



Freiman Little Actuaries, LLC
4105 Savannahs Trail
Merritt Island, FL 32953

Phone: (321) 453-6542
Fax: (321) 453-6998

City of Lauderhill

Firefighters' Retirement System

GASB 67/68 Supplement
As of September 30, 2021



REPORT TO PROVIDE DISCLOSURES UNDER GASB STATEMENT NO. 67 AND 68
FOR THE PLAN AND FISCAL YEARS ENDING
SEPTEMBER 30, 2021



January 3, 2022

Board of Trustees
City of Lauderhill Firefighters' Retirement System
Lauderhill, Florida

RE: GASB 67/68 Supplement as of September 30, 2021

Dear Board Members:

We are pleased to present the Governmental Accounting Standards Board Statement No. 67 (GASB 67) and No. 68 (GASB 68) Supplement as of September 30, 2021 for the City of Lauderhill Firefighters' Retirement System (the Plan). Note that this report is a supplement to the actuarial valuation of the Plan as of October 1, 2021.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report provides information required to be disclosed under GASB 67 and GASB 68 as described in the statement and the implementation guide. The relevant dates are as follows:

GASB 67		GASB 68	
Valuation Date	10/01/2021	Valuation Date	10/01/2021
Measurement Date	09/30/2021	Measurement Date	09/30/2021
Reporting Date	09/30/2021	Reporting Date	09/30/2021

Please let us know if you have any questions or need additional information.

Sincerely,

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

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

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Statement of Fiduciary Net Position

As of September 30,	2021	2020
Assets		
Receivables:		
Employer contributions	\$266,330	\$0
State contributions	456,497	\$414,302
Member contributions	37,874	0
Accrued investment income	137,136	116,424
Note interest	0	18,068
Receivable for securities sold	<u>117,037</u>	<u>72,765</u>
Total receivables	<u>\$1,014,874</u>	<u>\$621,559</u>
Investments, at fair value:		
Money market funds	\$2,360,826	\$1,552,326
Equity securities	48,376,792	41,870,456
U.S. government securities	8,104,999	5,975,856
Corporate bonds	10,220,361	8,640,092
Commingled equity funds	28,115,667	22,714,720
Real estate funds	13,587,661	12,044,799
Farmland investment fund	2,472,410	2,249,351
Note receivable	<u>1,031,250</u>	<u>1,031,250</u>
Total investments	<u>\$114,269,966</u>	<u>\$96,078,850</u>
Total assets	<u>\$115,284,840</u>	<u>\$96,700,409</u>
Liabilities		
Accounts payable and accrued expenses	\$112,429	\$123,077
Deferred interest income	0	15,625
Payable for securities purchased	<u>133,880</u>	<u>74,004</u>
Total liabilities	<u>\$246,309</u>	<u>\$212,706</u>
Net position restricted for pensions	<u>\$115,038,531</u>	<u>\$96,487,703</u>

Statement of Changes in Fiduciary Net Position

As of September 30,	2021	2020
Additions		
Contributions:		
Employer	\$3,018,920	\$3,210,740
State of Florida	456,497	414,303
Employees	<u>977,337</u>	<u>978,989</u>
Total contributions	<u>\$4,452,754</u>	<u>\$4,604,032</u>
Investment income (loss):		
Net (depreciation) appreciation in fair value of investments	\$18,190,147	\$6,963,553
Interest and dividends	1,917,926	1,748,372
Other income	0	0
Notes receivable income	<u>46,562</u>	<u>68,693</u>
Total investment income	<u>\$20,154,635</u>	<u>\$8,780,618</u>
Less investment expenses:		
Investment expense	<u>\$586,655</u>	<u>\$506,458</u>
Net investment income	<u>\$19,567,980</u>	<u>\$8,274,160</u>
Total additions	<u>\$24,020,734</u>	<u>\$12,878,192</u>
Deductions		
Benefits paid	\$4,557,648	\$4,437,023
DROP payments	237,656	427,962
Supplemental plan payments	433,922	642,235
Refund of contributions	79,742	5,600
Administrative expenses	<u>160,938</u>	<u>199,702</u>
Total deductions	<u>\$5,469,906</u>	<u>\$5,712,522</u>
Net increase in net position	\$18,550,828	\$7,165,670
Net position restricted for pensions		
Beginning of year	<u>96,487,703</u>	<u>89,322,033</u>
End of year	<u>\$115,038,531</u>	<u>\$96,487,703</u>

Net Pension Liability

The total pension liability under GASB 67 and 68 is based on the October 1, 2021 actuarial valuation which used the following actuarial assumptions applied to all periods included in the measurement.

Inflation expectation reported by the investment monitor:	2.2%
Salary increases:	Graded by service from 8.25% to 4.11%
Investment rate of return:	7.2% net of investment expense, including inflation
Mortality:	As used in the July 1, 2019 and 2020 actuarial valuations for Special Risk members in the FRS, as required by State Statute.

Assumptions are based on the results of an actuarial experience study for the period October 1, 2012 to September 30, 2017.

The long-term expected rate of return on investments was determined using a building-block method. Best-estimate ranges of expected future real rates of return are developed for each major asset class. The long-term expected rate of return on investments is the best-estimate ranges weighted by the asset allocation plus expected inflation and expected investment expense. Best estimates of arithmetic real rates of return for each major asset class as provided by the investment monitor are shown in the following table:

Investment Category	Target Allocation	Long Term Real Mean Return*
Large Cap	35.0%	8.28%
Mid Cap	7.5%	10.22%
Small Cap	7.5%	9.28%
International	10.0%	5.57%
Emerging Markets	5.0%	11.31%
Real Assets	12.0%	6.45%
Farmland	3.0%	6.45%
Fixed Income	<u>20.0%</u>	2.19%
	100.0%	
Weighted Average Long Term Real Mean Return =		6.89%

*For illustrative purposes, historical long term (20 year) average returns have been used as a reasonable expectation of returns.

The expected rate of inflation reported by the investment monitor is 2.2%.

Note, however, that long-term expected net rates of return for actuarial valuations should be compared to geometric returns.

The discount rate used to measure the total pension liability was 7.2%. This is the single rate that reflects the long-term expected net rate of return on pension plan investments expected to be used to finance the payment of benefits.

A projection of cash flows used to determine the discount rate assumed that plan member contributions are made at the current contribution rate and that City contributions will be made equal to the difference between the actuarially determined contribution and the member contributions. Based on those assumptions, the pension plan's fiduciary net position is projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected gross rate of return on pension plan investments is applied to all periods of projected benefits payments to determine the total pension liability. For purposes of this determination we understand pension plan assets are expected to be invested using a strategy to achieve the discount rate.

Note: See "Actuarial Assumptions and Methods" for a full description of the assumptions used in the determination of the total pension liability.

The components of the net pension liability as of September 30, 2021 were as follows:

Total pension liability	\$114,886,732
Plan fiduciary net position	<u>(115,038,531)</u>
Net pension liability	<u>\$(151,799)</u>

Sensitivity of the net pension liability to changes in the discount rate follows.

	1% Decrease (6.20%)	Current Discount Rate (7.20%)	1% Increase (8.20%)
Net pension liability	\$13,676,936	\$(151,799)	\$(11,552,752)

Schedule of Changes in Net Pension Liability and Related Ratios

This schedule will be updated each year until a 10-year history is accumulated.

Year Ending September 30,	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability								
Service cost	\$2,349,588	\$2,490,774	\$2,694,312	\$2,756,657	\$2,619,073	\$2,527,101	\$2,558,195	\$2,440,094
Interest	7,678,778	7,504,557	7,308,376	7,212,219	6,818,819	6,519,385	6,289,742	5,928,052
Changes of benefit terms	1,833,450	207,840	(2,411,361)	324,964	268,422	338,414	357,454	345,399
Differences between expected and actual experience	978,239	863,344	(115,374)	(1,803,585)	(326,449)	(749,900)	(1,715,691)	(551,848)
Changes of assumptions	0	(1,614,183)	0	4,732,870	224,755	1,946,542	101,056	96,389
Benefit payments	(5,229,226)	(5,507,220)	(4,668,908)	(4,794,601)	(4,512,657)	(5,500,238)	(3,730,013)	(3,982,063)
Contribution refunds	(79,742)	(5,600)	(84,793)	(107,919)	(35,787)	(52,793)	(69,592)	(4,028)
Other	<u>(7,156)</u>	<u>(34,142)</u>	<u>(63,736)</u>	<u>(47,435)</u>	<u>(71,203)</u>	<u>(114,118)</u>	<u>(39,152)</u>	<u>(19,920)</u>
Net change in total pension liability	7,523,931	3,905,370	2,658,516	8,273,170	4,984,973	4,914,393	3,751,999	4,252,075
Total pension liability - beginning	<u>107,362,801</u>	<u>103,457,431</u>	<u>100,798,915</u>	<u>92,525,745</u>	<u>87,540,772</u>	<u>82,626,379</u>	<u>78,874,380</u>	<u>74,622,305</u>
Total pension liability - ending (a)	\$114,886,732	\$107,362,801	\$103,457,431	\$100,798,915	\$92,525,745	\$87,540,772	\$82,626,379	\$78,874,380
Plan fiduciary net position								
Contributions - employer	\$3,018,920	\$3,210,740	\$3,695,375	\$3,586,180	\$3,521,811	\$3,822,621	\$4,064,434	\$4,164,581
Contributions - State of Florida	456,497	414,303	396,652	372,790	394,437	391,657	485,663	492,840
Contributions - employee	977,337	978,989	1,044,815	1,072,585	1,065,791	986,417	972,711	970,011
Net investment income	19,567,980	8,274,160	3,094,554	7,325,447	8,980,612	6,286,349	(507,362)	5,036,474
Benefit payments	(5,229,226)	(5,507,220)	(4,668,908)	(4,794,601)	(4,512,657)	(5,500,238)	(3,730,013)	(3,982,063)
Contribution refunds	(79,742)	(5,600)	(84,793)	(107,919)	(35,787)	(52,793)	(69,592)	(4,028)
Administrative expense	(160,938)	(199,702)	(184,320)	(216,523)	(220,226)	(219,180)	(176,928)	(169,317)
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	18,550,828	7,165,670	3,293,375	7,237,959	9,193,981	5,714,833	1,038,913	6,508,498
Plan fiduciary net position - beginning	<u>96,487,703</u>	<u>89,322,033</u>	<u>86,028,658</u>	<u>78,790,699</u>	<u>69,596,718</u>	<u>63,881,885</u>	<u>62,842,972</u>	<u>56,334,474</u>
Plan fiduciary net position - ending (b)	\$115,038,531	\$96,487,703	\$89,322,033	\$86,028,658	\$78,790,699	\$69,596,718	\$63,881,885	\$62,842,972
Net pension liability - ending (a) - (b)	(\$151,799)	\$10,875,098	\$14,135,398	\$14,770,257	\$13,735,046	\$17,944,054	\$18,744,494	\$16,031,408
Plan fiduciary net position as a percentage of the total pension liability	100.13 %	89.87 %	86.34 %	85.35 %	85.16 %	79.50 %	77.31 %	79.67 %
Covered employee payroll	\$8,580,684	\$8,056,817	\$7,990,310	\$7,634,463	\$7,651,439	\$7,136,191	\$6,884,383	\$6,945,643
Net pension liability as a percentage of covered employee payroll	(1.77)%	134.98 %	176.91 %	193.47 %	179.51 %	251.45 %	272.28 %	230.81 %

Statement of Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 9/30/2020	\$107,362,801	\$96,487,703	\$10,875,098
Changes for the year:			
Service cost	2,349,588		2,349,588
Interest	7,678,778		7,678,778
Changes of benefit terms	1,833,450		1,833,450
Differences between expected and actual experience	978,239		978,239
Changes of assumptions	0		0
Contributions—employer		3,018,920	(3,018,920)
Contributions—State of Florida		456,497	(456,497)
Contributions—employee		977,337	(977,337)
Net investment income		19,567,980	(19,567,980)
Benefit payments, including refunds of employee contributions	(5,308,968)	(5,308,968)	0
Administrative expense		(160,938)	160,938
Other changes	(7,156)	0	(7,156)
Net changes	<u>7,523,931</u>	<u>18,550,828</u>	<u>(11,026,897)</u>
Balances at 9/30/2021	<u>\$114,886,732</u>	<u>\$115,038,531</u>	<u>\$(151,799)</u>

Pension Expense and Deferred Outflows and Inflows of Resources

Pension expense for the year ended September 30, 2021 is as shown below.

Description	Amount
Service cost	\$2,349,588
Interest on the total pension liability	7,678,778
Changes of benefit terms	1,833,450
Differences between expected and actual experience	(73,171)
Changes of assumptions	774,729
Employee contributions	(977,337)
Projected earnings on pension plan investments	(6,894,063)
Differences between projected and actual earnings on plan investments	(3,197,533)
Pension plan administrative expense	160,938
Other changes in fiduciary net position	(7,156)
Total pension expense	<u>\$1,648,223</u>

There are deferred outflows and inflows of resources from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$1,243,890	\$158,797
Changes of assumptions	330,202	912,365
Net difference between projected and actual earnings	<u>0</u>	<u>10,185,033</u>
Total	<u>\$1,574,092</u>	<u>\$11,256,195</u>

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended September 30:	
2022	\$(2,256,654)
2023	(2,207,358)
2024	(2,772,237)
2025	(2,445,854)
2026	0

Recognition of Deferred Outflows and Inflows of Resources

<u>Year</u>	<u>Original Amount</u>	<u>Recognition Period</u>	<u>Recognition Year</u>				
			<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Differences between Expected and Actual Experience							
2017	(326,449)	4.5	(36,273)		0	0	0
2018	(1,803,585)	4.3	(419,438)	(125,833)	0	0	0
2019	(115,374)	4.2	(27,470)	(27,470)	(5,494)		0
2020	863,344	4.6	187,683	187,683	187,683	112,612	0
2021	978,239	4.4	222,327	222,327	222,327	222,327	88,931
0							
Changes in Assumptions							
2017	224,755	4.5	24,971	0	0 ⁰	0	0
2018	4,732,870	4.3	1,100,667	330,202	0	0	0
2020	(1,614,183)	4.6	(350,909)	(350,909)	(350,909)	(210,547)	
Differences between Projected and Actual Earnings on Pension Plan Investments							
2017	(3,524,377)	5.0	(704,877)		0	0	0
2018	(1,158,443)	5.0	(231,689)	(231,687)	0	0 ⁰	0
2019	3,178,317	5.0	635,663	635,663	635,665	0	0
2020	(1,809,234)	5.0	(361,847)	(361,847)	(361,847)	(361,846)	
2021	(12,673,917)	5.0	(2,534,783)	(2,534,783)	(2,534,783)	(2,534,783)	(2,534,785)
0							

0

Schedule of Contributions

Year Ending September 30,	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially determined contribution	\$3,247,169	\$3,409,066	\$3,887,214	\$3,772,575	\$3,716,888	\$3,985,678	\$4,231,795	\$4,331,942	\$4,369,844	\$3,691,300
Contributions in relation to the actuarially determined contribution	<u>3,247,169</u>	<u>3,417,891</u>	<u>3,893,701</u>	<u>3,772,575</u>	<u>3,719,029</u>	<u>3,989,982</u>	<u>4,231,795</u>	<u>4,331,942</u>	<u>4,369,844</u>	<u>3,691,300</u>
Contribution deficiency (excess)	<u>\$0</u>	<u>\$(8,825)</u>	<u>\$(6,487)</u>	<u>\$0</u>	<u>\$(2,141)</u>	<u>\$(4,304)</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Covered employee payroll	\$8,580,684	\$8,056,817	\$7,990,310	\$7,634,463	\$7,651,439	\$7,136,191	\$6,884,383	\$6,945,643	\$6,716,257	\$6,445,935
Contributions as a percentage of covered-employee payroll	37.8 %	42.4 %	48.7 %	49.4 %	48.6 %	55.9 %	61.5 %	62.4 %	65.1 %	57.3 %

Notes to Schedule

Methods and assumptions used to determine contributions for the year ending September 30, 2021:

Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	25 years effective October 1, 2016. Prior to this change a 30 year period was used.
Asset valuation method	4-year smoothed market
Inflation	2.0%
Salary increases	Graded by service from 8.25% to 4.11%, including inflation
Investment rate of return	Effective October 1, 2020, the investment return is 7.2%, net of investment expenses, including inflation. Effective October 1, 2018, the investment return was 7.3%, net of investment expenses, including inflation. Effective October 1, 2016, the investment return is 7.85%, net of investment expenses, including inflation. Prior to the change the assumption was 8% gross of investment expenses, including inflation.
Retirement age	See "Description of Assumptions and Methods" for the assumed retirement age assumption
Mortality	See "Description of Assumptions and Methods" for the mortality assumption

Schedule of Investment Returns

This schedule will be updated each year until a 10-year history is accumulated.

Year Ending September 30,	Annual money-weighted rate of return net of investment expense
2021	20.54 %
2020	9.26 %
2019	3.65 %
2018	9.31 %
2017	12.89 %
2016	10.02 %
2015	(0.66)%
2014	8.83 %

Plan Membership Statistics

Valuation as of October 1,	2021	2020
Inactive members or beneficiaries currently receiving benefits	89	89
Inactive members entitled to but not yet receiving benefits	2	2
Active members	<u>96</u>	<u>85</u>
Total	<u>187</u>	<u>176</u>

Plan Description

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by local ordinance.

Effective Date: July 1, 1977. The Plan was most recently amended December 9, 2019 with some items retroactively effective October 29, 2018 and November 25, 2019 with Ordinance No. 190-10-141.

Plan Administrator: The Board of Trustees

Board Composition: Two members are elected from among the fire employees of the City, who are members of the plan, two city residents appointed by the Commission and one person is chosen by a majority of the previous four members.

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

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Premium Tax Revenues: State insurance premium tax revenues remitted annually to the City which are collected on casualty insurance policies in the City in accordance with Florida Statutes (F.S.) Chapter 175. Commencing October 1, 2016, the City and union mutually consent that 50% of the Premium Tax Revenues received by the City are used to reduce its pension contributions or the UAL (whichever the City prefers), and 50% used to fund the "Supplemental Retirement Benefit Account."

Member: Firefighters become Members immediately upon hire (after medical examination and the firefighter acceptance of the terms and conditions which may include a declaration of ineligibility for disability benefits, designation of a Beneficiary and authorization for Employee Contribution deductions). Employees hired prior to October 1, 2009 are part of Tier One. Employees hired on or after October 1, 2009 are part of Tier Two.

Actuarial Equivalence: Actuarial Equivalence is determined using an interest rate of 7.0% and the 1971 Group Annuity Mortality Table for males.

Credited Service: Years and completed months of service (omitting intervening years and fractional parts of years when not employed as a full-time firefighter by the City) for which Employee Contributions are not withdrawn. Credited Service may be granted for an authorized leave of absence (not more than 6 months) and military leave (not more than 5 years assuming the member returns to service within one year).

Vesting: 100% upon earning ten years of Credited Service.

Earnings: Fixed monthly remuneration paid by the City to a firefighter, excluding overtime, bonuses and any other non-regular payment.

Employee Contributions: Effective October 1, 1997, 13.72% of Earnings. Ordinance No. 190-10-141 revised employee contributions as shown below.

<u>Effective</u>	<u>Percentage of Earnings</u>
10/01/1997	13.72%
10/30/2018	12.72%
10/01/2019	11.72%
10/01/2020	10.72%

Effective November 25, 2019, Employee Contributions are payable during DROP participation at a rate of 3.0% of Earnings. However, Tier One Members do not contribute 3% of Earnings until after the first

five years of DROP participation if they (1) were in the DROP on October 29, 2018 (and still in the DROP on November 25, 2019) or (2) were not eligible to enter into the DROP on October 29, 2018 but became eligible prior to November 25, 2019.

Accumulated Contributions means a member's own contributions and contributions picked up on behalf of a Member, plus interest compounded annually. All benefits payable under this system are in lieu of a refund of Accumulated Contributions. In any event, each Member is granted the payment of benefits at least equal to Accumulated Contributions with interest.

A Member who terminates non-vested is entitled to a refund of accumulated Employee Contributions with interest.

Vested Members who terminate employment prior to being eligible to receive an annuity may leave their Accumulated Contributions in the fund and begin commencement of the Accrued Benefit as early as age 50 as defined under the Early Retirement Benefit.

Contributions may be repaid with interest within 90 days after reemployment in order to maintain prior Credited Service.

Average Monthly Earnings: Prior to the changes in Ordinance No. 190-10-141, the Average Monthly Earnings for Tier One Members effective October 1, 2003 was 1/12 of the average of annual Earnings for the three highest consecutive years of the last ten full years immediately preceding the actual retirement or termination date. The Average Monthly Earnings for Tier Two Members who were to retire with 25 or more years of Credited Service was to be computed in the same manner. The Average Monthly Earnings for Tier Two Members who were to retire with less than 25 years of Credited Service was 1/12 of the average annual Earnings for the four highest consecutive years of the last ten full years immediately preceding the actual retirement or termination date.

Effective November 25, 2019 as provided by Ordinance No. 190-10-141, for Members not eligible for Normal Retirement at November 25, 2019, Average Monthly Earnings is the average of annual Earnings for the five highest consecutive years of the last ten full years immediately preceding the actual retirement or termination date. However, Average Monthly Earnings are not less than the Average Monthly Earnings determined on November 25, 2019 prior to Ordinance No. 190-10-141.

Note the wording in Ordinance No. 190-10-141 indicates the five-year average Earnings is applicable for prospective Credited Service as of November 25, 2019. However, as confirmed with the Board of Trustees, the five-year average is applicable to all Credited Service.

Normal Retirement Date: Effective October 1, 1998, the first day of the month coincident with or next following the earliest of (i) age 55 and completion of 10 years of Credited Service, or (ii) 20 years Credited Service, regardless of age.

Normal Retirement Benefit: The Accrued Benefit.

Accrued Benefit: Effective for Members retiring on or after November 25, 2019 who are part of Tier One:

3.0% x Average Monthly Earnings x Credited Service Prior to 10/1/2003

Plus

4.0% x Average Monthly Earnings x Credited Service on or After 10/1/2003 and Prior to 11/25/2019

Plus

3.0% of Average Monthly Earnings x Credited Service on or After 11/25/2019

The 3.0% multiplier on Tier One Credited Service on or after November 25, 2019 is in effect for those who were not Normal Retirement eligible on November 25, 2019. For Tier One Members who were Normal Retirement eligible by November 25, 2019 the 4.0% multiplier continues for Credited Service on or after November 25, 2019.

The Tier Two Accrued Benefit is 3.0% x Average Monthly Earnings x Credited Service, limited to not more than 75% of Average Monthly Earnings. Tier Two members may increase their pension multiplier to 3.5% provided all costs associated with such an increase (or its actuarially equivalent cost) are borne solely by the Tier Two Member as determined by the Plan actuary. Tier Two members who increase their pension multiplier to 3.5% are not subject to the 75% cap. In no circumstance should a Tier Two Member's total benefit exceed 100% of Average Monthly Earnings.

This benefit is payable as a 10-year certain and continuous annuity.

Early Retirement Date: The first day of the month coincident with or next following the attainment of age 50 and the completion of 10 years of Credited Service.

Early Retirement Benefit: The Accrued Benefit reduced by 3% per year by which the commencement of benefits precedes the Normal Retirement Date.

Delayed Retirement Date: A date following the Normal Retirement Date upon which a Member actually retires.

Delayed Retirement Benefit: On the first day of any month coincident with or next following the Delayed Retirement Date, the benefit payable is computed as described under the Normal Retirement Benefit based on Average Monthly Earnings and Credited Service as of the Delayed Retirement Date.

Cost-of-Living Adjustment (COLA): Prior to the changes in Ordinance No. 190-10-141, the COLA for Tier One Members effective October 1, 2006 was a 1.5% annual COLA is payable after three years of retirement or DROP participation (for both then current and future retirees). Tier Two Members' monthly retirement benefits were to be increased annually after three years of retirement or DROP participation by the net investment return of the Plan, not less than 0% and not more than 1.5% annually. The COLAs described in this paragraph continue to be payable for Members who were Normal Retirement eligible on November 25, 2019 or who terminated employment due a vested deferred benefit prior to November 25, 2019.

With the adoption of Ordinance No. 190-10-141, for all Members who were not Normal Retirement eligible on November 25, 2019 only the portion of the monthly retirement benefit for Credited Service earned on or before October 29, 2018 will have COLAs applied as described prior to this ordinance amendment. For Credited Service earned after October 29, 2018, a 1% annual COLA is payable after five years of retirement. However, a total of eight 1% COLAs are granted during the Member's lifetime.

Following the death of the retiree, the COLA is paid to each beneficiary.

Variable Benefit: For all firefighters employed on or after October 1, 1997, a Variable Benefit will be paid, effective October 1, 1999. Effective each October 1, a benefit increase of no more than 3% may be granted which is funded solely based on the investment return of the system and only in such amount as exceeds both (1) the investment return assumed for purpose of the actuarial valuation and (2) the total experience gains as compared to actuarial assumptions. Members who retired during the prior fiscal year are provided a prorata increase reflecting the number of payments they received divided by 12.

Supplemental Benefit: This type of benefit and the payment of such benefit shall be determined by negotiations between the City and the union.

The Supplemental Benefit will be paid only to eligible persons who retired on or after October 1, 2000. The first Supplemental Benefit is paid effective October 1, 2003, if funding is available.

The "Supplemental Retirement Benefit Account" is annually funded with 75% of the prior year's actuarial gain remaining after the application of payment of the Variable Benefit plus

- prior to October 1, 2016, with any increase in State contributions over that received for fiscal 1997 in the amount of \$167,361 after all minimum benefits are paid; and
- effective October 1, 2016, 50% of annual Premium Tax Revenues.

In practice, the Supplemental Benefit payable in the year from October 1, 2016 to September 30, 2017 was based on the Supplemental Retirement Benefit Account balance on October 1, 2016 determined

using the funding described in the first bullet, above. The Supplemental Benefit payable in the year from October 1, 2017 to September 30, 2018 was based on the Supplemental Retirement Benefit Account balance on October 1, 2017 determined using the funding described in the second bullet, above.

The Supplemental Benefit is re-determined each October 1 in an amount equal to the Supplemental Retirement Benefit Account divided by the total number of retirees and vested participants. Payments are made on a monthly basis. In no event will the Supplemental Benefits paid to a retiree exceed one year's payment of individual retiree health insurance provided by the City for the previous year ending September 30.

All funds not distributed to retirees remain in the Supplemental Retirement Benefit Account to be used for additional future benefits to eligible retirees and their eligible designated beneficiaries. The accumulated balance of Premium Tax Revenues received prior to 2016 are used to fund benefits payable from the Supplemental Retirement Benefit Account. Note that as Supplemental Benefits are paid, the accumulated balance of Premium Tax Revenues is reduced.

The Supplemental Benefit is paid to the beneficiaries of eligible retirees if the retiree was retired or eligible to retire as of September 30, 2016. For all other individuals who retired on or after October 1, 2016 and who were not eligible to retire until on or after October 1, 2016, the Supplemental Benefit terminates upon death.

Participants in the DROP do not receive the Supplemental Benefit until commencement of retirement benefits after the end of the DROP.

Disability Retirement: Members become eligible for service incurred disability benefits immediately upon Plan entry. Members become eligible for non-service incurred disability benefits upon earning 2 years of Credited Service.

The benefit payable to any Member who is wholly prevented either mentally or physically from rendering useful and efficient service as a firefighter is the greater of (i) 50% of the rate of monthly Earnings in effect on the date of disability and (ii) the Accrued Benefit. Total benefits paid (including workers compensation for example) shall not exceed 100% of the employee's salary.

The Average Final Compensation used in the calculation of the Accrued Benefit is the average taken over the period of actual employment if employed fewer than the number of years in the applicable number of years in the averaging period.

This benefit is payable as a 10-year certain and continuous annuity.

Members may be required to undergo a reexamination annually to confirm continued existence of the disability condition. In the event of recovery from disability, the period of time while disabled is included as Credited Service in future retirement benefits for (i) those who are immediately reemployed as a firefighter upon recovery, and (ii) those who are not immediately reemployed as a firefighter because they were not offered a position. Members who are offered reemployment and do not accept are treated as if they terminated employment on the date of disability.

At age fifty-five (55), the firefighter shall have the option of converting the disability to a normal retirement benefit, provided eligibility requirements are met.

Death Benefits: For purposes of death benefits, the date of death is treated as being the end of the calendar month in which the member dies.

In the event of service incurred death, the benefit payable is the amount greater in value between a monthly benefit equal to 20% of the rate of monthly Earnings at the time of death or a refund of contributions with interest. The monthly benefit is payable to the Spouse until the death of the Spouse. If there is no Spouse or upon the death of the Spouse, the monthly benefit is divided equally among the Member's surviving children under the age of 18 until the youngest child reaches the age of 18. If there is no Spouse and the value of a refund of contributions with interest is greater than the value of the monthly benefit, the refund of contributions with interest is divided equally amongst surviving children under the age of 18. The Member may choose one or more persons other than their spouse and children

under the age of 18 to receive the refund of contributions with interest. If there is no designated beneficiary, no Spouse and no children under the age of 18, the refund of contributions with interest is payable to the Member's estate.

In the event of service incurred death of a firefighter who had earned at least 10 years of Credited Service at the time of their death, the beneficiary may instead elect to receive the Accrued Benefit payable as a 10-year certain only annuity commencing when the Member would have reached their Normal Retirement Date, or with reduction for early commencement as defined for an early retirement benefit payable at the Early Retirement Date.

In the event of non-service incurred death of an active Member who has attained their Normal Retirement Date or the Early Retirement Date, a death benefit is payable to the Member's Spouse as if the Member retired from employment on the date of death, elected to receive a benefit in the form of a 50% joint and survivor annuity, and died the next day. Upon the death of the surviving Spouse, this monthly benefit is divided equally among the Member's surviving children under the age of 18 until the youngest child reaches the age of 18. If at the time of death there is no Spouse, the monthly benefit is payable in the form of a 10-year certain and continuous annuity where the monthly benefit is divided equally among the Member's surviving children under the age of 18 until the youngest child reaches the age of 18. However, at the election of the Spouse or children (for a Member who did not designate a beneficiary other than their Spouse or children), a firefighter who has continued employment beyond his Normal Retirement Date and has made an election as to the form of benefit desired upon retirement prior to death, the monthly benefit will be paid in the form of benefit chosen by the Member as if the Member retired on the day of death. For Members who designated a beneficiary other than their Spouse or children, the designated beneficiary is entitled to receive the Accrued Benefit payable as a 10-year certain only annuity commencing when the Member would have reached their Normal Retirement Date, or with reduction for early commencement as defined for an early retirement benefit payable at the Early Retirement Date.

In the event of non-service incurred death of an active Member who is not eligible for Normal Retirement or Early Retirement, and the Member earned less than 10 years of Credited Service at the time of death, a refund of employee contributions with interest is payable. For Members who had earned at least 10 years of Credited Service at the time of their death, the designated beneficiary is entitled to receive the Accrued Benefit payable as a 10-year certain only annuity commencing when the Member would have reached their Normal Retirement Date, or with reduction for early commencement as defined for an early retirement benefit payable at the Early Retirement Date.

Optional Forms of Benefit: The Accrued Benefit described above is payable in the form of a 10-year certain and continuous annuity (except as noted to be a 10-year certain only annuity under certain death benefits). Members may optionally choose an actuarially equivalent single life annuity, joint and survivor annuity (based on a fraction designated by the Member), a joint and last survivor annuity (with 50%, 66 2/3%, 75%, or 100% continuance), or joint and survivor annuity with an optional "pop-up" to the single life annuity form in the event the beneficiary predeceases the Member. Members may also choose benefits to be paid in any form approved by the board so long as actuarial equivalence with the benefit otherwise payable is maintained. The value of optional benefits shall be actuarially equivalent to the value of benefits otherwise payable, and the present value of payments to the retiring Member must be at least equal to 50% of the total present value of payments to the retiring Member and his beneficiary.

Deferred Retirement Option Plan (DROP): Effective October 1, 2003, Tier One Members are eligible to enter the DROP on the first day of the month following the Member's completion of 20 years of Credited Service or upon earning a pension benefit equal to 80%. For Tier One Members who enter the DROP more than 90 days after attaining the 80% Accrued Benefit, the amount of time after the accrual of the 80% benefit until the entry into the DROP will result in a commensurate reduction in the maximum time allowed for DROP participation.

Members with 20 years of Credited Service as of October 1, 2000 were eligible to elect within a 90-day period after the enactment of this section to enter the DROP retroactively to October 1, 2000. The maximum participation in the DROP was 36 months as of October 1, 2000.

As provided by Ordinance No. 040-07-152, effective September 13, 2004 the maximum DROP participation period was extended to 60 months. Members in the DROP at the time of this change were allowed to extend their DROP participation so that their maximum participation in the DROP was 60 months.

As provided by Ordinance No. 190-10-141, effective November 25, 2019 the maximum DROP participation period is extended to 84 months. Members in the DROP at the time of this change may extend their DROP participation so that their maximum participation in the DROP is 84 months. However, any Member whose DROP period was limited due to having reached their 80% multiplier may only extend their DROP participation by 24 months from the time their DROP period was to expire previously.

Prior to the changes in Ordinance No. 190-10-141, Tier Two Members were to become eligible to enter the DROP on the first day of the month following completion of 25 years of Credited Service for a maximum period of 60 months where the DROP term was to be reduced one month for each month of eligibility following the completion of 25 years of Credited Service during which the Member did not participate in the DROP. As provided by Ordinance No. 190-10-141, effective November 25, 2019 Tier Two Members become eligible to enter the DROP on the first day of the month following completion of 20 years of Credited Service for a maximum period of 84 months where the DROP term is reduced one month for each month of eligibility following completion of 25 years of Credited Service during which the Member does not participate in the DROP.

DROP participants are not eligible for death or disability benefits.

The Accrued Benefit is frozen at DROP entry. No payment shall be made for accrued unused leave upon entering the DROP, nor shall the amount of accrued unpaid leave be used in the calculation of the amount of pension benefits.

See "Employee Contributions" which describes Employee Contributions that are made during DROP participation.

The monthly retirement benefits, including any variable benefits that would have been payable had the Member elected to cease employment and not join the DROP, are deposited in the participant's DROP account. Prior to the changes in Ordinance No. 190-10-141, these payments were accumulated with interest, credited quarterly, at a rate equal to the actual rate of return achieved by the trust fund net of investment expenses (where DROP account earnings for Tier Two Members was never to be less than 0%). At the option of the Tier One Member, the DROP account is credited at a fixed rate as determined by the board of trustees (currently 65.625% of the Plan's actuarially assumed investment return), but no higher than the actuarially assumed investment earnings. As provided by Ordinance No. 190-10-141, effective November 25, 2019 DROP interest crediting is revised to the actual rate of return achieved by the trust fund net of investment expenses with a floor of zero and a cap of 5% each fiscal year. Members in the DROP on October 29, 2018 (and still in the DROP on November 25, 2019) and Members who were not eligible for the DROP on October 29, 2018 but who became eligible to enter the DROP prior to November 25, 2019 continue to be eligible for the crediting as defined prior to change for the first five years of DROP. Following resignation and prior to distribution, a rate of interest, as determined by the board of trustees, shall be credited to the participant's DROP account.

As directed by the Board of Trustees, ordinance language which says "the gross return of the Fund less the Fund's administrative costs" means the actual rate of return achieved by the fund net of investment expenses as reported by the investment monitor.

Within 30 days following the end of any calendar quarter after the termination of the Member's employment as a firefighter, the balance credited to the DROP account is distributed in a single lump sum, either directly to the Member (subject to applicable tax withholding) or as a direct rollover.

Defined Contribution Plan Component: Ordinance No. 160-01-100 was adopted effective February 8, 2016 which created a defined contribution (DC) component to the Plan. This component of the Plan is not activated until a portion of Chapter 175 premium tax revenues have been assigned to fund the DC Plan.

Actuarial Assumptions and Methods

Net Assumed Rate of Investment Return: 7.2% per year, net of investment expenses

Salary Increase – Individual: Salary increases vary based on service as follows:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	8.25%	11	5.25%
1	8.00%	12	5.00%
2	7.75%	13	4.75%
3	7.50%	14	4.50%
4	7.25%	15	4.30%
5	7.00%	16	4.22%
6	6.50%	17	4.19%
7	6.25%	18	4.16%
8	6.00%	19	4.14%
9	5.75%	>=20	4.11%
10	5.50%		

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

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

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

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

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

Juvenile rates are used for ages 15-17.

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

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

Retirement: Retirement is assumed at 50% of those eligible to retire or DROP with 20 through 24 years of service with 100% choosing to retire or DROP at 25 years of service or upon reaching age 55 with 10 years of service. DROP Members are assumed to retire on the valuation date such that no future employee contributions are expected.

Termination: Unisex rates, as follows:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	6.0%	6	3.5%
1	5.5%	7	3.0%
2	5.3%	8	2.8%
3	5.0%	9	2.7%
4	4.5%	10	2.6%
5	4.0%	>=11	0.0%

Disability: Unisex rates, as follows:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
15-21	0.14%	36	0.24%	46	0.59%	56	1.68%
22-25	0.15%	37	0.25%	47	0.70%	57	1.81%
26-27	0.16%	38	0.26%	48	0.79%	58	1.95%
28-29	0.17%	39	0.28%	49	0.90%	59	2.09%
30	0.18%	40	0.30%	50	1.00%	>=60	0.00%
31	0.19%	41	0.32%	51	1.10%		
32	0.20%	42	0.35%	52	1.20%		
33	0.21%	43	0.39%	53	1.31%		
34	0.22%	44	0.44%	54	1.43%		
35	0.23%	45	0.51%	55	1.55%		

On and Off Duty Disability and Death: 75% of disabilities are assumed to be in the line of duty.

Percentage Married at Retirement: 40% of active Members are assumed to be married at retirement and elect the 100% joint & survivor form of benefit.

Spouse Ages: Where spousal information was supplied, that information was used. Otherwise, wives are assumed to be three years younger than their husbands.

Administrative Expenses: Actual administrative expense for the prior year is added to the Normal Cost.

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

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

A description of the funding method is found in the October 1, 2021 actuarial valuation report on the page entitled "Glossary of Actuarial Terms."