#200718

CITY OF GAINESVILLE CONSOLIDATED POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN

ACTUARIAL VALUATION AS OF OCTOBER 1, 2020

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2022

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2020





July 14, 2021

Board of Trustees City of Gainesville Consolidated Police Officers' and Firefighters' Retirement Plan

Re: October 1, 2020 Actuarial Valuation

Dear Trustees:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Gainesville Police Officers' and Firefighters' Retirement Plan. 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. Foster & Foster provided the disclosure information under Statements No. 67 and No. 68 in a separate report dated February 19, 2021.

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, 175, 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 Gainesville, 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.

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, 2019. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2020 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 Gainesville, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Consolidated Police Officers' and Firefighters' Retirement Plan. 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.

Joseph Griffin, ASA, EA, MAAA Enrolled Actuary #20-6938

By:

Enclosures

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#### SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Gainesville Consolidated Police Officers' and Firefighters' Retirement Plan, performed as of October 1, 2020, 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, 2022.

The contribution requirements, compared with those set forth in the October 1, 2019 actuarial valuation report, are as follows:

Valuation Date	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2021</u>
City Required Contribution (Firefighters)	\$ 609,568	\$ 706,034
% of Projected Annual Payroll	5.73%	7.01%
City Required Contribution (Police Officers)	\$ 1,333,485	\$ 1,421,661
% of Projected Annual Payroll	8.84%	9.72%
City Required Contribution (Total)	\$ 1,943,053	\$ 2,127,695
% of Projected Annual Payroll	7.56%	8.62%

As you can see, the Minimum Required Contribution shows a decrease when compared to the results determined in the October 1, 2019 actuarial valuation report. The decrease is attributable to a decrease in the Unfunded Accrued Actuarial Liability associated with contributions in excess of the required minimum contribution. The decrease was offset in part by unfavorable actuarial experience as described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 7.37% (Actuarial Asset Basis) which fell short of the 7.90% assumption and an average salary increase of 12.43% which exceeded the 3.95% assumption. These losses were offset in part by gains associated with more turnover than expected and inactive mortality experience.

### CHANGES SINCE PRIOR VALUATION

#### Plan Changes

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

#### Actuarial Assumption/Method Changes

As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

The assumed payroll growth rate has been increased from 0.00% to 0.16% for this valuation. This assumption reflects the average annual payroll growth rate over the past 10 years.

There have been no method changes since the prior valuation.

# CONSOLIDATED TOTAL COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	410	410	391
Service Retirees	376	376	369
DROP Retirees	28	28	39
Beneficiaries	39	39	37
Disability Retirees	26	26	26
Terminated Vested	<u>39</u>	<u>39</u>	<u>29</u>
Total	918	918	891
Total Annual Payroll	\$25,481,061	\$25,481,061	\$24,710,307
Annual Rate of Payments to:			
Service Retirees	15,748,162	15,748,162	14,867,547
DROP Retirees	1,384,938	1,384,938	2,101,388
Beneficiaries	847,404	847,404	772,110
Disability Retirees	485,892	485,892	481,882
Terminated Vested	496,845	496,845	378,353
B. Assets			
Actuarial Value (AVA) <sup>1</sup>	302,938,520	302,938,520	292,543,799
Market Value (MVA) <sup>1</sup>	296,918,563	296,918,563	290,738,332
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	99,842,607	100,074,006	90,476,910
Disability Benefits	5,184,312	4,937,323	4,584,959
Death Benefits	599,784	825,092	767,684
Vested Benefits	352,127	347,422	348,667
Refund of Contributions	729,708	729,936	638,233
Service Retirees	186,824,432	190,754,695	180,198,998
DROP Retirees <sup>1</sup>	23,268,899	23,372,630	34,709,780
Beneficiaries	8,337,322	8,452,836	7,823,060
Disability Retirees	4,968,521	4,784,284	4,817,064
Terminated Vested	2,560,206	2,552,188	2,190,855
Share Plan Balances <sup>1</sup>	1,783,811	1,783,811	1,860,413
Excess State Monies Reserve	<u>0</u>	<u>0</u>	<u>0</u>
Total	334,451,729	338,614,223	328,416,623

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	215,122,847	214,986,802	197,437,235
Present Value of Future			
Member Contributions	17,560,640	17,549,422	16,122,318
Normal Cost (Retirement)	3,604,319	3,608,701	3,318,232
Normal Cost (Disability)	358,884	342,170	318,556
Normal Cost (Death)	36,007	48,575	45,121
Normal Cost (Vesting)	48,802	48,086	45,665
Normal Cost (Refunds)	<u>187,503</u>	<u>187,633</u>	<u>177,458</u>
Total Normal Cost	4,235,515	4,235,165	3,905,032
Present Value of Future			
Normal Costs	36,080,271	36,058,620	33,445,595
Accrued Liability (Retirement)	69,048,471	69,245,943	61,948,105
Accrued Liability (Disability)	2,196,522	2,100,623	1,941,194
Accrued Liability (Death)	293,481	417,116	388,347
Accrued Liability (Vesting)	(37,109)	(35,861)	(15,093)
Accrued Liability (Refunds)	(873,098)	(872,662)	(891,695)
Accrued Liability (Inactives) <sup>1</sup>	225,959,380	229,916,633	229,739,757
Share Plan Balances <sup>1</sup>	<u>1,783,811</u>	<u>1,783,811</u>	1,860,413
Actuarial Accrued Liability (EAN AL)	298,371,458	302,555,603	294,971,028
Unfunded Actuarial Accrued			
Liability (UAAL)	(4,567,062)	(382,917)	2,427,229
Funded Ratio (AVA / EAN AL)	101.5%	100.1%	99.2%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances <sup>1</sup>	227,743,191	231,700,444	231,600,170
Actives	25,343,108	25,334,437	22,109,581
Member Contributions	<u>16,567,184</u>	<u>16,567,184</u>	<u>15,537,104</u>
Total	269,653,483	273,602,065	269,246,855
Non-vested Accrued Benefits	12,336,513	12,433,797	<u>11,760,730</u>
Total Present Value			
Accrued Benefits (PVAB)	281,989,996	286,035,862	281,007,585
Funded Ratio (MVA / PVAB)	105.3%	103.8%	103.5%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(4,045,866)	0	
Plan Experience	0	3,720,356	
Benefits Paid	0	(20,097,814)	
Interest	0	21,405,735	
Refund of Member Contributions	<u>0</u>	<u>0</u>	
Total	(4,045,866)	5,028,277	

Valuation Date Applicable to Fiscal Year Ending	New Assump 10/1/2020 <u>9/30/2022</u>	Old Assump 10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
E. Pension Cost			
Normal Cost (with interest) % of Total Annual Payroll <sup>2</sup>	\$4,402,818 17.12	\$4,402,455 17.12	\$4,181,060 16.92
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	767,655 2.99	767,655 2.99	825,775 3.34
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years			
(as of 10/1/2020, with interest) % of Total Annual Payroll <sup>2</sup>	(352,007) (1.37)	(191,062) (0.74)	237,722 0.96
Minimum Required Contribution <sup>3</sup> % of Total Annual Payroll <sup>2 3</sup>	5,170,473 20.11	5,170,110 20.11	5,244,557 21.22
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	2,088,140 8.12	2,088,140 8.12	2,004,518 8.11
Expected State Contribution % of Total Annual Payroll <sup>2</sup>	1,139,280 4.43	1,139,280 4.43	1,112,344 4.50
Expected City Contribution % of Total Annual Payroll <sup>2</sup>	1,943,053 7.56	1,942,690 7.55	2,127,695 8.62
F. Past Contributions			
Plan Years Ending:	<u>9/30/2020</u>		
Total Required Contribution City and State Requirement	9,293,915 7,180,064		
Actual Contributions Made:			
Members (excluding buyback) City State Total	2,113,851 51,909,324 0 54,023,175		
G. Net Actuarial (Gain)/Loss	(2,762,325)		

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2020 and 9/30/2019.

<sup>2</sup> Contributions developed as of 10/1/2020 are expressed as a percentage of total annual payroll at 10/1/2020 of \$25,714,720.

<sup>3</sup> Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

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

	Projected Unfunded
Year	Actuarial Accrued Liability
2020	(4,567,062) 1

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2020	12.43%	3.95%
Year Ended	9/30/2019	3.95%	4.00%
Year Ended	9/30/2018	3.72%	4.14%
Year Ended	9/30/2017	4.33%	4.12%
Year Ended	9/30/2016	7.17%	5.01%

(ii) 5 Year Comparison of Investment Returns on Market and Actuarial Values

		Market	<u>Actuarial</u>	Assumed
Year Ended	9/30/2020	6.65%	7.37%	7.90%
Year Ended	9/30/2019	1.67%	7.71%	7.90%
Year Ended	9/30/2018	10.53%	9.38%	8.00%
Year Ended	9/30/2017	15.22%	9.21%	8.10%
Year Ended	9/30/2016	11.07%	7.91%	8.20%

### (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2020 10/1/2010	\$24,738,894 \$24,342,597
(b) Total Increase		1.63%
(c) Number of Years		10
(d) Average Annual Rate		0.16%

<sup>1</sup> Based on current State law and the existing UAAL bases, the UAAL is projected to never be positive.

# FIREFIGHTERS COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	10/1/2019
A. Participant Data			
Actives	167	167	154
Service Retirees	149	149	143
DROP Retirees	11	11	21
Beneficiaries	21	21	19
Disability Retirees	8	8	8
Terminated Vested	<u>6</u>	<u>6</u>	<u>2</u>
Total	362	362	347
Total Annual Payroll	\$10,486,247	\$10,486,247	\$10,083,025
Annual Rate of Payments to:			
Service Retirees	6,596,870	6,596,870	5,976,005
DROP Retirees	599,311	599,311	1,264,430
Beneficiaries	517,390	517,390	447,861
Disability Retirees	157,473	157,473	156,534
Terminated Vested	64,921	64,921	32,963
B. Assets			
Actuarial Value (AVA) <sup>1</sup>	123,558,402	123,558,402	120,692,580
Market Value (MVA) <sup>1</sup>	121,158,931	121,158,931	120,062,772
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	40,952,393	40,964,210	36,291,281
Disability Benefits	2,153,189	2,041,836	1,908,645
Death Benefits	264,729	366,008	345,074
Vested Benefits	18,927	18,550	13,499
Refund of Contributions	284,392	284,497	252,323
Service Retirees	75,895,991	77,746,497	69,784,026
DROP Retirees <sup>1</sup>	10,635,431	10,650,268	21,460,074
Beneficiaries Disability Patiraes	4,842,425 1,639,386	4,919,439	4,272,285
Disability Retirees Terminated Vested	300,481	1,584,129 300,013	1,602,246 213,049
Share Plan Balances <sup>1</sup>	396,259	396,259	432,726
Shart I tall Dalahets	390,239	390,239	432,720
Total	137,383,603	139,271,706	136,575,228

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	95,095,127	95,027,479	87,635,069
Present Value of Future			
Member Contributions	8,558,561	8,552,473	7,887,156
Normal Cost (Retirement)	1,551,810	1,549,826	1,450,724
Normal Cost (Disability)	140,243	132,925	126,096
Normal Cost (Death)	15,665	21,263	20,251
Normal Cost (Vesting)	2,325	2,271	2,073
Normal Cost (Refunds)	57,304	57,348	52,970
Total Normal Cost	1,767,347	1,763,633	1,652,114
Present Value of Future			
Normal Costs	15,908,640	15,869,721	14,791,561
Accrued Liability (Retirement)	27,024,588	27,054,278	23,327,920
Accrued Liability (Disability)	868,164	828,189	771,170
Accrued Liability (Death)	119,149	169,613	158,656
Accrued Liability (Vesting)	(86)	(15)	(1,765)
Accrued Liability (Refunds)	(246,825)	(246,685)	(236,720)
Accrued Liability (Inactives) <sup>1</sup>	93,313,714	95,200,346	97,331,680
Share Plan Balances <sup>1</sup>	396,259	396,259	432,726
Total Actuarial Accrued Liability (EAN AL)	121,474,963	123,401,985	121,783,667
Unfunded Actuarial Accrued			
Liability (UAAL)	(2,083,439)	(156,417)	1,091,087
Funded Ratio (AVA / EAN AL)	101.7%	100.1%	99.1%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances <sup>1</sup>	93,709,973	95,596,605	97,764,406
Actives	8,993,925	8,979,368	6,720,821
Member Contributions	6,756,265	6,756,265	6,006,423
Total	109,460,163	111,332,238	110,491,650
Non-vested Accrued Benefits	6,046,825	6,063,657	5,549,971
Total Present Value			
Accrued Benefits (PVAB)	115,506,988	117,395,895	116,041,621
Funded Ratio (MVA / PVAB)	104.9%	103.2%	103.5%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(1,888,907)	0	
Plan Experience	0	2,017,787	
Benefits Paid	0	(9,457,240)	
Interest	0	8,793,727	
Other	0	0	
Total	(1,888,907)	1,354,274	

	New Assump	Old Assump	
Valuation Date Applicable to Fiscal Year Ending	10/1/2020 <u>9/30/2022</u>	10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
E. Pension Cost			
Normal Cost (with interest)	\$1,837,157	\$1,833,297	\$1,768,894
% of Total Annual Payroll <sup>2</sup>	17.27	17.24	17.54
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	\$310,544 2.92	\$310,544 2.92	\$292,173 2.90
Payment Required to Amortize Unfunded Actuarial Accrued			
Liability over 30 years (as of 10/1/2020, with interest)	(\$161.245)	(\$300)	\$106,422
% of Total Annual Payroll <sup>2</sup>	(\$161,245) (1.52)	0.00	1.06
Minimum Required Contribution <sup>3</sup>	\$2,147,701	\$2,143,841	\$2,167,489
% of Total Annual Payroll <sup>23</sup>	20.19	20.16	21.50
Expected Member Contributions	\$957,214	\$957,214	\$907,472
% of Total Annual Payroll <sup>2</sup>	9.00	9.00	9.00
Expected State Contribution	\$580,919	\$580,919	\$553,983
% of Total Annual Payroll <sup>2</sup>	5.46	5.46	5.49
Expected City Contribution	\$609,568	\$605,708	\$706,034
% of Total Annual Payroll <sup>23</sup>	5.73	5.70	7.01
F. Past Contributions			
Plan Years Ending:	9/30/2020		
Total Required Contribution	4,154,021		
City and State Requirement	3,205,855		
Actual Contributions Made:			
Members (excluding buyback)	948,166		
City	23,162,771		
State	0		
Total	24,110,937		
G. Net Actuarial (Gain)/Loss	(1,226,450)		

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2020 and 9/30/2019.

<sup>2</sup> Contributions developed as of 10/1/2020 are expressed as a percentage of total annual payroll at 10/1/2020 of \$10,635,710.

<sup>3</sup> Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

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

<u>Year</u>	Projected Unfunded Actuarial Accrued Liability
2020	(2,083,439) 1

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2020	7.68%	3.49%
Year Ended	9/30/2019	6.34%	3.54%
Year Ended	9/30/2018	6.81%	3.50%
Year Ended	9/30/2017	1.88%	3.48%
Year Ended	9/30/2016	8.24%	5.04%

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

	Market Value	Actuarial Value	Assumed
9/30/2020	6.65%	7.39%	7.90%
9/30/2019	1.67%	7.73%	7.90%
9/30/2018	10.53%	9.40%	8.00%
9/30/2017	15.22%	9.22%	8.10%
9/30/2016	11.07%	7.91%	8.20%
	9/30/2019 9/30/2018 9/30/2017	9/30/2020       6.65%         9/30/2019       1.67%         9/30/2018       10.53%         9/30/2017       15.22%	9/30/2020       6.65%       7.39%         9/30/2019       1.67%       7.73%         9/30/2018       10.53%       9.40%         9/30/2017       15.22%       9.22%

<sup>1</sup> Based on current State law and the existing UAAL bases, the UAAL is projected to never be positive.

## POLICE OFFICERS COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	243	243	237
Service Retirees	227	227	226
DROP Retirees	17	17	18
Beneficiaries	18	18	18
Disability Retirees	18	18	18
Terminated Vested	<u>33</u>	<u>33</u>	<u>27</u>
Total	556	556	544
Total Annual Payroll	\$14,994,814	\$14,994,814	\$14,627,282
Payroll Under Assumed Ret. Age	14,448,366	14,448,366	14,627,282
Annual Rate of Payments to:			
Service Retirees	9,151,292	9,151,292	8,891,542
DROP Retirees	785,627	785,627	836,958
Beneficiaries	330,014	330,014	324,249
Disability Retirees	328,419	328,419	325,348
Terminated Vested	431,924	431,924	345,390
B. Assets			
Actuarial Value (AVA) <sup>1</sup>	179,380,118	179,380,118	171,851,219
Market Value (MVA) <sup>1</sup>	175,759,632	175,759,632	170,675,560
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	58,890,214	59,109,796	54,185,629
Disability Benefits	3,031,123	2,895,487	2,676,314
Death Benefits	335,055	459,084	422,610
Vested Benefits	333,200	328,872	335,168
Refund of Contributions	445,316	445,439	385,910
Service Retirees	110,928,441	113,008,198	110,414,972
DROP Retirees <sup>1</sup>	12,633,468	12,722,362	13,249,706
Beneficiaries	3,494,897	3,533,397	3,550,775
Disability Retirees	3,329,135	3,200,155	3,214,818
Terminated Vested	2,259,725	2,252,175	1,977,806
Share Plan Balances <sup>1</sup>	1,387,552	1,387,552	1,427,687
Total	197,068,126	199,342,517	191,841,395

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	120,027,720	119,959,323	109,802,166
Present Value of Future			
Member Contributions	9,002,079	8,996,949	8,235,162
Normal Cost (Retirement)	2,052,509	2,058,875	1,867,508
Normal Cost (Disability)	218,641	209,245	192,460
Normal Cost (Death)	20,342	27,312	24,870
Normal Cost (Vesting)	46,477	45,815	43,592
Normal Cost (Refunds)	130,199	130,285	124,488
Total Normal Cost	2,468,168	2,471,532	2,252,918
Present Value of Future			
Normal Costs	20,171,631	20,188,899	18,654,034
Accrued Liability (Retirement)	42,023,883	42,191,665	38,620,185
Accrued Liability (Disability)	1,328,358	1,272,434	1,170,024
Accrued Liability (Death)	174,332	247,503	229,691
Accrued Liability (Vesting)	(37,023)	(35,846)	(13,328)
Accrued Liability (Refunds)	(626,273)	(625,977)	(654,975)
Accrued Liability (Inactives) <sup>1</sup>	132,645,666	134,716,287	132,408,077
Share Plan Balances <sup>1</sup>	1,387,552	1,387,552	1,427,687
Total Actuarial Accrued Liability (EAN AL)	176,896,495	179,153,618	173,187,361
Unfunded Actuarial Accrued			
Liability (UAAL)	(2,483,623)	(226,500)	1,336,142
Funded Ratio (AVA / EAN AL)	101.4%	100.1%	99.2%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances <sup>1</sup>	134,033,218	136,103,839	133,835,764
Actives	16,349,183	16,355,069	15,388,760
Member Contributions	9,810,919	9,810,919	9,530,681
Total	160,193,320	162,269,827	158,755,205
Non-vested Accrued Benefits	6,289,688	6,370,140	6,210,759
Total Present Value			
Accrued Benefits (PVAB)	166,483,008	168,639,967	164,965,964
Funded Ratio (MVA / PVAB)	105.6%	104.2%	103.5%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(2,156,959)	0	
Plan Experience	0	1,702,569	
Benefits Paid	0	(10,640,574)	
Interest	0	12,612,008	
Other	0	0	
Total	(2,156,959)	3,674,003	

Valuation Date Applicable to Fiscal Year Ending	New Assump 10/1/2020 <u>9/30/2022</u>	Old Assump 10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
E. Pension Cost			
Normal Cost (with interest) % of Total Annual Payroll <sup>2</sup>	\$2,565,661 17.01	\$2,569,158 17.04	\$2,412,166 16.49
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	\$457,111 3.03	\$457,111 3.03	\$533,602 3.65
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years			
(as of 10/1/2020, with interest) % of Total Annual Payroll <sup>2</sup>	(\$190,762) (1.27)	(\$190,762) (1.27)	\$131,300 0.90
Minimum Required Contribution <sup>3</sup> % of Total Annual Payroll <sup>2</sup> <sup>3</sup>	\$3,022,772 20.04	\$3,026,269 20.07	\$3,077,068 21.04
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	\$1,130,926 7.50	\$1,130,926 7.50	\$1,097,046 7.50
Expected State Contribution % of Total Annual Payroll <sup>2</sup>	\$558,361 3.70	\$558,361 3.70	\$558,361 3.82
Expected City Contribution % of Total Annual Payroll <sup>2</sup>	\$1,333,485 8.84	\$1,336,982 8.87	\$1,421,661 9.72
F. Past Contributions			
Plan Years Ending:	<u>9/30/2020</u>		
Total Required Contribution City and State Requirement	5,139,894 3,974,209		
Actual Contributions Made:			
Members (excluding buyback) City State Total	1,165,685 28,746,553 0 29,912,238		
G. Net Actuarial (Gain)/Loss	(1,535,875)		

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2020 and 9/30/2019.

<sup>2</sup> Contributions developed as of 10/1/2020 are expressed as a percentage of total annual payroll at 10/1/2020 of \$15,079,010.

<sup>3</sup> Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

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

V	Projected Unfunded
Year	Actuarial Accrued Liability
2020	(2,483,623) 1

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2020	16.15%	4.31%
Year Ended	9/30/2019	2.32%	4.31%
Year Ended	9/30/2018	1.94%	4.51%
Year Ended	9/30/2017	5.67%	4.48%
Year Ended	9/30/2016	6.61%	4.99%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2020	6.65%	7.36%	7.90%
Year Ended	9/30/2019	1.67%	7.69%	7.90%
Year Ended	9/30/2018	10.53%	9.37%	8.00%
Year Ended	9/30/2017	15.22%	9.20%	8.10%
Year Ended	9/30/2016	11.07%	7.91%	8.20%

<sup>1</sup> Based on current State law and the existing UAAL bases, the UAAL is projected to never be positive.

#### 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.

Joseph L. Griffin, EA, ASA, MAAA Enrolled Actuary #20-6938

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

# CONSOLIDATED TOTAL RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$2,427,229
(2)	Sponsor Normal Cost developed as of October 1, 2019	1,900,514
(3)	Expected administrative expenses for the year ended September 30, 2020	771,218
(4)	Expected interest on (1), (2) and (3)	372,355
(5)	Sponsor contributions to the System during the year ended September 30, 2020	6,819,678
(6)	Expected interest on (5)	224,376
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	(1,572,738)
(8)	Change to UAAL due to Assumption Change	(4,184,145)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	1,189,821
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	(4,567,062)
(11)	Expected Unfunded Actuarial Accrued Liability Based on Outstanding Bases	2,379,408
(12)	Additional Actuarial (Gain) / Loss for Contribution Timing Needed to Maintain Equation of Balance (7) - (11)	(3,952,146)

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	Amount	Amount
Assum. Change	10/1/2003	13	\$125,804	\$14,554
Actuarial Loss	10/1/2003	13	81,180	9,391
Assum. Change	10/1/2004	14	(87,521)	(9,700)
Actuarial Loss	10/1/2004	14	52,049	5,768
Actuarial Gain	10/1/2005	15	(16,794)	(1,791)
Actuarial Gain	10/1/2006	16	(84,928)	(8,752)
Assum. Change	10/1/2007	17	(18,855)	(1,884)
Benefit Change	10/1/2007	17	153,662	15,354
Actuarial Gain	10/1/2007	17	(311,059)	(31,083)
Actuarial Loss	10/1/2008	18	181,543	17,643
Assum. Change	10/1/2009	19	89,610	8,492
Actuarial Loss	10/1/2009	19	679,332	64,381
Actuarial Loss	10/1/2010	20	395,049	36,597
Assum. Change	10/1/2010	20	21,355	1,978
Actuarial Loss	10/1/2011	21	735,026	66,697
Assum. Change	10/1/2011	21	(6,857)	(622)
Actuarial Loss	10/1/2012	22	98,208	8,745
Benefit Change	10/1/2012	22	(143,670)	(12,793)
Actuarial Gain	10/1/2013	23	(167,991)	(14,705)
Assum. Change	10/1/2013	23	131,982	11,553
Actuarial Gain	10/1/2014	24	(220,691)	(19,017)
Assum. Change	10/1/2014	24	137,169	11,820
Actuarial Gain	10/1/2015	25	26,455	2,247
Assum. Change	10/1/2015	25	140,496	11,934
Actuarial Loss	10/1/2016	26	148,558	12,455
Assum. Change	10/1/2016	26	266,459	22,339
Actuarial Gain	10/1/2017	27	(194,007)	(16,070)
Assum. Change	10/1/2017	27	231,193	19,151
Actuarial Gain	10/1/2018	28	(221,739)	(18,166)
Assum. Change	10/1/2018	28	156,051	12,785
Actuarial Loss	10/1/2019	29	2,339	189
Actuarial Gain	10/1/2020	30	(2,762,325)	(221,941)
Assump Change	10/1/2020	30	(4,184,145)	<u>(336,180)</u>
			(4,567,062)	(338,631)

# FIREFIGHTERS RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$1,091,087
(2)	Sponsor Normal Cost developed as of October 1, 2019	744,642
(3)	Expected administrative expenses for the year ended September 30, 2020	272,844
(4)	Expected interest on (1), (2) and (3)	155,800
(5)	Sponsor contributions to the System during the year ended September 30, 2020	2,962,871
(6)	Expected interest on (5)	94,087
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	(792,585)
(8)	Change to UAAL due to Assumption Change	(1,927,022)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	636,168
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	(2,083,439)
(11)	Expected Unfunded Actuarial Accrued Liability Based on Outstanding Bases	1,070,033
(12)	Additional Actuarial (Gain) / Loss for Contribution Timing Needed to Maintain Equation of Balance (7) - (11)	(1,862,618)

Type of	Date	Years	10/1/2020	Amortization
Base	<b>Established</b>	Remaining	<u>Amount</u>	Amount
Assum. Change	10/1/2003	13	50,826	5,880
Actuarial Loss	10/1/2003	13	32,798	3,794
Assum. Change	10/1/2004	14	(35,360)	(3,919)
Actuarial Loss	10/1/2004	14	21,029	2,330
Actuarial Gain	10/1/2005	15	(6,785)	(724)
Actuarial Gain	10/1/2006	16	(34,312)	(3,536)
Assum. Change	10/1/2007	17	(7,618)	(761)
Benefit Change	10/1/2007	17	62,082	6,203
Actuarial Gain	10/1/2007	17	(125,673)	(12,558)
Actuarial Loss	10/1/2008	18	73,346	7,128
Assum. Change	10/1/2009	19	36,204	3,431
Actuarial Loss	10/1/2009	19	274,462	26,011
Actuarial Loss	10/1/2010	20	159,607	14,786
Assum. Change	10/1/2010	20	8,628	799
Actuarial Loss	10/1/2011	21	296,963	26,947
Assum. Change	10/1/2011	21	(2,771)	(251)
Actuarial Loss	10/1/2012	22	39,678	3,533
Benefit Change	10/1/2012	22	(7,843)	(698)
Actuarial Gain	10/1/2013	23	(34,343)	(3,006)
Assum. Change	10/1/2013	23	51,250	4,486
Actuarial Gain	10/1/2014	24	(8,576)	(739)
Assum. Change	10/1/2014	24	54,158	4,667
Actuarial Gain	10/1/2015	25	(26,142)	(2,221)
Assum. Change	10/1/2015	25	53,945	4,582
Actuarial Loss	10/1/2016	26	49,143	4,120
Assum. Change	10/1/2016	26	98,716	8,276
Actuarial Gain	10/1/2017	27	(99,937)	(8,278)
Assum. Change	10/1/2017	27	89,862	7,444
Actuarial Gain	10/1/2018	28	(82,433)	(6,753)
Assum. Change	10/1/2018	28	60,516	4,958
Actuarial Loss	10/1/2019	29	28,613	2,320
Actuarial Gain	10/1/2020	30	(1,226,450)	(98,540)
Assump Change	10/1/2020	30	(1,927,022)	<u>(154,829)</u>
			(2,083,439)	(155,118)

# POLICE OFFICERS RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2019	\$1,336,142
(2)	Sponsor Normal Cost developed as of October 1, 2019	1,155,872
(3)	Expected administrative expenses for the year ended September 30, 2020	498,374
(4)	Expected interest on (1), (2) and (3)	216,555
(5)	Sponsor contributions to the System during the year ended September 30, 2020	3,856,807
(6)	Expected interest on (5)	130,289
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	(780,153)
(8)	Change to UAAL due to Assumption Change	(2,257,123)
(9)	Change to UAAL due to Actuarial (Gain)/Loss	553,653
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2020	(2,483,623)
(11)	Expected Unfunded Actuarial Accrued Liability Based on Outstanding Bases	1,309,375
(12)	Additional Actuarial (Gain) / Loss for Contribution Timing Needed to Maintain Equation of Balance (7) - (11)	(2,089,528)

Date	Years	10/1/2020	Amortization
<b>Established</b>	Remaining	Amount	Amount
10/1/2003	13	74,978	8,674
10/1/2003	13	48,382	5,597
10/1/2004	14	(52,161)	(5,781)
10/1/2004	14	31,020	3,438
10/1/2005	15	(10,009)	(1,067)
10/1/2006	16	(50,616)	(5,216)
10/1/2007	17	(11,237)	(1,123)
10/1/2007	17	91,580	9,151
10/1/2007	17	(185,386)	(18,525)
10/1/2008	18	108,197	10,515
10/1/2009	19	53,406	5,061
10/1/2009	19	404,870	38,370
10/1/2010	20	235,442	21,811
10/1/2010	20	12,727	1,179
10/1/2011	21	438,063	39,750
10/1/2011	21	(4,086)	(371)
10/1/2012	22	58,530	5,212
10/1/2012	22	(135,827)	(12,095)
10/1/2013	23	(133,648)	(11,699)
10/1/2013	23	80,732	7,067
10/1/2014	24	(212,115)	(18,278)
10/1/2014	24	83,011	7,153
10/1/2015	25	52,597	4,468
10/1/2015	25	86,551	7,352
	Established 10/1/2003 10/1/2003 10/1/2004 10/1/2004 10/1/2005 10/1/2007 10/1/2007 10/1/2007 10/1/2009 10/1/2009 10/1/2010 10/1/2010 10/1/2011 10/1/2011 10/1/2012 10/1/2013 10/1/2013 10/1/2014 10/1/2014 10/1/2015	EstablishedRemaining $10/1/2003$ 13 $10/1/2003$ 13 $10/1/2004$ 14 $10/1/2004$ 14 $10/1/2005$ 15 $10/1/2006$ 16 $10/1/2007$ 17 $10/1/2007$ 17 $10/1/2007$ 17 $10/1/2007$ 17 $10/1/2007$ 17 $10/1/2009$ 19 $10/1/2009$ 19 $10/1/2010$ 20 $10/1/2010$ 20 $10/1/2011$ 21 $10/1/2011$ 21 $10/1/2012$ 22 $10/1/2013$ 23 $10/1/2013$ 23 $10/1/2014$ 24 $10/1/2015$ 25	EstablishedRemainingAmount $10/1/2003$ 1374,978 $10/1/2003$ 1348,382 $10/1/2004$ 14(52,161) $10/1/2004$ 1431,020 $10/1/2005$ 15(10,009) $10/1/2006$ 16(50,616) $10/1/2007$ 17(11,237) $10/1/2007$ 17(185,386) $10/1/2007$ 17(185,386) $10/1/2007$ 17(185,386) $10/1/2009$ 1953,406 $10/1/2010$ 20235,442 $10/1/2010$ 2012,727 $10/1/2011$ 21(4,086) $10/1/2012$ 2258,530 $10/1/2012$ 2258,530 $10/1/2013$ 23(133,648) $10/1/2014$ 24(212,115) $10/1/2014$ 2483,011 $10/1/2015$ 2552,597

Assum. Change	10/1/2013	23	80,551	7,552
Actuarial Loss	10/1/2016	26	99,415	8,335
Assum. Change	10/1/2016	26	167,743	14,063
Actuarial Gain	10/1/2017	27	(94,070)	(7,792)
Assum. Change	10/1/2017	27	141,331	11,707
Actuarial Gain	10/1/2018	28	(139,306)	(11,413)
Assum. Change	10/1/2018	28	95,535	7,827
Actuarial Gain	10/1/2019	29	(26,274)	(2,131)
Actuarial Gain	10/1/2020	30	(1,535,875)	(123,401)
Assump Change	10/1/2020	30	(2,257,123)	(181,351)
			(2,483,623)	(183,513)

# CONSOLIDATED TOTAL DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$2,427,229
(2) Expected UAAL as of October 1, 2020	2,379,408
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	1,504,990
Salary Increases	3,066,066
Active Decrements	(1,662,814)
Inactive Mortality	(561,809)
Contribution Timing	(3,952,146)
Other	<u>(1,156,612)</u>
Increase in UAAL due to (Gain)/Loss	(2,762,325)
Assumption Changes	<u>(4,184,145)</u>
(4) Actual UAAL as of October 1, 2020	(\$4,567,062)

# FIREFIGHTERS DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$1,091,087
(2)	Expected UAAL as of October 1, 2020 Based on Outstanding Bases	1,070,033
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	599,868
	Salary Increases	489,382
	Active Decrements	(414,633)
	Inactive Mortality	(28,709)
	Contribution Timing	(1,862,618)
	Other	(9,740)
	Increase in UAAL due to (Gain)/Loss	(1,226,450)
	Assumption Changes	(1,927,022)
(4)	Actual UAAL as of October 1, 2020	(\$2,083,439)

# POLICE OFFICERS DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$1,336,142
(2)	Expected UAAL as of October 1, 2020 Based on Outstanding Bases	1,309,375
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	905,122
	Salary Increases	2,576,684
	Active Decrements	(1,248,181)
	Inactive Mortality	(533,100)
	Contribution Timing	(2,089,528)
	Other	(1,146,872)
	Increase in UAAL due to (Gain)/Loss	(1,535,875)
	Assumption Changes	(2,257,123)
(4)	Actual UAAL as of October 1, 2020	(\$2,483,623)

#### ACTUARIAL ASSUMPTIONS AND METHODS

Except where expressed herein, the actuarial assumptions and methods are the same as those used in the October 1, 2019 valuation. These assumptions were set by the prior actuary based on an experience study conducted in 2017 reflecting plan year experience for the six-year period ending September 30, 2015. The Board reviews assumptions at least once every five years.

Mortality Rate

Interest Rate

Administrative Expenses

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.

50% of all deaths are assumed to be in the line of duty.

Healthy Inactive Lives: Female: PubS.H-2010 for Healthy Retirees, set forward one year. Male: PubS.H-2010 for Healthy Retirees, set forward one year.

*Beneficiary Lives:* **Female:** PubG.H-2010 for Healthy Retirees **Male:** PubG.H-2010 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.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2019 FRS actuarial valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

7.9% per year 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.

Administrative expenses are assumed to equal the prior year's actual administrative expenses adjusted for interest and assumed payroll increases. Retirement Rates

Rates of retirement are shown below.

Service	<b>Firefighters</b>	Police Officers
20	17.5%	25%
21 - 24	5.0%	5.0%
25	100%	100%

Firefighters who entered the plan on or after January 1, 2014 and Police Officers who are not eligible to retire by July 1, 2013 are assumed to retire at a rate of 1.0% per year once the sum of age and years of Credited Service is at least 70, with 100% assumed to retire upon reaching 25 years of Credited Service. In addition, all Members are assumed to retire no later than age 58.

Sample rates of disability are shown below.

<u>Age</u>	Disability Rate
25	0.105%
30	0.144%
35	0.182%
40	0.308%
45	0.434%
50	0.854%
55	1.274%

100% of disablements are assumed to be service related.

Termination Rates

**Disability Rates** 

Sample rates of termination are shown below.

<u>Service</u>	<b>Firefighters</b>	Police Officers
0 - 5	0.5%	0.7%
6-9	1.5%	3.5%
10 - 11	0.0%	2.5%
12+	0.0%	0.0%

Non vested members are assumed to withdraw their contributions and vested members are assumed to commence an annuity at age 55.

Rates of salary increases are shown below.

<u>Service</u>	<b>Firefighters</b>	Police Officer
0 - 4	5.0%	6.0%
5 - 9	4.0%	5.0%
10 - 14	3.0%	4.0%
15+	2.0%	3.0%

State Contributions

Salary Increases

Payroll Increase Rate

State premium tax revenue is assumed to be the same as the most recent distribution.

3.00% per year for projecting aggregate payroll to the following fiscal year and 0.16% (previously 0.00%) for determining amortization payments towards the unfunded accrued liability.

Marital Assumptions	90% of active members are assumed to be married with males 2 years older than females.		
Overtime Pay	Overtime pay is assumed to equal to 6.5% of non- overtime related pensionable earnings in the years preceding retirement.		
Vacation Payout upon Termination	Accumulated vacation that is payable u of employment is assumed to be equal to balance as of July 1, 2013 for police of January 1, 2014 for firefighters.	to the vacation	
Accumulated Sick Leave	Accumulated sick leave is assumed to increase benefit service according to the balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.		
Funding Method	Entry Age Normal Actuarial Cost Meth	nod.	
Asset Allocation Method	Assets were allocated to police officers separately as of October 1, 2012. The a performed based on the accrued actuari each group (net of DROP accounts) wit certain assets (DROP account and State Revenue) are already designated to each investment returns are allocated to each the investment return as a percentage w the return on the total assets by taking it cash flow of each group separately.	llocation was al liability of th recognition that Premium Tax h group. Future a group such that vill be the same as	
<u>Actuarial Asset Method</u>	Each year, the prior Actuarial Value of Assets (AVA) is projected forward at the assumed interest rate assumption and reflecting actual contributions and benefit payments. One-fifth of the difference between the projected actuarial value and market value is added to the projected actuarial value. The resulting AVA cannot be greater than 120% of the market value or less than 80% of the market value. It is possible that over time this technique will produce an insignificant bias above or below Market Value.		
Amortization Periods	Changes in unfunded liability are amortized on a level percentage of payroll basis over the following periods:		
	Plan Changes	30 years	
	Assumption/Method Changes	30 years	
	Gains or Losses	30 years	

#### GLOSSARY

- <u>Individual Entry Age Normal Actuarial Cost Method</u> (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.
- <u>Normal (Current Year's) Cost</u> 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 active Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.
- <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>Payroll Growth</u>: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll does not increase according to the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.
- <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 87.1% on October 1, 2015 to 80.7% on October 1, 2020, 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 75.7%. 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 84.6% on October 1, 2015 to 100.5% on October 1, 2020, due primarily to an increase in plan assets associated with the pension obligation bond.
- 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, increased modestly from October 1, 2015 to October 1, 2020. The current Net Cash Flow Ratio of -3.7% 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.

## CONSOLIDATED TOTAL PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2015</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	10/1/2020
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	385 442 87.1%	393 491 80.0%	391 498 78.5%	410 508 80.7%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	204,606,885 23,189,944 882.3%	253,221,825 25,009,614 1,012.5%	290,738,332 24,710,307 1,176.6%	296,918,563 25,481,061 1,165.3%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	182,510,565 250,098,628 73.0%	224,412,465 287,969,775 77.9%	231,600,170 294,971,028 78.5%	225,959,380 298,371,458 75.7%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	211,539,983 250,098,628 84.6%	240,646,321 287,969,775 83.6%	292,543,799 294,971,028 99.2%	302,938,520 298,371,458 101.5%
<u>Net Cash Flow Ratio</u> Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	(11,072,631) 204,606,885 -5.4%	(12,306,508) 253,221,825 -4.9%	(11,794,677) 290,738,332 -4.1%	(11,077,937) 296,918,563 -3.7%

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

<sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses. Excludes the contribution received in fiscal 2020 associated with the Pension Obligation Bond.

## FIREFIGHTERS PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2015</u>	<u>10/1/2018</u>	10/1/2019	<u>10/1/2020</u>
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	129 188 68.6%	138 193 71.5%	154 193 79.8%	167 195 85.6%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	83,833,276 7,947,991 1,054.8%	103,609,352 9,116,212 1,136.5%	120,062,772 10,083,025 1,190.7%	121,158,931 10,486,247 1,155.4%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	77,898,504 104,338,805 74.7%	95,254,147 119,301,508 79.8%	97,764,406 121,783,667 80.3%	93,313,714 121,474,963 76.8%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	86,117,339 104,338,805 82.5%	98,373,250 119,301,508 82.5%	120,692,580 121,783,667 99.1%	123,558,402 121,474,963 101.7%
<u>Net Cash Flow Ratio</u> Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	(5,119,708) 83,833,276 -6.1%	(4,816,425) 103,609,352 -4.6%	(5,577,819) 120,062,772 -4.6%	(5,644,296) 121,158,931 -4.7%

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

<sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses. Excludes the contribution received in fiscal 2020 associated with the Pension Obligation Bond.

## POLICE OFFICERS PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2015	<u>10/1/2018</u> <u>10/1/2019</u>		<u>10/1/2020</u>
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	256 254 100.8%	255 298 85.6%	237 305 77.7%	243 313 77.6%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	120,773,609 15,241,953 792.4%	149,612,473 15,893,402 941.3%	170,675,560 14,627,282 1,166.8%	175,759,632 14,994,814 1,172.1%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	104,612,061 145,759,823 71.8%	129,158,318 168,668,267 76.6%	133,835,764 173,187,361 77.3%	132,645,666 176,896,495 75.0%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	125,422,644 145,759,823 86.0%	142,273,071 168,668,267 84.4%	171,851,219 173,187,361 99.2%	179,380,118 176,896,495 101.4%
<u>Net Cash Flow Ratio</u> Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	(5,952,923) 120,773,609 -4.9%	(7,490,083) 149,612,473 -5.0%	(6,216,858) 170,675,560 -3.6%	(5,433,640) 175,759,632 -3.1%

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

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

the contribution received in fiscal 2020 associated with the Pension Obligation Bond.

## FIREFIGHTERS EXCESS STATE MONIES RESERVE

Firefighters' Distribution				
		Regular Distribution		
	Actual	Applicable	Excess State	
	State Contribution	"Frozen" Amount	Monies Reserve	
1998	\$310,569.70	\$310,569.70	\$0.00	
1999	308,826.01	310,569.70	0.00	
2000	340,476.79	310,569.70	29,907.09	
2001	365,050.96	310,569.70	54,481.26	
2002	386,831.39	310,569.70	76,261.69	
2003	404,962.46	310,569.70	94,392.76	
2004	420,900.88	310,569.70	110,331.18	
2005	478,607.14	310,569.70	168,037.44	
2006	539,517.35	310,569.70	228,947.65	
2007	639,048.86	580,918.87	58,129.99	
2008	653,591.00	580,918.87	72,672.13	
2009	586,462.27	580,918.87	5,543.40	
2010	566,345.69	580,918.87	0.00	
2011	572,537.52	580,918.87	0.00	
2012	578,012.52	580,918.87	0.00	
2013	573,439.20	580,918.87	0.00	
2014	616,730.22	580,918.87	35,811.35	
2015	597,606.37	580,918.87	16,687.50	
2016	554,610.96	580,918.87	0.00	
2017	519,432.67	580,918.87	0.00	
2018	573,771.90	580,918.87	0.00	
2019	553,982.69	580,918.87	0.00	
2020	646,766.57	580,918.87	65,847.70	
			1,017,051.14	
	Accumulated Regular Ex		1,017,051.14	
	Accumulated Special Ex	cess	0.00	
	Total Excess State Moni	es	1,017,051.14	
	Less Amount Allocated	to Benefit Improvements	(1,017,051.14)	
Equals Current State Monies Reserve			\$0.00	

<sup>1</sup> Actual state contributions for 2019 and 2020 were received in fiscal 2021.

### POLICE OFFICERS EXCESS STATE MONIES RESERVE

Police Officers' Distribution				
		Regular Distribution		
	Actual	Applicable	Excess State	
	State Contribution <sup>1</sup>	"Frozen" Amount	Monies Reserve	
1998	\$485,156.16	\$485,156.16	\$0.00	
1999	484,907.97	485,156.16	0.00	
2000	479,761.05	485,156.16	0.00	
2000	532,645.23	485,156.16	47,489.07	
2001	577,629.43	485,156.16	92,473.27	
2002	613,690.66	485,156.16	128,534.50	
2003	599,120.94	485,156.16	113,964.78	
2001	607,282.55	485,156.16	122,126.39	
2006	632,775.65	485,156.16	147,619.49	
2007	614,350.42	558,361.13	55,989.29	
2008	641,820.00	558,361.13	83,458.87	
2009	667,804.62	558,361.13	109,443.49	
2010	614,258.14	558,361.13	55,897.01	
2011	609,604.08	558,361.13	51,242.95	
2012	599,909.03	558,361.13	41,547.90	
2013	596,585.28	558,361.13	38,224.15	
2014	643,264.53	558,361.13	84,903.40	
2015	672,221.27	558,361.13	113,860.14	
2016	688,129.56	558,361.13	129,768.43	
2017	738,850.69	558,361.13	180,489.56	
2018	792,532.36	558,361.13	234,171.23	
2019	1,029,476.16	558,361.13	471,115.03	
2020	911,505.90	558,361.13	353,144.77	
			2,655,463.72	
	Accumulated Regular Ex	xcess	2,655,463.72	
	Accumulated Special Ex	ccess	0.00	
,	Total Excess State Moni	es	2,655,463.72	
	Less Amount Allocated	to Benefit Improvements	(2,655,463.72)	
Equals Current State Monies Reserve \$0.00				

<sup>1</sup> Actual state contributions for 2019 and 2020 were received in fiscal 2021.

## FIREFIGHTERS RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

(1)	Total Required Contribution Rate	39.43%
(2)	Pensionable Payroll Derived from Member Contributions	\$10,535,177.78
(3)	Total Required Contribution (1) x (2)	4,154,020.60
(4)	Less Actual Member Contributions	(948,166.00)
(5)	Less Allowable State Contribution	(580,918.87)
(6)	Equals Required City Contribution for Fiscal 2020	2,624,935.73
(7)	Plus 2019 Shortfall Contribution	519,433.00
(8)	Less Actual City Contributions	(23,162,771.00)
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2020	(\$20,018,402.27)

## POLICE OFFICERS RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

(1)	Total Required Contribution Rate	33.07%
(2)	Pensionable Payroll Derived from Member Contributions	\$15,542,466.67
(3)	Total Required Contribution (1) x (2)	5,139,893.73
(4)	Less Actual Member Contributions	(1,165,685.00)
(5)	Less Allowable State Contribution	(558,361.13)
(6)	Equals Required City Contribution for Fiscal 2020	3,415,847.60
(7)	Plus 2019 Shortfall Contribution	558,361.00
(8)	Less Actual City Contributions	(28,746,553.00)
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2020	(\$24,772,344.40)

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS Contract Contractor	MARKET VALUE
Cash and Cash Equivalents: Share Plan Assets Equity in Pooled Cash	176,246 52,160,846
Total Cash and Equivalents	52,337,092
Receivables: Fire State Contributions Police State Contributions Miscellaneous Receivable Due from Other Funds	1,200,749 1,940,982 40,155 51,988
Total Receivable	3,233,874
Total Investments	242,948,222
Total Assets	298,519,188
LIABILITIES Payables: Accounts Payable Wages Payable	1,597,969 2,656
Total Liabilities	1,600,625
NET POSITION RESTRICTED FOR PENSIONS	296,918,563

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2020 Market Value Basis

	<u>SEPT</u>	SEPTEMBER 30, 2020		EMBER 30, 2019
ADDITIONS				
Contributions:				
Member	\$	2,113,851	\$	1,946,523
Buy-Back		7,400		0
City		5,680,398		4,958,811
State		0		0
Total Contributions	\$	7,801,649	\$	6,905,334
Investment Income:				
Net Increase in Fair Value of Investments	\$	14,417,499	\$	540,914
Interest & Dividends		3,268,700		3,550,140
Investment Income:	\$	17,686,199	\$	4,091,054
Transfer in POB 2020		46,228,926		
Total Additions	\$	71,716,774	\$	10,996,388
DEDUCTIONS				
Distributions to Members:				
Benefit Payments	\$	16,350,203	\$	15,651,166
Retiree DROP Payouts and Rollovers	Ψ	3,489,666	Ψ	2,728,372
Refunds of Member Contributions		257,945		467,507
Investment Expense		458,653		569,082
Administrative Expense		738,485		771,258
Transfer to Supplemental Retirement Plan		0		1,005,652
Total Deductions	\$	21,294,952	\$	21,193,037
NET POSITION RESTRICTED FOR PENSION	NS			
Beginning of the Year	\$	288,877,919	\$	251,767,848
Adjustment to Beginning of Year	\$	(46,228,926)	\$	-
Adjusted Beginning of Year	\$	242,648,993	\$	251,767,848
End of the Year	\$	293,070,815	\$	241,571,199
Receivable from State		2,063,937		1,077,794
Total Fund including Receivable from State	\$	295,134,752	\$	242,648,993
Share Plan Balance		1,783,811		1,860,413
Total Fund including Share Plan Balance	\$	296,918,563	\$	244,509,406
Rate of Investment Return		6.65%		1.67%

### CITY OF GAINESVILLE CONSOLIDATED POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2020 Market Value Basis

ADDITIONS Contributions:	FI	<u>REFIGHTERS</u>	POL	ICE OFFICERS
Member	\$	948,166	\$	1,165,685
Buy-Back		7,400		0
City		2,381,952		3,298,446
State		0		0
Total Contributions	\$	3,337,518	\$	4,464,131
Investment Income:				
Net Increase in Fair Value of Investments	\$	5,891,733	\$	8,525,766
Interest & Dividends		1,133,985	-	2,134,715
Investment Income	\$	7,025,718	\$	10,660,481
Transfer in POB 2020		20,780,819		25,448,107
Total Additions	\$	31,144,055	\$	40,572,719
DEDUCTIONS				
Distributions to Members:				
Benefit Payments	\$	6,700,811	\$	9,649,392
Lump Sum DROP Distributions		2,704,952		784,714
Refunds of Member Contributions		51,477		206,468
Investment Expense		155,942		302,711
Administrative Expense		298,744		439,741
Total Deductions	\$	9,911,926	\$	11,383,026
NET POSITION RESTRICTED FOR PENSIONS				
Beginning of the Year	\$	119,630,046	\$	169,247,873
Adjustment to Beginning of Year	\$	(20,780,819)	\$	(25,448,107)
Adjusted Beginning of Year	\$	98,849,227	\$	143,799,766
End of the Year	\$	120,081,356	\$	172,989,459
Receivable from State		681,316		1,382,621
Total Fund including Receivable from State	\$	120,762,672	\$	174,372,080
Share Plan Balance		396,259		1,387,552
Total Fund including Share Plan Balance	\$	121,158,931	\$	175,759,632
Rate of Investment Return		6.65%		6.65%

## CITY OF GAINESVILLE CONSOLIDATED POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS FOR THE YEAR ENDED SEPTEMBER 30, 2020 Actuarial Value Basis

		<u>FIF</u>	REFIGHTERS	<u>POL</u>	ICE OFFICERS
A.	Actuarial Value of Assets Beginning of the Year	\$	99,479,035	\$	145,227,453
B.	<ol> <li>Net Cash Flow</li> <li>Member Contributions</li> <li>City Contributions</li> <li>Transfer in POB 2020</li> <li>Distributions (Excluding Investment Expenses)</li> <li>Net Cash Flow During the Plan Year (B1 + B2 + B3 + B4)</li> </ol>	\$	948,166 2,381,952 20,780,819 (9,755,984) 14,354,953	\$	1,165,685 3,298,446 25,448,107 (10,855,533) 19,056,705
	6. State Contributions (Made at Year End)		681,316		1,382,621
	7. Net Cash Flow $(B5 + B6)$	\$	15,036,269	\$	20,439,326
C.	Expected Return of 7.9% (A + B3 + (B5-B3)/2) * 0.079	\$	9,246,707	\$	13,230,909
D.	Expected Actuarial Value End of Year (A + B7 + C)	\$	123,762,011	\$	178,897,688
E.	Market Value (MV) End of Year	\$	120,762,672	\$	174,372,080
F.	Excess of MV over Expected Actuarial Value (E - D)	\$	(2,999,339)	\$	(4,525,608)
G.	20% Adjustment Towards Market (20% * F)	\$	(599,868)	\$	(905,122)
н	Actuarial Value (AV) End of Year				
11.	1. Preliminary AV end of year: $(D + G)$	\$	123,162,143	\$	177,992,566
	2. Upper corridor limit: 120% * E	Ψ	144,915,206	Ψ	209,246,496
	3. Lower corridor limit: 80% * E		96,610,138		139,497,664
	4. Actuarial value end of year	\$	123,162,143	\$	177,992,566
I.	Share Plan Balance	\$	396,259	\$	1,387,552
J.	Actuarial Value including Share Plan Balance	\$	123,558,402	\$	179,380,118
K.	Rate of Investment Return on Actuarial Value		7.39%		7.36%

## CITY OF GAINESVILLE CONSOLIDATED POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN RECONCILIATION OF DROP ACCOUNTS FOR THE YEAR ENDED SEPTEMBER 30, 2020

	SEPTEMBER 30, 2020		SEPTEMBER 30, 2019	
Market Value Beginning of the Year	\$	6,077,061	\$	6,219,892
ADDITIONS Contributions Investment Income	\$	1,927,128 482,669	\$	2,142,302 443,239
Total Additions	\$	2,409,797	\$	2,585,541
DEDUCTIONS Benefit Payments Expenses	\$	(3,489,666)	\$	(2,728,372)
Total Deductions	\$	(3,489,666)	\$	(2,728,372)
Market Value of Assets End of the Year	\$	4,997,192	\$	6,077,061

	FIREFIGHTERS SEPTEMBER 30, 2020		POLICE OFFICERS SEPTEMBER 30, 2020	
Market Value Beginning of the Year	\$	4,150,064	\$	1,926,997
ADDITIONS Contributions Investment Income	\$	1,111,310 227,881	\$	815,818 254,788
Total Additions	\$	1,339,191	\$	1,070,606
DEDUCTIONS Benefit Payments Expenses	\$	(2,704,952)	\$	(784,714)
Total Deductions	\$	(2,704,952)	\$	(784,714)
Market Value of Assets End of the Year	\$	2,784,303	\$	2,212,889

## CITY OF GAINESVILLE CONSOLIDATED POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT PLAN RECONCILIATION OF SHARE ACCOUNTS FOR THE YEAR ENDED SEPTEMBER 30, 2020

	SEPTEMBER 30, 2020		SEPTEMBER 30, 201	
Market Value Beginning of the Year	\$	1,860,413	\$	1,453,977
ADDITIONS Contributions Investment Income	\$	25,945 0	\$	1,097,527 0
Total Additions	\$	25,945	\$	1,097,527
DEDUCTIONS Share Plan Distributions Expenses	\$	(90,462)	\$	(691,057) (34)
Total Deductions	\$	(90,462)	\$	(691,091)
Market Value of Assets End of the Year	\$	1,783,811	\$	1,860,413

	EFIGHTERS MBER 30, 2020	POLICE OFFICERS SEPTEMBER 30, 2020		
Market Value Beginning of the Year	\$ 432,726	\$	1,415,602	
ADDITIONS Contributions Investment Income	\$ 7,012	\$	18,933 0	
Total Additions	\$ 7,012	\$	18,933	
DEDUCTIONS Benefit Payments Expenses	\$ (43,479)	\$	(46,983) 0	
Total Deductions	\$ (43,479)	\$	(46,983)	
Market Value of Assets End of the Year	\$ 396,259	\$	1,387,552	

## CONSOLIDATED TOTAL STATISTICAL DATA

	10/1/2017	10/1/2018	<u>10/1/2019</u>	<u>10/1/2020</u>
Actives				
Number	396	393	391	410
Average Current Age	38.1	37.6	37.5	37.4
Average Age at Employment	28.1	28.1	28.1	28.1
Average Past Service	10.0	9.5	9.4	9.4
Average Annual Salary	\$61,028	\$59,219	\$59,940	\$63,061
Service Retirees				
Number	337	362	369	376
Average Current Age	65.7	65.6	65.8	66.1
Average Annual Benefit	\$37,962	\$39,122	\$40,291	\$41,883
DROP Retirees				
Number	49	41	39	28
Average Current Age	53.7	52.9	53.1	53.4
Average Annual Benefit	\$53,940	\$55,253	\$53,882	\$49,462
Beneficiaries				
Number	37	37	37	39
Average Current Age	73.1	73.0	74.1	74.8
Average Annual Benefit	\$19,713	\$20,642	\$20,868	\$21,728
Disability Retirees				
Number	24	25	26	26
Average Current Age	60.7	60.3	60.6	61.6
Average Annual Benefit	\$17,481	\$17,985	\$18,534	\$18,688
Terminated Vested				
Number	20	35	29	39
Average Current Age <sup>1</sup>	47.0	41.4	46.4	44.5
Average Annual Benefit <sup>2</sup>	\$14,080	\$9,763	\$14,013	\$12,740

<sup>1</sup> Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

<sup>2</sup> The Average Annual Benefit excludes participants awaiting a refund of contributions.

## CONSOLIDATED TOTAL AGE AND SERVICE DISTRIBUTION

## PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	8	8	2		1							19
25 - 29	18	21	15	9	9	2						74
30 - 34	8	15	10	5	11	23	11					83
35 - 39	3	5	1	1	2	21	24	11				68
40 - 44	1	3		1	1	8	20	34	3			71
45 - 49	1		1	2		3	9	21	10			47
50 - 54						2	5	15	10	4		36
55 - 59			1		1	1	2	3		1		9
60 - 64						1		1		1		3
65+												0
Total	39	52	30	18	25	61	71	85	23	6	0	410

# CONSOLIDATED TOTAL VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	391
b. Terminations	
i. Vested (partial or full) with deferred benefits	(13)
ii. Vested in refund of member contributions only	
iii. Refund of member contributions or full lump sum distribution received	(14)
c. Deaths	
i. Beneficiary receiving benefits	
ii. No future benefits payable	
d. Disabled	
e. Retired	(1)
f. DROP	(4)
g. Continuing participants	359
h. New entrants	<u>51</u>
i. Total active life participants in valuation	410

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	369	39	37	26	27	2	500
Retired	16	(15)					1
DROP		4					4
Vested (Deferred Annuity)					13		13
Vested (Due Refund)							
Hired/Terminated in Same Year							
Death, With Survivor	(3)		3				
Death, No Survivor	(6)		(1)				(7)
Disabled							
Refund of Contributions					(1)	(1)	(2)
Rehires						(1)	(1)
Expired Annuities							
Data Corrections							
b. Number current valuation	376	28	39	26	39	0	508

## FIREFIGHTERS STATISTICAL DATA

	10/1/2017	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
Actives				
Number Average Current Age Average Age at Employment Average Past Service Average Annual Salary	133 37.4 27.6 9.8 \$63,417	138 36.8 27.5 9.3 \$63,218	154 36.3 27.6 8.7 \$63,887	167 36.2 27.5 8.7 \$65,030
Service Retirees				
Number Average Current Age Average Annual Benefit	133 68.2 \$38,783	141 68.2 \$39,857	143 67.9 \$41,790	149 68.0 \$44,274
DROP Retirees				
Number Average Current Age Average Annual Benefit	27 53.1 \$58,210	24 53.1 \$59,155	21 53.0 \$60,211	11 52.2 \$54,483
Beneficiaries				
Number Average Current Age Average Annual Benefit <u>Disability Retirees</u>	17 73.7 \$23,321	17 74.7 \$23,739	19 75.2 \$23,572	21 75.4 \$24,638
Number Average Current Age Average Annual Benefit	8 60.3 \$19,339	8 61.3 \$19,452	8 62.3 \$19,567	8 63.3 \$19,684
Terminated Vested				
Number Average Current Age <sup>1</sup> Average Annual Benefit <sup>2</sup>	5 48.4 \$16,464	4 48.8 \$17,572	2 49.2 \$16,482	6 38.7 \$10,820

<sup>1</sup> Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

<sup>2</sup> The Average Annual Benefit excludes participants awaiting a refund of contributions.

## FIREFIGHTERS 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	5	1									7
25 - 29	9	14	4 6	5	3	2						39
30 - 34	1	7	4	4	5	5	3					29
35 - 39		3	1	1	1	13	8	9				36
40 - 44		2			1	4	8	12	1			28
45 - 49						2	2	10	1			15
50 - 54								5	5			10
55 - 59								2				2
60 - 64										1		1
65-	F											0
Tot	al 11	31	12	2 10	10	26	21	38	7	1	0	167

## FIREFIGHTERS VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	154
b. Terminations	
i. Vested (partial or full) with deferred annuity	(4)
ii. Vested in refund of member contributions only	
iii. Refund of member contributions or full lump sum distribution received	(4)
c. Deaths	
i. Beneficiary receiving benefits	
ii. No future benefits payable	
d. Disabled	
e. Retired	
f. DROP	
g. Continuing participants	146
h. New entrants	21
i. Total active life participants in valuation	167

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	143	21	19	8	2	0	193
Retired DROP	10	(10)					
Vested (Deferred Annuity)					4		4
Vested (Due Refund) Hired/Terminated in Same Year							
Death, With Survivor	(3)		3				
Death, No Survivor Disabled Refund of Contributions Rehires Expired Annuities Data Corrections	(1)		(1)				(2)
b. Number current valuation	149	11	21	8	6	0	195

## POLICE OFFICERS STATISTICAL DATA

	10/1/2017	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
Actives				
Number Average Current Age Average Age at Employment Average Past Service Average Annual Salary	263 38.4 28.3 10.1 \$59,820	255 38.1 28.5 9.6 \$57,055	237 38.3 28.4 9.9 \$57,375	243 38.3 28.5 9.8 \$61,707
Service Retirees				
Number Average Current Age Average Annual Benefit	204 64.0 \$37,427	221 63.9 \$38,653	226 64.4 \$39,343	227 64.9 \$40,314
DROP Retirees				
Number Average Current Age Average Annual Benefit	22 54.4 \$48,700	17 52.5 \$49,745	18 53.3 \$46,498	17 54.2 \$46,213
Beneficiaries				
Number Average Current Age Average Annual Benefit	20 72.5 \$16,647	20 71.5 \$18,010	18 73.0 \$18,014	18 74.0 \$18,334
Disability Retirees				
Number Average Current Age Average Annual Benefit	16 60.9 \$16,553	17 59.9 \$17,294	18 59.8 \$18,075	18 60.8 \$18,246
Terminated Vested				
Number Average Current Age <sup>1</sup> Average Annual Benefit <sup>2</sup>	15 46.5 \$13,286	31 40.4 \$10,866	27 46.2 \$13,816	33 45.5 \$13,089

<sup>1</sup> Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

<sup>2</sup> The Average Annual Benefit excludes participants awaiting a refund of contributions.

## POLICE OFFICERS AGE AND SERVICE DISTRIBUTION

## PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	7	3	1		1							12
25 - 29	9	7	9	4	6							35
30 - 34	7	8	6	1	6	18	8					54
35 - 39	3	2			1	8	16	2				32
40 - 44	1	1		1		4	12	22	2			43
45 - 49	1		1	2		1	7	11	9			32
50 - 54						2	5	10	5	4		26
55 - 59			1		1	1	2	1		1		7
60 - 64						1		1				2
65+												0
Total	28	21	18	8	15	35	50	47	16	5	0	243

## POLICE OFFICERS VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	237
b. Terminations	
i. Vested (partial or full) with deferred annuity	(9)
ii. Vested in refund of member contributions only	
iii. Refund of member contributions or full lump sum distribution received	(10)
c. Deaths	
i. Beneficiary receiving benefits	
ii. No future benefits payable	
d. Disabled	
e. Retired	(1)
f. DROP	(4)
g. Continuing participants	213
h. New entrants	30
i. Total active life participants in valuation	243

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	226	18	18	18	25	2	307
Retired DROP Vested (Deferred Annuity) Vested (Due Refund) Hired/Terminated in Same Year Death With Survivor	6	(5) 4			9		1 4 9
Death, With Survivor Death, No Survivor Disabled Refund of Contributions Rehires Expired Annuities Data Corrections	(5)				(1)	(1) (1)	(5) (2) (1)
b. Number current valuation	227	17	18	18	33	0	313

## SUMMARY OF CURRENT PLAN

Eligibility	Any full-time regular employee who is certified as a firefighter as a condition of employment in accordance with the provisions of F.S. § 633.35, and whose duty it is to extinguish fires, to protect life, and to protect property, or any full-time regular employee who is certified or required to be certified as a law enforcement officer in compliance with F.S. § 943.14, who is vested with authority to bear arms and make arrests, and whose primary responsibility is the prevention and detection of crime or the enforcement of the penal, criminal, traffic, or highway laws of the state.
Member Contributions	Members are required to contribute 7.5% of gross pay. Effective with the first full pay period following January 1, 2014, firefighters contribute 9.0% of gross pay.
State Contributions	State premium tax revenue under Chapter 175/185 received annually is used to offset required contributions. Chapter 185 premium tax revenue up to \$558,361.13 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program. Chapter 175 premium tax revenue up to \$580,918.87 will be used to offset annual required contributions with excess amounts reserved for extra benefits.
<u>Credited Service</u>	Credited Service means the total number of months of service with the City, expressed in terms of full and fractional years, where a member earns one month of service for at least 10 days of service within each month beginning on the day of the month corresponding to the member's date of employment. Credited Service will include unused sick leave credits, any authorized leave of absence up to 90 days, and military service as required by Federal law.
	Unused sick leave will be limited to the lesser of the number of credits at retirement and the credits earned as of July 1, 2013 for police officers and credits earned as of January 1, 2014 for firefighters.
Limited Participant Service	Service worked for the City as an ineligible member of the plan will be counted for any purpose of the Plan, except for the purpose of determining the member's accrued benefit.
<u>Gross Pay</u>	Types of compensation, at the discretion of the City, which will have member contribution deducted, provided that such types of compensation will also be included for determining Earnings.

<u>Earnings</u>	Earnings include base pay (including all paid leaves), overtime pay, working out of classification pay, longevity pay, Florida city firefighters supplemental education incentive payments, Florida police officer educational salary incentive payments, police security overtime pay, special assignment pay, special duty assignment pay, paramedic certification pay, stand-by pay, call-back pay, acting out of classification pay, and termination vacation pay, except as provided for by collective bargaining agreements. In addition, for those employees who become a member of the plan on or after October 1, 1996, earnings are limited to \$150,000 per year (as indexed).
	Effective July 1, 2013 for police officers and January 1, 2014 for firefighters, overtime is limited to 300 hours per year. In addition, accumulated vacation pay included in earnings will be the lesser of the number of credited hours at retirement and the number of hours as of July 1, 2013 for police officers and the number of hours as of January 1, 2014 for firefighters.
Final Average Earnings (FAE)	Final Average Earnings mean average earnings for the highest 36 consecutive months, or highest 48 consecutive months for police officers who become members on or after July 1, 2013.
Monthly Accrued Benefit	Final average earnings multiplied by a percentage per year of credited service as follows:
	Date         Firefighters         Officers           Prior to October 1, 2005         2.5%         2.5%           October 1, 2005 to July 1, 2013         2.625%         2.625%           July 1, 2013 to January 1, 2014         2.625%         2.5%           After January 1, 2014         2.5%         2.5%
Normal Retirement	
Date	First day of the month coincident with or following the earlier of:
	<ol> <li>(1) 20 years of service</li> <li>(2) Age 55 with 10 or more years of service</li> <li>(3) Age plus service equal 70</li> </ol>
	For police officers who become participants on or after July 1, 2013, and firefighters who become participants on or after January 1, 2014, item (1) above is equal to 25 years of service.
Benefit	Monthly Accrued Benefit

Vesting	
Schedule	100% after 10 years of Credited Service.
Benefit Amount	Members that terminate employment with 10 or more years of service, the Monthly Accrued Benefit is payable unreduced at age 55. The benefit can be commenced at age 50, actuarially reduced, but not to exceed 3.0% per year prior to age 55.
	Members that terminate employment with less than 10 years of service will be eligible to receive a refund of Member contributions without interest. Members may voluntarily leave contributions in the Plan for a period of five years after separation and receive service credit upon rehire within the five- year period. After five years, Member contributions will automatically be refunded without interest.
Disability Eligibility	
Service Incurred	Permanent and totally disabled in the line of duty.
Non-Service Incurred	Permanent and totally disabled not in the line of duty after completion of 5 years of credited service.
Benefit	
Service Incurred	The greater of the Monthly Accrued Benefit and 42% of Final Average Earnings.
Non-Service Incurred	The greater of the Monthly Accrued Benefit and 25% of Final Average Earnings.
Death Benefits	
Pre-Retirement	
Eligibility	Death prior to retirement.
Benefit	If the Member has less than 10 years of service upon death, the beneficiary will receive the member's contributions without interest. If the Member has 10 or more years of service, the beneficiary will receive the member's accrued benefit payable at normal or early retirement in the form of benefit chosen by the beneficiary.
Post-Retirement	Benefits payable to beneficiary in accordance with option selected at retirement.

Deferred Retirement Option Plan ("DROP")	
Eligibility	A Member who has earned at least 25 years of service or age plus service equal 70.
Participation	Members may participate for a maximum of 60 months.
Rate of Return	DROP benefits accumulate with interest at 4.5% per year for police officers and 5.5% per year for firefighters.
Distribution	Lump sum and/or rollover to qualified retirement plan(s) at termination of employment.
Reverse DROP	Members can select a date in the past for participation in the DROP.
Normal Form of Payment	Ten Year Certain & Life
Optional Forms of Payment	
Actuarial Equivalence	Interest rate: 9.5% Mortality Table: 1994 Group Annuity Mortality Basic Table-Unisex 50/50
Form of Payment	Life Annuity 100% Joint and Last Survivor 75% Joint and Last Survivor 66 2/3% Joint and Last Survivor 66 2/3% Joint and Survivor 50% Joint and Last Survivor
	Joint and Last Survivor reduces upon death of the Member or Beneficiary. Joint and Survivor reduces only upon death of the Member. All forms above guarantee the Member will receive the Member's contributions.
Cost of Living Adjustment ("COLA")	Members who are receiving a disability retirement after October 1, 1999 receive a 2.0% increase each October 1 <sup>st</sup> following attainment of age 62.
	<ul> <li><u>Firefighters</u></li> <li>(1) Retired prior to October 1, 1999 receive a 2.0% increase each October 1<sup>st</sup> following age 62.</li> <li>(2) Retired after October 1, 1999 with at least 25 years of service receive a 2.0% increase each October 1<sup>st</sup> following age 55.</li> <li>(3) Retired after October 1, 1999 with at least 20 years but less than 25 years of service receive a 2.0% increase each October 1<sup>st</sup> following age 62.</li> <li>(4) Retired after October 1, 1999 with less than 20 years of service with age plus service at least 70 receive a 2.0% increase each October 1<sup>st</sup> following age 62.</li> </ul>

Cost of Living Adjustment (continued)

#### Police Officers

- Retired prior to October 1, 1999 receive a 2.0% increase each October 1<sup>st</sup> following age 62.
- (2) Retired after October 1, 1999, had at least 20 years of service on July 1, 2013, and retired with at least 25 years of service receive a 2.0% increase each October 1<sup>st</sup> following age 55.
- (3) Retired after October 1, 1999, had at least 20 years of service on July 1, 2013, and retired with less than 25 years of service receive a 2.0% increase each October 1<sup>st</sup> following age 62.
- (4) Retired after October 1, 1999, had less than 20 years of service on July 1, 2013, and retired with at least 25 years of service receive a 1.0% increase each October 1<sup>st</sup> following age 55, increasing to 2.0% each October 1<sup>st</sup> following age 62.

#### Firefighters

Effective February 1, 2017, firefighters hired on or after October 1, 1998 are eligible to participate in the Supplemental Retirement Program, which includes fulltime active, retired, and beneficiaries of firefighters who died in the line of duty or while in the military.

The initial allocation was based on a pro rata distribution of excess State premium tax revenues for plan years 1999 through 2006. Subsequent annual allocations will be pro rata based on State premium tax revenue received annually in excess of \$580,918.87.

#### Police Officers

Effective July 1, 2013, police officers hired on or after October 1, 2000 are eligible to participate in the Supplemental Retirement Program, which includes fulltime active, retired, and beneficiaries of police officers who died in the line of duty or while in the military.

The initial allocation was based on a pro rata distribution of excess State premium tax revenues for plan years 2001 through 2012. Subsequent annual allocations will be pro rata based on State premium tax revenue received annually in excess of \$558,361.13.

#### Supplemental Retirement Program

## GASB 67

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents: Share Plan Assets	176,246
Equity in Pooled Cash	<u>52,160,845</u>
Total Cash and Equivalents	52,337,091
Receivables:	
Miscellaneous Receivable	3,181,886
Due to/from Other Funds	<u>51,988</u>
Total Receivables	3,233,874
Total Investments	242,948,222
Total Assets	298,519,187
LIABILITIES	
Payables:	
Accounts Payable	1,597,969
Wages Payable	<u>2,656</u>
Total Liabilities	1,600,625
NET POSITION RESTRICTED FOR PENSIONS	296,918,562

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2020 Market Value Basis

ADDITIONS		
Contributions:		
Employer	51,905,342	
Employee	2,113,851	
Employee - Through DROP	1,927,128	
Employee - Buyback	7,400	
State - Ins Tax Premiums	3,141,731	
Total Contributions		59,095,452
Investment Income:		
Net Increase in Fair Value of Investments	14,417,498	
Interest & Dividends	3,268,700	
Less Investment Expense <sup>1</sup>	(458,653)	
Net Investment Income		17,227,545
Other		0
Total Additions		76,322,997
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	15,868,322	
Retiree DROP Payouts and Rollovers	3,489,666	
Employee Disability	481,881	
Retiree DROP Payments	1,927,128	
Refund of Contributions	257,945	
Share Plan Distributions	90,462	
Total Distributions		22,115,404
Administrativa Evnanca		708,558
Administrative Expense		/08,558
Total Deductions		22,823,962
Net Increase in Net Position		53,499,035
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		243,431,612
Adjustment to beginning of year		(12,085)
End of the Year		296,918,562

<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, 2020)

#### Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Consolidated Plan. The Board of Trustees of the Consolidated Plan is composed of five individuals. Two are appointed by the City Commission, one police officer is elected by active police members, one firefighter is elected by active fire members and a fifth member selected by the other four trustees and confirmed by the City Commission through a ministerial function. This plan and any amendments were adopted through a City Ordinance by the Commission of the City of Gainesville in accordance with State Statute. The Board of Trustees approves Plan amendments.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	471
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	29
Active Plan Members	391
	891

#### Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

#### Member Contributions:

Members are required to contribute 7.5% of gross pay. Effective with the first full pay period following January 1, 2014, firefighters contribute 9.0% of gross pay.

#### State Contributions:

State premium tax revenue under Chapter 175/185 received annually is used to offset required contributions. Chapter 185 premium tax revenue up to \$558,361.13 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program. Chapter 175 premium tax revenue up to \$580,918.87 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program.

#### Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2020:

Asset Class	Target Allocation
Large Cap Equity	35.00%
Small Cap Equity	15.00%
International Equity	20.00%
Securitized Credit	5.00%
High Yield	5.00%
EMD Sovereign	2.50%
Private Markets	7.50%
Real Estate	10.00%
Total	100.00%

#### 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.

## GASB 67

#### Rate of Return:

For the year ended September 30, 2020, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 7.10 percent.

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

#### Deferred Retirement Option Program ("DROP"):

Eligibility: A Member who has earned at least 25 years of service or age plus service equal 70.

Participation: Members may participate for a maximum of 60 months.

Rate of Return: DROP benefits accumulate with interest at 4.5% per year for police officers and 5.5% per year for firefighters. Distribution: Lump sum and/or rollover to qualified retirement plan(s) at termination of employment.

Reverse DROP: Members can select a date in the past for participation in the DROP.

The DROP balance as September 30, 2020 is \$4,997,192.

## NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2020 were as follows:

Total Pension Liability	\$	302,407,734
Plan Fiduciary Net Position	\$ (	296,918,562)
Sponsor's Net Pension Liability	\$	5,489,172
Plan Fiduciary Net Position as a percentage of Total Pension Liability		98.18%

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2019 updated to September 30, 2020 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.90%
Investment Rate of Return	7.90%

#### Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.50% of all deaths are assumed to be in the line of duty.

#### Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

#### Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale. Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was conducted by the prior actuary Conduent in 2017.

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 2020 the inflation rate assumption of the investment advisor was 2.00%.

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.

## GASB 67

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

-	-
	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Large Cap Equity	10.0%
Small Cap Equity	9.3%
International Equity	3.7%
Securitized Credit	0.2%
High Yield	2.6%
EMD Sovereign	2.5%
Private Markets	3.7%
Real Estate	8.0%

<sup>1</sup> Source: Willis Towers Watson.

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.90 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
	6.90%	7.90%	8.90%
Sponsor's Net Pension Liability	\$ 40,601,473	\$ 5,489,172	\$ (23,612,172)

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

	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	3,905,032	3,757,740
Interest	22,777,676	22,397,470
Change in Excess State Money	0	(951,203)
Share Plan Allocation	890,108	951,203
Changes of benefit terms	0	0
Differences between Expected and Actual Experience	501,678	(1,185,483)
Changes of assumptions	0	3,102,805
Contributions - Buy Back	7,400	0
Benefit Payments, including Refunds of Employee Contributions	(20,188,276)	(19,538,102)
Net Change in Total Pension Liability	7,893,618	8,534,430
Total Pension Liability - Beginning	294,514,116	285,979,686
Total Pension Liability - Ending (a)	\$302,407,734	\$294,514,116
Plan Fiduciary Net Position	51 00 5 0 40	4.050.011
Contributions - Employer	51,905,342	4,958,811
Contributions - State	3,141,731	0
Contributions - Employee	2,113,851	1,946,523
Contributions - Buy Back	7,400	0
Net Investment Income	17,227,545	3,521,972
Benefit Payments, including Refunds of Employee Contributions	(20,188,276)	(19,538,102)
Administrative Expense	(708,558)	(771,292)
Other	0	91,875
Net Change in Plan Fiduciary Net Position	53,499,035	(9,790,213)
Plan Fiduciary Net Position - Beginning	243,431,612	253,221,825
Adjustment to beginning of year	(12,085)	0
Plan Fiduciary Net Position - Ending (b)	\$296,918,562	\$243,431,612
Net Pension Liability - Ending (a) - (b)	\$ 5,489,172	\$ 51,082,504
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	98.18%	82.66%
	20.1070	02.0070
Covered Payroll	\$ 26,077,644	\$ 24,058,071
Net Pension Liability as a percentage of Covered Payroll	21.05%	212.33%

## Notes to Schedule:

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.00% to 7.90%.

#### SCHEDULE OF CITY CONTRIBUTIONS Last 2 Fiscal Years

		City Contributions			
		in relation to			City
	Actuarially	the Actuarially			Contributions
	Determined	Determined	Contribution		as a percentage
	City	City	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2020	\$ 5,680,398	\$ 51,905,342	\$ (46,224,944)	\$ 26,077,644	199.04%
09/30/2019	\$ 4,958,811	\$ 4,958,811	\$ 0	\$ 24,058,071	20.61%

Notes to Schedule Valuation Date:

10/01/2018

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, 2018 Actuarial Valuation for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan 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
09/30/2020	7.10%
09/30/2019	1.30%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2020)

#### Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Consolidated Plan. The Board of Trustees of the Consolidated Plan is composed of five individuals. Two are appointed by the City Commission, one police officer is elected by active police members, one firefighter is elected by active fire members and a fifth member selected by the other four trustees and confirmed by the City Commission through a ministerial function. This plan and any amendments were adopted through a City Ordinance by the Commission of the City of Gainesville in accordance with State Statute. The Board of Trustees approves Plan amendments.

Eligible is any full-time regular employee who is certified as a firefighter as a condition of employment in accordance with the provisions of F.S. § 633.35, and whose duty it is to extinguish fires, to protect life, and to protect property, or any full-time regular employee who is certified or required to be certified as a law enforcement officer in compliance with F.S. § 943.14, who is vested with authority to bear arms and make arrests, and whose primary responsibility is the prevention and detection of crime or the enforcement of the penal, criminal, traffic, or highway laws of the state.

#### Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	471
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	29
Active Plan Members	391
	891

#### Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

#### Member Contributions:

Members are required to contribute 7.5% of gross pay. Effective with the first full pay period following January 1, 2014, firefighters contribute 9.0% of gross pay.

#### State Contributions:

State premium tax revenue under Chapter 175/185 received annually is used to offset required contributions. Chapter 185 premium tax revenue up to \$558,361.13 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program. Chapter 175 premium tax revenue up to \$580,918.87 will be used to offset annual required contributions with excess amounts going to the Supplemental Retirement Program.

#### Net Pension Liability

The measurement date is September 30, 2020.

The measurement period for the pension expense was October 1, 2019 to September 30, 2020. The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2020. 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, 2019 updated to September 30, 2020 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.90%
Investment Rate of Return	7.90%

## GASB 68

#### Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.50% of all deaths are assumed to be in the line of duty.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

#### Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2017 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was conducted by the prior actuary Conduent in 2017.

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 2020 the inflation rate assumption of the investment advisor was 2.00%.

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 geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return <sup>1</sup>
Large Cap Equity	35.00%	10.00%
Small Cap Equity	15.00%	9.30%
International Equity	20.00%	3.70%
Securitized Credit	5.00%	0.20%
High Yield	5.00%	2.60%
EMD Sovereign	2.50%	2.50%
Private Markets	7.50%	3.70%
Real Estate	10.00%	8.00%
Total	100.00%	

<sup>1</sup> Source: Willis Towers Watson.

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.90 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

	Increase (Decrease)		
	Total Pension Plan Fiduciary		Net Pension
	Liability	Net Position	Liability
	(a)	(b)	(a)-(b)
Balances as of September 30, 2019	\$ 294,514,116	\$ 243,431,612	\$ 51,082,504
Adjustment to beginning of year		(12,085)	12,085
Changes for a Year:			
Service Cost	3,905,032	0	3,905,032
Interest	22,777,676	0	22,777,676
Change in Excess State Money	0	0	0
Share Plan Allocation	890,108	0	890,108
Differences between Expected and Actual Experience	501,678	0	501,678
Changes of assumptions	0	0	0
Changes of benefit terms	0	0	0
Contributions - Employer	0	51,905,342	(51,905,342)
Contributions - State	0	3,141,731	(3,141,731)
Contributions - Employee	0	2,113,851	(2,113,851)
Contributions - Buy Back	7,400	7,400	0
Net Investment Income	0	17,227,545	(17,227,545)
Benefit Payments, including Refunds of Employee Contributions	(20,188,276)	(20,188,276)	0
Administrative Expense	0	(708,558)	708,558
Net Changes	7,893,618	53,499,035	(45,605,417)
Balances as of September 30, 2020	\$ 302,407,734	\$ 296,918,562	\$ 5,489,172

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

	Current Discount				
	1	% Decrease		Rate	1% Increase
		6.90%		7.90%	8.90%
Sponsor's Net Pension Liability	\$	40,601,473	\$	5,489,172	\$ (23,612,172)

#### 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 FISCAL YEAR SEPTEMBER 30, 2020

For the year ended September 30, 2020, the Sponsor will recognize a Pension Expense of \$4,028,246. On September 30, 2020, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	985,084	2,084,351
Changes of assumptions	4,520,729	0
Net difference between Projected and Actual Earnings on Pension Plan investments	6,066,459	0
Total	\$ 11,572,272	\$ 2,084,351

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:	
2021	\$ 1,206,157
2022	3,698,620
2023	4,081,065
2024	418,466
2025	83,613
Thereafter	0

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

Measurement date	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	3,905,032	3,757,740
Interest	22,777,676	22,397,470
Change in Excess State Money	0	(951,203)
Share Plan Allocation	890,108	951,203
Changes of benefit terms	0	0
Differences between Expected and Actual Experience	501,678	(1,185,483)
Changes of assumptions	0	3,102,805
Contributions - Buy Back	7,400	0
Benefit Payments, including Refunds of Employee Contributions	(20,188,276)	(19,538,102)
Net Change in Total Pension Liability	7,893,618	8,534,430
Total Pension Liability - Beginning	294,514,116	285,979,686
Total Pension Liability - Ending (a)	\$302,407,734	\$294,514,116
Plan Fiduciary Net Position		
Contributions - Employer	51,905,342	4,958,811
Contributions - State	3,141,731	0
Contributions - Employee	2,113,851	1,946,523
Contributions - Buy Back	7,400	0
Net Investment Income	17,227,545	3,521,972
Benefit Payments, including Refunds of Employee Contributions	(20,188,276)	(19,538,102)
Administrative Expense	(708,558)	(771,292)
Other	0	91,875
Net Change in Plan Fiduciary Net Position	53,499,035	(9,790,213)
Plan Fiduciary Net Position - Beginning	243,431,612	253,221,825
Adjustment to beginning of year	(12,085)	0
Plan Fiduciary Net Position - Ending (b)	\$296,918,562	\$243,431,612
Net Pension Liability - Ending (a) - (b)	\$ 5,489,172	\$ 51,082,504
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	98.18%	82.66%
Covered Payroll	\$ 26,077,644	\$ 24,058,071
Net Pension Liability as a percentage of Covered Payroll	21.05%	212.33%

## **Notes to Schedule:**

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 8.00% to 7.90%.

## SCHEDULE OF CITY CONTRIBUTIONS

Last 2 Fiscal	Years	

		City			
		Contributions			
		in relation to			City
	Actuarially	the Actuarially			Contributions
	Determined	Determined	Contribution		as a percentage
	City	City	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2020	\$ 5,680,398	\$ 51,905,342	\$ (46,224,944)	\$ 26,077,644	199.04%
09/30/2019	\$ 4,958,811	\$ 4,958,811	\$ 0	\$ 24,058,071	20.61%

Notes to Schedule Valuation Date:

10/01/2018

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, 2018 Actuarial Valuation for the City of Gainesville Consolidated Police Officers and Firefighters Retirement Plan 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, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 51,082,504	\$ 13,795,504	\$ 20,999,661	\$ -
Total Pension Liability Factors:				
Service Cost	3,905,032	-	-	3,905,032
Interest	22,777,676	-	-	22,777,676
Share Plan Allocation	890,108	-	-	890,108
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	7,400	-	-	7,400
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	501,678	-	501,678	-
Current year amortization of experience difference	-	(1,836,510)	(519,780)	(1,316,730)
Change in assumptions about future economic or				
demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(2,516,058)	2,516,058
Benefit Payments, including Refunds of Employee				
Contributions	(20,188,276)	-	-	-
Net change	7,893,618	(1,836,510)	(2,534,160)	28,779,544
Plan Fiduciary Net Position:				
Contributions - Employer	51,905,342	-	-	-
Contributions - State	3,141,731	-	-	(3,141,731)
Contributions - Employee	2,113,851	-	-	(2,113,851)
Contributions - Buy Back	7,400	-	-	(7,400)
Projected Net Investment Income	18,713,838	-	-	(18,713,838)
Difference between projected and actual earnings on				
Pension Plan investments	(1,486,293)	-	1,486,293	-
Current year amortization	-	(5,032,300)	(3,537,179)	(1,495,121)
Benefit Payments, including Refunds of Employee				
Contributions	(20,188,276)	-	-	-
Administrative Expenses	(708,558)	-	-	708,558
Net change	53,499,035	(5,032,300)	(2,050,886)	(24,763,383)
Adjustment to beginning of year	(12,085)	-	-	12,085
Ending Balance	\$ 5,489,172	\$ 6,926,694	\$ 16,414,615	\$ 4,028,246

#### AMORTIZATION SCHEDULE - INVESTMENTS

				Investments																				
		Differences tween Projected																						
Plan Year		and Actual	Recognition																					
Ending		Earnings	Period (Years)		2020		2021		2022		2023		2024		2025		2026		2027		2028		20	29
2020	\$	1,486,293	5	\$	297,257	\$	297,259	\$	297,259	\$	297,259	\$	297,259	\$	-	\$		-	\$	-	\$	-	\$	-
2019	\$	16,199,612	5	\$	3,239,922	\$	3,239,922	\$	3,239,922	\$	3,239,922	\$	-	\$	-	\$		-	\$	-	\$	-	\$	-
2018	\$	(4,863,873)	5	\$	(972,775)	\$	(972,775)	\$	(972,773)	\$	-	\$	-	\$	-	\$		-	\$	-	\$	-	\$	-
2017	\$	(14,483,967)	5	\$	(2,896,793)	\$	(2,896,795)	\$	-	\$	-	\$	-	\$	-	\$		-	\$	-	\$	-	\$	-
2016	\$	(5,813,652)	5		(1,162,732)				-	\$	-	\$	-	\$	-	\$		-	\$	-	\$	-	\$	-
Net Increase	(De	ecrease) in Pensi	on Expense	\$	(1,495,121)	\$	(332,389)	\$	2,564,408	\$	3,537,181	\$	297,259	\$	-	\$		-	\$	-	\$	-	\$	-

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

#### AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

	Changes of	Recognition																						
Α	ssumptions	Period (Years)		2020		2021		2022		2023		2024		2025		2026		2027			2028		2029	9
	_																							
\$	3,102,805	5.1	\$	608,393	\$	608,393	\$	608,393	\$	608,393	\$	60,839	\$	-	\$	-	\$		-	\$		-	\$	-
\$	4,612,282	5.2	\$	886,977	\$	886,977	\$	886,977	\$	177,397	\$	-	\$	-	\$	-	\$		-	\$		-	\$	-
\$	2,158,450	5.3	\$	407,255	\$	407,255	\$	122,175	\$	-	\$	-	\$	-	\$	-	\$		-	\$		-	\$	-
\$	2,719,455	5.3	\$	513,105	\$	153,930	\$	-	\$	-	\$	-	\$	-	\$	-	\$		-	\$		-	\$	-
\$	2,608,508	5.2	\$	100,328	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$		-	\$		-	\$	-
(Dec	rease) in Pensi	ion Expense	\$	2.516.058	\$	2.056.555	\$	1.617.545	\$	785,790	\$	60.839	\$		\$	-	\$		-	\$		-	\$	
	A \$ \$ \$ \$ \$	Assumptions \$ 3,102,805 \$ 4,612,282 \$ 2,158,450 \$ 2,719,455 \$ 2,608,508	Assumptions         Period (Years)           \$ 3,102,805         5.1           \$ 4,612,282         5.2           \$ 2,158,450         5.3           \$ 2,719,455         5.3	Assumptions         Period (Years)           \$ 3,102,805         5.1         \$           \$ 4,612,282         5.2         \$           \$ 2,158,450         5.3         \$           \$ 2,719,455         5.3         \$           \$ 2,608,508         5.2         \$	Assumptions         Period (Years)         2020           \$ 3,102,805         5.1         \$ 608,393           \$ 4,612,282         5.2         \$ 886,977           \$ 2,158,450         5.3         \$ 407,255           \$ 2,719,455         5.3         \$ 513,105           \$ 2,608,508         5.2         \$ 100,328	Assumptions         Period (Years)         2020           \$ 3,102,805         5.1         \$ 608,393         \$           \$ 4,612,282         5.2         \$ 886,977         \$           \$ 2,158,450         5.3         \$ 407,255         \$           \$ 2,719,455         5.3         \$ 513,105         \$           \$ 2,608,508         5.2         \$ 100,328         \$	Assumptions         Period (Years)         2020         2021           \$ 3,102,805         5.1         \$ 608,393         \$ 608,393         \$ 608,393           \$ 4,612,282         5.2         \$ 886,977         \$ 886,977         \$ 886,977           \$ 2,158,450         5.3         \$ 407,255         \$ 407,255         \$ 407,255           \$ 2,719,455         5.3         \$ 513,105         \$ 153,930         \$ 2,608,508         5.2         \$ 100,328         \$ -	Assumptions         Period (Years)         2020         2021           \$ 3,102,805         5.1         \$ 608,393         \$ 608,393         \$           \$ 4,612,282         5.2         \$ 886,977         \$ 886,977         \$           \$ 2,158,450         5.3         \$ 407,255         \$ 407,255         \$           \$ 2,719,455         5.3         \$ 513,105         \$ 153,930         \$           \$ 2,608,508         5.2         \$ 100,328         \$ -         \$	Assumptions         Period (Years)         2020         2021         2022           \$ 3,102,805         5.1         \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,507         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ 886,977         \$ \$ \$ 886,977         \$ \$ \$ 886,977         \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Assumptions         Period (Years)         2020         2021         2022           \$ 3,102,805         5.1         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 50,393         \$ 608,393         \$ 608,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 50,393         \$ 51,31,05         \$ 122,175         \$ 5,3930         \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Assumptions         Period (Years)         2020         2021         2022         2023           \$ 3,102,805         5.1         \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ 608,393         \$ \$ \$ 608,393         \$ \$ \$ \$ \$ 608,393         \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Assumptions         Period (Years)         2020         2021         2022         2023           \$ 3,102,805         5.1         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 502,202           \$ 4,612,282         5.2         \$ 886,977         \$ 886,977         \$ 886,977         \$ 886,977         \$ 177,397         \$ 2,158,450         5.3         \$ 407,255         \$ 122,175         \$ - \$         \$ \$ \$ 2,719,455         5.3         \$ 513,105         \$ 153,930         \$ - \$         \$ - \$         \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Assumptions         Period (Years)         2020         2021         2022         2023         2024           \$ 3,102,805         5.1         \$ 608,393         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333         \$ 61,333	Assumptions         Period (Years)         2020         2021         2022         2023         2024           \$ 3,102,805         5.1         \$ 608,393         \$ 60,839         \$ 5	Assumptions         Period (Years)         2020         2021         2022         2023         2024         2025           \$ 3,102,805         5.1         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 608,393         \$ 60,839         \$ -	Assumptions         Period (Years)         2020         2021         2022         2023         2024         2025           \$ 3,102,805         5.1         \$ 608,393         \$ 608,	Assumptions         Period (Years)         2020         2021         2022         2023         2024         2025         2026           \$ 3,102,805         5.1         \$ 608,393         \$ 508,493         \$ 508,493         \$ 508,493         \$ 508,493         \$ 508,493         \$ 508,493         \$ 508,493         \$ 508,493 </td <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026         \$ 3,102,805       5.1       \$ 608,393       \$ 6</td> <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 50,333       \$ 513,105       \$ 122,175</td> <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 60,839       \$ 5 5       \$ 5</td> <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 608,393       \$ 608,393       \$ 608,393       \$ 60,839       \$ - \$</td> <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028         \$ 3,102,805       5.1       \$ 608,393<td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028         \$ 3,102,805       5.1       \$ 608,393<td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028       2029         \$ 3,102,805       5.1       \$ 608,393</td></td></td>	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026         \$ 3,102,805       5.1       \$ 608,393       \$ 6	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 50,333       \$ 513,105       \$ 122,175	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 60,839       \$ 5 5       \$ 5	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027         \$ 3,102,805       5.1       \$ 608,393       \$ 608,393       \$ 608,393       \$ 608,393       \$ 60,839       \$ - \$	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028         \$ 3,102,805       5.1       \$ 608,393 <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028         \$ 3,102,805       5.1       \$ 608,393<td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028       2029         \$ 3,102,805       5.1       \$ 608,393</td></td>	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028         \$ 3,102,805       5.1       \$ 608,393 <td>Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028       2029         \$ 3,102,805       5.1       \$ 608,393</td>	Assumptions       Period (Years)       2020       2021       2022       2023       2024       2025       2026       2027       2028       2029         \$ 3,102,805       5.1       \$ 608,393

#### AMORTIZATION SCHEDULE - EXPERIENCE

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

		Differences																								
	Be	etween Expected																								
Plan Year		and Actual	Recognition																							
Ending		Experience	Period (Years)		2020		2021		2022		2023		2024		2025		2026		20	27		2028			2029	
2020	\$	501,678	6.0	\$	83,613	\$	83,613	\$	83,613	\$	83,613	\$	83,613	\$	83,613	\$		-	\$	-	\$		-	\$		-
2019	\$	(1,185,483)	5.1	\$	(232,448)	\$	(232,448)	\$	(232,448)	\$	(232,448)	\$	(23,245)	\$	-	\$		-	\$	-	\$		-	\$		-
2018	\$	(2,419,821)	5.2	\$	(465,350)	\$	(465,350)	\$	(465,350)	\$	(93,071)	\$	-	\$	-	\$		-	\$	-	\$		-	\$		-
2017	\$	2,311,687	5.3	\$	436,167	\$	436,167	\$	130,852	\$	-	\$	-	\$	-	\$		-	\$	-	\$		-	\$		-
2016	\$	(6,006,515)	5.3	\$	(1,133,305)	\$	(339,991)	\$	-	\$	-	\$	-	\$	-	\$		-	\$	-	\$		-	\$		-
2015	\$	(140,568)	5.2	\$	(5,407)	\$	-	\$	-	\$	-	\$	-	\$	-	\$		-	\$	-	\$		-	\$		-
Net Increase	) (D	ecrease) in Pensi	ion Exnense	¢	(1,316,730)	¢	(518,009)	¢	(483,333)	¢	(241,906)	¢	60,368	¢	83,613	¢			\$		\$		-	\$		
inci merease		corease) in Pensi	ion Expense	¢	(1,310,730)	ф	(318,009)	¢	(403,333)	φ	(241,900)	φ	00,308	φ	05,015	ф		-	þ	-	¢		-	φ		<u> </u>