

November 7, 2022

VIA EMAIL

Board of Trustees City of Live Oak Firefighters' Pension Board

RE: GASB Statement No.67 and No.68 - City of Live Oak Firefighters' Substitute Pension Trust Fund

Dear Board:

We are pleased to present to the Board a GASB Statement No.67 and No.68 measured as of September 30, 2022 as for the City of Live Oak Firefighters' Substitute Pension Trust Fund.

The calculation of the liability associated with the benefits referenced in this report was performed for satisfying the requirements of GASB No.67 and No.68 and is not applicable for other purposes, such as determining the plan's funding requirements. A calculation of the plan's liability for other purposes may produce significantly different results.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2020. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2022 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.

Certain schedules should include a 10-year history of information. As provided for in GASB No.67 and No.68, this historical information is only presented for the last 2 years in which the information was measured in conformity with the requirements of GASB No.67 and No.68.

To the best of our knowledge, these statements are complete and accurate and are in accordance with generally recognized actuarial practices and methods. 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 valuation, we did not perform an analysis of the potential range of such future measurements.

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.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #20-7778

Enclosures

# GASB 67

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2022

ASSETS	MARKET VALUE
Cash and Cash Equivalents: Cash	33,127
Total Cash and Equivalents	33,127
Receivables:	
From Broker for Investments Sold	533
Investment Income	2,290
Total Receivable	2,823
Investments:	
U. S. Bonds and Bills	307,373
Federal Agency Guaranteed Securities	45,580
Corporate Bonds	181,902
Stocks	826,007
Total Investments	1,360,862
Total Assets	1,396,812
LIABILITIES	
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	1,396,812

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2022 Market Value Basis

## **ADDITIONS**

Contributions:		
City	60,869	
Total Contributions		60,869
Investment Income: Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	(302,259) 28,010 (15,940)	
Net Investment Income		(290,189)
Total Additions		(229,320)
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	176,506	
Total Distributions		176,506
Administrative Expense		7,986
Total Deductions		184,492
Net Increase in Net Position		(413,812)
NET DOGITION DEGEDICITED FOD DENGLONG		
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year		1,810,624
End of the Year		1,396,812

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

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2022)

## Plan Administration

The Plan is a single-employer defined benefit pension plan. The general administration and responsibility for the proper operation of the Plan and for making effective the provisions of Ordinance 1274 are hereby vested in a Board of Trustees consisting of five (5) persons as follows:

1. Two (2) residents of the City, recommended by the Mayor and appointed by the City Council;

2. Two (2) active or retired Firefighters/plan members elected by a majority of the active and retired Firefighters who are members of this Plan; and

3. A fifth Trustee to be selected by the other four Trustees and appointed as a ministerial act by the City Council.

Active Members of this Plan shall include any Firefighter who was an active Member of the Predecessor Plan on the date the Predecessor Plan was terminated, including all Members receiving benefits on that termination date.

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

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	7
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	
	7

### Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Live Oak Firefighters' Substitute Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### **Contributions**

Member Contributions: 3.0% of Compensation.

City Contributions: Amount required after Member contributions in order to pay current costs and amortize unfunded past service cost over a period not to exceed 30 years

#### Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2022:

Asset Class	Target Allocation
Domestic Equity	55.00%
International Equity	10.00%
Fixed Income	35.00%
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, 2022, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -16.58 percent.

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

## NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2022 were as follows:

Total Pension Liability	\$ 1,879,493
Plan Fiduciary Net Position	\$ (1,396,812)
Sponsor's Net Pension Liability	\$ 482,681
Plan Fiduciary Net Position as a percentage of Total Pension Liability	 74.32%

### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2020 updated to September 30, 2022 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	N/A
Discount Rate	6.75%
Investment Rate of Return	6.75%

## Mortality Rate Healthy Retiree:

Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year. *Mortality Rate Beneficiary Lives:*Female: PubG.H-2010 (Below Median) for Healthy Retirees.
Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.

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

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2019 FRS valuation report for special risk employees.

Since this is a retiree-only plan, the assumptions for withdrawal, retirement, disability, payroll growth, and salary increases are not applicable. Accordingly, no formal actuarial experience study has been performed for these assumptions.

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 2022 the inflation rate assumption of the investment advisor was 2.26%.

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, 2022 are summarized in the following table:

	Long Term Expected Real Rate of		
Asset Class	Return <sup>1</sup>		
Domestic Equity	5.84%		
International Equity	4.64%		
Fixed Income	1.31%		

<sup>1</sup> Source: Morgan Stanley. Secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

## Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.75 percent.

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

	Current					
	1% Decrease Discount Rate				1% Increase	
	5.75%		6.75%		7.75%	
Sponsor's Net Pension Liability	\$	640,415	\$	482,681	\$	345,940

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

	0	9/30/2022	0	9/30/2021
Total Pension Liability				
Service Cost		-		-
Interest		124,424		124,432
Changes of benefit terms		-		-
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Benefit Payments, including Refunds of Employee Contributions		(176,506)		(176,284)
Net Change in Total Pension Liability		(52,082)		(51,852)
Total Pension Liability - Beginning		1,879,723		1,931,575
Total Pension Liability - Ending (a)	\$	1,827,641	\$	1,879,723
Plan Fiduciary Net Position				
Contributions - Employer		60,869		60,869
Net Investment Income		(290,189)		320,993
Benefit Payments, including Refunds of Employee Contributions		(176,506)		(176,284)
Administrative Expense		(7,986)		(14,579)
Net Change in Plan Fiduciary Net Position		(413,812)		190,999
Plan Fiduciary Net Position - Beginning		1,810,624		1,619,625
Plan Fiduciary Net Position - Ending (b)	\$	1,396,812	\$	1,810,624
Net Pension Liability - Ending (a) - (b)	\$	430,829	\$	69,099
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		76.43%		96.32%
Covered Payroll		N/A		N/A
Net Pension Liability as a percentage of Covered Payroll		N/A		N/A

## SCHEDULE OF CONTRIBUTIONS Last 2 Fiscal Years

				tributions elation to				Contributions
	Actuarially the Actuarially Contribution							as a percentage
	De	termined	Determined		Determined Deficiency		Covered	of Covered
Fiscal Year Ended	Cor	ntribution	Contributions		(	Excess)	Payroll	Payroll
09/30/2022	\$	60,869	\$	60,869	\$	-	N/A	N/A
09/30/2021	\$	60,869	\$	60,869	\$	-	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2020

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, 2020 Actuarial Valuation for the City of Live Oak Firefighters' Substitute Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

## SCHEDULE OF INVESTMENT RETURNS Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2022	-16.58%
09/30/2021	20.54%

## GASB 68

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2022)

## Plan Description

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1. Two (2) residents of the City, recommended by the Mayor and appointed by the City Council;

2. Two (2) active or retired Firefighters/plan members elected by a majority of the active and retired Firefighters who are members of this Plan; and

3. A fifth Trustee to be selected by the other four Trustees and appointed as a ministerial act by the City Council.

Active Members of this Plan shall include any Firefighter who was an active Member of the Predecessor Plan on the date the Predecessor Plan was terminated, including all Members receiving benefits on that termination date.

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

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	7
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	-
	7

## Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Live Oak Firefighters' Substitute Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### **Contributions**

Member Contributions: 3.0% of Compensation.

City Contributions: Amount required after Member contributions in order to pay current costs and amortize unfunded past service cost over a period not to exceed 30 years

## Net Pension Liability

The measurement date is September 30, 2022.

The measurement period for the pension expense was October 1, 2021 to September 30, 2022. The reporting period is October 1, 2021 through September 30, 2022.

The Sponsor's Net Pension Liability was measured as of September 30, 2022.

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

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2020 updated to September 30, 2022 using the following actuarial assumptions:

Inflation	2.30%
Salary Increases	N/A
Discount Rate	6.75%
Investment Rate of Return	6.75%

## GASB 68

Mortality Rate Healthy Retiree:
Female: PubS.H-2010 for Healthy Retirees, set forward one year.
Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year.
Mortality Rate Beneficiary Lives:
Female: PubG.H-2010 (Below Median) for Healthy Retirees.
Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.

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

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2019 FRS valuation report for special risk employees.

Since this is a retiree-only plan, the assumptions for withdrawal, retirement, disability, payroll growth, and salary increases are not applicable. Accordingly, no formal actuarial experience study has been performed for these assumptions.

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 2022 the inflation rate assumption of the investment advisor was 2.26%.

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, 2022 are summarized in the following table:

Asset Class	Target Allegation	Long Term Expected Real Rate of Return <sup>1</sup>
Asset Class	Target Allocation	Keal Kale of Kelulli
Domestic Equity	55.00%	5.84%
International Equity	10.00%	4.64%
Fixed Income	35.00%	1.31%
Total	100.00%	

<sup>1</sup> Source: Morgan Stanley. Secular annualized return and volatility estimates are based on a 20-year-plus time horizon. Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

## Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.75 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			n Fiduciary et Position		et Pension Liability				
	(a)			(b)		(a)-(b)				
Balance at September 30, 2021	\$	1,879,723	\$	1,810,624	\$	69,099				
Changes for a Year:										
Service Cost		-		-		-				
Interest		124,424		-		124,424				
Differences between Expected and Actual Experience		-		-		-				
Changes of assumptions		-		-		-				
Changes of benefit terms		-		-		-				
Contributions - Employer		-		60,869		(60,869)				
Net Investment Income		-		(290,189)		290,189				
Benefit Payments, including Refunds of Employee Contributions		(176,506)		(176,506)		-				
Administrative Expense		-		(7,986)		7,986				
Net Changes		(52,082)		(413,812)		361,730				
Balance at September 30, 2022	\$	1,827,641	\$	1,396,812	\$	430,829				

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

		Current						
	1%	Decrease	Dis	scount Rate	1	% Increase		
		5.75%		6.75%		7.75%		
Sponsor's Net Pension Liability	\$	640,415	\$	430,829	\$	345,940		

Pension Plan Fiduciary Net Position.

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

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

For the year ended September 30, 2022, the Sponsor will recognize a Pension Expense of \$66,111. On September 30, 2022, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Ou	Deferred utflows of esources	Deferred Inflows of Resources
Differences between Expected and Actual Experience		-	-
Changes of assumptions		-	-
Net difference between Projected and Actual Earnings on Pension Plan investments		224,679	
Total	\$	224,679	\$-

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:	
2023	\$ 60,372
2024	\$ 44,224
2025	\$ 38,436
2026	\$ 81,647
2027	\$ -
Thereafter	\$ -

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

	0	9/30/2022	0	9/30/2021
Total Pension Liability				
Service Cost		-		-
Interest		124,424		124,432
Changes of benefit terms		-		-
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Benefit Payments, including Refunds of Employee Contributions		(176,506)		(176,284)
Net Change in Total Pension Liability		(52,082)		(51,852)
Total Pension Liability - Beginning		1,879,723		1,931,575
Total Pension Liability - Ending (a)	\$	1,827,641	\$	1,879,723
Plan Fiduciary Net Position				
Contributions - Employer		60,869		60,869
Net Investment Income		(290,189)		320,993
Benefit Payments, including Refunds of Employee Contributions		(176,506)		(176,284)
Administrative Expense		(7,986)		(14,579)
Net Change in Plan Fiduciary Net Position		(413,812)		190,999
Plan Fiduciary Net Position - Beginning		1,810,624		1,619,625
Plan Fiduciary Net Position - Ending (b)	\$	1,396,812	\$	1,810,624
Net Pension Liability - Ending (a) - (b)	\$	430,829	\$	69,099
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		76.43%		96.32%
Covered Payroll		N/A		N/A
Net Pension Liability as a percentage of Covered Payroll		N/A		N/A

## SCHEDULE OF CONTRIBUTIONS Last 2 Fiscal Years

			Con	tributions				
	in relation to							Contributions
	Ac	tuarially	the A	Actuarially	Cor	ntribution		as a percentage
	Det	ermined	De	termined	De	ficiency	Covered	of Covered
Fiscal Year Ended	Con	tribution	Con	tributions	(I	Excess)	Payroll	Payroll
09/30/2022	\$	60,869	\$	60,869	\$	-	N/A	N/A
09/30/2021	\$	60,869	\$	60,869	\$	-	N/A	N/A

Notes to Schedule

Valuation Date:

10/01/2020

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, 2020 Actuarial Valuation for the City of Live Oak Firefighters' Substitute Pension Trust Fund prepared by Foster & Foster Actuaries and Consultants.

# EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

# COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2022

Beginning balance	\$ 69,099	\$		Dutflows	Expense
		φ	181,469	\$ 49,660	\$ -
Total Pension Liability Factors:					
Service Cost	-		-	-	-
Interest	124,424		-	-	124,424
Changes in benefit terms	-		-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions					
Current year amortization of experience difference	-		-	-	-
	-		-	-	-
Change in assumptions about future economic or demographic factors or other inputs	-		-	-	-
Current year amortization of change in assumptions	-		-	-	-
Benefit Payments, including Refunds of Employee					
Contributions	(176,506)		-	-	-
Net change	(52,082)		-	-	 124,424
Plan Fiduciary Net Position:					
Contributions - Employer	60,869		-	-	-
Projected Net Investment Income	118,045		-	-	(118,045)
Difference between projected and actual earnings on					
Pension Plan investments	(408,234)		-	408,234	-
Current year amortization	-		(51,836)	(103,582)	51,746
Benefit Payments, including Refunds of Employee				,	
Contributions	(176,506)		-	-	-
Administrative Expenses	(7,986)		-	-	7,986
Net change	(413,812)		(51,836)	304,652	(58,313)
Ending Balance	\$ 430,829	\$	129,633	\$ 354,312	\$ 66,111

# 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	Projec	ences Between ted and Actual Earnings	Recognition Period (Years)	2022	2023	2024	2025	2026	2	027	2028		2029		2030	
2022	\$	408,234	5	\$ 81,646	\$ 81,647	\$ 81,647	\$ 81,647	\$ 81,647	\$	-	\$	- \$		• \$		-
2021	\$	(216,056)	5	\$ (43,211)	\$ (43,211)	\$ (43,211) \$	\$ (43,211)	\$ - 3	\$	-	\$	- \$		- \$		-
2020	\$	28,938	5	\$ 5,788	\$ 5,788	\$ 5,788 \$	\$ -	\$ - 5	\$	-	\$	- \$		• \$		-
2019	\$	80,740	5	\$ 16,148	\$ 16,148	\$ - \$	\$ -	\$ - 5	\$	-	\$	- \$		• \$		-
2018	\$	(43,123)	5	\$ (8,625)	\$ -	\$ - \$	\$ -	\$ - 5	\$	-	\$	- \$		• \$		-
Net Increas	e (Decre	ease) in Pension	Expense	\$ 51,746	\$ 60,372	\$ 44,224	\$ 38,436	\$ 81,647	\$	-	\$	- \$		• \$		_