Beach Police and Firefighters Retirement System liability if continued beyond the availability of funding by the current funding source.

AA. Changes from Previous Valuation

Since the previous valuation, the Plan was amended by Ordinance 2020-001 to incorporate changes required as a result of recent amendments to the Florida Statutes (Senate Bill 426).