# CITY OF LEESBURG MUNICIPAL POLICE OFFICERS' PENSION TRUST FUND

ACTUARIAL VALUATION AS OF OCTOBER 1, 2021

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2023

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2021





January 21, 2022

Board of Trustees City of Leesburg Police Officers' Pension Board

Re: City of Leesburg Municipal Police Officers' Pension Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Leesburg Municipal Police Officers' Pension Trust Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the City of Leesburg, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding and accounting rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2020. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2021 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Leesburg, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Municipal Police Officers' Pension Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:

Patrick T. Donlan, EA, ASA, MAAA Enrolled Actuary #20-6595

By:

Kevin H. Peng, ASA, EA, MAAA Enrolled Actuary #20-7783

PTD/lke

Enclosures

# TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	15
	b. History of Funding Progress	16
	c. Actuarial Assumptions and Methods	17
	d. Glossary	20
	e. Discussion of Risk	22
	f. Partial History of Premium Tax Refunds	25
III	Trust Fund	26
IV	Member Statistics	
	a. Statistical Data	33
	b. Age and Service Distribution	34
	c. Valuation Participant Reconciliation	35
V	Summary of Current Plan	36
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	39

#### SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Leesburg Municipal Police Officers' Pension Trust Fund, performed as of October 1, 2021, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2023.

The contribution requirements, compared with those set forth in the October 1, 2020 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2021 <u>9/30/2023</u>	10/1/2020 <u>9/30/2022</u>
Minimum Required Contribution % of Projected Annual Payroll	23.62%	24.29%
Member Contributions (Est.) % of Projected Annual Payroll	7.65%	7.65%
City And State Required Contribution % of Projected Annual Payroll	15.97%	16.64%
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll	\$242,702 5.86%	\$242,702 5.86%
City Required Contribution <sup>2</sup> % of Projected Annual Payroll	10.11%	10.78%

<sup>&</sup>lt;sup>1</sup> Represents the amount received in calendar 2021. As per a Mutual Consent Agreement between the Membership and the City, all State Monies received each year will be available to offset the City's required contribution.

<sup>&</sup>lt;sup>2</sup> The required contribution from the combination of City and State sources for the year ending September 30, 2023, is 15.97% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 10.11% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that a shortfall contribution of \$798.74 is due in addition to the above stated requirements for the fiscal year ending September 30, 2022.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results presented in the October 1, 2020 actuarial valuation report. The decrease is attributable to the amortization loss established in conjunction with the 1991 valuation being fully paid off and favorable actuarial experience as described in the following paragraph. The decrease was offset in part by a change in assumptions as described on the next page.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial gain was an investment return of 9.78% (Actuarial Asset Basis) which exceeded the 7.00% assumption. This gain was offset in part by losses associated with unfavorable retirement experience and unfavorable turnover experience.

#### CHANGES SINCE PRIOR VALUATION

#### Plan Changes

There have been no changes in benefits since the prior valuation.

#### Actuarial Assumption/Method Changes

As a result of an Experience Study dated December 3, 2021, the Board approved the following changes in conjunction with this valuation:

- 1.) Decrease the investment return assumption from 7.0% to 6.8% per year, net of investment related expenses.
- 2.) Increase the expected individual salary increases from 7.0% to 12.0% for the first year of employment and reduce the expectation in years 1-4 from 7.0% to 5.0% per year.
- 3.) Update the expected rate of Early Retirement to be 10% per year, regardless of Credited Service and the expected rate of Normal Retirement to be 75% at first eligibility and 100% beginning one year after first eligibility.
- 4.) Switch to an entirely service-based assumption for expected turnover rates, with 13% for each of the first 5 years of employment, 9% for the next 5 years of employment, 8% for the next 5 years of employment and 2% per year beginning at 15 years of employment.
- 5.) Change the Actuarial Cost Method from Frozen Initial Liability or Frozen Entry Age Cost Method to the Entry Age Normal Cost Method with 15-year amortizations.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Asmp/Mthd <u>10/1/2021</u>	Old Asmp/Mthd 10/1/2021	<u>10/1/2020</u>
A. Participant Data			
Actives	63	63	62
Service Retirees	28	28	29
DROP Retirees	7	7	4
Beneficiaries	1	1	1
Disability Retirees	3	3	2
Terminated Vested	<u>12</u>	<u>12</u>	<u>14</u>
Total	114	114	112
Total Annual Payroll	\$4,402,127	\$4,389,274	\$4,190,317
Payroll Under Assumed Ret. Age	4,143,912	4,240,477	4,053,693
Annual Rate of Payments to:			
Service Retirees	811,402	811,402	840,573
DROP Retirees	382,024	382,024	232,514
Beneficiaries	30,985	30,985	30,985
Disability Retirees	79,112	79,112	52,748
Terminated Vested	32,938	32,938	50,926
B. Assets			
Actuarial Value (AVA) <sup>1</sup>	26,623,784	26,623,784	24,313,376
Market Value (MVA) <sup>1</sup>	29,322,935	29,322,935	24,313,376
C. Liabilities			
Present Value of Benefits			
Actives	15 245 106	15.060.626	15 775 100
Retirement Benefits	15,245,186	15,969,626	15,775,180
Disability Benefits	514,613	544,161	509,734
Death Benefits	182,207	190,215	180,577
Vested Benefits	1,455,013	1,159,856	1,089,399
Refund of Contributions	341,095	334,951	297,020
Service Retirees	8,409,769	8,273,378	8,535,568
DROP Retirees <sup>1</sup>	5,754,021	5,648,946	3,300,486
Beneficiaries	289,219	285,347	292,930
Disability Retirees	1,084,133	1,060,418	696,663
Terminated Vested	374,402	366,437	486,516
Total	33,649,658	33,833,335	31,164,073

C. Liabilities - (Continued)	New Asmp/Mthd <u>10/1/2021</u>	Old Asmp/Mthd <u>10/1/2021</u>	10/1/2020
Present Value of Future Salaries	30,176,614	32,376,965	29,835,677
Present Value of Future			
Member Contributions	2,308,511	2,476,838	2,282,429
Normal Cost (Retirement)	405,599	N/A	N/A
Normal Cost (Disability)	35,845	N/A	N/A
Normal Cost (Death)	11,024	N/A	N/A
Normal Cost (Vesting)	91,663	N/A	N/A
Normal Cost (Refunds)	52,815	N/A	N/A
Total Normal Cost	596,946	635,231	587,395
Present Value of Future			
Normal Costs (EAN)	4,176,982	5,251,844	4,778,067
Accrued Liability (Retirement)	12,294,979	11,969,646	12,149,926
Accrued Liability (Disability)	253,944	230,934	220,876
Accrued Liability (Death)	101,016	91,777	89,210
Accrued Liability (Vesting)	806,877	564,724	535,903
Accrued Liability (Refunds)	104,316	89,884	77,928
Accrued Liability (Inactives) 1	15,911,544	15,634,526	13,312,163
Total Actuarial Accrued Liability (EAN AL)	29,472,676	28,581,491	26,386,006
Total Actuarial Accrued			
Liability (FIL)	N/A	28,983,210	26,840,775
Unfunded Actuarial Accrued			
Liability (UAAL)	2,848,892	2,359,426	2,527,399
Funded Ratio (AVA / EAN AL)	90.3%	93.2%	92.1%
Funded Ratio (AVA / FIL AL)	N/A	91.9%	90.6%

D. Actuarial Present Value of Accrued Benefits	New Asmp/Mthd 10/1/2021	Old Asmp/Mthd 10/1/2021	10/1/2020
Accided Belletits	10/1/2021	10/1/2021	10/1/2020
Vested Accrued Benefits			
Inactives <sup>1</sup>	15,911,544	15,634,526	13,312,163
Actives	6,618,491	6,399,073	6,835,870
Member Contributions	2,608,318	2,608,318	2,636,707
Total	25,138,353	24,641,917	22,784,740
Non-vested Accrued Benefits	414,582	405,634	300,589
Total Present Value			
Accrued Benefits (PVAB)	25,552,935	25,047,551	23,085,329
Funded Ratio (MVA / PVAB)	114.8%	117.1%	105.3%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption/Method Changes	505,384	0	
Plan Experience	0	1,374,985	
Benefits Paid	0	(993,948)	
Interest	0	1,581,185	
Other	0	0	
Total	505,384	1,962,222	

Valuation Date	New Asmp/Mthd 10/1/2021	Old Asmp/Mthd 10/1/2021	10/1/2020
Applicable to Fiscal Year Ending	9/30/2023	9/30/2023	9/30/2022
E. Pension Cost			
Normal Cost (with interest)			
% of Total Annual Payroll <sup>2</sup>	14.90	15.50	15.00
Administrative Expenses (with interest)			
% of Total Annual Payroll <sup>2</sup>	1.59	1.55	1.33
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 23 years			
(as of 10/1/2021, with interest) % of Total Annual Payroll <sup>2</sup>	7.13	5.83	7.96
% of Total Allitual Payton -	7.13	3.63	7.90
Minimum Required Contribution	22.62	22.00	24.20
% of Total Annual Payroll <sup>2</sup>	23.62	22.88	24.29
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	7.65	7.65	7.65
Expected City and State Contribution			
% of Total Annual Payroll <sup>2</sup>	15.97	15.23	16.64
F. Past Contributions			
Plan Years Ending:	9/30/2021		
Total Required Contribution	997,798		
City and State Requirement	678,952		
Actual Contributions Made:			
Members (excluding buyback)	318,845		
City	436,251		
State	242,702		
Total	997,798		
G. Net Actuarial (Gain)/Loss	N/A		

 $<sup>^{\</sup>rm 1}\,$  The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2021 and 9/30/2020.

 $<sup>^{2}</sup>$  Contributions developed as of 10/1/2021 are expressed as a percentage of total annual payroll at 10/1/2021 of \$4,143,912 after assumption changes and of \$4,240,477 before assumption changes.

# H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

	Projected Unfunded
Year	Actuarial Accrued Liability
2021	2,848,892
2022	2,737,317
2023	2,618,155
2028	1,889,198
2034	1,003,264
2039	199,997
2044	0

# I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	Assumed
Year Ended	9/30/2021	7.56%	5.43%
Year Ended	9/30/2020	3.43%	5.38%
Year Ended	9/30/2019	4.29%	5.36%
Year Ended	9/30/2018	2.17%	5.39%
Year Ended	9/30/2017	5.65%	5.20%

# (ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2021	21.00%	9.78%	7.00%
Year Ended	9/30/2020	9.10%	8.75%	7.40%
Year Ended	9/30/2019	5.68%	8.02%	7.65%
Year Ended	9/30/2018	8.60%	6.22%	7.65%
Year Ended	9/30/2017	11.72%	6.98%	7.65%

### (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2021 10/1/2011	\$4,143,912 3,687,749
(b) Total Increase		12.37%
(c) Number of Years		10.00
(d) Average Annual Rate		1.17%

#### STATEMENT BY ENROLLED ACTUARY

This actuarial valuation 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.

Patrick T. Donlan, EA, ASA, MAAA

Enrolled Actuary #20-6595

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112, Florida Statutes:

Mr. Keith Brinkman Bureau of Local Retirement Systems Post Office Box 9000 Tallahassee, FL 32315-9000

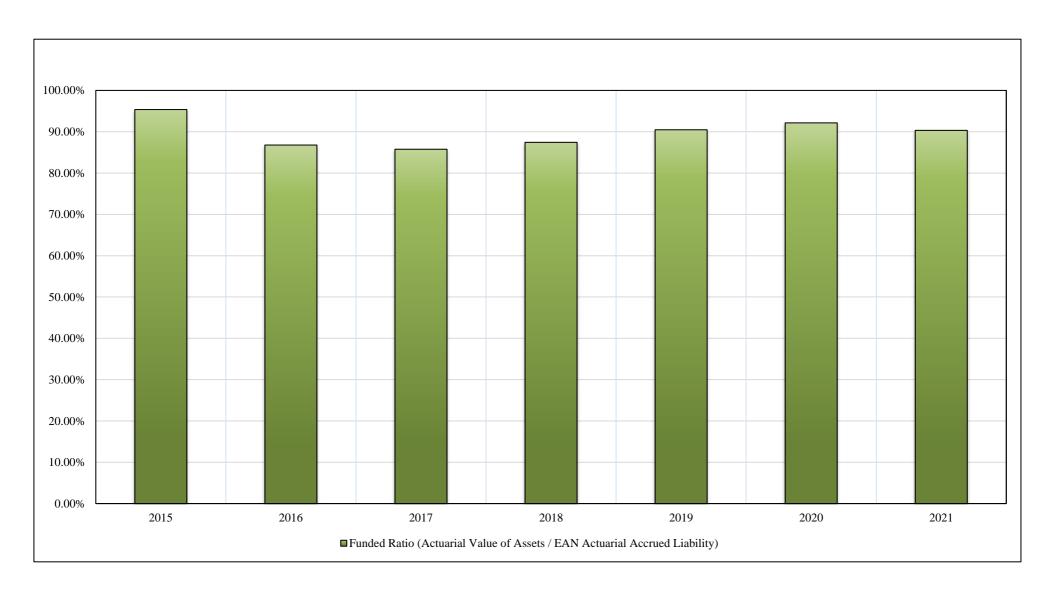
Mr. Steve Bardin Municipal Police and Fire Pension Trust Funds Division of Retirement Post Office Box 3010 Tallahassee, FL 32315-3010

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2020	\$2,527,399
(2)	Sponsor Normal Cost developed as of October 1, 2020	277,287
(3)	Expected administrative expenses for the year ended September 30, 2021	52,220
(4)	Expected interest on (1), (2) and (3)	198,156
(5)	Sponsor contributions to the System during the year ended September 30, 2021	678,952
(6)	Expected interest on (5)	16,684
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2021 (1)+(2)+(3)+(4)-(5)-(6)	2,359,426
(8)	Change to UAAL due to Assumption/Method Change	489,466
(9)	Unfunded Actuarial Accrued Liability as of October 1, 2021	2,848,892

Type of	Date	Years	10/1/2021	Amortization
<u>Base</u>	<b>Established</b>	Remaining	<u>Amount</u>	Amount
"B"	10/1/1998	7	224,747	38,775
"C"	10/1/2001	10	(729,221)	(96,317)
"D"	10/1/2003	12	(36,136)	(4,215)
"E"	10/1/2004	13	217,144	24,052
Method Change	10/1/2008	7	169,394	29,225
Assum Changes	10/1/2010	9	271,294	38,658
Benefit Change	10/1/2012	21	(146,149)	(12,427)
Assum Changes	10/1/2012	11	27,681	3,422
Benefit Change	10/1/2012	21	198,987	16,920
Benefit Change	10/1/2014	23	352,787	28,806
Assum Changes	10/1/2016	15	514,260	52,202
Assum Changes	10/1/2019	18	616,117	56,525
Asmp/Mthd Change	10/1/2020	19	678,521	60,550
Asmp/Mthd Change	10/1/2021	15	489,466	49,685
			2,848,892	285,861

# HISTORY OF FUNDING PROGRESS



#### **ACTUARIAL ASSUMPTIONS AND METHODS**

#### Mortality Rate

Healthy Active Lives:

**Female:** PubS.H-2010 (Below Median) for Employees, set forward one year.

**Male:** PubS.H-2010 (Below Median) for Employees, set forward one year.

Healthy Retiree Lives:

Female: PubS.H-2010 (Below Median) for Healthy

Retirees, set forward one year.

Male: PubS.H-2010 (Below Median) for Healthy

Retirees, set forward one year.

Beneficiary Lives:

Female: PubG.H-2010 (Below Median) for Healthy

Retirees.

Male: PubG.H-2010 (Below Median) for Healthy

Retirees, set back one year.

Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2020 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

75% of active deaths are assumed to be service-incurred.

Interest Rate

6.8% per year (previously 7.0%) compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

#### Salary Increases

	Current	Prior
Service	Rate	Rate
0	12.0%	7.0%
1 - 4	5.0%	7.0%
5 - 9	5.0%	5.0%
10 - 14	5.0%	5.0%
15+	4.5%	4.5%

Projected salary at retirement is increased individually to account for non-regular compensation. This is based on the results of the December 3, 2021 experience study.

### Payroll Growth

Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

0.00% for purposes of amortizing the Unfunded

#### Administrative Expenses

\$63,602 annually, based on the average of actual expenses incurred in the prior two fiscal years.

#### Amortization Method

New UAAL amortization bases are amortized over 15 years.

Previously, the following amortization periods were

Assumption/Method Changes: 20 Years.

Benefit Changes: 30 Years.

#### Retirement Age

#### Current

Years After Normal Eligibility	Probability of <a href="Retirement">Retirement</a>
0	75%
1+	100%

Prior			
Age/Service	<b>Probability</b>		
25 Yrs of Service	100%		
< 25 Yrs, Age 55	75%		
< 25 Yrs, Age 56	25%		
< 25 Yrs, Age 57	25%		
< 25 Yrs, Age 58	25%		
< 25 Yrs, Age 59	25%		
< 25 Yrs, Age 60	100%		

This is based on the results of the December 3, 2021 experience study.

#### **Early Retirement**

Commencing at eligibility for Early Retirement Members are assumed to retire with an immediate benefit at the rate of 10% per year (previously 2% if they had 25+ years of Credited Service). This is based on the results of the December 3, 2021 experience study.

#### Disability Rate

See table of sample rates later in this section (1207). This was supported by the December 3, 2021 experience study. It is assumed that 75% of disablements are service related.

#### Termination Rate

Current		
Service	Rate	
0-4	13.0%	
5 - 9	9.0%	
10 - 14	8.0%	
15+	2.0%	

This is based on the results of the December 3, 2021 experience study.

#### **Prior**

See Table later in this section applied after 10 years of service (1302). The assumption was 9.0% for each of the first 10 years.

#### Funding Method

Entry Age Normal Actuarial Cost Method (previously Frozen Entry Age Actuarial Cost Method).

#### **Asset Valuation**

All assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

	Prior	
	% Terminating	
	During the Year	% Becoming Disabled
<u>Age</u>	(After 10 Yrs Svc)	During the Year
20	9.0%	.07%
30	7.5	.11
40	3.9	.19
50	1.2	.51

#### **GLOSSARY**

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

<u>Entry Age Normal Cost Method</u> - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
  - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
  - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

<u>Market Value of Assets</u> is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

<u>Normal (Current Year's) Cost</u> is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

<u>Total Required Contribution</u> is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> is the difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

#### DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- <u>Demographic Assumptions:</u> Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

#### Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 202.9% on October 1, 2011 to 153.7% on October 1, 2021, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 54.0%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 82.1% on October 1, 2011 to 90.3% on October 1, 2021.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 0.7% on October 1, 2011 to -0.2% on October 1, 2021. The current Net Cash Flow Ratio of -0.2% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

# PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2011	10/1/2016	10/1/2020	10/1/2021
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	71 35 202.9%	57 37 154.1%	62 39 159.0%	63 41 153.7%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	12,285,713 3,687,749 333.1%	17,840,282 3,804,687 468.9%	24,313,376 4,190,317 580.2%	29,322,935 4,402,127 666.1%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	6,974,296 16,127,129 43.2%	10,484,626 21,614,379 48.5%	13,312,163 26,386,006 50.5%	15,911,544 29,472,676 54.0%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	13,237,121 16,127,129 82.1%	18,757,499 21,614,379 86.8%	24,313,376 26,386,006 92.1%	26,623,784 29,472,676 90.3%
Net Cash Flow Ratio				
Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	89,740 12,285,713 0.7%	(294,783) 17,840,282 -1.7%	26,118 24,313,376 0.1%	(64,074) 29,322,935 -0.2%

<sup>&</sup>lt;sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>&</sup>lt;sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses.

# PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from Previous Year
1998	166,718.18	%
1999	118,410.85	-29.0%
2000	114,627.92	-3.2%
2001	120,045.31	4.7%
2002	137,612.65	14.6%
2003	159,149.65	15.7%
2004	166,624.90	4.7%
2005	184,093.15	10.5%
2006	184,827.50	0.4%
2007	184,093.15	-0.4%
2008	184,093.15	0.0%
2009	170,126.72	-7.6%
2010	159,138.64	-6.5%
2011	161,436.95	1.4%
2012	155,518.07	-3.7%
2013	155,996.52	0.3%
2014	160,225.10	2.7%
2015	168,105.42	4.9%
2016	183,761.35	9.3%
2017	182,473.16	-0.7%
2018	199,426.22	9.3%
2019	213,640.66	7.1%
2020	227,475.29	6.5%
2021	242,701.64	6.7%

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2021

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:	<b>-</b> 40.000.00	7.10.000.00
Short Term Investments	549,090.00	549,090.00
Cash	154.54	154.54
Total Cash and Equivalents	549,244.54	549,244.54
Receivables:		
Member Contributions	450.61	450.61
Additional City Contributions	798.74	798.74
Total Receivable	1,249.35	1,249.35
Investments:		
Fixed Income	7,922,477.09	8,078,556.62
Equities	12,082,647.29	18,165,848.28
Pooled/Common/Commingled Funds:		
Equity	1,649,049.70	2,528,035.95
Total Investments	21,654,174.08	28,772,440.85
Total Assets	22,204,667.97	29,322,934.74
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	22,204,667.97	29,322,934.74

### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2021 Market Value Basis

# ADDITIONS Contributions:

Member	318,845.08
City	436,250.82
State	242,701.64

Total Contributions 997,797.54

**Investment Income:** 

Net Realized Gain (Loss)

Unrealized Gain (Loss)

Net Increase in Fair Value of Investments

Interest & Dividends

Less Investment Expense<sup>1</sup>

806,007.25

3,513,317.55

4,319,324.80

806,015.52

(51,707.36)

Net Investment Income 5,073,632.96

Total Additions 6,071,430.50

**DEDUCTIONS** 

Distributions to Members:

Benefit Payments940,302.08Lump Sum DROP Distributions0.00Refunds of Member Contributions53,645.58

Total Distributions 993,947.66

Administrative Expense 67,923.94

Total Deductions 1,061,871.60

Net Increase in Net Position 5,009,558.90

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 24,313,375.84

End of the Year 29,322,934.74

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

#### ACTUARIAL ASSET VALUATION September 30, 2021

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year		Gains/Losses Not ` Ame	<u>Yet Recognized</u> ounts Not Yet Rec	cognized by Value	uation Year	
Ending	Gain/(Loss)	2021	2022	2023	2024	2025
09/30/2021	3,373,939	2,699,151	2,024,363	1,349,575	674,787	0
Total		2,699,151	2,024,363	1,349,575	674,787	0

## Development of Investment Gain/Loss

Market Value of Assets, 09/30/2020	24,313,376
Contributions Less Benefit Payments & Admin Expenses	(64,074)
Expected Investment Earnings*	1,699,694
Actual Net Investment Earnings	5,073,633
2021 Actuarial Investment Gain/(Loss)	3,373,939

<sup>\*</sup>Expected Investment Earnings = 0.07 \* (24,313,376 - 0.5 \* 64,074)

## Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2021	29,322,935
(2) Gains/(Losses) Not Yet Recognized	2,699,151
(3) Actuarial Value of Assets, 09/30/2021, (1) - (2)	26,623,784
(A) 09/30/2020 Actuarial Assets:	24,313,376
(I) Net Investment Income:	
1. Interest and Dividends	806,016
2. Realized Gain (Loss)	806,007
3. Unrealized Gain (Loss)	3,513,318
4. Change in Actuarial Value	(2,699,151)
5. Investment Expenses	(51,707)
Total	2,374,482
(B) 09/30/2021 Actuarial Assets,:	26,623,784
Actuarial Assets Rate of Return = $2I/(A+B-I)$ :	9.78%
Market Value of Assets Rate of Return:	21.00%
10/01/2021 Limited Actuarial Assets:	26,623,784
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	674,788

### CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2021 Actuarial Asset Basis

REVENUES		
Contributions: Member	318,845.08	
City	436,250.82	
State	242,701.64	
Total Contributions		997,797.54
Earnings from Investments:		
Interest & Dividends	806,015.52	
Net Realized Gain (Loss)	806,007.25	
Unrealized Gain (Loss)	3,513,317.55	
Change in Actuarial Value	(2,699,151.00)	
Total Earnings and Investment Gains		2,426,189.32
EXPENDITURE	ES	
Distributions to Members:		
Benefit Payments	940,302.08	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	53,645.58	
Total Distributions		993,947.66
Expenses:		
Investment related <sup>1</sup>	51,707.36	
Administrative	67,923.94	
	0.,220.5	
Total Expenses		119,631.30
Change in Net Assets for the Year		2,310,407.90
Net Assets Beginning of the Year		24,313,375.84

Net Assets End of the Year<sup>2</sup>

26,623,783.74

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

## DEFERRED RETIREMENT OPTION PLAN ACTIVITY October 1, 2020 to September 30, 2021

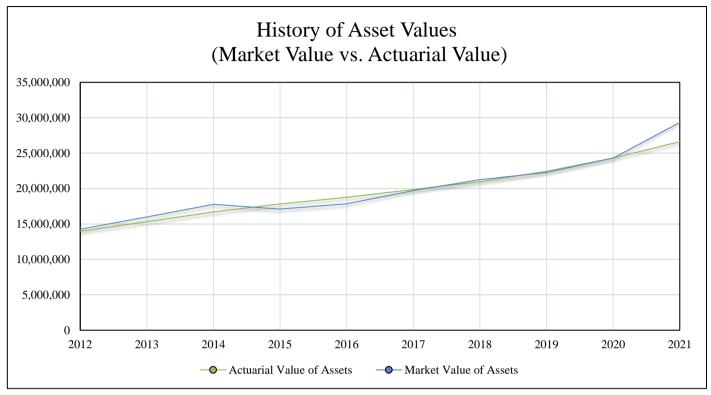
Beginning of the Year Balance	292,538.06
Plus Additions	267,801.12
Investment Return Earned	97,296.95
Less Distributions	0.00
End of the Year Balance	657,636.13

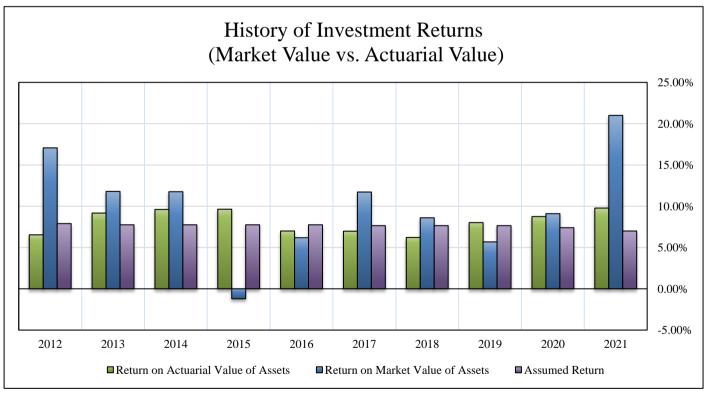
Note: Investment Return Earned is based on available data through June 30, 2021. Investment Return Earned includes earnings for the Quarter ending September 30, 2020.

# RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2021

(1)	Total Required Contribution Rate	23.94%
(2)	Pensionable Payroll Derived from Member Contributions	\$4,167,909.54
(3)	Total Required Contribution (1) x (2)	997,797.54
(4)	Less Actual Member Contributions	(318,845.08)
(5)	Less Allowable State Contribution	(242,701.64)
(6)	Equals Required City Contribution for Fiscal 2021	436,250.82
(7)	Plus 2020 Shortfall Contribution	250.19
(8)	Less Actual City Contributions	(435,702.27)
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2021	\$798.74

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





# STATISTICAL DATA

	10/1/2018	10/1/2019	10/1/2020	10/1/2021	
Actives					
Number	63	66	62	63	
Average Current Age	38.5	38.8	38.5	38.1	
Average Age at Employment	28.5	28.9	28.4	28.4	
Average Past Service	10.0	9.9	10.1	9.7	
Average Annual Salary	\$66,299	\$66,755	\$67,586	\$69,875	
Service Retirees					
Number	34	30	29	28	
Average Current Age	67.2	67.2	68.5	68.8	
Average Annual Benefit	\$28,183	\$28,478	\$28,985	\$28,979	
DROP Retirees					
Number	1	2	4	7	
Average Current Age	53.2	54.2	54.6	55.1	
Average Annual Benefit	\$52,958	\$55,997	\$58,129	\$54,575	
<u>Beneficiaries</u>					
Number	0	1	1	1	
Average Current Age	N/A	71.0	72.0	73.0	
Average Annual Benefit	N/A	\$30,985	\$30,985	\$30,985	
Disability Retirees					
Number	2	2	2	3	
Average Current Age	45.2	46.2	47.2	47.8	
Average Annual Benefit	\$26,374	\$26,374	\$26,374	\$26,371	
Terminated Vested					
Number	12	10	14	12	
Average Current Age 1	50.5	48.7	52.1	56.1	
Average Annual Benefit 1	\$18,734	\$19,181	\$16,975	\$16,469	

<sup>&</sup>lt;sup>1</sup> The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

# AGE AND SERVICE DISTRIBUTION

# PAST SERVICE

AG	E (	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19													0
20 - 24		1		1	1								3
25 - 29	4	4	3	1		2	2						12
30 - 34		1	1	1	1	3	4						11
35 - 39	,	2	1	1	2		2	3					11
40 - 44						1	1	2	2	1			7
45 - 49							1	2	3	3			9
50 - 54									1	4	2		7
55 - 59								1					1
60 - 64									1	1			2
65	+												0
To	tal	8	5	4	4	6	10	8	7	9	2	0	63

#### VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2020		
b. Terminations		
i. Vested (partial or full) with deferred annuity	0	
ii. Vested in refund of member contributions only	(2)	
iii. Refund of member contributions or full lump sum distribution received	(2)	
c. Deaths		
i. Beneficiary receiving benefits	0	
ii. No future benefits payable	0	
d. Disabled	0	
e. Retired	0	
f. DROP	<u>(3)</u>	
g. Continuing participants	55	
h. New entrants	8	
i. Total active life participants in valuation	63	

# 2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	29	4	1	2	3	11	50
Retired	0	0	0	0	0	0	0
DROP	0	3	0	0	0	0	3
Vested (Deferred Annuity)	0	0	0	1	(1)	0	0
Vested (Due Refund)	0	0	0	0	0	2	2
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0	0
Death, No Survivor	(1)	0	0	0	0	0	(1)
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	(3)	(3)
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	28	7	1	3	2	10	51

#### SUMMARY OF CURRENT PLAN

(Through Ordinance No. 19-1)

<u>Eligibility</u> Full-time sworn police officers.

Salary Reportable W-2 compensation, less Christmas bonuses,

but including lump sum payment of accrued sick leave, accrued annual leave, or accrued compensatory leave, plus all tax deferred (IRC Section 414(h)(2) and IRC Section 457 contributions) and tax exempt (IRC Section 125) items of income. Effective January 22, 2013, Salary shall not include more than 300 hours of overtime per year. Additionally, Salary will include the lesser of the amount of unused sick and annual leave time accrued as of January 22, 2013, or the actual amount of sick and vacation leave time for which the retiree receives

payment at the time of retirement.

<u>Average Final Compensation</u> Average of Salary paid during the 5 best years of the last

10 years of Credited Service. (The best 4 years for any Member eligible for Normal Retirement as of January

27, 2014.)

Credited Service Years and fractional parts of years of service with the

City as a Police Officer.

Normal Retirement

Date Earlier of 1.) Age 52 (Age 50 for Members eligible for

Normal Retirement as of October 1, 2015 under the prior provisions) and the completion of 25 Years of Credited Service, or 2.) Age 55 and the completion of 10 years of

Credited Service.

Benefit 3.00% of Average Final Compensation times Credited

Service prior to May 27, 2003; 2.00% for each year between May 27, 2003 and September 30, 2009; 2.5% for each year of Credited Service between October 1, 2009 and September 30, 2015; and 3.00% for each year

of Credited Service thereafter.

Form of Benefit Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility Age 50 (Age 45 for Members who will be eligible for

Early Retirement as of October 1, 2015 under the prior provisions) and completion of 10 years of Credited

Service.

Benefit Accrued benefit, reduced 3.0% per year from what

would have been the Normal Retirement Date had the

member remained employed.

**Disability Benefit** 

Eligibility Total and permanent; Medical proof required. 10 years

of Credited Service required for non-service incurred

disability benefit.

Exclusions Disability resulting from the use of drugs, illegal

participation in riots, service in military, etc.

Benefit

Service Connected Greater of accrued benefit or 50% of Average

Final Compensation.

Non-Service Connected Greater of accrued benefit or 25% of Average

Final Compensation.

Pre-Retirement Death Benefit

Service Connected Beneficiary receives a monthly benefit which can be

provided by the greater of: 1.) present value of

Member's accrued benefit, or 2.) lesser of 24 times the Member's Average Final Compensation, or 100 times the Member's anticipated normal retirement benefit.

Non-Service Connected If less than 10 years of service, beneficiary receives a

refund of Member contributions; otherwise, same as

service connected benefits.

Death After Retirement Benefit payable in accordance with optional form of

pension selected at time of retirement.

Vesting (Termination of Employment)

Less than 10 years Refund of Member Contributions.

10 years or more Accrued pension payable on a reduced basis at Normal

(unreduced) or Early (reduced) Retirement Date.

<u>Member Contributions</u> 7.65% of Salary.

<u>City Contributions</u> Amount required after State premium tax refunds in

order to pay current costs and amortize unfunded past service cost, as provided in Part VII, Chapter 112,

Florida Statutes.

#### **Board of Trustees**

- 1.) Two City residents appointed by the City Commission,
- 2.) Two Police Officers elected by a majority of Police Officers and
- 3.) A fifth Member elected by the Board and appointed (as a ministerial duty) by the City Commission.

#### <u>Deferred Retirement Option Plan</u>

Eligibility Satisfaction of Normal Retirement requirements.

Participation Not to exceed 60 months.

brokerage commissions, management fees and transaction costs) credited each fiscal quarter.

Form of Distribution Cash lump sum (options available) at termination of

employment.

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2021

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	549,090
Cash	155
Total Cash and Equivalents	549,245
Receivables:	
Member Contributions	450
Additional City Contributions	799
Total Receivable	1,249
Investments:	
Fixed Income	8,078,557
Equities	18,165,848
Pooled/Common/Commingled Funds:	
Equity	2,528,036
Total Investments	28,772,441
Total Assets	29,322,935
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	29,322,935

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2021

### Market Value Basis

ADDITIONS		
Contributions:		
Member	318,845	
City	436,251	
State	242,702	
Total Contributions		997,798
Investment Income:		
Net Increase in Fair Value of Investments	4,319,325	
Interest & Dividends	806,015	
Less Investment Expense <sup>1</sup>	(51,707)	
Net Investment Income		5,073,633
Total Additions		6,071,431
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	940,302	
Lump Sum DROP Distributions	0	
Refunds of Member Contributions	53,646	
Total Distributions		993,948
Administrative Expense		67,924
Total Deductions		1,061,872
Net Increase in Net Position		5,009,559
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year		24,313,376
End of the Year		29,322,935

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

#### NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

#### Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees.

The Board consists of 5 Trustees, 2 of whom are legal residents and are appointed by the City Council, 2 of whom are full-time Police Officers who are elected by a majority of the members of the Plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees. Each Trustee serves a two year term.

#### Plan Membership as of October 1, 2020:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	36
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	62
	112

#### Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Leesburg Municipal Police Officers' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

Member Contributions: 7.65% of Salary.

City Contributions: Amount required after State premium tax refunds in order to pay current costs and amortize unfunded past service cost, as provided in Part VII, Chapter 112, Florida Statutes.

#### Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2021:

Asset Class	Target Allocation
Domestic Equity	45.0%
International Equity	15.0%
Broad Market Fixed Income	20.0%
Global Fixed Income	5.0%
TIPS	5.0%
Private Real Estate	10.0%
Total	100.0%

#### Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

#### Rate of Return:

For the year ended September 30, 2021, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 21.0 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## <u>Deferred Retirement Option Program</u>

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 60 months.

Rate of Return: Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.

The DROP balance as September 30, 2021 is \$657,6361.

Investment Return Earned includes earnings for the Quarter ending September 30, 2020.

<sup>&</sup>lt;sup>1</sup> Investment Return Earned is based on available data through June 30, 2021.

#### NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2021 were as follows:

Total Pension Liability \$ 28,229,983
Plan Fiduciary Net Position \$ (29,322,935)
Sponsor's Net Pension Liability \$ (1,092,952)
Plan Fiduciary Net Position as a percentage of Total Pension Liability 103.87%

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2020 updated to September 30, 2021 using the following actuarial assumptions:

Inflation 2.50%
Salary Increases Service based
Discount Rate 6.80%
Investment Rate of Return 6.80%

Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year. Male: PubS.H-2010 (Below Median) for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year. Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year.

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 (Below Median) for Healthy Retirees.

Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2020 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

75% of active deaths are assumed to be service-incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated December 3, 2021.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2021 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2021 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Global Fixed Income	3.50%
TIPS	2.50%
Private Real Estate	4.50%

<sup>&</sup>lt;sup>1</sup> Source: AndCo Consulting

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.80 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	Current		
	1% Decrease	Discount Rate	1% Increase
	5.80%	6.80%	7.80%
Sponsor's Net Pension Liability	\$ 2.378,275	\$ (1.092.952)	\$ (3.969.550)

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS Last 2 Fiscal Years

	09/30/2021	09/30/2020
Total Pension Liability		
Service Cost	687,968	664,416
Interest	1,871,051	1,893,071
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(509,406)	(1,008,318)
Changes of assumptions	636,013	571,135
Benefit Payments, including Refunds of Employee Contributions	(993,948)	(999,239)
Net Change in Total Pension Liability	1,691,678	1,121,065
Total Pension Liability - Beginning	26,538,305	25,417,240
Total Pension Liability - Ending (a)	\$ 28,229,983	\$ 26,538,305
Die a Fille die ma Ni & Decidie a		_
Plan Fiduciary Net Position	427.251	5.42.002
Contributions - Employer	436,251	542,982
Contributions - State	242,702	227,475
Contributions - Employee	318,845	314,179
Net Investment Income	5,073,633	2,022,845
Benefit Payments, including Refunds of Employee Contributions	(993,948)	(999,239)
Administrative Expense	(67,924)	(59,279)
Net Change in Plan Fiduciary Net Position	5,009,559	2,048,963
Plan Fiduciary Net Position - Beginning	24,313,376	22,264,413
Plan Fiduciary Net Position - Ending (b)	\$ 29,322,935	\$ 24,313,376
Net Pension Liability - Ending (a) - (b)	¢ (1,002,052)	¢ 2.224.020
Net Felision Liability - Eliding (a) - (b)	\$ (1,092,952)	\$ 2,224,929
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	103.87%	91.62%
Covered Payroll	\$ 4,167,910	\$ 4,106,916
Net Pension Liability as a percentage of Covered Payroll	-26.22%	54.18%

#### **Notes to Schedule:**

Changes of assumptions:

For measurement date 09/30/2021, the Board approved the following assumption changes based on the December 3, 2021 actuarial actuarial experience study:

- 1. Decrease in investment return assumption from 7.0% to 6.8% per year, net of investment related expenses.
- 2. Increase the expected individual salary increases from 7.0% to 12.0% for the first year of employment and reduce the expectation in years 1-4 from 7.0% to 5.0% per year.
- 3. Update the expected rate of Early Retirement to be 10% per year, regardless of Credited Service and the expected rate of Normal Retirement to be 75% at first eligibility and 100% beginning one year after first eligibility.
- 4. Switch to an entirely service-based assumption for expected turnover rates, with 13% for each of the first 5 years of employment, 9% for the next 5 years of employment, 8% for the next 5 years of employment and 2% per year beginning at 15 years of employment.

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return was lowered from 7.40% to 7.00% net of investment related expenses.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

			in 1	ntributions relation to				Contributions
	Act	tuarially	the .	Actuarially	Co	ntribution		as a percentage
	Det	ermined	De	termined	D	eficiency	Covered	of Covered
Fiscal Year Ended	Con	tribution	Cor	ntributions	(	Excess)	 Payroll	Payroll
09/30/2021	\$	678,953	\$	678,953	\$	-	\$ 4,167,910	16.29%
09/30/2020	\$	770,457	\$	770,457	\$	-	\$ 4,106,916	18.76%

## Notes to Schedule

Valuation Date: 10/01/2019

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2019 Actuarial Valuation for the City of Leesburg Municipal Police Officers' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

# SCHEDULE OF INVESTMENT RETURNS

## Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2021	21.00%
09/30/2020	9.10%

#### NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

#### Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees.

The Board consists of 5 Trustees, 2 of whom are legal residents and are appointed by the City Council, 2 of whom are full-time Police Officers who are elected by a majority of the members of the Plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees. Each Trustee serves a two year term.

Each person employed by the City Police Department as a full-time Police Officer becomes a Member of the Plan as a condition of his employment. All Members are therefore eligible for all plan benefits as provided for in the plan document and by applicable law.

#### Plan Membership as of October 1, 2020:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	36
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	62
	112

#### Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Leesburg Municipal Police Officers' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

Member Contributions: 7.65% of Salary.

City Contributions: Amount required after State premium tax refunds in order to pay current costs and amortize unfunded past service cost, as provided in Part VII, Chapter 112, Florida Statutes.

### **Net Pension Liability**

The measurement date is September 30, 2021.

The measurement period for the pension expense was October 1, 2020 to September 30, 2021.

The reporting period is October 1, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of September 30, 2021.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2020 updated to September 30, 2021 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	6.80%
Investment Rate of Return	6.80%

#### **GASB 68**

Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year. Male: PubS.H-2010 (Below Median) for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year. Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year.

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 (Below Median) for Healthy Retirees.

Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2020 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

75% of active deaths are assumed to be service-incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated December 3, 2021.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2021 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2021 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Domestic Equity	45.0%	7.50%
International Equity	15.0%	8.50%
Broad Market Fixed Income	20.0%	2.50%
Global Fixed Income	5.0%	3.50%
TIPS	5.0%	2.50%
Private Real Estate	10.0%	4.50%
Total	100.0%	

<sup>&</sup>lt;sup>1</sup> Source: AndCo Consulting

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.80 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

# CHANGES IN NET PENSION LIABILITY

		I	ncre	ease (Decrease	e)	
	T	otal Pension	Pl	an Fiduciary	N	Net Pension
		Liability	N	Net Position		Liability
		(a)		(b)		(a)-(b)
Balances at September 30, 2020	\$	26,538,305	\$	24,313,376	\$	2,224,929
Changes for a Year:						
Service Cost		687,968		-		687,968
Interest		1,871,051		-		1,871,051
Differences between Expected and Actual Experience		(509,406)		-		(509,406)
Changes of assumptions		636,013		-		636,013
Changes of benefit terms		-		-		-
Contributions - Employer		-		436,251		(436,251)
Contributions - State		-		242,702		(242,702)
Contributions - Employee		-		318,845		(318,845)
Net Investment Income		-		5,073,633		(5,073,633)
Benefit Payments, including Refunds of Employee Contributions		(993,948)		(993,948)		-
Administrative Expense		-		(67,924)		67,924
Net Changes		1,691,678		5,009,559		(3,317,881)
Balances at September 30, 2021	\$	28,229,983	\$	29,322,935	\$	(1,092,952)

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current									
	1%	6 Decrease	Di	scount Rate	19	% Increase				
		5.80%		6.80%		7.80%				
Sponsor's Net Pension Liability	\$	2,378,275	\$	(1,092,952)	\$	(3,969,550)				

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

# PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$161,664. On September 30, 2021, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of	Deferred Inflows of
	Resources	Resources
Differences between Expected and Actual Experience	73,470	1,160,724
Changes of assumptions	1,094,496	-
Net difference between Projected and Actual Earnings on Pension Plan investments		2,790,434
Total	\$ 1,167,966	\$ 3,951,158

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2022	\$ (633,250)
2023	\$ (669,718)
2024	\$ (805,436)
2025	\$ (674,788)
2026	\$ -
Thereafter	\$ -

#### Payable to the Pension Plan

On September 30, 2021, the Sponsor reported a payable of \$799 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2021.

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS Last 2 Fiscal Years

	09/30/2021	09/30/2020
Total Pension Liability		
Service Cost	687,968	664,416
Interest	1,871,051	1,893,071
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(509,406)	(1,008,318)
Changes of assumptions	636,013	571,135
Benefit Payments, including Refunds of Employee Contributions	(993,948)	(999,239)
Net Change in Total Pension Liability	1,691,678	1,121,065
Total Pension Liability - Beginning	26,538,305	25,417,240
Total Pension Liability - Ending (a)	\$ 28,229,983	\$ 26,538,305
Plan Fiduciary Net Position		
Contributions - Employer	436,251	542,982
Contributions - State	242,702	227,475
Contributions - Employee	318,845	314,179
Net Investment Income	5,073,633	2,022,845
Benefit Payments, including Refunds of Employee Contributions	(993,948)	(999,239)
Administrative Expense	(67,924)	(59,279)
Net Change in Plan Fiduciary Net Position	5,009,559	2,048,963
Plan Fiduciary Net Position - Beginning	24,313,376	22,264,413
Plan Fiduciary Net Position - Ending (b)	\$ 29,322,935	\$ 24,313,376
Net Pension Liability - Ending (a) - (b)	\$ (1,092,952)	\$ 2,224,929
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	103.87%	91.62%
Covered Payroll	\$ 4,167,910	\$ 4,106,916
Net Pension Liability as a percentage of Covered Payroll	-26.22%	54.18%

### **Notes to Schedule:**

Changes of assumptions:

For measurement date 09/30/2021, the Board approved the following assumption changes based on the December 3, 2021 actuarial experience study:

- 1. Decrease in investment return assumption from 7.0% to 6.8% per year, net of investment related expenses.
- 2. Increase the expected individual salary increases from 7.0% to 12.0% for the first year of employment and reduce the expectation in years 1-4 from 7.0% to 5.0% per year.
- 3. Update the expected rate of Early Retirement to be 10% per year, regardless of Credited Service and the expected rate of Normal Retirement to be 75% at first eligibility and 100% beginning one year after first eligibility.
- 4. Switch to an entirely service-based assumption for expected turnover rates, with 13% for each of the first 5 years of employment, 9% for the next 5 years of employment and 2% per year beginning at 15 years of employment.

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return was lowered from 7.40% to 7.00% net of investment related expenses.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions in relation to the			Contributions
	Actuarially	Actuarially	Contribution		as a percentage
	Determined	Determined	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2021	\$ 678,953	\$ 678,953	\$ -	\$ 4,167,910	16.29%
09/30/2020	\$ 770,457	\$ 770,457	\$ -	\$ 4,106,916	18.76%

## Notes to Schedule

Valuation Date: 10/01/2019

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2019 Actuarial Valuation for the City of Leesburg Municipal Police Officers' Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

# EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

# COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2021

	N	let Pension Liability		Deferred Inflows		Deferred Outflows		Pension Expense
Beginning balance	\$	2,224,929	\$	1,582,922	\$	1,600,322	\$	-
Total Pension Liability Factors:								
Service Cost		687,968		-		-		687,968
Interest		1,871,051		-		-		1,871,051
Changes in benefit terms		-		-		-		-
Differences between Expected and Actual Experience								
with regard to economic or demographic assumptions		(509,406)		509,406		-		-
Current year amortization of experience difference		-		(415,852)		(402,276)		(13,576)
Change in assumptions about future economic or								
demographic factors or other inputs		636,013		-		636,013		-
Current year amortization of change in assumptions		-		-		(410,634)		410,634
Benefit Payments, including Refunds of Employee								
Contributions		(993,948)						
Net change		1,691,678		93,554		(176,897)		2,956,077
Plan Fiduciary Net Position:								
Contributions - Employer		436,251		-		-		-
Contributions - State		242,702		-		-		-
Contributions - Employee		318,845		-		-		(318,845)
Projected Net Investment Income		1,699,694		-		-		(1,699,694)
Difference between projected and actual earnings on								
Pension Plan investments		3,373,939		3,373,939		-		-
Current year amortization		-		(928,951)		(85,153)		(843,798)
Benefit Payments, including Refunds of Employee								
Contributions		(993,948)		-		-		-
Administrative Expenses		(67,924)				-		67,924
Net change		5,009,559		2,444,988		(85,153)		(2,794,413)
	Φ.	(1,002,052)	Φ.	4 121 464	Φ.	1 220 272	<u></u>	161 664
Ending Balance	<b>3</b>	(1,092,952)	\$	4,121,464	\$	1,338,272	\$	161,664

# AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year	Differences Betwo	ual Recognition	2021	2022	2022	2024	2025	20	2.0	2025	2020		2026		2020	
Ending	Earnings	Period (Years)	2021	2022	2023	2024	2025	20	26	2027	2028		2029	,	 2030	
2021	\$ (3,373,9	939) 5	\$ (674,787)	\$ (674,788)	\$ (674,788)	\$ (674,788)	\$ (674,788) \$		-	\$ -	\$ }	_	\$	-	\$	_
2020	\$ (374,3	312) 5	\$ (74,862)	\$ (74,862)	\$ (74,862)	\$ (74,862)	\$ - \$		-	\$ -	\$ }	-	\$	-	\$	-
2019	\$ 425,7	767 5	\$ 85,153	\$ 85,153	\$ 85,153	\$ -	\$ - \$		-	\$ -	\$ }	-	\$	_	\$	-
2018	\$ (185,0	)10) 5	\$ (37,002)	\$ (37,002)	\$ -	\$ -	\$ - \$		-	\$ -	\$	-	\$	_	\$	_
2017	\$ (711,4	198) 5	\$ (142,300)	\$ -	\$ -	\$ -	\$ - \$		-	\$ -	\$ •	-	\$	-	\$	-
Net Increase	e (Decrease) in Pens	sion Expense	\$ (843,798)	\$ (701,499)	\$ (664,497)	\$ (749,650)	\$ (674,788) \$		_	\$ 	\$	_	\$		\$ 	

# AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending		Changes of Assumptions	Recognition Period (Years)	2021	2022	2023	2024	2025		2026	2027		2028		2029		 2030	
2021	\$	636,013	4	\$ 159,004	\$ 159,003	\$ 159,003	\$ 159,003	\$	_	\$ -	\$ _	9		_	\$	_	\$	_
2020	\$	571,135	5	\$ 114,227	\$ 114,227		\$ 114,227	\$	-	\$ -	\$ -	9		-	\$	-	\$	_
2019	\$	687,014	5	\$ 137,403	\$ 137,403	\$ 137,403	\$ -	\$	-	\$ -	\$ -	\$		-	\$	-	\$	-
Net Increas	e (De	ecrease) in Pension	Expense	\$ 410,634	\$ 410,633	\$ 410,633	\$ 273,230	\$	-	\$ -	\$ _	\$		-	\$	_	\$	<u>-</u>

# AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year		erences Between ected and Actual	Recognition														
Ending	•	Experience	Period (Years)	2021	2022	2023	2024	2025		2026	2027	2028		20	29	 2030	
2021	\$	(509,406)	4	\$ (127,350)	\$ (127,352)	\$ (127,352)	\$ (127,352)	\$	_	\$ _	\$ _	\$	- :	\$	_	\$	_
2020	\$	(1,008,318)	5	, ,	, ,	, ,	(201,664)		-	\$ -	\$ -	\$	- 5	\$	-	\$	-
2019	\$	(434,190)	5	\$ (86,838)	\$ (86,838)	\$ (86,838)	\$ -	\$	-	\$ -	\$ -	\$	- 5	\$	-	\$	-
2018	\$	367,350	5	\$ 73,470	\$ 73,470	\$ -	\$ -	\$	-	\$ -	\$ -	\$	- 5	\$	-	\$	-
2017	\$	1,644,031	5	\$ 328,806	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$	- 3	\$	-	\$	-
Net Increase	e (Dec	rease) in Pension	Expense	\$ (13,576)	\$ (342,384)	\$ (415,854)	\$ (329,016)	\$	-	\$ -	\$ -	\$	- 3	\$	-	\$	-