



May 2, 2022

VIA Email

William Johnston  
 Chief Investment Officer  
 Budget & Finance Department  
 City of Gainesville  
 P.O. Box 490, Station 8  
 Gainesville, FL 32602  
[johnstonwd@cityofgainesville.org](mailto:johnstonwd@cityofgainesville.org)

Re: Consolidated Police Officers' and Firefighters' Retirement Plan – Investment Rate of Return Study

Dear William:

This letter provides an analysis for the Board's consideration of lowering the investment rate of return for the annual actuarial valuation for the Consolidated Police Officers' and Firefighters' Retirement Plan ("Plan"). Enclosed are the exhibits A-1 through A-4 (firefighters) and C-1 through C-4 (police officers) containing 5-year forecasts of the Plan's financial information under the current investment rate of return ("IRR") assumption of 7.90% per year and various alternative IRR assumptions. In addition, we have provided exhibits B-1 through B-4 (firefighters) and D-1 through D-4 (police officers) reflecting a "fresh start" of the Actuarial Value of Assets ("AVA") as of October 1, 2021 in which the AVA is set equal to the Market Value of Assets:

Exhibit	Group	IRR	Fresh Start
A-1	Fire	7.90%	No
A-2	Fire	7.75%	No
A-3	Fire	7.50%	No
A-4	Fire	7.25%	No
B-1	Fire	7.90%	Yes
B-2	Fire	7.75%	Yes
B-3	Fire	7.50%	Yes
B-4	Fire	7.25%	Yes
C-1	Police	7.90%	No
C-2	Police	7.75%	No
C-3	Police	7.50%	No
C-4	Police	7.25%	No
D-1	Police	7.90%	Yes
D-2	Police	7.75%	Yes
D-3	Police	7.50%	Yes
D-4	Police	7.25%	Yes

### **Discussion of Forecasting Methodology**

Liabilities were rolled forward from October 1, 2020 using commonly accepted actuarial techniques. The actual asset return of 23.70% was provided for the fiscal year ending September 30, 2021 and future asset values were projected using expected cash flows and asset returns set equal to the corresponding IRR assumption. Future payroll, administrative expenses, and investment expenses were assumed to increase at 3.0% per year.

### **Comments on Investment Rate of Return Assumption**

The investment rate of return assumption is used to estimate the portion of the Plan's funding that will be achieved by investing the Plan's assets in capital markets over a long period of time. The Board, Actuary, and Investment Consultant work collaboratively to set this rate as their best estimate of anticipated future investment returns. The following analysis of the investment rate of return assumption was based on the Horizon Actuarial Services 2021 Survey of Capital Market Assumptions (20-year time horizon).

<b>Asset Class</b>	<b>Expected Geometric Return</b>	<b>Expected Risk</b>	<b>Expected Arithmetic Return</b>	<b>Target Asset Allocation</b>	<b>Asset Return Impact (Arithmetic)</b>
Large Cap U.S. Equity	6.65%	16.42%	7.91%	34.50%	2.73%
Small/Mid Cap U.S. Equity	7.04%	20.17%	8.92%	15.50%	1.38%
Non-US Equity - Developed	7.14%	18.32%	8.69%	17.00%	1.48%
Non-US Equity - Emerging	7.81%	24.33%	10.52%	3.00%	0.32%
US Corp Bonds - High Yield	4.98%	9.88%	5.44%	10.00%	0.54%
Real Estate	6.21%	17.62%	7.66%	15.00%	1.15%
Private Debt	6.87%	11.42%	7.48%	<u>5.00%</u>	<u>0.37%</u>
				100.00%	7.97%
Expected Risk for Portfolio					14.93%
Conversion to Geometric Return Reflecting Expected Risk of Portfolio					6.94%
Impact of Plan's Inflation Assumption (above Survey assumption of 2.23% per year)					<u>0.27%</u>
Expected Portfolio Return (prior to Manager Outperformance)					7.21%
Expected Manager Outperformance					<u>0.70%</u>
Expected Portfolio Return (after Manager Outperformance)					7.91%

Based on the above analysis, an IRR assumption of 7.91% per year would represent the 50<sup>th</sup> percentile outcome. Therefore, there is a 50% likelihood that the actual long-term rate of return for the Plan will be either above or below 7.91% per year. To increase the Plan's likelihood of achieving the IRR assumption, we would recommend an assumption in the range of 7.25% to 7.75% per year.

### **Financial Information, Census Data, Assumptions, Methods, and Plan Provisions**

Except as otherwise noted, the census data, assumptions, methods and plan provisions are the same as those provided in the October 1, 2020 Actuarial Valuation Report of the Plan.

### **Actuarial Notes and Certifications**

This analysis is provided to assist the Board in determining the impact on contributions associated with reducing the investment rate of return assumption used in the annual actuarial valuation. This analysis may not be appropriate for use by other parties and/or other purposes.

Future actuarial measurements may differ significantly from the current measurements presented herein 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, we did not perform an analysis of the potential range of such future measurements.

The October 1, 2020 Actuarial Valuation Report of the Plan provides a detailed discussion of key risks that should also be considered when reviewing the results. There have been no additional risks identified specific to this analysis.

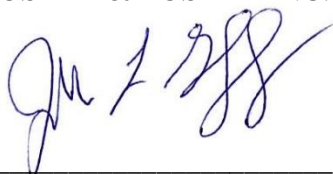
In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the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

To our knowledge, no associate of Foster & Foster, Inc. has any direct financial interest or indirect material interest in the Fund, nor does anyone at Foster & Foster, Inc. act as a member of the Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

To the best of my knowledge, this report is complete and accurate in all aspects. The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. If you have any questions regarding any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

FOSTER & FOSTER INC.



---

Joseph L. Griffin, ASA, EA, MAAA  
Consulting Actuary

Enclosures

**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit A-1**  
**Investment Rate of Return = 7.90% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.90%	7.90%	7.90%	7.90%	7.90%
Actual Investment Return	6.65%	23.70%	7.90%	7.90%	7.90%	7.90%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 124,268	\$ 127,147	\$ 130,150	\$ 133,261	\$ 136,451
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>130,699</u>	<u>137,039</u>	<u>143,423</u>	<u>149,858</u>	<u>156,353</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(6,431)	(9,892)	(13,273)	(16,597)	(19,902)
Funded Percentage (AVA / AAL)	101.7%	105.2%	107.8%	110.2%	112.5%	114.6%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 1,892	\$ 1,949	\$ 2,008	\$ 2,068	\$ 2,130
Expenses	311	345	355	366	377	388
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,237	\$ 2,304	\$ 2,374	\$ 2,445	\$ 2,518
% of Payroll	20.19%	20.11%	20.11%	20.11%	20.11%	20.11%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 655	\$ 692	\$ 731	\$ 770	\$ 810
% of Payroll	5.73%	5.89%	6.04%	6.19%	6.33%	6.47%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit A-2**  
**Investment Rate of Return = 7.75% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.75%	7.75%	7.75%	7.75%	7.75%
Actual Investment Return	6.65%	23.70%	7.75%	7.75%	7.75%	7.75%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 126,181	\$ 129,099	\$ 132,141	\$ 135,292	\$ 138,523
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>130,699</u>	<u>136,844</u>	<u>143,073</u>	<u>149,331</u>	<u>155,626</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(4,518)	(7,745)	(10,932)	(14,039)	(17,103)
Funded Percentage (AVA / AAL)	101.7%	103.6%	106.0%	108.3%	110.4%	112.3%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 1,957	\$ 2,016	\$ 2,076	\$ 2,138	\$ 2,203
Expenses	311	344	355	365	376	388
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,301	\$ 2,371	\$ 2,441	\$ 2,514	\$ 2,591
% of Payroll	20.19%	20.69%	20.69%	20.69%	20.69%	20.69%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 719	\$ 758	\$ 798	\$ 840	\$ 882
% of Payroll	5.73%	6.46%	6.62%	6.76%	6.91%	7.05%



**FOSTER & FOSTER**  
 ACTUARIES AND CONSULTANTS

May 2, 2022

**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit A-3**  
**Investment Rate of Return = 7.50% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.50%	7.50%	7.50%	7.50%	7.50%
Actual Investment Return	6.65%	23.70%	7.50%	7.50%	7.50%	7.50%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 129,488	\$ 132,473	\$ 135,582	\$ 138,803	\$ 142,104
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>130,699</u>	<u>136,520</u>	<u>142,503</u>	<u>148,475</u>	<u>154,448</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(1,211)	(4,047)	(6,921)	(9,672)	(12,344)
Funded Percentage (AVA / AAL)	101.7%	100.9%	103.1%	105.1%	107.0%	108.7%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 2,071	\$ 2,133	\$ 2,197	\$ 2,263	\$ 2,331
Expenses	311	343	353	364	375	386
Amortization of Unfunded Liability	<u>0</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,420	\$ 2,486	\$ 2,561	\$ 2,638	\$ 2,717
% of Payroll	20.19%	21.75%	21.70%	21.70%	21.70%	21.70%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 838	\$ 874	\$ 918	\$ 963	\$ 1,009
% of Payroll	5.73%	7.53%	7.63%	7.78%	7.92%	8.06%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit A-4**  
**Investment Rate of Return = 7.25% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.25%	7.25%	7.25%	7.25%	7.25%
Actual Investment Return	6.65%	23.70%	7.25%	7.25%	7.25%	7.25%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 132,952	\$ 136,006	\$ 139,186	\$ 142,479	\$ 145,854
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>130,699</u>	<u>136,196</u>	<u>142,239</u>	<u>148,025</u>	<u>153,720</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	2,253	(190)	(3,053)	(5,546)	(7,866)
Funded Percentage (AVA / AAL)	101.7%	98.3%	100.1%	102.2%	103.9%	105.4%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 2,193	\$ 2,258	\$ 2,326	\$ 2,396	\$ 2,468
Expenses	311	342	352	363	374	385
Amortization of Unfunded Liability	<u>0</u>	<u>298</u>	<u>65</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,833	\$ 2,675	\$ 2,689	\$ 2,770	\$ 2,853
% of Payroll	20.19%	25.46%	23.35%	22.78%	22.78%	22.78%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 1,250	\$ 1,063	\$ 1,046	\$ 1,095	\$ 1,145
% of Payroll	5.73%	11.24%	9.28%	8.86%	9.00%	9.14%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit B-1**  
**Investment Rate of Return = 7.90% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.90%	7.90%	7.90%	7.90%	7.90%
Actual Investment Return	6.65%	23.70%	7.90%	7.90%	7.90%	7.90%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 124,268	\$ 127,147	\$ 130,150	\$ 133,261	\$ 136,451
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>143,614</u>	<u>148,212</u>	<u>153,093</u>	<u>158,230</u>	<u>163,604</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(19,346)	(21,065)	(22,943)	(24,969)	(27,153)
Funded Percentage (AVA / AAL)	101.7%	115.6%	116.6%	117.6%	118.7%	119.9%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 1,892	\$ 1,949	\$ 2,008	\$ 2,068	\$ 2,130
Expenses	311	345	355	366	377	388
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,237	\$ 2,304	\$ 2,374	\$ 2,445	\$ 2,518
% of Payroll	20.19%	20.11%	20.11%	20.11%	20.11%	20.11%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 655	\$ 692	\$ 731	\$ 770	\$ 810
% of Payroll	5.73%	5.89%	6.04%	6.19%	6.33%	6.47%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit B-2**  
**Investment Rate of Return = 7.75% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.75%	7.75%	7.75%	7.75%	7.75%
Actual Investment Return	6.65%	23.70%	7.75%	7.75%	7.75%	7.75%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 126,181	\$ 129,099	\$ 132,141	\$ 135,292	\$ 138,523
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>143,614</u>	<u>148,001</u>	<u>152,715</u>	<u>157,666</u>	<u>162,836</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(17,433)	(18,902)	(20,574)	(22,374)	(24,313)
Funded Percentage (AVA / AAL)	101.7%	113.8%	114.6%	115.6%	116.5%	117.6%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 1,957	\$ 2,016	\$ 2,076	\$ 2,138	\$ 2,203
Expenses	311	344	355	365	376	388
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,301	\$ 2,371	\$ 2,441	\$ 2,514	\$ 2,591
% of Payroll	20.19%	20.69%	20.69%	20.69%	20.69%	20.69%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 719	\$ 758	\$ 798	\$ 840	\$ 882
% of Payroll	5.73%	6.46%	6.62%	6.76%	6.91%	7.05%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit B-3**  
**Investment Rate of Return = 7.50% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.50%	7.50%	7.50%	7.50%	7.50%
Actual Investment Return	6.65%	23.70%	7.50%	7.50%	7.50%	7.50%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 129,488	\$ 132,473	\$ 135,582	\$ 138,803	\$ 142,104
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>143,614</u>	<u>147,650</u>	<u>152,098</u>	<u>156,751</u>	<u>161,590</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(14,126)	(15,177)	(16,516)	(17,948)	(19,486)
Funded Percentage (AVA / AAL)	101.7%	110.9%	111.5%	112.2%	112.9%	113.7%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 2,071	\$ 2,133	\$ 2,197	\$ 2,263	\$ 2,331
Expenses	311	343	353	364	375	386
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,414	\$ 2,486	\$ 2,561	\$ 2,638	\$ 2,717
% of Payroll	20.19%	21.70%	21.70%	21.70%	21.70%	21.70%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 832	\$ 874	\$ 918	\$ 963	\$ 1,009
% of Payroll	5.73%	7.48%	7.63%	7.78%	7.92%	8.06%



**City of Gainesville**  
**Consolidated Retirement Plan - Firefighters**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit B-4**  
**Investment Rate of Return = 7.25% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.25%	7.25%	7.25%	7.25%	7.25%
Actual Investment Return	6.65%	23.70%	7.25%	7.25%	7.25%	7.25%
Payroll	\$ 10,636	\$ 11,125	\$ 11,459	\$ 11,802	\$ 12,156	\$ 12,521
Entry Age Normal Liability (AAL)	\$ 121,475	\$ 132,952	\$ 136,006	\$ 139,186	\$ 142,479	\$ 145,854
Actuarial Value of Assets (AVA)	<u>123,558</u>	<u>143,614</u>	<u>147,299</u>	<u>151,789</u>	<u>156,242</u>	<u>160,793</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,083)	(10,662)	(11,293)	(12,603)	(13,763)	(14,939)
Funded Percentage (AVA / AAL)	101.7%	108.0%	108.3%	109.1%	109.7%	110.2%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 1,837	\$ 2,193	\$ 2,258	\$ 2,326	\$ 2,396	\$ 2,468
Expenses	311	342	352	363	374	385
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 2,148	\$ 2,535	\$ 2,610	\$ 2,689	\$ 2,770	\$ 2,853
% of Payroll	20.19%	22.78%	22.78%	22.78%	22.78%	22.78%
Employee Contributions	\$ 957	\$ 1,001	\$ 1,031	\$ 1,062	\$ 1,094	\$ 1,127
% of Payroll	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
State Contributions	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581	\$ 581
% of Payroll	5.46%	5.22%	5.07%	4.92%	4.78%	4.64%
City Contributions	\$ 610	\$ 952	\$ 998	\$ 1,046	\$ 1,095	\$ 1,145
% of Payroll	5.73%	8.56%	8.71%	8.86%	9.00%	9.14%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit C-1**  
**Investment Rate of Return = 7.90% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.90%	7.90%	7.90%	7.90%	7.90%
Actual Investment Return	6.65%	23.70%	7.90%	7.90%	7.90%	7.90%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 181,761	\$ 186,731	\$ 191,875	\$ 197,087	\$ 202,388
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>189,841</u>	<u>199,590</u>	<u>209,395</u>	<u>219,175</u>	<u>229,007</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(8,080)	(12,859)	(17,520)	(22,088)	(26,619)
Funded Percentage (AVA / AAL)	101.4%	104.4%	106.9%	109.1%	111.2%	113.2%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,643	\$ 2,722	\$ 2,804	\$ 2,888	\$ 2,974
Expenses	457	508	523	539	555	572
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,151	\$ 3,245	\$ 3,343	\$ 3,443	\$ 3,546
% of Payroll	20.04%	19.69%	19.69%	19.69%	19.69%	19.69%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,392	\$ 1,451	\$ 1,511	\$ 1,573	\$ 1,637
% of Payroll	8.84%	8.70%	8.81%	8.90%	9.00%	9.09%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit C-2**  
**Investment Rate of Return = 7.75% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.75%	7.75%	7.75%	7.75%	7.75%
Actual Investment Return	6.65%	23.70%	7.75%	7.75%	7.75%	7.75%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 184,693	\$ 189,720	\$ 194,920	\$ 200,189	\$ 205,546
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>189,841</u>	<u>199,308</u>	<u>208,879</u>	<u>218,392</u>	<u>227,922</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(5,148)	(9,588)	(13,959)	(18,203)	(22,376)
Funded Percentage (AVA / AAL)	101.4%	102.8%	105.1%	107.2%	109.1%	110.9%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,729	\$ 2,811	\$ 2,896	\$ 2,982	\$ 3,072
Expenses	457	507	522	538	554	571
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,236	\$ 3,333	\$ 3,434	\$ 3,536	\$ 3,643
% of Payroll	20.04%	20.23%	20.23%	20.23%	20.23%	20.23%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,478	\$ 1,539	\$ 1,602	\$ 1,667	\$ 1,734
% of Payroll	8.84%	9.24%	9.34%	9.44%	9.54%	9.63%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit C-3**  
**Investment Rate of Return = 7.50% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.50%	7.50%	7.50%	7.50%	7.50%
Actual Investment Return	6.65%	23.70%	7.50%	7.50%	7.50%	7.50%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 189,766	\$ 194,890	\$ 200,187	\$ 205,552	\$ 211,005
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>189,841</u>	<u>198,838</u>	<u>208,124</u>	<u>217,212</u>	<u>226,263</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(75)	(3,948)	(7,937)	(11,660)	(15,258)
Funded Percentage (AVA / AAL)	101.4%	100.0%	102.0%	104.0%	105.7%	107.2%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,882	\$ 2,968	\$ 3,057	\$ 3,149	\$ 3,244
Expenses	457	505	520	536	552	569
Amortization of Unfunded Liability	<u>0</u>	<u>92</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,479	\$ 3,488	\$ 3,593	\$ 3,701	\$ 3,813
% of Payroll	20.04%	21.75%	21.17%	21.17%	21.17%	21.17%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,721	\$ 1,694	\$ 1,762	\$ 1,832	\$ 1,903
% of Payroll	8.84%	10.76%	10.28%	10.38%	10.48%	10.57%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit C-4**  
**Investment Rate of Return = 7.25% per year**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.25%	7.25%	7.25%	7.25%	7.25%
Actual Investment Return	6.65%	23.70%	7.25%	7.25%	7.25%	7.25%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 195,085	\$ 200,309	\$ 205,706	\$ 211,170	\$ 216,721
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>189,841</u>	<u>198,368</u>	<u>207,750</u>	<u>216,662</u>	<u>225,296</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	5,244	1,941	(2,044)	(5,492)	(8,575)
Funded Percentage (AVA / AAL)	101.4%	97.3%	99.0%	101.0%	102.6%	104.0%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 3,045	\$ 3,136	\$ 3,230	\$ 3,327	\$ 3,427
Expenses	457	503	518	534	550	567
Amortization of Unfunded Liability	<u>0</u>	<u>538</u>	<u>200</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 4,086	\$ 3,854	\$ 3,764	\$ 3,877	\$ 3,994
% of Payroll	20.04%	25.55%	23.39%	22.18%	22.18%	22.18%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 2,329	\$ 2,061	\$ 1,933	\$ 2,008	\$ 2,085
% of Payroll	8.84%	14.56%	12.51%	11.39%	11.49%	11.58%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit D-1**  
**Investment Rate of Return = 7.90% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.90%	7.90%	7.90%	7.90%	7.90%
Actual Investment Return	6.65%	23.70%	7.90%	7.90%	7.90%	7.90%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 181,761	\$ 186,731	\$ 191,875	\$ 197,087	\$ 202,388
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>208,516</u>	<u>215,799</u>	<u>223,474</u>	<u>231,416</u>	<u>239,661</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(26,755)	(29,068)	(31,599)	(34,329)	(37,273)
Funded Percentage (AVA / AAL)	101.4%	114.7%	115.6%	116.5%	117.4%	118.4%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,643	\$ 2,722	\$ 2,804	\$ 2,888	\$ 2,974
Expenses	457	508	523	539	555	572
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,151	\$ 3,245	\$ 3,343	\$ 3,443	\$ 3,546
% of Payroll	20.04%	19.69%	19.69%	19.69%	19.69%	19.69%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,392	\$ 1,451	\$ 1,511	\$ 1,573	\$ 1,637
% of Payroll	8.84%	8.70%	8.81%	8.90%	9.00%	9.09%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit D-2**  
**Investment Rate of Return = 7.75% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.75%	7.75%	7.75%	7.75%	7.75%
Actual Investment Return	6.65%	23.70%	7.75%	7.75%	7.75%	7.75%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 184,693	\$ 189,720	\$ 194,920	\$ 200,189	\$ 205,546
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>208,516</u>	<u>215,493</u>	<u>222,916</u>	<u>230,578</u>	<u>238,513</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(23,823)	(25,773)	(27,996)	(30,389)	(32,967)
Funded Percentage (AVA / AAL)	101.4%	112.9%	113.6%	114.4%	115.2%	116.0%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,729	\$ 2,811	\$ 2,896	\$ 2,982	\$ 3,072
Expenses	457	507	522	538	554	571
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,236	\$ 3,333	\$ 3,434	\$ 3,536	\$ 3,643
% of Payroll	20.04%	20.23%	20.23%	20.23%	20.23%	20.23%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,478	\$ 1,539	\$ 1,602	\$ 1,667	\$ 1,734
% of Payroll	8.84%	9.24%	9.34%	9.44%	9.54%	9.63%



**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit D-3**  
**Investment Rate of Return = 7.50% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.50%	7.50%	7.50%	7.50%	7.50%
Actual Investment Return	6.65%	23.70%	7.50%	7.50%	7.50%	7.50%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 189,766	\$ 194,890	\$ 200,187	\$ 205,552	\$ 211,005
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>208,516</u>	<u>214,983</u>	<u>222,091</u>	<u>229,307</u>	<u>236,748</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(18,750)	(20,093)	(21,904)	(23,755)	(25,743)
Funded Percentage (AVA / AAL)	101.4%	109.9%	110.3%	110.9%	111.6%	112.2%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 2,882	\$ 2,968	\$ 3,057	\$ 3,149	\$ 3,244
Expenses	457	505	520	536	552	569
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,387	\$ 3,488	\$ 3,593	\$ 3,701	\$ 3,813
% of Payroll	20.04%	21.17%	21.17%	21.17%	21.17%	21.17%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,629	\$ 1,694	\$ 1,762	\$ 1,832	\$ 1,903
% of Payroll	8.84%	10.18%	10.28%	10.38%	10.48%	10.57%



**FOSTER & FOSTER**  
 ACTUARIES AND CONSULTANTS

May 2, 2022

**City of Gainesville**  
**Consolidated Retirement Plan - Police Officers**  
**Investment Rate of Return Study**  
**\$ Thousands**

**Exhibit D-4**  
**Investment Rate of Return = 7.25% per year**  
**Fresh Start Assets**

<b>Valuation Date as of October 1st</b>	<b><u>2020</u></b>	<b><u>2021</u></b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>
Assumed Investment Rate of Return	7.90%	7.25%	7.25%	7.25%	7.25%	7.25%
Actual Investment Return	6.65%	23.70%	7.25%	7.25%	7.25%	7.25%
Payroll	\$ 15,079	\$ 15,997	\$ 16,477	\$ 16,972	\$ 17,481	\$ 18,005
Entry Age Normal Liability (AAL)	\$ 176,896	\$ 195,085	\$ 200,309	\$ 205,706	\$ 211,170	\$ 216,721
Actuarial Value of Assets (AVA)	<u>179,380</u>	<u>208,516</u>	<u>214,472</u>	<u>221,648</u>	<u>228,667</u>	<u>235,677</u>
Unfunded/(Surplus) Liability (AAL - AVA)	(2,484)	(13,431)	(14,163)	(15,942)	(17,497)	(18,956)
Funded Percentage (AVA / AAL)	101.4%	106.9%	107.1%	107.7%	108.3%	108.7%
<b>Fiscal Year Ending September 30th</b>	<b><u>2022</u></b>	<b><u>2023</u></b>	<b><u>2024</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>
Normal Cost	\$ 2,566	\$ 3,045	\$ 3,136	\$ 3,230	\$ 3,327	\$ 3,427
Expenses	457	503	518	534	550	567
Amortization of Unfunded Liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Required Contribution	\$ 3,023	\$ 3,548	\$ 3,654	\$ 3,764	\$ 3,877	\$ 3,994
% of Payroll	20.04%	22.18%	22.18%	22.18%	22.18%	22.18%
Employee Contributions	\$ 1,131	\$ 1,200	\$ 1,236	\$ 1,273	\$ 1,311	\$ 1,350
% of Payroll	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
State Contributions	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558
% of Payroll	3.70%	3.49%	3.39%	3.29%	3.19%	3.10%
City Contributions	\$ 1,333	\$ 1,790	\$ 1,861	\$ 1,933	\$ 2,008	\$ 2,085
% of Payroll	8.84%	11.19%	11.29%	11.39%	11.49%	11.58%



**FOSTER & FOSTER**  
 ACTUARIES AND CONSULTANTS

May 2, 2022