St. Lucie County Fire District Firefighters' Pension Trust Fund

Actuarial Valuation Report as of October 1, 2019

Annual Employer Contribution for the Fiscal Year Ending September 30, 2021

GRS

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June 24, 2020

Board of Trustees
St. Lucie County Fire District
Firefighters' Pension Trust Fund
5160 N.W. Milner Dr.
Port St. Lucie, FL 34983

Re: St. Lucie County Fire District Firefighters' Pension Trust Fund
Actuarial Valuation as of October 1, 2019 and Actuarial Disclosures

Dear Board Members:

The results of the October 1, 2019 Annual Actuarial Valuation of the St. Lucie County Fire District (the District) Firefighter's Pension Trust Fund are presented in this report. **This report does not reflect the recent and still developing impact of COVID-19, which may significantly impact demographic and economic experience.**

This report was prepared at the request of the Board and is intended for use by the District and those designated or approved by the Board. This report may be provided to parties other than the District 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 District's funding progress and determine the employer contribution rate for the fiscal year ending September 30, 2021. 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. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make 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 District concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator and the District.

This report was prepared using certain assumptions approved by the Board and prescribed by the Florida Statutes. The prescribed assumptions are the assumed mortality rates in accordance with Chapter 112.63, Florida Statutes. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Assumptions and Methods.

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 St. Lucie County Fire District Firefighter's Pension Trust fund 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.

Pete N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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

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

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By ______________________________
Pete N. Strong, FSA, EA, MAAA, FCA
Enrolled Actuary No. 20-06975

By ______________________________
Jeffrey Amrose, EA, MAAA
Enrolled Actuary No. 20-06599

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SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Comparison of Required Employer Contributions

A comparison of the required employer contribution developed in this year's actuarial valuation and the previous valuation is as follows:

	For FYE 9/30/2021 Based on 10/1/2019 Valuation	For FYE 9/30/2020 Based on 10/1/2018 Valuation	Increase (Decrease)
Required Employer/State Contribution	$ 17,694,455	$ 16,315,048	$ 1,379,407
As % of Covered Payroll	52.86 %	47.84 %	5.02 %
Estimated State Contribution*	2,112,321	2,212,862	(100,541)
As % of Covered Payroll	6.31	6.49	(0.18)
Required Employer Contribution	15,582,134	14,102,186	1,479,948
As % of Covered Payroll	46.55	41.35	5.20

*The "Frozen Amount" for estimated state contributions is $2,112,321, and all contributions over that amount will be added to the Excess State Contribution Reserve. Resolution 674-19 allows the District to utilize all state money received during fiscal year 2020 to offset the required employer contribution during the fiscal year ending September 30, 2020.

The required employer contribution has been adjusted for interest on the basis that the District contribution is made in full by January 1st (three months after the beginning of the fiscal year).

The contribution has also been computed under the assumption that the amount to be received from the State on behalf of firefighters will be capped at the" Frozen Amount" of $2,112,321. However, per Resolution 674-19 the District may use the entire state money (projected as $2,212,862) to offset the employer contribution for the fiscal year ending September 30, 2020. If the actual State revenue received falls below these amounts, the difference will need to be made up by the District.

The minimum required employer contribution (District and State) for the fiscal year ending September 30, 2019 was $15,273,245. The actual District and State contributions for the fiscal year ending September 30, 2019 were $13,499,355 and $2,112,321, respectively, for a total of $15,611,676. The District previously had a prepaid contribution of $132,150 available to offset the contribution requirement. This year's excess contribution of $338,431 ($15,611,676 - $15,273,245) increased the District's prepaid contribution to $470,581 as of October 1, 2019.

We note that total Member contributions reported during the year were $1,741,166, which was comprised of $1,558,572 in Member contributions from active members and $182,894 in contributions from DROP members. In accordance with Resolution No. 674-19, contributions made by DROP members ($182,894) were used to reduce the unfunded actuarial accrued liability (UAAL).

Revisions in Benefits

In compliance with the recently adopted Florida Statutes Chapter 112.1816, the following additional provisions are reflected:

> As provided and subject to the limitations in Section 112.1816, Florida Statutes, effective July 1, 2019, a firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the disability or death benefit payable from the Plan.

In conjunction with the benefit changes, the proportion of firefighter deaths and disabilities that are assumed to be service-connected (versus non-service connected) was increased from 75% to 85%. This change increased the required contribution by $41,484 or 0.12% of pay.

Revisions in Actuarial Assumptions or Methods

The following actuarial assumption changes are reflected:

- The investment return assumption was lowered from 8.0% to 7.6%, effective October 1, 2019. This assumption is scheduled to be decreased in the future by 0.10% per year until 7.0% is reached.
- The mortality tables were updated from the mortality tables used by the Florida Retirement System (FRS) for Special Risk Class members in the July 1, 2018 FRS Actuarial Valuation to the rates used in the July 1, 2019 FRS Actuarial Valuation. Please see the Actuarial Assumptions and Cost Method section for more details.
- The payroll growth assumption to project Covered Payroll to the contribution year was lowered from 6.37% (the average salary increase assumption) to 3.0% (the wage inflation assumption).
- For the October 1, 2019 actuarial experience gain/loss base, and all future actuarial experience gain/loss bases, the amortization period was increased from 10 years to 20 years. Also, for all current and future assumption changes, the amortization period was increased from 20 to 25 years.

These changes in combination increased the required contribution by $471,974 or 2.84% of pay.

Actuarial Experience

There was a net actuarial experience loss of $4,435,786 since the last valuation, which means that actual experience was less favorable than expected. The loss was primarily due to a lower than expected investment return on the actuarial value of assets during the year ending September 30, 2019 (5.6% actual versus 8.0% expected). The return on the market value of assets during this period was 3.9%. The loss was partially offset by lower than expected salary increases (4.8% actual versus 6.4% expected). The net experience loss caused the required employer contribution to increase by $663,733, or 1.92% of covered payroll.

Analysis of Change in Employer Contribution

The components of change in the actuarially required employer contribution are as follows:

Contribution Rate Last Year	41.35 %
Plan Changes	0.12
Changes in Assumptions/Methods	2.84
Experience (Gains) or Losses	1.92
Change in Employer Normal Cost Rate	(0.13)
Amortization of UAAL	0.07
State Contribution	0.38
Contribution Rate This Year	46.55 %

Funded Ratio

This year's funded ratio is 71.8% compared to 72.9% last year. The ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

Required Contributions in Later Years

The current calculated District contribution requirement is 46.55% of payroll starting October 1, 2020. Under the asset smoothing method, market value gains and losses are recognized over five years. As of October 1, 2019, the market value of assets was $8,069,500 less than the actuarial value of assets. Once all the gains and losses through September 30, 2019 have been fully recognized in the actuarial value of assets, the employer contribution rate will increase by roughly 2.33% of payroll unless there are offsetting gains (by an approximate dollar amount of $0.8 million).

Relationship to Market Value

If the Market Value of Assets had been the basis for this valuation, the required District contribution rate would have been 48.88% (a dollar amount of $16,362,083) and the funded ratio would have been 69.7%. The funded ratio on a market value basis was 71.8% last year.

Conclusion

Please note that this report does not reflect the recent and still developing impact of COVID-19, which may significantly impact demographic and economic experience.

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

STATE CONTRIBUTION RESERVE

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, there were no cost-related changes needed to be made to comply with minimum benefits.

Actuarial Confirmation of the Use of State Chapter Money

	Fire	Supplement	Total
1. Base Amount Previous Plan Year	$ 2,112,321	$ 0	$ 2,112,321
2. Amount Received for Previous Plan Year	2,212,862	0	2,212,862
3. Benefit Improvements Made in Previous Plan Year	0	0	0
4. Excess Funds for Previous Plan Year	100,541	0	100,541
5. Accumulated Excess at Beginning of Previous Year	268,056	0	268,056
6. Prior Excess Used in Previous Plan Year	0	0	0
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) + (5) - (6)	368,597	0	368,597
8. Base Amount This Plan Year	2,112,321	0	2,112,321

RISKS ASSOCIATED WITH 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 required 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 Values

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:

	2019	2018
Ratio of the market value of assets to covered payroll	8.03	7.78
Ratio of actuarial accrued liability to covered payroll	11.52	10.84
Ratio of actives to retirees and beneficiaries	1.63	1.68
Ratio of net cash flow to market value of assets	1.2%	0.7%

Ratio of Market Value of Assets to Payroll

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

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time. The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

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

Ratio of Net Cash Flow to Market Value of Assets

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

Additional Risk Assessment

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

SECTION B

VALUATION RESULTS

PARTICIPANT DATA		
	October 1, 2019	October 1, 2018*
ACTIVE MEMBERS		
Number	354	353
Payroll Under Assumed Ret. Age	$ 32,499,211	$ 31,906,504
Total Payroll	$ 32,834,609	$ 32,038,980
Average Payroll	$ 92,753	$ 90,762
Average Age	39.7	39.4
Average Past Service	12.7	12.4
Average Age at Hire	27.0	27.0
RETIREES, BENEFICIARIES & DROP		
Number	201	193
Annual Benefits	$ 15,686,010	$ 14,896,586
Average Annual Benefit	$ 78,040	$ 77,184
Average Age	62.8	62.2
DISABILITY RETIREES		
Number	16	17
Annual Benefits	$ 902,732	$ 937,681
Average Annual Benefit	$ 56,421	$ 55,158
Average Age	58.0	57.6
TERMINATED VESTED MEMBERS		
Number	22	20
Annual Benefits	$ 435,614	$ 374,837
Average Annual Benefit	$ 19,801	$ 18,742
Average Age	42.9	42.4

*Counts in the 2018 valuation report included duplicate records for members entering the DROP with a delayed supplemental benefit. In addition, other minor data changes were made during the transition process.

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)				
A. Valuation Date	October 1, 2019 *After All Changes*	October 1, 2019 *After Plan Change*	October 1, 2019 *Before Changes*	October 1, 2018
B. ADC to Be Paid During Fiscal Year Ending	9/30/2021	9/30/2021	9/30/2021	9/30/2020
C. Assumed Dates of Employer Contributions	1/1/2021	1/1/2021	1/1/2021	1/1/2020
D. Annual Payment to Amortize Unfunded Actuarial Liability	$ 9,271,081	$ 8,974,710	$ 8,984,564	$ 8,194,247
E. Employer Normal Cost	7,589,027	6,898,332	6,849,976	6,768,471
F. ADC if Paid on the Valuation Date: D+E	16,860,108	15,873,042	15,834,540	14,962,718
G. ADC Adjusted for Timing of Payments	17,180,450	16,190,503	16,151,231	15,261,972
H. ADC as % of Covered Payroll	52.86 %	49.82 %	49.70 %	47.83 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	3.00 %	6.37 %	6.37 %	6.90 %
J. Covered Payroll as of Contribution Date	33,474,187	34,569,411	34,569,411	34,108,053
K. ADC for Contribution Year: H x J	17,694,455	17,222,481	17,180,997	16,315,048
L. Estimate of State Revenue in Contribution Year	2,112,321	2,112,321	2,112,321	2,212,862
M. Required Employer Contribution (REC) in Contribution Year	15,582,134	15,110,160	15,068,676	14,102,186
N. REC as % of Covered Payroll in Contribution Year: M ÷ J	46.55 %	43.71 %	43.59 %	41.35 %

ACTUARIAL VALUE OF BENEFITS AND ASSETS

A. Valuation Date	October 1, 2019 *After All Changes*	October 1, 2019 *After Plan Change*	October 1, 2019 *Before Changes*	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for				
1. Active Members				
a. Service Retirement Benefits	$ 224,883,812	$ 210,705,626	$ 210,705,626	$ 201,652,672
b. Vesting Benefits	5,765,979	5,253,235	5,253,235	5,619,188
c. Disability Benefits	10,452,738	9,425,128	9,216,949	9,003,772
d. Preretirement Death Benefits	3,401,788	4,181,711	4,088,939	4,002,091
e. Return of Member Contributions	172,103	169,523	171,822	48,744
e. Total	244,676,420	229,735,223	229,436,571	220,326,467
2. Inactive Members				
a. Service Retirees & Beneficiaries	168,477,601	166,730,194	166,730,194	156,611,991
b. Disability Retirees	10,071,905	9,653,893	9,653,893	9,946,396
c. Terminated Vested Members	2,274,554	2,136,241	2,136,241	5,323,905
d. Excess State Monies Reserve	368,597	368,597	368,597	268,056
e. DROP Balances	37,928,400	37,928,400	37,928,400	33,858,637
f. Total	219,121,057	216,817,325	216,817,325	206,008,985
3. Total for All Members	463,797,477	446,552,548	446,253,896	426,335,452
C. Actuarial Accrued (Past Service) Liability per Entry Age Normal Method	374,427,934	365,962,562	366,082,388	345,862,105
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	325,795,173	318,647,842	318,217,492	289,486,896
E. Plan Assets				
1. Market Value	260,810,130	260,810,130	260,810,130	248,361,567
2. Actuarial Value	268,879,630	268,879,630	268,879,630	252,105,896
F. Unfunded Actuarial Accrued Liability (EAN Method): C - E2	105,548,304	97,082,932	97,202,758	93,756,209
G. Funded Ratio: E2 / C	71.8 %	73.5 %	73.4 %	72.9 %
H. Accumulated Contributions of Active Members	5,298,414	5,298,414	5,298,414	5,738,260

CALCULATION OF EMPLOYER NORMAL COST				
A. Valuation Date	October 1, 2019 *After All Changes*	October 1, 2019 *After Plan Change*	October 1, 2019 *Before Changes*	October 1, 2018
B. Normal Cost for				
1. Service Retirement Benefits	$ 7,913,625	$ 7,286,064	$ 7,286,064	$ 7,325,732
2. Vesting Benefits	436,460	392,852	392,852	420,329
3. Disability Benefits	747,061	680,077	647,147	523,034
4. Preretirement Death Benefits	290,322	337,933	322,230	260,716
5. Return of Member Contributions	20,718	20,565	20,842	15,924
6. Total for Future Benefits	9,408,186	8,717,491	8,669,135	8,545,735
7. Assumed Amount for Administrative Expenses	130,794	130,794	130,794	137,126
8. Total Normal Cost	9,538,980	8,848,285	8,799,929	8,682,861
C. Expected Member Contribution	1,949,953	1,949,953	1,949,953	1,914,390
D. Employer Normal Cost: B8-C	7,589,027	6,898,332	6,849,976	6,768,471
E. Employer Normal Cost as a % of Covered Payroll	23.35 %	21.23 %	21.08 %	21.21 %

DERIVATION OF CURRENT UAAL	
1. Last Year's UAAL	$ 93,756,209
2. Employer Normal Cost in Previous Year	6,768,471
3. Last Year's Contributions	15,273,245
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	8,041,974
b. 3 from dates paid	526,437
c. a - b	7,515,537
5. This Year's Expected UAAL Prior to Revision: 1 + 2 - 3 + 4c	92,766,972
6. Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions/Methods	8,345,546
7. This Year's Expected UAAL: 5 + 6	101,112,518
8. This Year's Actual UAAL	105,548,304
9. This Year's Gain (Loss): 7 - 8	(4,435,786)
10. Gain (Loss) due to Investments	(6,128,646)
11. Gain (Loss) due to Other Causes	1,692,860

LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

UAAL AMORTIZATION PERIOD AND PAYMENTS						
Original UAAL			Current UAAL			
					Payment	
Valuation Date	Source	Amortization Period (Years)	Years Remaining	Amount	After All Changes	Before Assumption Changes
10/1/2015	Fresh Start	23	19	$ 87,982,197	$ 7,427,740	$ 7,629,993
10/1/2015	Benefit Change	30	26	1,447	120	124
10/1/2016	Assumption Changes	20	17	462,181	45,841	46,915
10/1/2016	Actuarial Loss	10	7	726,686	127,949	129,237
10/1/2017	Actuarial Loss	10	8	2,592,013	412,849	417,638
10/1/2017	Benefit Change	30	28	341	28	29
10/1/2018	Actuarial Loss	10	9	1,002,107	146,616	148,534
10/1/2019	(Gain)/Loss*	20	20	4,435,786	407,463	612,095
10/1/2019	Benefit Change	30	30	(119,826)	(9,521)	(9,855)
10/1/2019	Assumption Changes	25	25	8,465,372	711,996	N/A
				105,548,304	9,271,081	8,974,710

** The 10/1/2019 (Gain)/Loss base was previously amortized over 10 years.*

The UAAL is being amortized as a level percent of pay for bases created before October 1, 2016 and as a level dollar for bases created on and after October 1, 2016 over the number of years remaining in each amortization period. The following schedule illustrates the expected amortization of the UAAL:

AMORTIZATION SCHEDULE	
Year	**Expected UAAL**
2019	$ 105,548,304
2020	103,594,303
2021	101,369,506
2022	98,851,471
2023	96,016,015
2024	92,837,083
2029	72,254,049
2034	41,274,087
2039	3,022,147
2044	0

10- Year Growth in Covered Payroll

	Payroll	Growth
10/1/2009	$ 28,198,221	
10/1/2019	32,834,609	1.53%

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. 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.

Net actuarial gains/(losses) in previous years have been as follows:

Year Ending 9/30	Net Gain (Loss)
2018	(1,069,446)
2019	(4,435,786)

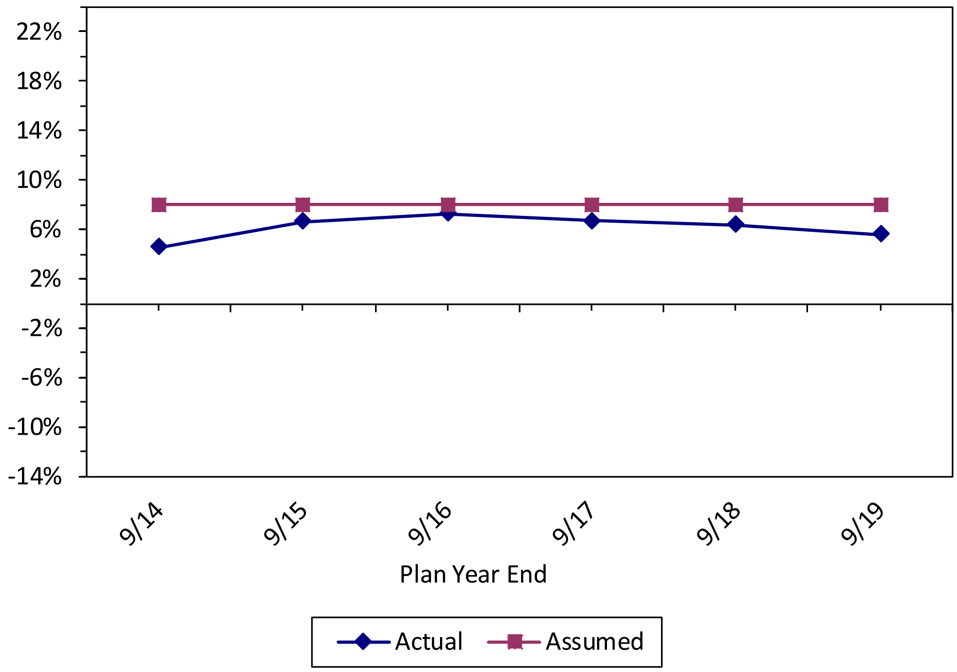
Actual and Assumed Rates of Return and Salary Increase

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

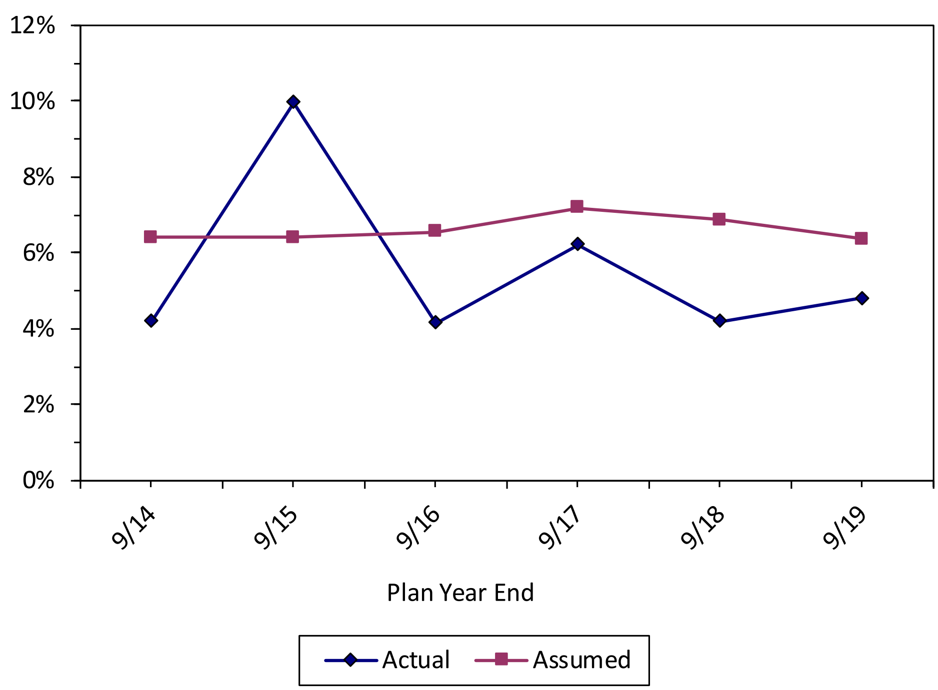
	Investment Return		Salary Increases	
Year Ending	Actual	Assumed	Actual	Assumed
9/30/2014	4.6 %	8.0 %	4.2 %	6.4 %
9/30/2015	6.6	8.0	10.0	6.4
9/30/2016	7.3	8.0	4.2	6.6
9/30/2017	6.7	8.0	6.2	7.2
9/30/2018	6.4	8.0	4.2	6.9
9/30/2019	5.6	8.0	4.8	6.4
Averages	6.2	N/A	5.6	N/A

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

HISTORY OF INVESTMENT RETURN BASED ON ACTUARIAL VALUE OF ASSETS



HISTORY OF SALARY INCREASES



Actual (A) Compared to Expected (E) Decrements Among Active Employees													
Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
									Vested	Other	Totals		
	A	E	A	E	A	E	A	E	A	A	A	E	
9/30/2019	15	14	7	6	0	1	0	0	2	5	7	5	**354**
9/30/2020				8		1		0				5	
1 Yr Totals *	15	14	7	6	0	1	0	0	2	5	7	5	

*Totals are through current Plan Year only.

RECENT HISTORY OF VALUATION RESULTS

Valuation Date	Number of Active Members	Number of Inactive Members*	Valuation Payroll	Actuarial Value of Assets	Unfunded Actuarial Liability	Employer Normal Cost Amount	Employer Normal Cost % of Payroll
10/1/2017	345	223	$ 31,114,789	$ 235,393,178	$ 92,404,184	$ 6,887,184	22.13 %
10/1/2018	353	230	31,906,504	252,105,896	93,756,209	6,768,471	21.21
10/1/2019	354	239	32,499,211	268,879,630	105,548,304	7,589,027	23.35

*Inactive counts have been adjusted to remove DROP members being counted as two different inactive records.

RECENT HISTORY OF UAAL AND FUNDED RATIO

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)
10/1/2017	$ 235,393,178	$ 327,797,362	$ 92,404,184	71.8 %	$ 31,241,424	295.8 %
10/1/2018	252,105,896	345,862,105	93,756,209	72.9	32,038,980	292.6
10/1/2019	268,879,630	374,427,934	105,548,304	71.8	32,834,609	321.5

RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS										
	End of Year To Which Valuation Applies	Required Contributions						Actual Contributions		
		Employer & State		Estimated State		Net Employer				
Valuation		Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Employer	State	Total
10/1/2017	9/30/2019	15,273,245	45.96	2,112,321	6.36	13,160,924	39.60	13,160,924	2,112,321	15,273,245
10/1/2018	9/30/2020	16,315,048	47.84	2,212,862	6.49	14,102,186	41.35	---	---	---
10/1/2019	9/30/2021	17,694,455	52.86	2,112,321	6.31	15,582,134	46.55	---	---	---

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 were amortized as a level (principal & interest combined) percent of payroll over a prescribed period of future years. For bases created on and after October 1, 2016, the unfunded actuarial accrued liabilities are amortized as a level dollar amount over a prescribed period of future years. For the amortization of bases as a level percent of payroll, the actual payroll growth average over the last 10 years was 1.53%. This is compared to the assumed rate of 3.0%. Florida administrative code requires using the lesser of the two rates for purposes of amortizing unfunded liabilities as a level percent of pay, but not less than zero.

Actuarial Value of Assets - The Actuarial Value of Assets phase in the difference between the expected return on actuarial value and actual return on market value of assets 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 decrement assumptions were established following the Experience Study, prepared by Foster & Foster dated September 12, 2016.

Economic Assumptions

The investment return rate assumed in the valuation is 7.60% per year, compounded annually (net after investment expenses), previously 8.00%. This assumption will be lowered by 0.10% each year until 7.00% is reached.

The ***Inflation Rate*** assumed in this valuation is 2.50% per year. The Inflation Rate is defined to be the expected long-term rate of increases in the prices of goods and services.

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 7.60% investment return rate translates to an assumed real rate of return over inflation of 5.10%.

The rate of salary increase for individual active members is shown in the table below. Salary increases are a combination of merit, seniority and productivity increases plus annual inflation of 2.50%. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

Years of Credited Service	% Increase in Salary
Less than 1	25.0%
1 - 3	10.0%
4 - 9	7.5%
10 - 14	6.0%
15 & over	5.5%

Demographic Assumptions

The mortality tables are the PUB-2010 Headcount Weighted Safety Below Median Employee Male and Female Tables (for pre-retirement mortality), and the PUB-2010 Headcount Weighted Safety Below Median Healthy Retiree Male and Female Tables (for post-retirement mortality). The ages are set forward one year in these tables and mortality improvements are projected to all future years after the year 2010 (the base year) using Scale MP-2018. These are the same rates used for the Special Risk Class members in the July 1, 2019 Actuarial Valuation of the Florida Retirement System (FRS), and they were selected for FRS after a statewide experience study.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained	Probability of Dying Next Year		Future Life Expectancy (years)	
Ages (in 2019)	Men	Women	Men	Women
50	0.42 %	0.20 %	32.31	36.15
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

This assumption is used to measure the probabilities of each year's benefit payments being made after retirement.

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year Men	Probability of Dying Next Year Women	Future Life Expectancy (years) Men	Future Life Expectancy (years) Women
50	0.17 %	0.11 %	35.50	39.43
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

This assumption is used to measure the probabilities of active members dying prior to retirement (85% of pre-retirement deaths are assumed to be service-connected).

For disabled retirees, the male mortality tables are 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Male Table and 20% of the Headcount Weighted Safety Disabled Retiree Male Table, and the female mortality tables are 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Female Table and 20% of the Headcount Weighted Safety Disabled Retiree Female Table, both with no provision being made for future mortality improvements. These are the same rates used for the Special Risk Class members in the July 1, 2019 Actuarial Valuation of the Florida Retirement System (FRS).

FRS Disabled Mortality for Special Risk Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year Men	Probability of Dying Next Year Women	Future Life Expectancy (years) Men	Future Life Expectancy (years) Women
50	1.45 %	1.25 %	24.04	26.84
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 members retiring during the next year were as follows:

Eligible for retirement with less than 25 years of credited service:

Age	Probability of Retirement
55	30.0%
56	40.0%
57	50.0%
58 & over	100.0%

Eligible for retirement with 25 or more years of credited service:

Years of Credited Service	Probability of Retirement
25	40.0%
26	40.0%
27	40.0%
28	40.0%
29	40.0%
30	40.0%
31 & over	100.0%

For those eligible for early retirement, 10% each year.

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members separating from employment for reasons other than death, disability or retirement.

Years of Credited Service	% of Active Members Separating Within Next Year
Less than 3	3.0%
3 - 9	2.0%
10 & over	1.0%

Rates of disability among active members (85% of disabilities are assumed to be service-connected).

Age	% Becoming Disabled Within Next Year
20	0.07%
25	0.09%
30	0.10%
35	0.14%
40	0.21%
45	0.32%
50	0.52%
55	0.92%
60	1.53%
65	1.65%

Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the prior year's expenses. Assumed administrative expenses are added to the Normal Cost.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
Decrement Operation	Disability and mortality decrements operate during retirement eligibility.
Decrement Timing	Decrements of all types are assumed to occur halfway through the year.
Eligibility Testing	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.
Forfeitures	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit.
Incidence of Contributions	Employer contributions are assumed to be made in full on January 1st (three months into the fiscal year). 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.
Marriage Assumption	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.
Normal Form of Benefit	10-year certain and life annuity is the normal form of benefit.
Pay Increase Timing	Beginning of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.

GLOSSARY OF TERMS

Actuarial Accrued Liability (AAL)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
Actuarial Assumptions	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.
Actuarial Cost Method	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.
Actuarial Equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV)	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.
Actuarial Present Value of Future Benefits (APVFB)	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.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.
Actuarial Value of Assets	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).

Actuarially Determined Contribution (ADC)	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ARC consists of the Employer Normal Cost and Amortization Payment.
Amortization Method	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.
Amortization Payment	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
Amortization Period	The period used in calculating the Amortization Payment.
Closed Amortization Period	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 25 years, it is 24 years at the end of one year, 23 years at the end of two years, etc.
Employer Normal Cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Equivalent Single Amortization Period	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.
Experience Gain/Loss	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.

Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.
GASB No. 67	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. 67 sets accounting rules for the public retirement systems.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	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.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
Valuation Date	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	September 30 2018
A. Receivables:		
1. Member Contributions in Transit	$ 62,564	$ 48,705
2. From Broker for Investments Sold	176,400	2,062,811
3. State Contributions	2,212,862	2,131,983
4. Investment Income and Other Receivables	455,991	442,641
5. Prepaid Expenses	670	1,959
6. Total Receivables	$ 2,908,487	$ 4,688,099
B. Investments		
1. Short Term Investments	$ 6,941,273	$ 6,449,240
2. Fixed Income	72,833,978	74,433,706
3. Equities	85,240,151	57,383,714
4. Mutual Funds (Equities)	66,316,583	97,461,111
5. Real Estate	17,139,515	9,195,055
6. Alternatives	10,231,926	-
7. Total Investments	$ 258,703,426	$ 244,922,826
C. Liabilities		
1. Prior Refunds	$ (14,363)	$ (14,363)
2. Investment Expenses	(206,708)	(212,796)
3. Accrued Expenses and Other Payables	(110,131)	(889,925)
4. Prepaid Member Contribution	-	(124)
5. Prepaid District Contribution	(470,581)	(132,150)
6. Total Liabilities	$ (801,783)	$ (1,249,358)
D. Total Market Value of Assets Available for Benefits	$ 260,810,130	$ 248,361,567
E. Allocation of Investments		
1. Short Term Investments	2.7%	2.6%
2. Fixed Income	28.2%	30.4%
3. Equities	32.9%	23.4%
4. Mutual Funds (Equities)	25.6%	39.8%
5. Real Estate	6.6%	3.8%
6. Alternatives	4.0%	0.0%
7. Total Investments	100.0%	100.0%

Reconciliation of Plan Assets

Item	September 30 2019	September 30 2018
A. Market Value of Assets at Beginning of Year	$ 248,361,567	$ 230,573,754
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	$ 1,741,466	$ 1,375,276
b. Employer Contributions	13,160,924	12,300,271
c. State Contributions	2,212,862	2,131,983
d. Purchased Service Credit	5,167	148,879
f. Total	$ 17,120,419	$ 15,956,410
2. Investment Income		
a. Interest, Dividends, and Other Income	$ 6,797,686	$ 7,159,549
b. Net Realized/Unrealized Gains/(Losses)	4,127,755	9,932,122
c. Investment Expenses	(1,082,450)	(965,649)
d. Net Investment Income	$ 9,842,991	$ 16,126,021
3. Benefits and Refunds		
a. Regular Monthly Benefits	$ (12,665,517)	$ (12,118,556)
b. Refunds	(4,672)	-
c. Lump Sum Benefits	-	-
d. DROP Disbursements	(1,713,864)	(2,038,936)
e. Total	$ (14,384,053)	$ (14,157,492)
4. Administrative and Miscellaneous Expenses	$ (130,794)	$ (137,126)
5. Transfers	$ -	$ -
C. Market Value of Assets at End of Year	$ 260,810,130	$ 248,361,567

ACTUARIAL VALUE OF ASSETS

Valuation Date – September 30	2018	2019	2020	2021	2022	2023
A. Actuarial Value of Assets Beginning of Year	$ 235,393,178	$ 252,238,170	$ -	$ -	$ -	$ -
B. Market Value End of Year	248,493,841	261,280,711	-	-	-	-
C. Market Value Beginning of Year	230,573,754	248,493,841	-	-	-	-
D. Non-Investment/Administrative Net Cash Flow	1,794,066	2,943,879				
E. Investment Income						
E1. Actual Market Total: B-C-D	16,126,021	9,842,991	-	-	-	-
E2. Assumed Rate of Return	8.00%	8.00%	7.60%	7.50%	7.40%	7.30%
E3. Assumed Amount of Return	18,517,663	19,997,262	-	-	-	-
E4. Amount Subject to Phase-In: E1–E3	(2,391,642)	(10,154,271)	-	-	-	-
F. Phase-In Recognition of Investment Income						
F1. Current Year: 0.2 x E4	(478,328)	(2,030,854)	-	-	-	-
F2. First Prior Year	715,873	(478,328)	(2,030,854)	-	-	-
F3. Second Prior Year	57,154	715,873	(478,328)	(2,030,854)	-	-
F4. Third Prior Year	(4,092,945)	57,154	715,873	(478,328)	(2,030,854)	-
F5. Fourth Prior Year	331,509	(4,092,945)	57,156	715,874	(478,330)	(2,030,855)
F6. Total Phase-Ins	(3,466,737)	(5,829,100)	(1,736,153)	(1,793,308)	(2,509,184)	(2,030,855)
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets:	$ 252,238,170	$ 269,350,211	$ -	$ -	$ -	$ -
G2. Upper Corridor Limit: 120%*B	298,192,609	313,536,853	-	-	-	-
G3. Lower Corridor Limit: 80%*B	198,795,073	209,024,569	-	-	-	-
G4. Funding Value End of Year	252,238,170	269,350,211	-	-	-	-
G5. Less: Prepaid Contributions	(132,274)	(470,581)	-	-	-	-
G6. Final Funding Value End of Year	252,105,896	268,879,630	-	-	-	-
H. Difference between Market & Actuarial Value	$ (3,744,329)	$ (8,069,500)	$ -	$ -	$ -	$ -
I. Actuarial Rate of Return	6.4%	5.6%	0.0%	0.0%	0.0%	0.0%
J. Market Value Rate of Return	6.9%	3.9%	0.0%	0.0%	0.0%	0.0%
K. Ratio of Actuarial Value to Market Value	101.51%	103.09%	0.0%	0.0%	0.0%	0.0%

Reconciliation of DROP Accounts

Year Ended 9/30	Beginning of Year Balance	Credits	Interest	Distributions	Adjustment	Balance at End of Year
2018	30,577,010	2,899,046	2,421,518	(2,038,936)	-	33,858,637
2019	33,858,637	3,084,358	2,699,122	(1,713,864)	147	37,928,400

Historical Investment Rates of Return

Year Ending September 30th	Actuarial Value Basis	Market Value Basis
2014	4.6 %	8.8 %
2015	6.6	(2.4)
2016	7.3	8.0
2017	6.7	9.6
2018	6.4	6.9
2019	5.6	3.9
Average Returns:		
Last 5 Years	6.5 %	5.1 %
All Years	6.2 %	5.7 %

The above rates are based on the retirement systems 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

	October 1, 2019	October 1, 2018
A. Valuation Date	October 1, 2019	October 1, 2018
B. Actuarial Present Value of Accumulated Plan Benefits		
1. Vested Benefits		
a. Members Currently Receiving Payments	$ 216,477,906	$ 200,417,024
b. Terminated Vested Members	2,274,554	5,323,905
c. Other Members	92,396,992	83,745,967
d. Total	311,149,452	289,486,896
2. Non-Vested Benefits	14,645,721	22,956,851
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	325,795,173	312,443,747
4. Accumulated Contributions of Active Members	5,298,414	5,738,260
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits		
1. Total Value at Beginning of Year	312,443,747	293,895,875
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	430,350	0
b. Change in Actuarial Assumptions	7,147,331	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	20,157,798	32,705,364
d. Benefits Paid	(14,384,053)	(14,157,492)
e. Net Increase	13,351,426	18,547,872
3. Total Value at End of Period	325,795,173	312,443,747
D. Market Value of Assets	260,810,130	248,361,567
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		

SECTION E

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA		
	From 10/1/18 To 10/1/19	From 10/1/17 To 10/1/18*
A. Active Members		
1. Number Included in Last Valuation	353	345
2. New Members Included in Current Valuation	15	18
3. Non-Vested Employment Terminations	(5)	0
4. Vested Employment Terminations	(2)	(3)
5. Service Retirements	0	0
6. DROP Retirements	(7)	(7)
7. Disability Retirements	0	0
8. Deaths	0	0
9. Rehires	0	0
10. Other	0	0
11. Number Included in This Valuation	354	353
B. Terminated Vested Members*		
1. Number Included in Last Valuation	20	18
2. Additions from Active Members	2	3
3. Lump Sum Payments/Refunds	0	(1)
4. Payments Commenced	0	0
5. Deaths	0	0
6. Other	0	0
7. Number Included in This Valuation	22	20
C. DROP Participation		
1. Number Included in Last Valuation	35	36
2. Additions from Active Members	7	7
3. Payments Commenced	(3)	(8)
4. Deaths	0	0
5. Other	0	0
6. Number Included in This Valuation	39	35
D. Service Retirees, Disability Retirees and Beneficiaries		
1. Number Included in Last Valuation	177	169
2. Additions from Active Members	0	0
3. Additions from Terminated Vested Members	0	0
4. Additions from DROP	3	8
5. Deaths Resulting in No Further Payments	(1)	0
6. Deaths Resulting in New Survivor Benefits	1	0
7. End of Certain Period - No Further Payments	0	0
8. Other - Data Correction	(2)	0
9. Number Included in This Valuation	178	177

*Counts in the 2018 valuation have been adjusted so DROP members do not have 2 data records. In addition, data corrections were made to members outside of DROP whose data records were counted twice.

Schedule of Active Participant Data as of October 1, 2019

Age Group	Years of Service to Valuation Date							Earnings	
	0-1	1-4	5-9	10-14	15-19	20-24	**Total**	**Total**	**Average**
< 25	10	7	-	-	-	-	17	$ 788,766	$ 46,398
25-29	1	30	5	-	-	-	36	2,251,260	62,535
30-34	2	19	6	17	-	-	44	3,478,948	79,067
35-39	2	13	3	46	22	-	86	8,388,742	97,544
40-44	-	7	2	25	28	8	70	7,288,750	104,125
45-49	-	2	2	9	15	39	67	6,921,167	103,301
50-54	-	-	1	5	6	15	27	2,948,562	109,206
55-59	-	-	-	1	2	3	6	627,990	104,665
60-64	-	-	-	-	-	1	1	140,424	140,424
Total	15	78	19	103	73	66	354	32,834,609	92,753

Schedule of Inactive Benefits as of October 1, 2019

	Terminated Vested		Disabled		Retired		Beneficiaries		Grand Total	
		Total		Total		Total		Total		Total
Age	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 30	0	0	0	0	0	0	0	0	0	0
30 - 34	2	19,800	0	0	0	0	0	0	2	19,800
35 - 39	4	62,934	0	0	0	0	0	0	4	62,934
40 - 44	8	207,913	2	124,843	0	0	0	0	10	332,756
45 - 49	7	119,791	2	159,300	15	1,495,449	0	0	24	1,774,541
50 - 54	1	25,176	1	87,795	28	2,628,202	1	78,910	31	2,820,083
55 - 59	0	0	3	219,747	48	4,477,789	4	277,137	55	4,974,672
60 - 64	0	0	3	121,332	28	2,360,771	1	42,796	32	2,524,899
65 - 69	0	0	4	147,764	34	2,515,590	1	50,634	39	2,713,989
70 - 74	0	0	1	41,950	11	552,740	3	64,879	15	659,569
75 - 79	0	0	0	0	9	396,271	4	172,108	13	568,379
80 - 84	0	0	0	0	8	426,325	0	0	8	426,325
85 - 89	0	0	0	0	3	122,823	2	17,894	5	140,716
90 & Over	0	0	0	0	0	0	1	5,691	1	5,691
Total	22	435,614	16	902,732	184	14,975,961	17	710,049	239	17,024,355
Average Age:		42.9		58.0		62.0		71.4		60.6
Avg. Annual Benefit:		19,801		56,421		81,391		41,768		71,232

SECTION F

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

The St. Lucie County Fire District Firefighters' Pension Trust Fund was most recently amended by Resolution 674-19. The Fund 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. Plan Year

October 1 through September 30

C. Type of Plan

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

D. Eligibility Requirements

All full-time firefighters are eligible for membership on the date of employment.

E. Credited Service

Service is measured as the total number of years and fractional parts of years of service with the District as a firefighter. No service is credited for any periods of employment for which the member received a refund of employee contributions.

F. Compensation

Total salary or wages, including lump sum payments. For members who enter into the DROP with less than ten consecutive years of service, payments for accumulated sick leave, and vacation leave payments that exceed twice the annual accrual, are not included.

G. Average Final Compensation (AFC)

AFC is the average of Compensation during the 4 highest years out of the last 10 years.

H. Normal Retirement

Eligibility: Firefighters hired prior to October 1, 2014 may retire on the first day of the month coincident with or next following the earliest of:

(1) age 55 with 5 years of Credited Service, or
(2) 25 years of Credited Service regardless of age.

Firefighters hired on or after October 1, 2014 may retire on the first day of the month coincident with or next following the earliest of:

(1) age 55 with 10 years of Credited Service, or
(2) 25 years of Credited Service regardless of age.

Benefit: 3.00% of AFC multiplied by Credited Service.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

I. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 5 years of Credited Service (10 years for those hired on or after October 1, 2014).

Benefit: The Normal Retirement Benefit is reduced by 3.0% for each year by which the Early Retirement date precedes the Normal Retirement date.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

J. Delayed Retirement

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

K. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled and unable to render useful and efficient service to the District as a result of an act occurring in the performance of service for the District is immediately eligible for a disability benefit.

Benefit: Greater of the accrued benefit and 75% of AFC during the disability period.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

L. Non-Service Connected Disability

Eligibility: Any member with 5 or more years of Credited Service (10 years for those hired on or after October 1, 2014) who becomes totally and permanently disabled and unable to render useful and efficient service to the District is immediately eligible for a disability benefit.

Benefit: Accrued benefit.

Normal Form
of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

M. Death in the Line of Duty

Eligibility: Members who die as a direct result of the performance of the member's duties are eligible for survivor benefits regardless of Credited Service.

Benefit: The survivor benefit payable to the designated beneficiary is the greater of the accrued benefit and 75% of AFC.

Normal Form
of Benefit: 10 Years Certain and Life thereafter. Other options are also available.

COLA: None

N. Other Pre-Retirement Death

Eligibility: Any member who dies with 5 or more years of Credited Service (10 years for those hired on or after October 1, 2014) is eligible for survivor benefits.

Benefit: Accrued benefit.

Normal Form
of Benefit: 10 Years Certain and Life thereafter. Other options are also available.

COLA: None

O. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

P. 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 or a 50%, 66 2/3%, 75% or 100% Joint and Survivor Annuity with Pop-Up options.

Q. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 5 years of Credited Service (10 years of Credited Service for those hired on or after October 1, 2014).

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's earliest Normal Retirement date.

Alternatively, members with 5 or more years of Credited Service (10 years of credited service for those hired on or after October 1, 2014) may elect to receive benefits any time after age 50. The benefit will be reduced for Early Retirement, when applicable.

Normal Form of Benefit: 10-Year Certain and Life Annuity. Other options are also available.

COLA: None

R. Refunds

Eligibility: All members terminating employment with less than 5 years of Credited Service (10 years of Credited Service for those hired on or after October 1, 2014) are eligible. Optionally, vested members may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's accumulated contributions without interest.

S. Member Contributions

4% of Compensation prior to October 1, 2018. Effective October 1, 2018, 5% of Compensation (including members entering the DROP on and after October 1, 2018). Effective October 1, 2019, 6% of Compensation (including members entering the DROP on and after October 1, 2019).

T. State Contributions

Chapter 175 Premium Tax Refunds

U. Employer Contributions

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

V. Cost of Living Increases

Not Applicable

W. Supplemental Benefit

Eligibility: 5 years of Credited Service (10 years of credited service for those hired on or after October 1, 2014).

Benefit: Age-based Pension Factor for each year of Credited Service, including years of service while participating in the DROP. The Pension Factor ranges from $12 at age 40, up to $44 for ages 55 and older at the time benefits commence. For Plan members participating in the DROP, this benefit commences after DROP exit.

Normal Form
of Benefit: Single Life Annuity. Other options are also available.

COLA: None

X. Deferred Retirement Option Plan

Eligibility: Plan members are eligible for the DROP upon the attainment of Normal or Early Retirement requirements.

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

Maximum
DROP Period: 5 years.

Interest
Credited: The member's DROP account is credited with interest based upon one of the following options chosen by the member.

(1) the actual net investment return realized by the Fund each fiscal quarter, or
(2) actuarial rate of return provided for in the most recent actuarial valuation.

Normal Form
of Benefit: Lump Sum at termination of employment; other options are available.

COLA: None

Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a St. Lucie County Fire District Firefighters' Pension Trust Fund liability if continued beyond the availability of funding by the current funding source.

Z. Changes from Previous Valuation

In compliance with newly adopted Florida Statutes Chapter 112.1816, the following additional provisions are reflected:

> As provided and subject to the limitations in Section 112.1816, Florida Statutes, effective July 1, 2019, a Firefighter who is diagnosed with certain specified cancers is presumed to have contracted those cancers while in the line of duty for purposes of determining the disability or death benefit payable from the Plan.