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City of Leesburg Municipal Firemen's Retirement Plan

Actuarial Valuation as of October 1, 2022

February 17, 2023

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS
FOR THE PLAN AND FISCAL YEAR
BEGINNING OCTOBER 1, 2023

FLA

FREIMAN LITTLE ACTUARIES

February 17, 2023

Board of Trustees
City of Leesburg Municipal Firemen's Retirement Plan
Leesburg, Florida

RE: Actuarial Valuation as of October 1, 2022

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2022 for the City of Leesburg Municipal Firemen's Retirement Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending September 30, 2024, and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.0% net assumed return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. While we find all other inputs and outputs to be reasonable, this prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We continue to recommend lowering the net assumed return.

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; 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.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. 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."

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We look forward to the presentation of these results to you in person and we are always available to answer any questions you may have.

Sincerely,

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 20-6619

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 20-5796

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Section 1 Board Summary

Summary of Principal Valuation Results

Fiscal Year Ending September 30,	2024	2023	2022
Minimum Funding Requirements			
As a Dollar Amount			
Minimum Required City Contribution	$990,735	$895,607	$867,105
Expected State Contribution	169,319	164,563	152,264
Expected Employee Contributions	166,870	180,444	177,616
Total Minimum Required Contribution	$1,326,924	$1,240,614	$1,196,985
As a Percent of Valuation Payroll			
Minimum Required City Contribution	38.59%	32.26%	31.73%
Expected State Contribution	6.60%	5.93%	5.57%
Expected Employee Contributions	6.50%	6.50%	6.50%
Total Minimum Required Contribution	51.69%	44.69%	43.80%
Valuation Payroll	$2,567,224	$2,776,056	$2,732,559

Note: Funding requirements are determined as a dollar amount assuming premium tax money received from the State will be the same amount received for the prior year. The City must contribute $895,607 for fiscal 2023 on at least a quarterly basis and must contribute $990,735 for fiscal 2024 on at least a quarterly basis. Should the premium tax money received for fiscal 2023 and 2024 be less than expected, or should a portion of the State contribution be used towards the share component of the Plan, the City will need to contribute any potential shortfall to the Plan. The Minimum Required City Contribution is NOT adjusted for differences between actual and expected employee contributions.

Funded Status

Valuation as of October 1,	2022	2021	2020
Accrued Liability (AL)	$29,494,937	$27,754,609	$25,625,775
Actuarial Value of Assets	(24,996,648)	(24,135,288)	(22,132,214)
Unfunded Accrued Liability (UAL)	$4,498,289	$3,619,321	$3,493,561
Funded Percentage	84.75%	86.96%	86.37%

Key Assumptions

Valuation as of October 1,	2022	2021	2020
Assumed Investment Return, Net of Expenses	7.00%	7.00%	7.40%

Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on funding policy, participant data, asset information, Plan provisions, actuarial methods and assumptions, as well as contributions made to the Plan by the State of Florida. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan Administrator, the Plan Attorney, and the City. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Participant Data

The number of active members decreased from 46 in the prior valuation to 42 in the current valuation. The number of inactive members increased from 41 in the prior valuation to 43 in the current valuation. The change in member head counts resulted from 3 retirements, 1 vested termination, 3 nonvested terminations, 3 new hires and 2 retiree deaths. Average individual salary increases amongst continuing active members were more than expected at 9.83% compared to the 4.87% individual salary increase assumption. The following provides a summary comparing the actual and expected pay increases for the 12-month periods ending on the date specified.

Year Ended	Individual		Valuation Payroll
September 30,	Actual	Expected	Increase
2022	9.83 %	4.87 %	(7.52)%
2021	7.03 %	4.58 %	1.59 %
2020	7.58 %	4.55 %	9.52 %
2019	1.13 %	4.57 %	(7.37)%
2018	3.13 %	4.53 %	1.32 %
2017	5.92 %	4.60 %	3.29 %
2016	4.65 %	4.51 %	13.43 %
2015	6.22 %	4.63 %	(20.48)%
2014	1.30 %	4.75 %	(5.63)%
2013	0.40 %	5.00 %	0.64 %
Average:	4.68 %	4.66 %	(1.56)%

Pay increases were more than expected with the actual average pay increases amongst continuing actives at 9.83% in comparison to the 4.87% salary increase assumption. In addition, total payroll decreased 1.56% each year on average over the last 10 years. Florida Statutes 112.64(5)(a) requires that the payroll growth assumption not exceed the average payroll growth for the prior ten years. This requirement is met in that the Unfunded Accrued Liability is amortized as a level dollar amount.

Overall, there was a demographic loss primarily due to pay increases more than expected, retirement experience, and the correction of benefits payable to one retiree offset in part by the death of two retirees and the termination of four members. Should a pattern of consistent gains or losses develop, assumptions will be adjusted as needed. A review of actuarial experience was last conducted by the prior actuary January 8, 2017.

Assets

The investment return on the Market Value of Assets was (15.95%) and the return on the Actuarial Value of Assets was 4.76%, each in comparison to the 7.0% rate of return net of investment expenses assumed for the fiscal year ending September 30, 2022. Because the return on the Actuarial Value of Assets was more than the net assumed investment return, there was an actuarial investment gain for the year ending September 30, 2022.

Note only a portion of actual investment gains or losses are recognized in the current year Actuarial Value of Assets with the remainder recognized over the next four years. Even if all assumptions are realized in the next several years, the Plan will experience changes in the required contribution rate until prior gains and losses are fully recognized.

The table below provides a comparison of the investment return on the Market Value of Assets and the Actuarial Value of Assets in comparison to the investment return assumed in the valuation of the Plan.

12-Month Period Ended September 30,	% Market Return	% Actuarial Return	% Assumed Return
2022	(15.93%)	4.76%	7.00%
2021	19.96%	10.15%	7.40%
2020	12.19%	8.20%	7.50%
2019	3.85%	5.44%	7.50%
2018	4.95%	6.43%	7.50%
2017	10.01%	8.09%	7.50%
2016	10.27%	7.61%	7.50%
2015	(1.45%)	8.81%	7.50%
2014	8.82%	8.16%	7.50%
2013	13.41%	7.52%	7.75%
Average	6.17%	7.51%	7.46%

Investment returns less than the assumed rate of return result in increased annual minimum required contributions in the future.

Plan Provisions

There were no changes in Plan provisions since the prior valuation of the Plan. However, premium tax contributions in the amount of $12,683.50 were allocated to Share accounts for the year ending September 30, 2022.

Assumptions and Methods

The net assumed rate of investment return continues to be 7.0% for this the October 1, 2022 actuarial valuation, unchanged from the assumption used in the prior actuarial valuation as directed by the Board of Trustees. The net assumed return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. The prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. As discussed with the Board we recommend lowering the net assumed return.

The impact of the change may be found in the reconciliation of the funded status and minimum funding requirements found at the end of Section 2 of this report. See "Reconciliations" in the table of contents.

State Contributions

The funding requirement is determined as a dollar amount assuming premium tax money received from the State will be the same amount received for the prior year. The City must contribute the dollar amount shown on page 1 on at least a quarterly basis. We understand there is no mutual consent regarding State premium tax dollar usage. Should the premium tax money received be less than expected or should a different portion of the State contribution be used towards the share component of the Plan, the City will need to contribute any potential shortfall to the Plan.

As described in the Outline of Plan Provisions found in Section 4 of this report, Share Participant allocations are based on excess premium tax money determined using the default methodology described in Chapter 175, F.S. which calls for half of any premium tax money greater than $156,635.48 to be used for share allocations with the other half used to reduce the City's funding requirement.

Assessment and Disclosure of Risk

As described in Actuarial Standard of Practice No. 51 (ASOP 51), this section is meant to address the assessment and disclosure of risk in a pension funding valuation. This is not meant to be a comprehensive summary but should provide information regarding risks related to this plan. Additional historical information provided in this report also contain relevant information regarding asset size, asset mix, pay increases, benefits and contributions. This information can be used to understand the changes over time to identify trends.

Note that ASOP 51 defines risk as "The potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience…." The following provides examples of potential risk.

Investment Risk: As noted previously, investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

Interest Rate Risk: Interest rates are used to discount the value of benefits. If the long-term expectation of returns is higher or lower than the assumed net investment return, the assumed net investment return should be adjusted. When the assumed net investment return is increased the estimated liability is decreased. When the assumed net investment return is decreased the estimated liability is increased. The chart below shows what the funded status of the plan is on a market value of assets basis after changing the net assumed return by 1% or 2%.

Funded Status on Market Value of Assets Basis

As of 10/1	2% Decrease	1% Decrease	Valuation Net Assumed Return	1% Increase	2% Increase	Valuation Net Assumed Return Assumption
2022	59.44%	66.97%	74.83%	82.97%	91.36%	7.00%
2021	76.14%	85.72%	95.70%	106.05%	116.73%	7.00%
2020	69.70%	78.29%	87.24%	96.51%	106.07%	7.40%
2019	65.14%	73.45%	82.11%	91.09%	100.34%	7.50%
2018	*	*	82.12%	*	*	7.50%

*Information not shown in report of prior actuary.

Longevity and Other Demographic Risks: The estimated liability of the Plan is based on assumptions related to mortality, retirement, disability and termination. To the extent that Plan experience is different than these assumptions the gains and losses affect future required contributions and estimated liability.

Contribution Risk: The possibility that the plan sponsor does not make contributions to the plan according to the funding policy.

Intergenerational equity risk: Intergenerational equity is the concept that resources do not belong to a specific generation and they must be preserved for future generations. One way to alleviate this risk is to pay for benefits over the average future service of the group receiving benefits. Members may feel there are inequities when one is paying more than others, receiving less than others, or paying more than others in relation to what they are receiving.

Plan maturity measures may help understand the risks associated with the plan. As the Plan matures, the ratio of the Market Value of Assets to the Covered Payroll increases. As this ratio gets larger, the impact of asset volatility has a larger effect on the volatility of the Minimum Required Contribution as a percentage of pay.

Year Ending September 30,	Market Value of Assets	Valuation Payroll	Asset Volatility Ratio
2022	$22,070,143	$2,567,224	8.6
2021	26,561,799	2,776,056	9.6
2020	22,355,440	2,732,559	8.2
2019	20,141,146	2,495,048	8.1
2018	19,669,022	2,693,628	7.3
2017	18,996,791	2,658,407	7.1
2016	17,475,117	2,573,622	6.8
2015	16,241,906	2,269,006	7.2
2014	17,027,525	2,853,270	6.0
2013	15,329,767	3,023,471	5.1
2012	13,180,704	3,004,257	4.4
2011	11,051,863	3,073,457	3.6
2010	10,692,387	3,106,945	3.4

Another measure of a pension plan's maturity is the Ratio of Benefit Payments to Contributions. Over the life of a pension plan, it is expected that the majority of the benefits will be paid for by returns rather than contributions. For this to happen, as a plan matures, the plan will eventually pay out more in benefits than it receives in contributions. It is important to understand the magnitude of this difference so that steps can be taken, if necessary, to manage cash flows going forward. The table below provides the Ratio of Benefit Payments to Contributions. Note that there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending September 30,	Benefit Payments	Contributions	Ratio of Benefit Payments to Contributions
2022	$1,456,197	$1,245,074	1.2
2021	1,307,565	1,158,870	1.1
2020	1,279,859	1,131,163	1.1
2019	1,268,317	1,035,049	1.2
2018	1,229,206	1,014,795	1.2
2017	1,165,231	1,003,375	1.2
2016	1,222,312	854,970	1.4
2015	1,445,857	954,892	1.5
2014	836,424	1,218,267	0.7
2013	780,467	1,172,229	0.7
2012	734,192	1,183,900	0.6
2011	783,495	1,313,278	0.6
2010	705,299	1,296,802	0.5

When looking at Net Cash Flows, it is useful to understand the relative size of the cash flows in comparison to the Market Value of Assets. The following table provides the ratio of the Net Cash Flows divided by the Market Value of Assets. As mentioned previously, there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending September 30,	Contributions	Disbursements	Market Value of Assets	Net Cash Flow Divided by Assets
2022	$1,245,074	$1,526,690	$22,070,143	(0.01)
2021	1,158,870	1,390,717	26,561,799	(0.01)
2020	1,131,163	1,358,401	22,355,440	(0.01)
2019	1,035,049	1,315,253	20,141,146	(0.01)
2018	1,014,795	1,274,156	19,669,022	(0.01)
2017	1,003,375	1,209,943	18,996,791	(0.01)
2016	854,970	1,258,690	17,475,117	(0.02)
2015	954,892	1,496,179	16,241,906	(0.03)
2014	1,218,267	883,046	17,027,525	0.02
2013	1,172,229	815,215	15,329,767	0.02
2012	1,183,900	768,725	13,180,704	0.03
2011	1,313,278	818,174	11,051,863	0.04
2010	1,296,802	763,853	10,692,387	0.05

Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Investment Allocation

Valuation Date	**October 1, 2022**		**October 1, 2021**	
Equity	$11,203,450	51%	$13,861,337	53%
Fixed Income	7,723,625	35%	8,980,510	34%
Real Estate	2,730,012	12%	2,194,334	8%
Infrastructure	0	0%	620,781	2%
Cash and Cash Equivalents	472,685	2%	842,378	3%
Net Receivables	(59,629)	0%	62,459	0%
Fair Market Value of Assets	$22,070,143	100%	$26,561,799	100%

Note: To meet minimum contribution requirements for the Plan year ending September 30, 2021, an additional $10,818.59 was deposited to the Plan by the City on November 16, 2021. This amount is the difference between the Net Position Restricted for Pensions in the GASB 67/68 supplement and the Fair Market Value of Assets shown above at October 1, 2021. In addition, when providing information as of October 1, 2022, the auditor revised the net receivables at October 1, 2021. We have continued to show information at October 1, 2021 as shown in our prior report.

Reconciliation of Market Value of Assets

Year Ending September 30,	2022	2021
Additions		
Contributions:		
Employer	$867,105	$806,306
State of Florida	182,002	172,490
Member Regular	195,967	180,074
Member Buy-Back	0	0
Total contributions	$1,245,074	$1,158,870
Investment income (loss):		
Realized gains and losses	$342,222	$871,004
Unrealized gains and losses	(5,197,445)	3,035,021
Interest and dividends	767,140	544,689
Other income	0	76,263
Total investment income	($4,088,083)	$4,526,977
Less investment expenses:		
Investment expense	$121,957	$88,771
Net investment income	($4,210,040)	$4,438,206
Total additions	($2,964,966)	$5,597,076
Deductions		
Benefit payments	$1,322,295	$1,241,901
PLOP lump sums	25,000	0
Share lump sums	82,411	38,803
Refunds of contributions	26,491	26,861
Administrative expenses	70,493	83,152
Total deductions	$1,526,690	$1,390,717
Net increase in net position	($4,491,656)	$4,206,359
Fair Market Value of Assets		
Beginning of year	$26,561,799	$22,355,440
End of year	$22,070,143	$26,561,799

Note: Information for the year ending September 30, 2021 is as shown in our prior report. See the GASB 67/68 supplement for notes regarding differences between this information and the asset information provided by the auditor as of October 1, 2022. Refunds are shown in our GASB 67/68 supplement as $26,492 as shown in the report of the auditor. Actual refunds totaled $26,491.47. Refunds are shown as $26,491 above to arrive at the same $22,070,143 market value of assets as shown in the information provided by the auditor.

Development of Actuarial Value of Assets

The Market Value of Assets is adjusted to recognize investment earnings greater than (or less than) the assumed investment return over a five-year period. The Actuarial Value of Assets shall not be more than 120% or less than 80% of the Market Value of Assets.

1.	Market Value of Assets as of 9/30/2022	$	22,070,143
2.	Phase-In Gains (Losses) Over Five Year Period		

		Original Gain (Loss)	Percent Unrecognized		Unrecognized Gain (Loss)
a.	Year Ending 9/30/2022	$ (6,053,139)	80%	$	(4,842,511)
b.	Year Ending 9/30/2021	2,798,864	60%		1,679,318
c.	Year Ending 9/30/2020	945,177	40%		378,071
d.	Year Ending 9/30/2019	(706,917)	20%		(141,383)
e.	Total			$	(2,926,505)

3.	Cumulative Balance of State Monies for Benefit Improvement	$	0
4.	Preliminary Actuarial Value of Assets as of 9/30/2022 = 1. - 2.e. - 3.	$	24,996,648
5.	Corridor Around Market Value		
	a. Minimum = 80% of Market Value of Assets	$	17,656,114
	b. Maximum = 120% of Market Value of Assets	$	26,484,172
	c. Corridor Adjustment to Preliminary Actuarial Value	$	0
6.	Actuarial Value of Assets as of 9/30/2022 (4. + 5.c.)	$	24,996,648

Determination of Actuarial Asset Gain (Loss)

1.	Actuarial Value of Assets - Beginning of Year	$	24,135,288
2.	Contributions		1,245,074
3.	Benefit Payments + Administrative Expense		(1,526,690)
4.	Interest		1,673,243
5.	Expected Value of Assets at End of Year	$	25,526,915
6.	Actuarial Value of Assets - End of Year	$	24,996,648
7.	Gain (Loss) for Plan Year = (6) - (5)	$	(530,267)

Development of Historical Gain or Loss on Market Value of Assets

Year Ending September 30,	2022	2021
1. Market Value of Assets - Beginning of Year	$26,561,799	$22,355,440
2. Contributions	1,245,074	1,158,870
3. Benefit Payments + Administrative Expenses	(1,526,690)	(1,390,717)
4. Expected Interest	1,843,099	1,639,342
5. Expected Value of Assets at End of Year	$28,123,282	$23,762,935
6. Market Value of Assets - End of Year	$22,070,143	$26,561,799
7. Gain (Loss) for Plan Year = (6) - (5)	$(6,053,139)	$2,798,864

Year Ending September 30,	2020	2019
1. Market Value of Assets - Beginning of Year	$20,141,146	$19,669,022
2. Contributions	1,131,163	1,035,049
3. Benefit Payments + Administrative Expenses	(1,358,401)	(1,315,253)
4. Expected Interest	1,496,355	1,459,245
5. Expected Value of Assets at End of Year	$21,410,263	$20,848,063
6. Market Value of Assets - End of Year	$22,355,440	$20,141,146
7. Gain (Loss) for Plan Year = (6) - (5)	$945,177	$(706,917)

Historical Asset Values

Year Ending September 30,	Market Value of Assets	Actuarial Value of Assets	% Market Return	% Actuarial Return	% Assumed Return
2022	$22,070,143	24,996,648	(15.93)%	4.76%	7.00 %
2021	26,561,799	24,135,288	19.96 %	10.15 %	7.40 %
2020	22,355,440	22,132,214	12.19 %	8.20 %	7.50 %
2019	20,141,146	20,522,401	3.85 %	5.44 %	7.50 %
2018	19,669,022	19,737,487	4.95 %	6.43 %	7.50 %
2017	18,996,791	18,797,281	10.01 %	8.09 %	7.50 %
2016	17,475,117	17,589,407	10.27 %	7.61 %	7.50 %
2015	16,241,906	16,734,353	(1.45)%	8.81 %	7.50 %
2014	17,027,525	15,898,619	8.82 %	8.16 %	7.50 %
2013	15,329,767	14,377,035	13.41 %	7.52 %	7.75 %

Historical Contribution Amounts

Year Ending September 30,	Employer	State	Member Regular	Member Buy-back	Total
2022	$867,105	$182,002	$195,967	$0	$1,245,074
2021	806,306	172,490	180,074	0	1,158,870
2020	783,957	152,264	177,275	17,667	1,131,163
2019	665,627	144,627	166,141	58,654	1,035,049
2018	663,723	141,149	169,310	40,613	1,014,795
2017	639,746	146,815	169,905	46,909	1,003,375
2016	540,916	150,584	163,470	0	854,970
2015	609,819	166,380	178,693	0	954,892
2014	866,635	161,481	190,151	0	1,218,267
2013	827,920	156,635	187,674	0	1,172,229

Historical Deductions from Fund

Year Ending September 30,	Monthly + PLOP Lump Sums	Share Lump Sums	Refunds	Administrative Expense	Total
2022	$1,347,295	$82,411	$26,491	$70,493	$1,526,690
2021	1,241,901	38,803	26,861	83,152	1,390,717
2020	1,239,160	16,452	24,247	78,542	1,358,401
2019	1,229,132	39,185	0	46,936	1,315,253
2018	1,185,367	24,842	18,997	44,950	1,274,156
2017	1,119,905	41,882	3,444	44,712	1,209,943
2016	1,135,299	62,918	24,095	36,378	1,258,690
2015	1,278,661	85,985	81,211	50,322	1,496,179
2014	801,902	31,523	2,999	46,622	883,046
2013	757,760	21,112	1,595	34,748	815,215

Historical State Contributions

Calendar Year	Fiscal Year Ending September 30,	Total
2021	2022	182,002.48
2020	2021	172,490.22
2019	2020	152,263.73
2018	2019	144,626.57
2017	2018	141,149.15
2016	2017	146,815.00
2015	2016	150,583.64
2014	2015	166,379.91
2013	2014	161,481.42
2012	2013	156,635.48
2011	2012	163,137.34
2010	2011	148,365.97
2009	2010	150,459.61
2008	2009	151,617.38
2007	2008	177,356.72
2006	2007	179,780.63
2005	2006	138,695.36
2004	2005	123,857.18
2003	2004	119,787.79
2002	2003	114,618.49
2001	2002	101,494.92
2000	2001	94,571.61
1999	2000	98,330.96
1998	1999	94,115.90
1997	1998	97,054.72

Present Value of Benefits

Valuation as of October 1,		2022	2021
1.	**Active Members**		
	a. Retirement Benefits	$15,853,473	$16,201,627
	b. Termination Benefits	1,125,217	1,101,680
	c. Survivor Benefits	170,586	176,798
	d. Disability Retirement	321,764	337,346
	e. Total for Active Members	$17,471,040	$17,817,451
2.	**Inactive Members**		
	a. Retirement	$13,699,781	$11,728,674
	b. Terminated Members	1,468,836	1,323,546
	c. Beneficiaries	632,066	649,532
	d. Disability Retirement	162,107	166,008
	e. Total for Inactive Members	$15,962,790	$13,867,760
3.	**Share Balances**	$476,426	$630,729
4.	**Present Value of Benefits (PVB)**	$33,910,256	$32,315,940

Accrued Liability

Valuation as of October 1,		2022	2021
1.	**Active Members**		
	a. Retirement Benefits	$12,393,574	$12,640,342
	b. Termination Benefits	423,090	367,344
	c. Survivor Benefits	80,302	82,167
	d. Disability Retirement	158,755	166,267
	e. Total for Active Members	$13,055,721	$13,256,120
2.	**Inactive Members**		
	a. Retirement	$13,699,781	$11,728,674
	b. Terminated Members	1,468,836	1,323,546
	c. Beneficiaries	632,066	649,532
	d. Disability Retirement	162,107	166,008
	e. Total for Inactive Members	$15,962,790	$13,867,760
3.	**Share Balances**	$476,426	$630,729
4.	**Accrued Liability (AL)**	$29,494,937	$27,754,609

Normal Cost

Valuation as of October 1,		2022	2021
1.	**Preliminary Normal Cost**		
a.	Retirement Benefits	$420,985	$466,350
b.	Termination Benefits	80,811	87,276
c.	Survivor Benefits	10,636	11,876
d.	Disability Retirement	20,249	23,328
e.	Total for Active Members	$532,681	$588,830
2.	**Total Normal Cost**		
a.	Preliminary Normal Cost	$532,681	$588,830
b.	Estimated Administrative Expense	70,493	83,152
c.	Total Normal Cost	$603,174	$671,982
d.	Total Normal Cost as a % of Pay	23.50%	24.21%
3.	**Actual Employer Normal Cost**		
a.	Preliminary Normal Cost		$588,830
b.	Actual Administrative Expense		70,493
c.	Actual Employee Contributions (Excluding Buy-back)		(195,967)
d.	Actual Employer NC		$463,356
e.	Employer Normal Cost as a % of Pay		16.69%
4.	**Valuation Payroll**	$2,567,224	$2,776,056

Unfunded Accrued Liability

Derivation of Unfunded Accrued Liability (UAL)

Actuarial Valuation as of October 1,	2022
Unfunded Accrued Liability	
1. Actuarial Accrued Liability	$29,494,937
2. Actuarial Value of Assets	24,996,648
3. Unfunded Accrued Liability	$4,498,289
Funded Percentage	84.75%
Determination of Expected Unfunded Accrued Liability	
1. Unfunded Accrued Liability as of Prior Year	$3,619,321
2. Employer Normal Cost	463,356
3. Interest on (1) and (2)	285,787
4. Contribution from City and State	
a. Contribution from City	$(867,105)
b. Recognized Contribution from State	(182,002)
c. Total Contribution	$(1,049,107)
5. Interest on Contribution for Time on Deposit	(30,349)
6. Change in Plan, Methods or Assumptions	12,684
7. Expected Unfunded Accrued Liability	$3,301,692
Calculation of (Gain) or Loss	
1. Actual Unfunded Accrued Liability	$4,498,289
2. Expected Unfunded Accrued Liability	3,301,692
3. Total (Gain) or Loss	$1,196,597
Reconciliation of Unfunded Accrued Liability	
1. Unfunded Actuarial Liability as of Prior Year	$3,619,321
2. Total Change in Unfunded Accrued Liability	
a. Expected Change in Unfunded Accrued Liability	$(330,313)
b. Change in Plan, Methods or Assumptions	12,684
c. Change Due to (Gain) or Loss	
i. Portion of (Gain) / Loss Due to Investments	$530,267
ii. Portion of (Gain) / Loss Due to Demographics	666,330
iii. Total (Gain) or Loss	$1,196,597
d. Total Change in Unfunded Accrued Liability	878,968
3. Unfunded Accrued Liability	$4,498,289

Amortization of Unfunded Liability

The Unfunded Accrued Liability is being amortized as a level dollar amount based on the interest assumption. Changes in the Unfunded Accrued Liability due to plan changes, assumption changes, and method changes are amortized over a 20-year period. Actuarial experience is amortized over a 10-year period.

Amortization Bases

	10/1	Type	Original	Outstanding Before Adjustment	Outstanding Amount	Years Remain	7.00% Amortization
1.	2007	Initial Base	$3,346,963	$1,646,812	$1,599,855	5	$364,663
2.	2008	Method Change	(1,296,344)	(699,486)	(679,541)	6	(133,238)
3.	2010	Assumption Change	(234,736)	(142,939)	(138,863)	8	(21,734)
4.	2010	Plan Change	*	(9,643)	(9,368)	18	(870)
5.	2013	Assumption Change	158,637	117,145	113,805	11	14,184
6.	2013	Method Change	2,630,644	1,942,578	1,887,188	11	235,205
7.	2014	Actuarial Experience	(327,555)	(89,880)	(87,317)	2	(45,135)
8.	2015	Actuarial Experience	(631,086)	(245,686)	(238,681)	3	(85,000)
9.	2016	Actuarial Experience	162,127	81,000	78,690	4	21,712
10.	2016	Assumption Change	741,206	632,937	614,890	14	65,710
11.	2017	Actuarial Experience	150,465	89,422	86,872	5	19,801
12.	2017	Method Change	(225,709)	(197,173)	(191,551)	15	(19,655)
13.	2018	Actuarial Experience	303,232	207,227	201,318	6	39,473
14.	2019	Actuarial Experience	(104,482)	(78,705)	(76,461)	7	(13,259)
15.	2020	Actuarial Experience	233,317	196,198	190,604	8	29,832
16.	2020	Assumption Change	(338,204)	(317,502)	(308,449)	18	(28,658)
17.	2020	Method Change	(164,551)	(154,479)	(150,074)	18	(13,943)
18.	2021	Actuarial Experience	(745,471)	(691,515)	(671,797)	9	(96,366)
19.	2021	Assumption Change	1,140,098	1,112,287	1,080,572	19	97,709
20.	2022	Actuarial Experience	1,196,597	1,196,597	1,196,597	10	159,223
	Amortization of Unfunded Accrued Liability						$589,654
	Total Outstanding Bases			$4,595,195	$4,498,289		
	Unfunded Accrued Liability				4,498,289		

*The original base for plan change as of 10/1/2010 is not shown in the 10/1/2010 actuarial valuation. The base first appears in the 10/1/2011 valuation as (10,060) with 29 years remaining.

Projected Unfunded Accrued Liability and Amortization Payments

Plan Year Beginning October 1	Outstanding Bases	Amortization Payment
2022	$4,498,289	$589,654
2023	4,182,238	589,654
2024	3,844,066	634,789
2025	3,433,927	719,787
2026	2,904,129	698,078
2027	2,360,474	313,609
2028	2,190,144	407,374
2029	1,907,564	420,636
2030	1,591,014	412,539
2031	1,260,970	508,903
2032	804,712	349,681
2033	486,883	100,293
2034	413,652	100,293
2035	335,294	100,292
2036	251,453	34,575
2037	232,058	54,238
2038	190,267	54,238
2039	145,551	54,234
2040	97,709	97,709
2041	0	0

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded actuarial accrued liability. This payment is designed to reduce the Unfunded Accrued Liability in an orderly fashion over the next 20 years.

Minimum Funding Requirements

Determination of Required Contribution

Valuation as of October 1,		**2022**	**2021**
Funding for Year Ending September 30,		**2024**	**2023**
1.	**Minimum Required Contribution**		
a.	Total Normal Cost	$603,174	$671,982
b.	Amortization of Unfunded Accrued Liability	589,654	443,061
c.	Total Minimum Required Contribution		
i)	Beginning of Year	$1,192,828	$1,115,043
ii)	Periodic in Funding Year	$1,326,924	$1,240,614
2.	**Contribution by Source - $ Amount**		
a.	City Minimum Required Contribution	$990,735	$895,607
b.	Expected State Contribution	169,319	164,563
c.	Expected Employee Contributions	166,870	180,444
d.	Total Minimum Required Contribution	$1,326,924	$1,240,614
e.	Required from City Plus State in Funding Year	$1,160,054	$1,060,170
3.	**Contribution by Source - % of Pay**		
a.	City Minimum Required Contribution	38.59%	32.26%
b.	Expected State Contribution	6.60%	5.93%
c.	Expected Employee Contributions	6.50%	6.50%
d.	Total Minimum Required Contribution	51.69%	44.69%
e.	Required from City Plus State in Funding Year % of Pay	45.19%	38.19%
4.	**Valuation Payroll**		
a.	In Year Following Valuation Date	$2,567,224	$2,776,056
b.	Projected to Funding Year	$2,567,224	$2,776,056
5.	**Key Assumptions**		
a.	Net Assumed Rate of Return	7.00%	7.00%
b.	Total Payroll Increase to Funding Year	0.00%	0.00%

Reconciliations

Reconciliation of Funded Status

	Unfunded Accrued Liability	Funded Percentage	Change in Unfunded Accrued Liability	Change in Funded Percentage
October 1, 2021	**$3,619,321**	**86.96 %**		
Changes in Funded Percentage due to:				
Normal Operation of Plan	3,301,692	88.55 %	$(317,629)	1.59 %
Investment Experience	3,831,959	86.71 %	530,267	(1.84)%
Demographic Experience	4,498,289	84.75 %	666,330	(1.96)%
Total Changes			$878,968	(2.21)%
October 1, 2022	**$4,498,289**	**84.75 %**		

Reconciliation of City Minimum Funding Requirement

	$ Amount	% of Pay
As of Prior Valuation (Fiscal 2023)	**$895,607**	**32.26%**
Changes in Contribution due to:		
Change Expected	$0	0.00%
Change in Expected State Contribution	(4,589)	(0.16%)
Change in Expenses	(14,020)	(0.51%)
Investment Experience	78,141	2.82%
Demographic Experience	35,596	4.18%
Total Changes	$95,128	6.33%
As of Current Valuation (Fiscal 2024)	**$990,735**	**38.59%**

Section 3 Accounting Information

Information Required by GASB 67/68

A supplemental report provides information under the Governmental Accounting Standards Board No. 67/68.

Statement of Accumulated Plan Benefits

The following table is based on prior accounting standards and is required by the State. The present value of accrued benefits is an estimate of the liability for all benefits accrued to date.

Valuation as of October 1,	2022	2021
1. Actuarial present value of accumulated plan benefits		
a. Participants currently receiving benefits	$14,495,222	$12,545,007
b. Other participants	11,769,166	12,200,548
c. Total vested plan benefits	$26,264,388	$24,745,555
d. Total non-vested plan benefits	277,839	266,663
e. Total accumulated plan benefits	$26,542,227	$25,012,218
2. Change in accumulated plan benefits		
a. Accumulated plan benefits beginning of year	$25,012,218	
b. Increase (decrease) during year attributable to:		
i. Plan amendment	$12,684	
ii. Change in assumptions or methods	0	
iii. Benefits paid	(1,456,197)	
iv. Increase for interest and probability of payment due to decrease in discount period and benefits accrued	2,973,522	
v. Net increase (decrease)	$1,530,009	
c. Accumulated plan benefits end of year	$26,542,227	

Other Disclosures Required by the State of Florida

Valuation as of October 1,	2022	2021
Present value of active member:		
Future salaries (attained age)	$21,685,185	$22,183,556
Future contributions (attained age)	$1,409,537	$1,441,931
Balance of contributions without interest for actives	$1,777,494	$1,860,490

Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

(a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations.

(b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.

(c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.

(d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	2% Decrease (5.00%)	Current Discount Rate (7.00%)	2% Increase (9.00%)
Total pension liability	$37,131,223	$29,494,937	$24,157,460
Plan fiduciary net position	(22,070,143)	(22,070,143)	(22,070,143)
Net pension liability	$15,061,080	$7,424,794	$2,087,317
Plan fiduciary net position as a percentage of the total pension liability	59.44%	74.83%	91.36%
Years of benefit payments:			
Expected for current members:	97	97	97
Paid for with current assets:	13.34	16.25	21.95
City Plus State Contribution Requirement, Plus Expected Employee Contributions			
As a Dollar Amount	$2,224,098	$1,326,924	$586,657
Percent of Payroll	86.63%	51.69%	22.85%

Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending September 30,	**2022**	**2021**	**2020**	**2019**	**2018**
Net assumed rate of return	7.00%	7.40%	7.50%	7.50%	7.50%
Actual rate of return	(15.93%)	19.96%	12.19%	3.85%	4.95%
Percentages of assets in:					
Cash	2%	3%	2%	3%	5%
Equity	51%	53%	51%	61%	49%
Bond	35%	34%	36%	26%	36%
Alternative	12%	10%	11%	10%	10%
Total	100%	100%	100%	100%	100%

Section 4 Supplementary Information

Summary of Participant Data

Member Statistics

As of October 1,	2022	2021
Active Participants		
Number	42	46
Average Age	39.1	39.0
Average Service	12.2	12.0
Percent Male	90.5	91.3
Average Annual Pay	$68,802	$64,473
Total Covered Payroll	$2,889,679	$2,965,750
Valuation Payroll	$2,567,224	$2,776,056
Annual Report	$3,014,863	$2,770,370
Terminated Vested Participants		
Number	11	10
Average Age	44.3	44.3
Percent Male	90.9	90.0
Average Monthly Benefit	$1,796	$1,826
Service Retirements		
Number	26	25
Average Age	62.9	65.2
Percent Male	100.0	100.0
Average Monthly Benefit	$4,004	$3,706
Beneficiaries		
Number	5	5
Average Age	76.3	75.3
Percent Male	0.0	0.0
Average Monthly Benefit	$1,270	$1,270
Disabled		
Number	1	1
Average Age	60.3	59.3
Percent Male	100.0	100.0
Average Monthly Benefit	$1,534	$1,534

Number of Active Members by Age and Service as of October 1, 2022

	Service							
Age	< 1	< 5	< 10	< 15	< 20	< 25	< 30	Total
< 20								
< 25	2	4						6
< 30	1	3	1					5
< 35		4	3		1			8
< 40				2				2
< 45				1	6			7
< 50					2	1		3
< 55					3	4	2	9
< 60						1	1	2
Total	3	11	4	3	12	6	3	42

Active Valuation Pay by Age and Service as of October 1, 2022

	Service							
Age	<1	<5	<10	<15	<20	<25	<30	Total
< 20								
< 25	42,478	45,456						44,463
< 30	42,478	46,691	52,219					46,954
< 35		52,570	65,702		68,575			59,495
< 40				68,999				68,999
< 45				53,487	85,763			81,152
< 50					67,940	99,561		78,480
< 55					65,345	98,852	88,854	85,461
< 60						99,465	102,050	100,758
Total	42,478	48,380	62,331	63,828	76,256	99,073	93,253	68,802

Reconciliation of Plan Participants

	Active	Retired	Deferred Vested	Disabled	Survivor	Total
October 1, 2021	**46**	**25**	**10**	**1**	**5**	**87**
Retired	(3)	3				0
Terminated Vested	(1)		1			0
Nonvested Termination	(3)					(3)
Deceased		(2)				(2)
Additions	3					3
October 1, 2022	**42**	**26**	**11**	**1**	**5**	**85**

Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Effective Date: The original effective date was July 1, 1963 (also known as the "Superseded Plan").

The Plan was amended and restated effective October 1, 1978 ("Prior Plan") with Ordinance No. 79-3 dated March 12, 1979. Subsequently the Plan was amended by Ordinances No. 82-16, 82-35 and 82-58.

The Plan was amended and restated effective October 1, 1991 ("Prior Plan Two") with Ordinance No. 92-24 dated August 24, 1992. (The Plan had also been amended by Ordinance No. 92-20 adopted July 13, 1992 but this Ordinance was rescinded with Ordinance No. 92-24.) Subsequently the Plan was amended as follows:

Ord. #	Adopted	Effective	Description
93-15	09/13/1993	01/01/1993	Addition of language regarding *nonadmissible causes of disability* and *eligible rollover distributions*.
94-03	01/24/1994	04/01/1994	The definition of *Basic Compensation* was revised to that shown below (except it did not include tax-deferred compensation). *Early Retirement factors* were revised to a reduction 0.25% per month for retirement prior to the Normal Retirement Date as described below. The Employee Rate was increased from 5% to 6.5% of Basic Compensation. The *multiplier* was increased from 2.25% to 2.75%.
96-25	05/28/1996	04/01/1996	The *multiplier* was increased from 2.75% to 3.0%, *Supplemental Retirement Income* was increased from $166.67 to $200 per month for Normal Retirements on or after April 1, 1996 on a temporary life only basis to age 58 with a maximum of 36 payments, and a one-time COLA was granted to Participants who had been retired for three or more years.
96-42	11/12/1996	10/01/1996	Language pertaining to *Disability Retirement* was removed. The language removed included statements that *Line of Duty Disability* provisions do not apply to Participants who have reached the Normal Retirement or Early Retirement Date and also that the monthly amount may be reduced by Workmen's Compensation Law of the State of Florida.
97-39	10/27/1997	10/15/1997	NCNB National Bank of Florida was removed as Trustee and the *Retirement Committee* was appointed.
99-06	02/08/1999	10/01/1998	The *Normal Retirement Date* was lowered to that described below and *Supplemental Retirement Income* was increased from $200 to $220 per month for Normal Retirements on or after October 1, 1998 on a temporary life only basis to age 58 with a maximum of 72 payments.
99-06	02/08/1999	10/01/1999	The section defining "*Contributions*" was revised to read as summarized under "Funding Requirements" below.

Most recently the Plan was amended and restated effective April 1, 2000 with Ordinance No. 00-47 dated September 25, 2000 to incorporate the above amendments, to revise the definition of Basic Compensation, Employee and Firefighter, to add options for ad-hoc COLAs, along with other administrative language changes. Participants do not receive less than the benefits accrued as of March 31, 2000 and no vested rights as of March 31, 2000 are diminished. Subsequently the Plan was amended as follows:

Ord. #	Adopted	Effective	Amnd	Description
04-55	08/09/2004	10/01/2003	1	*Supplemental Retirement Income* was increased for Normal Retirements from $220 per month on a temporary life only basis to age 58 with a maximum of 72 payments to $13 per month x Credited Service (not less than $220 per month) on a temporary life only basis to age 65.
08-10	01/28/2008	10/01/2007	2	Employees become *Participant*s upon hire effective October 1, 2007 and begin Employee Contributions immediately.
08-102	12/08/2008	10/01/2008	3	The definition of *Retirement Committee*, *buy-back of prior service with the City*, various rules related to *Disability Retirement* (including removal of the five-month requirement for Not Line of Duty Disability) and *benefit payable other than on retirement*, and *Optional Forms of Benefit* including lump sum payment of small retirement income were revised as described below. The definition of *Beneficiary* was revised to the person(s) designated by the Participant to receive death benefits and that if there is no designation on file or if the designated Beneficiary and Contingent Beneficiary are not living the Beneficiary is the estate of the Participant. Language was added to allow a Participant to voluntarily *leave Employee Contributions in the Plan* for a period of five years pending the possibility of rehire. Credited Service was revised to include certain service for *military service* voluntarily or involuntarily after employment with the City for all purposes including vesting. *Leave of Absence* was amended to remove that military service must be compulsory and that return to work must be within the time allowed by federal or state law.
08-103	12/08/2008	10/01/2008	4	The *Share Program* was created as described below.
10-20	02/22/2010	10/01/2009	5	Credited Service is revised to indicate the Beneficiary of a Participant who leaves employment and dies on or after January 1, 2007 while performing *qualified military service* is entitled to benefits as if the deceased Participant had resumed employment then terminated on account of death. *Optional Forms of Benefit* is revised to indicate the

Ord. #	Adopted	Effective	Amnd	Description
10-20 cont'd.	02/22/2010	10/01/2009	5	Participant may change the joint pensioner at any time, but not the option previously selected. The amount of retirement income payable would be actuarially redetermined to take into the account the age of the former and new joint pensioner. *Benefits Not Assignable* is revised to indicate the Retirement Committee may authorize certain deductions. *Termination of the Plan* is revised to indicate Plan repeal or termination would be based Florida Statutes. *Authority of the Retirement Committee* is revised with respect to the investment of assets in accordance with Florida Statutes. *Applicable Law* is revised to remove certain Florida Statutes citations.
10-51	07/12/2010	01/01/2010	6	*Average Monthly Compensation* is revised from an average of the three successive to the three highest calendar years out of the last five calendar years. The computation is subject to written rules adopted by the Board of Trustees. The definition of Employee and Firefighter is revised to indicate that if the *Fire Chief*, when appointed, is not a Participant of the Plan, may make an irrevocable election not to Participate in the Plan within 90 days of notice from the Retirement Committee.
11-20	03/14/2001	01/01/2011	7	*Supplemental Retirement Income* was revised from being for Normal Retirements at $13 per month x Credited Service (not less than $220 per month) on a temporary life only basis to age 65 to payable for Normal, Early, or Disability Retirement at $10.50 per month x Credited Service for 156 monthly payments, or until the Participant's death if earlier.
15-31	09/14/2015	08/01/2015	8	For Participants hired on or after August 1, 2015 *Employee Contributions* are not credited with any interest.
2017-22	05/22/2017	07/01/2017	9	Participants may *purchase a total of 5 years of Credited Service* for military service prior to hire and firefighter service prior to hire if not entitled to receive a benefit for such prior service. The service purchased does not count until 5 actual years of Credited Service are worked. See below for details.

Plan Year: The 12-month period from October 1st to the next September 30th.

Plan Administrator: The Board of Trustees

Retirement Committee Composition: Two are elected from among the Participants of the Plan, two City residents are appointed by the Commission, and one person is chosen by a majority of the previous four members.

Funding Requirements: City contributions are actuarially determined and along with Employee Contributions are meant to maintain the Plan on a sound actuarial basis. If the required City contribution (net of Employee Contributions and those received under Chapter 175) exceeds the percentage of payroll contributed to the General Plan of the City, the Plan will be amended to increase Employee Contributions or to implement prospective benefit reductions to maintain the Plan on a sound actuarial basis. City contributions are subject to State statute.

Employee: Any person in the regular full-time service of the City Fire Department as defined in in Florida Statute 175-032(11)(a) who within one year of employment meets the required standards of the Florida Firefighters Standards Council. However, an Employee does not include voluntary firefighters, Elected Officials, the City Manager, City Attorney, Judge, Prosecutor (and assistants), dispatchers, clerk typists, or any person employed for a temporary period or temporary job. As provided for in Amendment 6, if the Fire Chief, when appointed, is not a Participant of the Plan, an irrevocable election may be made not to Participate in the Plan within 90 days of notice from the Retirement Committee.

Participant: Prior to Amendment 2 effective October 1, 2007, Employees who attained both age 18 and 1 year of Credited Service became Participants of the Plan and began Employee Contributions upon Participation. Effective with Amendment 2, Employees become Participants upon hire effective October 1, 2007 and begin Employee Contributions immediately. Any retired, disabled or terminated person with a right to benefits is also a Participant.

Effective on or after January 1, 1982 per Ordinance No. 82-35, if an Employee has an employment status change which is not a termination of employment which makes them ineligible for continued participation in another retirement plan of the City, they Participate in this Plan upon their status change, or when eligibility requirements are met. Benefits are calculated only using Credited Service and Basic Compensation in this Plan. Vesting and eligibility for Early Retirement is determined based on total Credited Service under all retirement plans of the City. If the employment status change makes the Participant ineligible for continued participation in this Plan, they are treated as a terminated participant except they are not allowed to withdraw Employee Contributions and Vesting is determined based on total Credited Service under all retirement plans of the City. If such a person again becomes a Participant of this Plan, any accrued deferred monthly retirement income which the Participant subsequently becomes entitled to is added to that previously earned. If a Participant is no longer in an employment status that qualifies for the Plan, the Participant may be able to elect to retirement benefits even though employment has not terminated.

Credited Service: Employment service computed in years and completed calendar months.

A period of absence of 31 days or more is excluded from Credited Service unless regular compensation is received during absence. While the document states the first two years of military service are included in Credited Service, under the Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA), a Participant is entitled to service while absent due to active military service after March 12, 1999 up to five years subject to certain requirements related to the return to work (within 1 year of release). See Amendment 3. Different rules apply to Participants absent due to military service prior to April 1, 2000. See the Plan document and Amendment 3 for the definition of Leave of Absence. See the Plan document for rules related to Participants who terminate while entitled to a retirement income and subsequently re-enter service of the City.

As provided for in Amendment 3, Participants are permitted to "buy-back" Credited Service due to prior service with the City by payment of Employee Contributions for which the buy-back is applicable plus 6% interest compounded annually to the date of payment (as a lump sum or over a period not more than 1 year). If payments are not completed by the time the Participant or Beneficiary begins to receive benefits, the remaining payments are offset from benefits payable.

As provided for in Amendment 5, the Beneficiary of a Participant who leaves employment and dies on or after January 1, 2007 while performing qualified military service is entitled to benefits as if the deceased Participant had resumed employment then terminated on account of death. See other language in Amendment 5.

As provided for in Amendment 9 effective July 1, 2017, Participants may purchase a total of 5 years of Credited Service for military service prior to hire and firefighter service prior to hire if not entitled to receive a benefit for such prior service. The cost of the purchase is the actuarial equivalent attributable to the Credited Service purchased on the date of deposit based on interest and mortality determined by the Retirement Committee (with actuary advice). The purchase of Credited Service does not count until 5 actual years of Credited Service are earned, excluding the service purchase. A refund is paid of the total amount deposited for those who terminate prior to reaching 5 actual years of Credited Service and to those who terminate prior to completing payment of the purchase.

<u>Vesting:</u> Participants become 100% vested after earning 10 years of Credited Service.

<u>Basic Compensation:</u> Total compensation actually paid in a calendar year including tax deferred compensation and excluding overtime, shift differential, commissions, bonuses, accrued annual leave, accrued sick leave, accrued compensatory time, expense allowances, working out of class pay and all other extraordinary compensation.

<u>Employee Contributions:</u> Employee Contributions are made on a pre-tax basis commencing October 1, 1991. Effective with Amendment 2, Employees become Participants upon hire effective October 1, 2007 and begin Employee Contributions immediately.

Employee Contributions are made at the following percentage of Basic Compensation.

Prior to April 1, 1994:	5.0%
Effective April 1, 1994:	6.5%

Employee Contributions made on or after October 1, 1978 are credited with 5% interest compounded annually. However, as provided by Amendment 8, for Participants hired on or after August 1, 2015 Employee Contributions are not credited with any interest.

Participants who terminate non-vested are entitled to the return of Employee Contributions accumulated with interest at 5% to the first day of the month in which termination occurs. However, as provided by Amendment 8, for Participants hired on or after August 1, 2015 Employee Contributions are not credited with any interest.

Participants receive benefits under the Plan no less than the value of their accumulated Employee Contributions (with interest for Participants hired before August 1, 2015).

<u>Average Monthly Compensation:</u> Effective January 1, 2010 as provided for in Amendment 6 , the sum of the highest three calendar years of Basic Compensation in the last five calendar years of employment divided by 36. Prior to January 1, 2010 the three calendar years were successive. Board policy allows for proration of the third highest calendar year of compensation when final year is not a 12 month period.

<u>Normal Retirement Date:</u> Effective October 1, 1998 as provided for in Ordinance No. 99-06, the first day of the month coincident with or next following the earlier of attainment of both age 52 and 25 years of Credited Service or both age 55 and 10 years of Credited Service.

<u>Accrued Benefit:</u> The amount of monthly retirement income payable at the Normal Retirement Date is determined as follows:

3% x Average Monthly Compensation x Credited Service

The Accrued Benefit is payable in the form of a 10-year certain and continuous annuity. Participants who terminate employment 100% vested prior the Normal Retirement Date are eligible to receive their Accrued Benefit once the age requirements for the Normal Retirement Date are met, provided Employee Contributions remain in the Plan.

Participants who terminate employment 100% vested prior the Normal Retirement Date but on or after their Early Retirement Date and do not commence receipt of an Early Retirement Benefit at termination will receive a monthly retirement income not less than the monthly retirement income which can be provided by the single-sum value of the monthly early retirement income which would have been payable if he had retired immediately upon termination, accumulated with interest from termination to the date the monthly retirement income payments are to commence (where all computations are based on interest and mortality assumptions in effect at termination).

Historical multiplier used for determination of the accrued benefit is as follows:

Effective	Ord. No.	Multiplier
*	*	2.25%
04/01/1994	94-03	2.75%
04/01/1996	96-25	3.00%

*We do not have information on when the 2.25% multiplier became effective.

Supplemental Retirement Income: As provided for in Amendment 7, effective January 1, 2011 Participants who retire under Normal, Early, or Disability Retirement are entitled to a monthly Supplemental Retirement Income of $10.50 per month per year of Credited Service for 156 monthly payments, or until the Participant's death if earlier.

Historical Supplemental Retirement Income is as follows:

Effective	Ord. No.	Eligibility	Monthly Amount	Payable Until Age**	Maximum Monthly Payments**
*	*	*	$166.67	58	36
04/01/1996	96-25	Normal	$200.00	58	36
10/01/1998	99-06	Normal	$220.00	58	72
10/01/2003	04-55	Normal	$13.00 x Credited Service Not Less than $220.00	65	N/A
01/01/2011	11-20	Normal, Early, Disability	$10.50 x Credited Service	N/A	156

*We do not have information on when the 166.67 per month became payable.

**Payable until age shown for a maximum number of monthly payments, or until death if earlier.

Late Retirement Benefit: The amount of monthly retirement income payable to a Participant who retires after the Normal Retirement Date is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit payable if he had retired at the Normal Retirement Date, accumulated with interest from the Normal Retirement Date to the date the monthly retirement income payments are to commence (where all computations are based on interest and mortality assumptions in effect on the Normal Retirement Date), and (ii) the monthly retirement income computed as described for the Accrued Benefit using Credited Service and Average Monthly Compensation determined at the Participant's actual retirement date.

<u>Early Retirement Date:</u> The first day of the month coincident with or next following the date an Employee retires prior to the Normal Retirement Date after attainment of both age 50 and 10 years of Credited Service.

<u>Early Retirement Benefit:</u> Effective April 1, 1994 as in Ordinance No. 94-03, the Accrued Benefit is reduced for commencement earlier than the Normal Retirement Date at a rate of 0.25% per month.

Participants who terminate employment 100% vested prior to reaching the Early Retirement Date requirements may elect to receive an Early Retirement Benefit once the age requirements are met, provided Employee Contributions remain in the Plan.

Participants who recover from Disability Retirement and who were eligible for an Early Retirement Benefit at the date of disability may elect to receive this benefit upon recovery from disability.

<u>Disability Retirement:</u> A Participant may retire if terminated by reason of Total and Permanent Disability on or after October 1, 1991 but prior to the Normal Retirement Date. See the Plan document and Amendment 3 for the definition of Total and Permanent Disability, Nonadmissible Causes of Disability, and the requirements for continued Proof of Disability every six months.

As defined in Amendment 3, once the Retirement Committee approves the Participant's Disability Retirement, this benefit is payable from the first day of the month following the last day the Participant was paid Basic Compensation. The benefit is payable in the form of a 10-year certain and continuous annuity. The last payment is that due next preceding the earlier of (1) the date of recovery prior to the Normal Retirement Date and (2) the later of the date of death or the 120th payment. The amount of monthly retirement income is determined as follows.

(a) Non-Line of Duty: Participants with less than 10 years of Credited Service upon disability receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the calendar year immediately preceding disability. The monthly retirement income which may be provided by (ii) is limited to 60% x Anticipated Monthly Retirement Income at the Normal Retirement Date.

(b) Non-Line of Duty: Participants with 10 years of Credited Service or more upon disability receive a monthly retirement income which is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit and (ii) 30% x Basic Compensation paid in the calendar year immediately preceding disability. Note the single-sum value of (ii) is limited to 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. As included in Amendment 3, the minimum amount payable is 25% of the Participant's Average Monthly Compensation at the time of disability.

(c) Line of Duty: Participants receive a monthly retirement income which is 50% x Basic Compensation paid in the calendar year immediately preceding disability where the single-sum value of this monthly amount does not exceed 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. As included in Amendment 3, the minimum amount payable is the greater of 42% of the Participant's Average Monthly Compensation at the time of disability and the Accrued Benefit at disability.

Participants who recover from disability and re-enter the service of the City within 30 days of recovery will be deemed to have continuous service for the period during which the Participant was Totally and Permanently Disabled. Disability Retirement benefits are discontinued to Participants who recover from disability and do not re-enter the service of the City within 30 days of recovery, but they may be eligible for Early or vested deferred retirement.

Anticipated Monthly Retirement Income at the Normal Retirement Date: Determined as described for the Accrued Benefit, but instead using Anticipated Credited Service and Anticipated Average Monthly Compensation. Anticipated Credited Service is the sum of Credited Service actually earned as of the end of the Plan Year next preceding termination plus additional time as if the Participant remains employed to the Normal Retirement Date. Anticipated Average Monthly Compensation is computed assuming that the last complete calendar year of Basic Compensation is paid in each following year, without change, to the Normal Retirement Date.

Survivor Benefit at Death of Disabled Participant Prior to Disability Retirement: As provided for in Amendment 3, the designated beneficiary of a disabled Participant who dies prior to receipt of Disability Retirement benefits is eligible to receive a monthly retirement income payable in the form of a 10-year certain and continuous annuity payable commencing on the first of the month coincident with or next following the date of the disabled Participant's death. The designated beneficiary will receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the calendar year immediately preceding disability limited to 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. The single-sum value may be paid to the Beneficiary instead of monthly payments.

Survivor Benefit at Death of Vested Terminated Participants: As provided for in Amendment 3, the designated beneficiary of vested Participant who dies prior to retirement is eligible to receive a monthly retirement income payable in the form of a 10-year certain and continuous annuity payable commencing on the first of the month coincident with or next following the Participant's death which can be provided by the single-sum value of the Participant's Accrued Benefit (or Early Retirement benefit). The single-sum value may be paid to the Beneficiary instead of monthly payments.

Survivor Benefit at Death of Active Employee Prior to Normal Retirement Date: As provided for in Amendment 3, the designated beneficiary of a Participant who dies while in active service prior to the Normal Retirement Date is eligible to receive a monthly retirement income payable in the form of a 10-year certain and continuous annuity payable commencing on the first of the month coincident with or next following the Participant's death which can be provided by the greater of (i) the single-sum value of the Accrued Benefit as of the date of death, not less than the single-sum value of the Early Retirement Benefit which would have been payable if the Participant had retired early on the date of death, and (ii) 2 x Basic Compensation paid in the calendar year immediately preceding death limited to 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date. All computations are based on interest and mortality assumptions in effect on the date of death. The single-sum value may be paid to the Beneficiary instead of monthly payments. As provided for in Amendment 5, the Beneficiary of a Participant who leaves employment and dies on or after January 1, 2007 while performing qualified military service is entitled to benefits as if the deceased Participant had resumed employment then terminated on account of death.

Survivor Benefit at Death of Active Employee After Normal Retirement Date: As provided for in Amendment 3, the designated beneficiary of a Participant who dies while in active service after the Normal Retirement Date is eligible to receive a monthly retirement income payable in the form of a 10-year certain and continuous annuity payable commencing on the first of the month coincident with or next following the Participant's death which can be provided by the single-sum value of the Late Retirement Benefit. The single-sum value may be paid to the Beneficiary instead of monthly payments. As provided for in Amendment 5, the Beneficiary of a Participant who leaves employment and dies on or after January 1, 2007 while performing qualified military service is entitled to benefits as if the deceased Participant had resumed employment then terminated on account of death.

Optional Forms of Retirement Income: The Normal Form of Payment is a 10-year certain and continuous form of annuity. In addition to the Normal Form, also available under the terms of the Plan are a life only annuity and a joint and 50%, 66 2/3%, 75%, or 100% survivor annuity. Participants are allowed to elect another form of payment as in the opinion of the Retirement Committee to best meet the circumstances of a Participant. See Amendment 3. A partial lump sum distribution may be requested not more than 25% of the actuarial present value of the accrued benefit where the monthly benefit is reduced actuarially for the partial lump sum payment. If the single-sum value is less than $5,000 the Retirement Committee may specify payment of the lump sum value or payments for a period certain not more than 60 months. As provided for in Amendment 5, the Participant may change the joint pensioner at any time, but not the option previously selected. The amount of retirement income payable would be actuarially redetermined to take into the account the age of the former and new joint pensioner.

<u>Share Program:</u> A Share Program is created as provided for in Amendment 4 under Ordinance No. 08-103 adopted December 8, 2008 effective October 1, 2008.

Share Participants include (i) any retired firefighter who separated service on or after October 1, 1984, (ii) terminated vested firefighters (and their Beneficiaries) upon commencement of monthly benefits, and (iii) firefighters employed on or after October 1, 2008. Any Beneficiary of these Participants are also Share Participants.

The Share Program has a calendar year with an annual valuation date of September 30th.

The following are not entitled to any Share Program payments or shares: (i) Participants who terminated non-vested prior to October 1, 2008 and received a refund of Employee Contributions (or who died with no survivor benefits payable), and (ii) those who received a lump sum distribution.

A Share Participant's account is credited with (i) an allocation of the initial amount, (ii) subsequent annual allocations, (iii) forfeitures, and (iv) the investment return of the Plan net of investment expenses (as reported by the investment consultant) and then also net of administrative expenses of the Share Program. Allocations to Share Participants are net of Share Program expense. Subsequent annual allocations are not made to vested terminations who are not yet receiving monthly benefits.

The following describes the initial allocation of the cumulative balance of additional state premium tax money as of October 1, 2008.

(1) Share Participants who retired before December 31, 1998 and are receiving monthly benefits on October 1, 2008 (or their Beneficiary) are allocated $2,000 (unless a higher distribution allocation is determined by (2) below).

(2) The remaining balance is allocated to Share Participants (or their Beneficiary) who had completed 12 months of Credited Service during calendar years 1998 through 2007 where the Share Participant receives 1 share for each year (10 maximum). Those who earn a share and terminate non-vested on or after October 1, 2008 and receive a refund of Employee Contributions (and without qualifying for Disability Retirement or any survivor benefits) the share plus any earnings is forfeited and allocated equally among the remaining active Share Participants employed on the October 1st immediately following the forfeiture if they had completed 12 months of Credited Service during the previous calendar year.

(3) Each eligible retired firefighter (or Beneficiary) receiving monthly benefits on October 1, 2008 receives the initial distribution on or before December 31, 2008. Any subsequent distributions are made on or before December 31st following the Plan Year in which a Share Participant terminates and commences payment of monthly benefits.

The following describes the subsequent annual allocations of additional excess state premium tax moneys received after October 1, 2008. These allocations are made as soon as possible after the receipt of any additional premium tax moneys. For any state premium tax moneys collected for calendar year 2008 and after in excess of the then current frozen state contribution amount (as determined by the Plan actuary, which was $110,449.18 for the plan year ending September 30, 2009) allocations are made as follows.

However, note that effective for the Plan Year ending September 30, 2018, Share Participant allocations are based on excess premium tax money determined using the default methodology described in Chapter 175, F.S. which calls for half of any premium tax money greater than $156,635.48 to be used for share allocations with the other half used to reduce the City's funding requirement. This is because there was no statement of mutual consent in the collective bargaining agreement for October 1, 2017 through September 30, 2020 or for the period from October 1, 2020 through September 30, 2023 for the City of Leesburg and Professional Firefighters of Leesburg Local 2957, IAFF, AFL-CIO-CLC.

(1) Ten percent (10%) of the excess state premium tax money is allocated equally to each Share Participant retiree on or after January 1, 1978 (or their Beneficiary) who on October 1, 2009 and each October 1st thereafter are receiving monthly benefits.

(2) Ninety percent (90%) of the excess state premium tax money is allocated equally to active Share Participants employed on October 1, 2009 and each October 1st thereafter who had 12 completed months of Credited Service during the previous calendar year. Those who terminate non-vested after October 1, 2008 and receive a refund of Employee Contributions (and without qualifying for Disability Retirement or any survivor benefits) share allocations plus any earnings are forfeited and allocated equally among the remaining active Share Participants employed on the October 1st immediately following the forfeiture if they had completed 12 months of Credited Service during the previous calendar year.

(3) However, for those who retire on December 31st with 12 completed months of Credited Service that calendar year receive, for the <u>following</u> distribution, the greater of the equal allocation of 10% of the excess state premium tax money as a retiree or the equal allocation of 90% as an active Share Participant who had completed 12 months of Credited Service for the calendar year in which the December 31st retirement occurred.

Distributions are made on or before December 31st following the Plan Year in which a vested Share Participant terminates or dies, in which Disability Retirement is awarded (even for those with less than 10 years of Credited Service), or in which a Share Participant incurs a service incurred death with less than 10 years of Credited Service.

<u>Cost-of-Living Adjustment (COLA)</u>: The ordinance contains the following wording. Participants who retired prior to October 1, 1978 receive a COLA annually on July 1st not more than 3% based on a ratio of the March 31st Consumer Price Index (all items – United States city average) published monthly by the Bureau of Labor Statistics for the prior year divided by that for the current year to the nearest one-tenth of one percent. Both increases and decreases are applied, but benefits are not less than that first payable. However, we understand COLAs are considered by the Board every year and are only provided through Board approval.

Every three years beginning October 1, 1994 the Retirement Committee may grant (with City Commission approval) a one-time payment of not more than 3% per year for a maximum of three years to Participants who have been retired under Normal Retirement provisions for three years or more if the additional liability does not have an effect on the current funding of the Plan.

<u>Actuarial Equivalence Assumptions</u>: Interest and mortality assumptions in effect on the specified date. Optional forms of benefit and the present value of accrued benefits are computed using 7.5% and the RP-00 combined mortality table (50% male, 50% female) with no projection for mortality improvement.

Description of Assumptions and Methods

Assumed Rate of Investment Return: 7.0% per year, net of investment expenses

Inflation: 2.0% per year (not directly used in the calculation of valuation liabilities)

Salary Increase – Individual: Annual increases as follows:

Service	Increase
0-5	6%
6-10	5%
>=11	4%

Salary Increase – Total Payroll: Unfunded Accrued Liability is amortized as a level dollar amount. In order to compute projected minimum required contributions as a dollar amount, a 0% total payroll increase is applied to valuation payroll to determine valuation payroll in the funding year.

Mortality: The mortality table is that used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2019, 2020 and 2021, as required by state statue.

The following sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Active:	Male:	PubS.H-2010(B) male employee set forward 1 year
	Female:	PubS.H-2010 female employee set forward 1 year
Healthy Retiree:	Male:	PubS.H-2010(B) male healthy retiree set forward 1 year
	Female:	PubS.H-2010 female healthy retiree set forward 1 year

The following sex distinct tables are used with no mortality improvement projection.

Disabled Retiree:	Male:	80% PubG.H-2010 male disabled retiree + 20% PubS.H-2010 male disabled retiree
	Female:	80% PubG.H-2010 female disabled retiree + 20% PubS.H-2010 female disabled retiree

Juvenile rates are used for ages 15-17.

The active tables reference the healthy retiree rates, above, at ages 80+.

The healthy retiree tables reference the active mortality rates, above, before age 44.

Retirement: Unisex rates as follows:

	Service				
Age	0-9	10-24	25-26	27-29	>=30
<=49	0%	0%	0%	0%	0%
50	0%	5%	5%	5%	5%
51	0%	5%	5%	5%	5%
52	0%	5%	50%	50%	100%
53	0%	5%	50%	50%	100%
54	0%	5%	50%	100%	100%
>=55	0%	100%	100%	100%	100%

These rates are as determined by the prior actuary from a March 7, 2014 experience study and updated at a January 8, 2017 meeting of the Retirement Committee.

Termination: Unisex rates as follows:

Service	Rate
0	25%
1-4	10%
5-9	3%
>=10	2%

These rates are as determined by the prior actuary from a March 7, 2014 experience study.

Disability: Unisex rates as follows.

Age	Rate	Age	Rate	Age	Rate	Age	Rate	Age	Rate
15	0.00051	25	0.00051	35	0.00065	45	0.00217	55	0.00891
16	0.00051	26	0.00058	36	0.00072	46	0.00245	56	0.01005
17	0.00051	27	0.00058	37	0.00072	47	0.00276	57	0.01130
18	0.00051	28	0.00058	38	0.00084	48	0.00320	58	0.01262
19	0.00051	29	0.00058	39	0.00099	49	0.00370	59	0.01398
20	0.00051	30	0.00058	40	0.00121	50	0.00429	60	0.01611
21	0.00051	31	0.00058	41	0.00136	51	0.00050	61	0.01859
22	0.00051	32	0.00058	42	0.00158	52	0.00581	62	0.02134
23	0.00051	33	0.00065	43	0.00173	53	0.00674	63	0.02445
24	0.00051	34	0.00065	44	0.00195	54	0.00777	64	0.02798
								65+	0.00000

75% of disabilities are assumed to occur in the line of duty.

These rates are as determined by the prior actuary from a March 7, 2014 experience study.

Administrative Expenses: Prior year administrative expense is added to Normal Cost.

Actuarial Value of Assets: The market value of assets is adjusted to recognize gains and losses over a five-year period. The Actuarial Value of Assets shall not be more than 120% or less than 80% of the market value of assets.

Funding Method: Entry Age Normal (level percent of salary)

A description of the funding method is found on the next page entitled "Glossary of Actuarial Terms."

Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): Under the Individual Entry Age Normal Cost Method, the annual normal cost for each individual active member is determined as the amount, from the date of employment to the date of retirement, sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost is a constant percentage of the member's projected covered pay.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus. Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Actuarial Value of Assets: The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets. In this valuation, the Actuarial Value of Assets has been calculated to smooth out unexpected fluctuations in the fair market value of assets over a 5-year period.