

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



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

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.

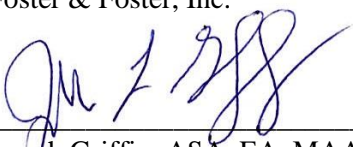
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Gainesville, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Consolidated Police Officers' 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.

By:



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

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 Applicable to Fiscal Year Ending	10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
City Required Contribution (Firefighters) % of Projected Annual Payroll	\$ 609,568 5.73%	\$ 706,034 7.01%
City Required Contribution (Police Officers) % of Projected Annual Payroll	\$ 1,333,485 8.84%	\$ 1,421,661 9.72%
City Required Contribution (Total) % of Projected Annual Payroll	\$ 1,943,053 7.56%	\$ 2,127,695 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) ¹	302,938,520	302,938,520	292,543,799
Market Value (MVA) ¹	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 ¹	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 ¹	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

CONSOLIDATED TOTAL

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) ¹	225,959,380	229,916,633	229,739,757
Share Plan Balances ¹	<u>1,783,811</u>	<u>1,783,811</u>	<u>1,860,413</u>
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%

CONSOLIDATED TOTAL

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 ¹	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	<u>12,336,513</u>	<u>12,433,797</u>	<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	

CONSOLIDATED TOTAL

Valuation Date	New Assump 10/1/2020	Old Assump 10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<u>9/30/2021</u>

E. Pension Cost

Normal Cost (with interest)	\$4,402,818	\$4,402,455	\$4,181,060
% of Total Annual Payroll ²	17.12	17.12	16.92
Administrative Expenses (with interest)	767,655	767,655	825,775
% of Total Annual Payroll ²	2.99	2.99	3.34
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2020, with interest)	(352,007)	(191,062)	237,722
% of Total Annual Payroll ²	(1.37)	(0.74)	0.96
Minimum Required Contribution ³	5,170,473	5,170,110	5,244,557
% of Total Annual Payroll ^{2 3}	20.11	20.11	21.22
Expected Member Contributions	2,088,140	2,088,140	2,004,518
% of Total Annual Payroll ²	8.12	8.12	8.11
Expected State Contribution	1,139,280	1,139,280	1,112,344
% of Total Annual Payroll ²	4.43	4.43	4.50
Expected City Contribution	1,943,053	1,942,690	2,127,695
% of Total Annual Payroll ²	7.56	7.55	8.62

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
Total Required Contribution	9,293,915
City and State Requirement	7,180,064
Actual Contributions Made:	
Members (excluding buyback)	2,113,851
City	51,909,324
State	0
Total	<u>54,023,175</u>

G. Net Actuarial (Gain)/Loss (2,762,325)

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

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

³ Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

CONSOLIDATED TOTAL

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2020	(4,567,062) ¹

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

	<u>Actual</u>	<u>Assumed</u>
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

	<u>Market</u>	<u>Actuarial</u>	<u>Assumed</u>
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	\$24,738,894
	10/1/2010	\$24,342,597
(b) Total Increase		1.63%
(c) Number of Years		10
(d) Average Annual Rate		0.16%

¹ 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>	<u>10/1/2019</u>
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) ¹	123,558,402	123,558,402	120,692,580
Market Value (MVA) ¹	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 ¹	10,635,431	10,650,268	21,460,074
Beneficiaries	4,842,425	4,919,439	4,272,285
Disability Retirees	1,639,386	1,584,129	1,602,246
Terminated Vested	300,481	300,013	213,049
Share Plan Balances ¹	<u>396,259</u>	<u>396,259</u>	<u>432,726</u>
Total	137,383,603	139,271,706	136,575,228

FIREFIGHTERS

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)	<u>57,304</u>	<u>57,348</u>	<u>52,970</u>
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) ¹	93,313,714	95,200,346	97,331,680
Share Plan Balances ¹	<u>396,259</u>	<u>396,259</u>	<u>432,726</u>
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%

FIREFIGHTERS

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 ¹	93,709,973	95,596,605	97,764,406
Actives	8,993,925	8,979,368	6,720,821
Member Contributions	<u>6,756,265</u>	<u>6,756,265</u>	<u>6,006,423</u>
Total	109,460,163	111,332,238	110,491,650
Non-vested Accrued Benefits	<u>6,046,825</u>	<u>6,063,657</u>	<u>5,549,971</u>
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	<u>0</u>	<u>0</u>	
Total	(1,888,907)	1,354,274	

FIREFIGHTERS

	New Assump	Old Assump	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<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 ²	17.27	17.24	17.54
Administrative Expenses (with interest)	\$310,544	\$310,544	\$292,173
% of Total Annual Payroll ²	2.92	2.92	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 ²	(1.52)	0.00	1.06
Minimum Required Contribution ³	\$2,147,701	\$2,143,841	\$2,167,489
% of Total Annual Payroll ^{2 3}	20.19	20.16	21.50
Expected Member Contributions	\$957,214	\$957,214	\$907,472
% of Total Annual Payroll ²	9.00	9.00	9.00
Expected State Contribution	\$580,919	\$580,919	\$553,983
% of Total Annual Payroll ²	5.46	5.46	5.49
Expected City Contribution	\$609,568	\$605,708	\$706,034
% of Total Annual Payroll ^{2 3}	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)

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

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

³ Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

FIREFIGHTERS

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

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

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

		<u>Actual</u>	<u>Assumed</u>
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

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

¹ 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) ¹	179,380,118	179,380,118	171,851,219
Market Value (MVA) ¹	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 ¹	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 ¹	<u>1,387,552</u>	<u>1,387,552</u>	<u>1,427,687</u>
Total	197,068,126	199,342,517	191,841,395

POLICE OFFICERS

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)	<u>130,199</u>	<u>130,285</u>	<u>124,488</u>
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) ¹	132,645,666	134,716,287	132,408,077
Share Plan Balances ¹	<u>1,387,552</u>	<u>1,387,552</u>	<u>1,427,687</u>
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%

POLICE OFFICERS

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 ¹	134,033,218	136,103,839	133,835,764
Actives	16,349,183	16,355,069	15,388,760
Member Contributions	<u>9,810,919</u>	<u>9,810,919</u>	<u>9,530,681</u>
Total	160,193,320	162,269,827	158,755,205
Non-vested Accrued Benefits	<u>6,289,688</u>	<u>6,370,140</u>	<u>6,210,759</u>
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	<u>0</u>	<u>0</u>	
Total	(2,156,959)	3,674,003	

POLICE OFFICERS

Valuation Date	New Assump 10/1/2020	Old Assump 10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<u>9/30/2021</u>

E. Pension Cost

Normal Cost (with interest)	\$2,565,661	\$2,569,158	\$2,412,166
% of Total Annual Payroll ²	17.01	17.04	16.49
Administrative Expenses (with interest)	\$457,111	\$457,111	\$533,602
% of Total Annual Payroll ²	3.03	3.03	3.65
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2020, with interest)	(\$190,762)	(\$190,762)	\$131,300
% of Total Annual Payroll ²	(1.27)	(1.27)	0.90
Minimum Required Contribution ³	\$3,022,772	\$3,026,269	\$3,077,068
% of Total Annual Payroll ^{2 3}	20.04	20.07	21.04
Expected Member Contributions	\$1,130,926	\$1,130,926	\$1,097,046
% of Total Annual Payroll ²	7.50	7.50	7.50
Expected State Contribution	\$558,361	\$558,361	\$558,361
% of Total Annual Payroll ²	3.70	3.70	3.82
Expected City Contribution	\$1,333,485	\$1,336,982	\$1,421,661
% of Total Annual Payroll ²	8.84	8.87	9.72

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
Total Required Contribution	5,139,894
City and State Requirement	3,974,209
Actual Contributions Made:	
Members (excluding buyback)	1,165,685
City	28,746,553
State	0
Total	29,912,238

G. Net Actuarial (Gain)/Loss

(1,535,875)

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

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

³ Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

POLICE OFFICERS

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2020	(2,483,623) ¹

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

	<u>Actual</u>	<u>Assumed</u>
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%

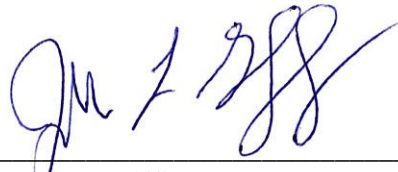
(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
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%

¹ 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 Base	Date Established	Years Remaining	10/1/2020 Amount	Amortization 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)	(336,180)
			(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 Base	Date Established	Years Remaining	10/1/2020 Amount	Amortization 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	<u>(1,927,022)</u>	<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)

Type of Base	Date Established	Years Remaining	10/1/2020 Amount	Amortization Amount
Assum. Change	10/1/2003	13	74,978	8,674
Actuarial Loss	10/1/2003	13	48,382	5,597
Assum. Change	10/1/2004	14	(52,161)	(5,781)
Actuarial Loss	10/1/2004	14	31,020	3,438
Actuarial Gain	10/1/2005	15	(10,009)	(1,067)
Actuarial Gain	10/1/2006	16	(50,616)	(5,216)
Assum. Change	10/1/2007	17	(11,237)	(1,123)
Benefit Change	10/1/2007	17	91,580	9,151
Actuarial Gain	10/1/2007	17	(185,386)	(18,525)
Actuarial Loss	10/1/2008	18	108,197	10,515
Assum. Change	10/1/2009	19	53,406	5,061
Actuarial Loss	10/1/2009	19	404,870	38,370
Actuarial Loss	10/1/2010	20	235,442	21,811
Assum. Change	10/1/2010	20	12,727	1,179
Actuarial Loss	10/1/2011	21	438,063	39,750
Assum. Change	10/1/2011	21	(4,086)	(371)
Actuarial Loss	10/1/2012	22	58,530	5,212
Benefit Change	10/1/2012	22	(135,827)	(12,095)
Actuarial Gain	10/1/2013	23	(133,648)	(11,699)
Assum. Change	10/1/2013	23	80,732	7,067
Actuarial Gain	10/1/2014	24	(212,115)	(18,278)
Assum. Change	10/1/2014	24	83,011	7,153
Actuarial Loss	10/1/2015	25	52,597	4,468
Assum. Change	10/1/2015	25	86,551	7,352
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	<u>(9,740)</u>
Increase in UAAL due to (Gain)/Loss	(1,226,450)
Assumption Changes	<u>(1,927,022)</u>
(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	<u>(1,146,872)</u>
Increase in UAAL due to (Gain)/Loss	(1,535,875)
Assumption Changes	<u>(2,257,123)</u>
(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

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.

Interest Rate

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

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.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
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.

Disability Rates

Sample rates of disability are shown below.

<u>Age</u>	<u>Disability Rate</u>
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

Sample rates of termination are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officers</u>
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.

Salary Increases

Rates of salary increases are shown below.

<u>Service</u>	<u>Firefighters</u>	<u>Police Officer</u>
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

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

Payroll Increase Rate

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 upon termination of employment is assumed to be equal to the vacation balance as of July 1, 2013 for police officers and January 1, 2014 for firefighters.

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 Method.

Asset Allocation Method

Assets were allocated to police officers and firefighters separately as of October 1, 2012. The allocation was performed based on the accrued actuarial liability of each group (net of DROP accounts) with recognition that certain assets (DROP account and State Premium Tax Revenue) are already designated to each group. Future investment returns are allocated to each group such that the investment return as a percentage will be the same as the return on the total assets by taking into account the cash flow of each group separately.

Actuarial Asset Method

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

Individual Entry Age Normal Actuarial Cost Method (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.

Normal (Current Year's) Cost 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.

Present Value of Benefits 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.

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

Total Required Contribution 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.

Unfunded Actuarial Accrued Liability (UAAL) 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.

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

¹ Excludes terminated participants awaiting a refund of member contributions.

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

¹ Excludes terminated participants awaiting a refund of member contributions.

² 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

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

¹ Excludes terminated participants awaiting a refund of member contributions.

² 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 <u>State Contribution</u> ¹	Applicable <u>"Frozen" Amount</u>	Excess State <u>Monies Reserve</u>
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
			<u>1,017,051.14</u>
Accumulated Regular Excess			1,017,051.14
Accumulated Special Excess			<u>0.00</u>
Total Excess State Monies			1,017,051.14
Less Amount Allocated to Benefit Improvements			<u>(1,017,051.14)</u>
Equals Current State Monies Reserve			\$0.00

¹ Actual state contributions for 2019 and 2020 were received in fiscal 2021.

POLICE OFFICERS
EXCESS STATE MONIES RESERVE

Police Officers' Distribution			
Regular Distribution			
	<u>Actual State Contribution¹</u>	<u>Applicable "Frozen" Amount</u>	<u>Excess State Monies Reserve</u>
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
2001	532,645.23	485,156.16	47,489.07
2002	577,629.43	485,156.16	92,473.27
2003	613,690.66	485,156.16	128,534.50
2004	599,120.94	485,156.16	113,964.78
2005	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 Excess			2,655,463.72
Accumulated Special Excess			0.00
Total Excess State Monies			2,655,463.72
Less Amount Allocated to Benefit Improvements			(2,655,463.72)
Equals Current State Monies Reserve			\$0.00

¹ 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	<u>(580,918.87)</u>
(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	<u>(23,162,771.00)</u>
(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	<u>(558,361.13)</u>
(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	<u>(28,746,553.00)</u>
(9) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2020	(\$24,772,344.40)

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Share Plan Assets	176,246
Equity in Pooled Cash	52,160,846
Total Cash and Equivalents	52,337,092
Receivables:	
Fire State Contributions	1,200,749
Police State Contributions	1,940,982
Miscellaneous Receivable	40,155
Due from Other Funds	51,988
Total Receivable	3,233,874
Total Investments	242,948,222
Total Assets	298,519,188
<u>LIABILITIES</u>	
Payables:	
Accounts Payable	1,597,969
Wages Payable	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>SEPTEMBER 30, 2020</u>	<u>SEPTEMBER 30, 2019</u>
<u>ADDITIONS</u>		
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	<u>\$ 7,801,649</u>	<u>\$ 6,905,334</u>
Investment Income:		
Net Increase in Fair Value of Investments	\$ 14,417,499	\$ 540,914
Interest & Dividends	3,268,700	3,550,140
Investment Income:	<u>\$ 17,686,199</u>	<u>\$ 4,091,054</u>
Transfer in POB 2020	46,228,926	
Total Additions	\$ 71,716,774	\$ 10,996,388
<u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	\$ 16,350,203	\$ 15,651,166
Retiree DROP Payouts and Rollovers	3,489,666	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	<u>\$ 21,294,952</u>	<u>\$ 21,193,037</u>
NET POSITION RESTRICTED FOR PENSIONS		
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	<u>2,063,937</u>	<u>1,077,794</u>
Total Fund including Receivable from State	\$ 295,134,752	\$ 242,648,993
Share Plan Balance	<u>1,783,811</u>	<u>1,860,413</u>
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

<u>ADDITIONS</u>	<u>FIREFIGHTERS</u>	<u>POLICE OFFICERS</u>
Contributions:		
Member	\$ 948,166	\$ 1,165,685
Buy-Back	7,400	0
City	2,381,952	3,298,446
State	0	0
Total Contributions	<u>\$ 3,337,518</u>	<u>\$ 4,464,131</u>
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	<u>\$ 7,025,718</u>	<u>\$ 10,660,481</u>
Transfer in POB 2020	20,780,819	25,448,107
Total Additions	\$ 31,144,055	\$ 40,572,719
<u>DEDUCTIONS</u>		
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	<u>\$ 9,911,926</u>	<u>\$ 11,383,026</u>
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	<u>681,316</u>	<u>1,382,621</u>
Total Fund including Receivable from State	\$ 120,762,672	\$ 174,372,080
Share Plan Balance	<u>396,259</u>	<u>1,387,552</u>
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>FIREFIGHTERS</u>	<u>POLICE OFFICERS</u>
A. Actuarial Value of Assets Beginning of the Year	\$ 99,479,035	\$ 145,227,453
B. Net Cash Flow		
1. Member Contributions	\$ 948,166	\$ 1,165,685
2. City Contributions	2,381,952	3,298,446
3. Transfer in POB 2020	20,780,819	25,448,107
4. Distributions (Excluding Investment Expenses)	(9,755,984)	(10,855,533)
5. Net Cash Flow During the Plan Year (B1 + B2 + B3 + B4)	14,354,953	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)
H. Actuarial Value (AV) End of Year		
1. Preliminary AV end of year: (D + G)	\$ 123,162,143	\$ 177,992,566
2. Upper corridor limit: 120% * E	144,915,206	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

	<u>SEPTEMBER 30, 2020</u>	<u>SEPTEMBER 30, 2019</u>
Market Value Beginning of the Year	\$ 6,077,061	\$ 6,219,892
<u>ADDITIONS</u>		
Contributions	\$ 1,927,128	\$ 2,142,302
Investment Income	482,669	443,239
Total Additions	\$ 2,409,797	\$ 2,585,541
<u>DEDUCTIONS</u>		
Benefit Payments	\$ (3,489,666)	\$ (2,728,372)
Expenses	0	0
Total Deductions	\$ (3,489,666)	\$ (2,728,372)
Market Value of Assets End of the Year	\$ 4,997,192	\$ 6,077,061

	<u>FIREFIGHTERS SEPTEMBER 30, 2020</u>	<u>POLICE OFFICERS SEPTEMBER 30, 2020</u>
Market Value Beginning of the Year	\$ 4,150,064	\$ 1,926,997
<u>ADDITIONS</u>		
Contributions	\$ 1,111,310	\$ 815,818
Investment Income	227,881	254,788
Total Additions	\$ 1,339,191	\$ 1,070,606
<u>DEDUCTIONS</u>		
Benefit Payments	\$ (2,704,952)	\$ (784,714)
Expenses	0	0
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

	<u>SEPTEMBER 30, 2020</u>	<u>SEPTEMBER 30, 2019</u>
Market Value Beginning of the Year	\$ 1,860,413	\$ 1,453,977
<u>ADDITIONS</u>		
Contributions	\$ 25,945	\$ 1,097,527
Investment Income	<u>0</u>	<u>0</u>
Total Additions	\$ 25,945	\$ 1,097,527
<u>DEDUCTIONS</u>		
Share Plan Distributions	\$ (90,462)	\$ (691,057)
Expenses	<u>0</u>	<u>(34)</u>
Total Deductions	\$ (90,462)	\$ (691,091)
Market Value of Assets End of the Year	\$ 1,783,811	\$ 1,860,413

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

CONSOLIDATED TOTAL
STATISTICAL DATA

	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Actives</u>				
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
<u>Service Retirees</u>				
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
<u>DROP Retirees</u>				
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
<u>Beneficiaries</u>				
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
<u>Disability Retirees</u>				
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
<u>Terminated Vested</u>				
Number	20	35	29	39
Average Current Age ¹	47.0	41.4	46.4	44.5
Average Annual Benefit ²	\$14,080	\$9,763	\$14,013	\$12,740

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

² 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	51
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 Annuity)	Vested (Due Refund)	Total
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

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

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

² The Average Annual Benefit excludes participants awaiting a refund of contributions.

FIREFIGHTERS
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	1	5	1									7
25 - 29	9	14	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+												0
Total	11	31	12	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 Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	143	21	19	8	2	0	193
Retired	10	(10)					
DROP							
Vested (Deferred Annuity)					4		4
Vested (Due Refund)							
Hired/Terminated in Same Year							
Death, With Survivor	(3)		3				
Death, No Survivor	(1)		(1)				(2)
Disabled							
Refund of Contributions							
Rehires							
Expired Annuities							
Data Corrections							
b. Number current valuation	149	11	21	8	6	0	195

POLICE OFFICERS
STATISTICAL DATA

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

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

² 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 Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	226	18	18	18	25	2	307
Retired	6	(5)					1
DROP		4					4
Vested (Deferred Annuity)					9		9
Vested (Due Refund)							
Hired/Terminated in Same Year							
Death, With Survivor							
Death, No Survivor	(5)						(5)
Disabled							
Refund of Contributions					(1)	(1)	(2)
Rehires						(1)	(1)
Expired Annuities							
Data Corrections							
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.

Credited Service

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.

Gross Pay

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.

Earnings

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:

<u>Date</u>	<u>Firefighters</u>	<u>Police Officers</u>
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:

- (1) 20 years of service
- (2) Age 55 with 10 or more years of service
- (3) Age plus service equal 70

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	<p>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.</p> <p>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.</p>

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 1st following attainment of age 62.

Firefighters

- (1) Retired prior to October 1, 1999 receive a 2.0% increase each October 1st following age 62.
- (2) Retired after October 1, 1999 with at least 25 years of service receive a 2.0% increase each October 1st following age 55.
- (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 1st following age 62.
- (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 1st following age 62.

Cost of Living Adjustment (continued)

Police Officers

- (1) Retired prior to October 1, 1999 receive a 2.0% increase each October 1st 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 1st 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 1st 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 1st following age 55, increasing to 2.0% each October 1st following age 62.

Supplemental Retirement Program

Firefighters

Effective February 1, 2017, firefighters hired on or after October 1, 1998 are eligible to participate in the Supplemental Retirement Program, which includes full-time 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 full-time 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.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	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	<u>242,948,222</u>
Total Assets	298,519,187
<u>LIABILITIES</u>	
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
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Investment Income:

Net Increase in Fair Value of Investments	14,417,498
Interest & Dividends	3,268,700
Less Investment Expense ¹	(458,653)

Net Investment Income	17,227,545
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Other	0
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Total Additions	76,322,997
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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
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Administrative Expense	708,558
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Total Deductions	22,823,962
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Net Increase in Net Position	53,499,035
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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

¹Investment 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.

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	<u>\$ 5,489,172</u>
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.

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	Long Term Expected Real Rate of Return ¹
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%

¹ 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.

	1% Decrease 6.90%	Current Discount Rate 7.90%	1% Increase 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

	<u>09/30/2020</u>	<u>09/30/2019</u>
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	<u>7,893,618</u>	<u>8,534,430</u>
Total Pension Liability - Beginning	<u>294,514,116</u>	<u>285,979,686</u>
Total Pension Liability - Ending (a)	<u><u>\$302,407,734</u></u>	<u><u>\$294,514,116</u></u>
 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	<u>53,499,035</u>	<u>(9,790,213)</u>
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)	<u><u>\$296,918,562</u></u>	<u><u>\$243,431,612</u></u>
 Net Pension Liability - Ending (a) - (b)	<u><u>\$ 5,489,172</u></u>	<u><u>\$ 51,082,504</u></u>
 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

Fiscal Year Ended	Actuarially Determined City Contribution	City Contributions in relation to the Actuarially Determined City Contributions	Contribution Deficiency (Excess)	Covered Payroll	City Contributions as a percentage of Covered 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

Fiscal Year Ended	Annual Money-Weighted Rate of Return 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%

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 ¹
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%	

¹ 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 Liability	Plan Fiduciary Net Position	Net Pension 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	<u>\$ 11,572,272</u>	<u>\$ 2,084,351</u>

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)	<u>\$302,407,734</u>	<u>\$294,514,116</u>
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)	<u>\$296,918,562</u>	<u>\$243,431,612</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 5,489,172</u>	<u>\$ 51,082,504</u>
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

Fiscal Year Ended	Actuarially Determined City Contribution	City Contributions in relation to the Actuarially Determined City Contributions	Contribution Deficiency (Excess)	Covered Payroll	City Contributions as a percentage of Covered 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

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
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 (Decrease) in Pension Expense			\$ (1,495,121)	\$ (332,389)	\$ 2,564,408	\$ 3,537,181	\$ 297,259	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 3,102,805	5.1	\$ 608,393	\$ 608,393	\$ 608,393	\$ 608,393	\$ 60,839	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 4,612,282	5.2	\$ 886,977	\$ 886,977	\$ 886,977	\$ 177,397	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 2,158,450	5.3	\$ 407,255	\$ 407,255	\$ 122,175	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 2,719,455	5.3	\$ 513,105	\$ 153,930	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 2,608,508	5.2	\$ 100,328	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 2,516,058	\$ 2,056,555	\$ 1,617,545	\$ 785,790	\$ 60,839	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	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 (Decrease) in Pension Expense			\$ (1,316,730)	\$ (518,009)	\$ (483,333)	\$ (241,906)	\$ 60,368	\$ 83,613	\$ -	\$ -	\$ -	\$ -