### MIDWAY FIRE PROTECTION DISTRICT FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION AS OF OCTOBER 1, 2021

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2023

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2021





June 27, 2022

Board of Trustees Midway Fire Protection District Firefighters' Pension Board

### Re: Midway Fire Protection District Firefighters' Pension Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Midway Fire Protection District Firefighters' Pension Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Midway Fire Protection District, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, 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 that apply the funding and accounting rules to generate the results. All internally developed models are reviewed as part of the valuation 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.

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, 2021 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Midway Fire Protection District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

By:

Drew D. Ballard, ASA, EA, MAAA Enrolled Actuary #20-8193

Luke M. Schoenhofen, ASA, EA, MAAA Enrolled Actuary #20-8968

DDB/lke

Enclosures

Midway Fire Protection District Firefighters' Pension Fund

Section	Title	Page
Ι	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. History of Funding Progress	15
	b. Actuarial Assumptions and Methods	16
	c. Glossary	18
	d. Discussion of Risk	19
III	Trust Fund	22
IV	Member Statistics	
	a. Statistical Data	27
	b. Age and Service Distribution	28
	c. Valuation Participant Reconciliation	29
V	Summary of Current Plan	30
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	32

# TABLE OF CONTENTS

### SUMMARY OF REPORT

The regular annual actuarial valuation of the Midway Fire Protection District Firefighters' Pension Fund, performed as of October 1, 2021, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2023.

The contribution requirements, compared with those set forth in the October 1, 2020 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2021 <u>9/30/2023</u>	10/1/2020 <u>9/30/2022</u>
Minimum Required Contribution % of Projected Annual Payroll	31.2%	30.7%
Member Contributions (Est.) % of Projected Annual Payroll	10.0%	10.0%
District And State Required Contribution % of Projected Annual Payroll	21.2%	20.7%
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll	\$153,220 6.7%	\$153,220 6.7%
District Required Contribution <sup>2</sup> % of Projected Annual Payroll	14.5%	14.0%

<sup>1</sup> Represents the amount received in calendar 2021. As per a Mutual Consent Agreement between the Membership and the District, all State Monies received each year will be available to offset the District's required contribution.

<sup>2</sup> The required contribution from the combination of District and State sources for the year ending September 30, 2023, is 21.2% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 14.5% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the October 1, 2020 actuarial valuation report. The increase is mainly attributable to net unfavorable plan experience outlined in the following paragraph, and an increase in active membership.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was less turnover than expected. This loss was offset in part by a gain associated with an investment return of 8.99% (Actuarial Asset Basis) which exceeded the 7.00% assumption.

### CHANGES SINCE PRIOR VALUATION

# Plan Changes

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

# Actuarial Assumption/Method Changes

There have been no assumption or method changes since the prior valuation.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2021	<u>10/1/2020</u>
A. Participant Data		
Actives	37	32
Service Retirees	2	2
DROP Retirees	0	0
Beneficiaries	0	0
Disability Retirees	1	1
Terminated Vested	<u>8</u>	<u>8</u>
Total	48	43
Total Annual Payroll	\$2,281,747	\$1,955,829
Payroll Under Assumed Ret. Age	2,281,747	1,955,829
Annual Rate of Payments to:		
Service Retirees	26,944	26,944
DROP Retirees	0	0
Beneficiaries	0	0
Disability Retirees	14,479	14,479
Terminated Vested	37,089	54,885
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	8,788,900	7,566,852
Market Value (MVA) <sup>1</sup>	9,475,095	7,494,228
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	10,834,510	9,041,104
Disability Benefits	204,002	174,241
Death Benefits	75,849	65,229
Vested Benefits	1,841,710	1,671,411
Refund of Contributions	120,466	91,858
Service Retirees	355,511	357,940
DROP Retirees <sup>1</sup>	0	0
Beneficiaries	0	0
Disability Retirees	169,321	170,872
Terminated Vested	324,827	401,534
Share Plan Balances <sup>1</sup>	0	0
Total	13,926,196	11,974,189

C. Liabilities - (Continued)	<u>10/1/2021</u>	<u>10/1/2020</u>
Present Value of Future Salaries	18,146,365	15,940,930
Present Value of Future		
Member Contributions	1,814,637	1,594,093
Total Normal Cost	645,970	540,746
Present Value of Future		
Normal Costs (EAN)	4,177,603	3,621,738
Accrued Liability (Retirement)	7,601,208	6,245,949
Accrued Liability (Disability)	87,095	70,953
Accrued Liability (Death)	42,272	35,718
Accrued Liability (Vesting)	1,150,636	1,057,188
Accrued Liability (Refunds)	17,723	12,297
Accrued Liability (Inactives) <sup>1</sup>	849,659	930,346
Share Plan Balances <sup>1</sup>	0	0
Total Actuarial Accrued Liability (EAN AL)	9,748,593	8,352,451
Total Actuarial Accrued		
Liability (Aggregate)	8,788,900	7,566,852
Unfunded Actuarial Accrued		
Liability (UAAL)	0	0
Funded Ratio (AVA / EAN AL)	90.2%	90.6%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2021	<u>10/1/2020</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	849,659	930,346
Actives	2,987,470	2,303,385
Member Contributions	1,455,099	1,221,209
Total	5,292,228	4,454,940
Non-vested Accrued Benefits	640,698	447,664
Total Present Value		
Accrued Benefits (PVAB)	5,932,926	4,902,604
Funded Ratio (MVA / PVAB)	159.7%	152.9%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	730,013	
Benefits Paid	(41,423)	
Interest	341,732	
Other	0	
Total	1,030,322	

Valuation Date Applicable to Fiscal Year Ending	10/1/2021 <u>9/30/2023</u>	10/1/2020 <u>9/30/2022</u>
E. Pension Cost		
Normal Cost (with interest)		
% of Total Annual Payroll <sup>2</sup>	29.3	28.6
Expenses (with interest)		
% of Total Annual Payroll <sup>2</sup>	1.9	2.1
Payment Required to Amortize		
Unfunded Actuarial Accrued Liability		
(as of 10/1/2021, with interest)		
% of Total Annual Payroll <sup>2</sup>	0.0	0.0
Minimum Required Contribution		
% of Total Annual Payroll <sup>2</sup>	31.2	30.7
Expected Member Contributions		
% of Total Annual Payroll <sup>2</sup>	10.0	10.0
Expected District and State Contribution		
% of Total Annual Payroll <sup>2</sup>	21.2	20.7
F. Past Contributions		
Plan Years Ending:	9/30/2021	
Total Required Contribution	574,268	
District and State Requirement	365,443	
Actual Contributions Made:		
Members (excluding buyback)	208,825	
District	230,000	
State	153,220	
Total	592,045	
G. Net Actuarial (Gain)/Loss	N/A	

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2021 and 9/30/2020.

<sup>2</sup> Contributions developed as of 10/1/2021 are expressed as a percentage of total annual payroll at 10/1/2021 of \$2,281,747.

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

# Projected Unfunded Year Actuarial Accrued Liability

# N/A - Aggregate Actuarial Cost Method

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2021	5.59%	6.36%
Year Ended	9/30/2020	15.22%	5.87%
Year Ended	9/30/2019	6.61%	5.96%
Year Ended	9/30/2018	7.28%	5.89%
Year Ended	9/30/2017	3.51%	5.89%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2021	18.86%	8.99%	7.00%
Year Ended	9/30/2020	6.71%	6.59%	7.00%
Year Ended	9/30/2019	5.65%	6.69%	7.00%
Year Ended	9/30/2018	7.32%	7.32%	7.00%
Year Ended	9/30/2017	13.32%	13.32%	7.00%
Year Ended Year Ended Year Ended	9/30/2020 9/30/2019 9/30/2018	6.71% 5.65% 7.32%	6.59% 6.69% 7.32%	7.00% 7.00% 7.00%

### STATEMENT BY ENROLLED ACTUARY

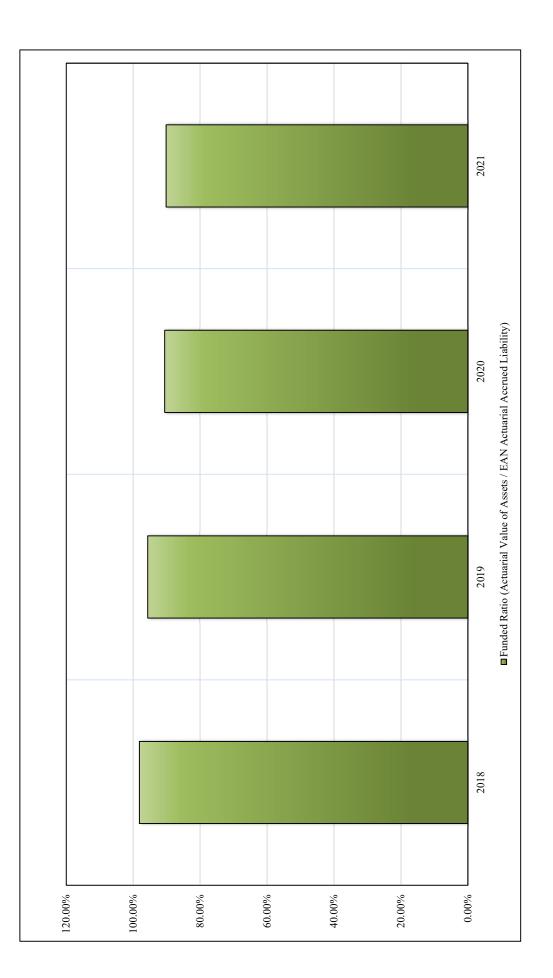
This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Drew D. Ballard, ASA, EA, MAAA Enrolled Actuary #20-8193

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman Bureau of Local Retirement Systems Post Office Box 9000 Tallahassee, FL 32315-9000

Mr. Steve Bardin Municipal Police and Fire Pension Trust Funds Division of Retirement Post Office Box 3010 Tallahassee, FL 32315-3010 HISTORY OF FUNDING PROGRESS



### ACTUARIAL ASSUMPTIONS AND METHODS

#### Mortality Rate

#### *Healthy Active Lives:*

**Female:** PubS.H-2010 (Below Median) for Employees, set forward one year. **Male:** PubS.H-2010 (Below Median) for Employees, set forward one year.

#### Healthy Retiree Lives:

**Female:** PubS.H-2010 for Healthy Retirees, set forward one year. **Male:** PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year.

#### Beneficiary Lives:

**Female:** PubG.H-2010 (Below Median) for Healthy Retirees. **Male:** PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.

### Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018. 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, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

7.00% per year compounded annually, gross of expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

\$41,598 annually, based on the average of actual expenses incurred in the prior two fiscal years.

# Interest Rate

Expenses

Sala	y	Increases

Retirement Age

Disability Rate

Termination Rate

**Funding Method** 

Asset Method

Assumed salary increases are displayed below:

Service	Rate
0	10.00%
1	8.00%
2-4	7.00%
5+	5.50%

10.0% per year eligible for Early Retirement. 10.0% per year eligible for Normal Retirement (with 100% at 25 Years of Service). Also, any member who has reached Normal Retirement Age on the valuation date is assumed to continue employment for one additional year.

Sample disability rates are displayed below:

% Becoming Disabled		
During t	he Year	
Age	Rate	
20	0.03%	
25	0.03%	
30	0.04%	
35	0.05%	
40	0.07%	
45	0.10%	
50	0.18%	
55	0.36%	
60	0.90%	

Additionally, 90% of disabilities are assumed to be service-incurred.

Assumed rates of termination are displayed below:

% Terminating			
During the	he Year	_	
Service	Rate	_	
0-2	15.0%	-	
3+	5.0%		

Aggregate Actuarial Cost Method.

All assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

### GLOSSARY

<u>Actuarial Value of Assets</u> is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

<u>Aggregate Actuarial Cost Method</u> (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost.

<u>Market Value of Assets</u> is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Normal (Current Year's) Cost Rate is the current year's cost for benefits yet to be funded and is determined in the aggregate as the ratio of (a) and (b) as follows:

- (a) The present value of benefits for all Plan participants, less the actuarial value of assets.
- (b) The present value of future compensation over the anticipated number of years of participation, determined as of the valuation date.

The Normal Cost dollar requirement is the ratio of (a) and (b), multiplied by the Total Annual Payroll as of the valuation date

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

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

<u>Total Required Contribution</u> is equal to the Normal Cost plus an adjustment for interest according to the timing of sponsor contributions during the year.

### DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's experience differing from assumptions. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- <u>Demographic Assumptions</u>: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

### Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 1050.0% on October 1, 2011 to 925.0% on October 1, 2021, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 8.7%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in lower volatility in contribution requirements when compared to a more mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has decreased from 95.5% on October 1, 2016 to 90.2% on October 1, 2021.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 12.2% on October 1, 2011 to 5.5% on October 1, 2021. The current Net Cash Flow Ratio of 5.5% indicates that contributions are generally in excess of the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

# PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2011</u>	10/1/2016	10/1/2020	10/1/2021
Support Ratio				
Total Actives	21	27	32	37
Total Inactives <sup>1</sup>	2	3	5	4
Actives / Inactives <sup>1</sup>	1050.0%	900.0%	640.0%	925.0%
Asset Volatility Ratio				
Market Value of Assets (MVA)	1,752,004	4,150,214	7,494,228	9,475,095
Total Annual Payroll	923,852	1,285,657	1,955,829	2,281,747
MVA / Total Annual Payroll	189.6%	322.8%	383.2%	415.3%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	N/A	374,087	930,346	849,659
Total Accrued Liability (EAN)	N/A	4,344,886	8,352,451	9,748,593
Inactive AL / Total AL	N/A	8.6%	11.1%	8.7%
Funded Ratio				
Actuarial Value of Assets (AVA)	N/A	4,150,214	7,566,852	8,788,900
Total Accrued Liability (EAN)	N/A	4,344,886	8,352,451	9,748,593
AVA / Total Accrued Liability (EAN)	N/A	95.5%	90.6%	90.2%
Net Cash Flow Ratio				
Net Cash Flow <sup>2</sup>	214,529	188,984	412,465	518,202
Market Value of Assets (MVA)	1,752,004	4,150,214	7,494,228	9,475,095
Ratio	12.2%	4.6%	5.5%	5.5%

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

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

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2021

ASSETS	MARKET VALUE
Total Cash and Equivalents	0.00
Total Receivable	0.00
Investments: FL Municipal Investment Trust	9,475,094.96
Total Investments	9,475,094.96
Total Assets	9,475,094.96
LIABILITIES_	
Total Liabilities	0.00
NET POSITION RESTRICTED FOR PENSIONS	9,475,094.96

### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2021 Market Value Basis

# **ADDITIONS**

Contributions:		
Member	208,824.85	
Buy-Back	4,915.00	
District	230,000.00	
State	153,220.08	
Total Contributions		596,959.93
Investment Income:		
Net Increase in Fair Value of Investments	1,462,665.39	
Less Investment Expense <sup>1</sup>	(15,689.36)	
Net Investment Income		1,446,976.03
Total Additions		2,043,935.96
		, ,
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	41,423.16	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		41,423.16
		)
Administrative Expense		21,646.00
		(2.0(0.1))
Total Deductions		63,069.16
Net Increase in Net Position		1,980,866.80
		) )
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		7,494,228.16
End of the Year		9,475,094.96

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

#### ACTUARIAL ASSET VALUATION September 30, 2021

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year		Gains/Losses Not Y	<u>Yet Recognized</u> ounts Not Yet Rec	omized by Valu	uation Vear	
Ending	Gain/(Loss)	2021	2022	2023	2024	2025
09/30/2019	(94,335)	(37,734)	(18,867)	0	0	0
09/30/2020	(20,029)	(12,017)	(8,011)	(4,005)	0	0
09/30/2021	919,932	735,946	551,960	367,974	183,988	0
Total		686,195	525,082	363,969	183,988	0

Development of Investment Gain/Loss	
Market Value of Assets, 09/30/2020	7,494,228
Contributions Less Benefit Payments & Expenses	518,201
Expected Investment Earnings*	542,733
Actual Investment Earnings	1,462,665
2021 Actuarial Investment Gain/(Loss)	919,932

\*Expected Investment Earnings = 0.07 \* (7,494,228 + 0.5 \* 518,201)

Development of Actuarial Value of Assets	
(1) Market Value of Assets, 09/30/2021	9,475,095
(2) Gains/(Losses) Not Yet Recognized	686,195
(3) Actuarial Value of Assets, 09/30/2021, (1) - (2)	8,788,900
(A) 09/30/2020 Actuarial Assets:	7,566,852
(I) Investment Income:	
1. Increase in Fair Value of Investments	1,462,665
2. Change in Actuarial Value	(758,819)
Total	703,846
(B) 09/30/2021 Actuarial Assets:	8,788,900
Actuarial Assets Rate of Return = $2I/(A+B-I)$ :	8.99%
Market Value of Assets Rate of Return:	18.86%
10/01/2021 Limited Actuarial Assets:	8,788,900
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	156,030

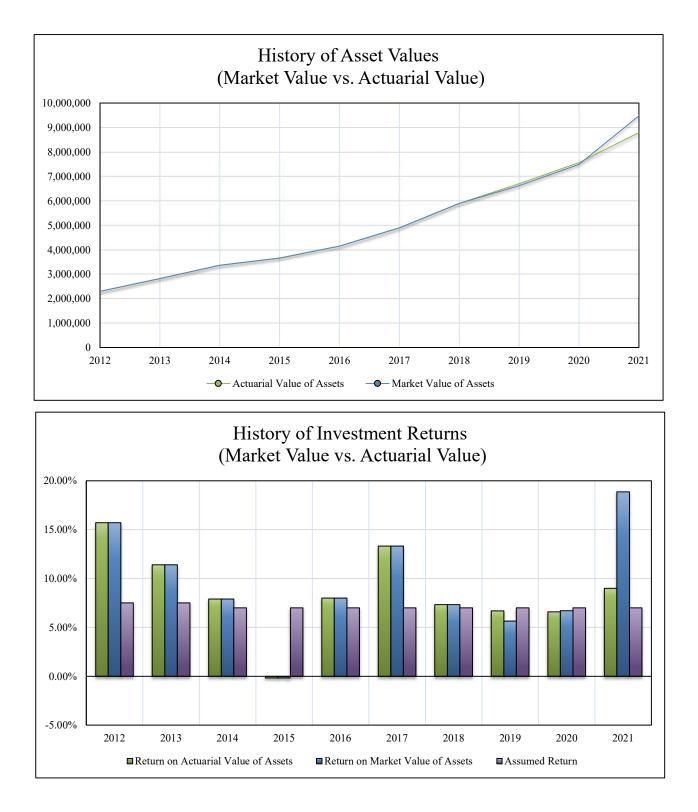
### CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2021 Actuarial Asset Basis

### REVENUES

	KE VENUES	
Contributions:		
Member	208,824.85	
Buy-Back	4,915.00	
District	230,000.00	
State	153,220.08	
State	155,220.08	
Total Contributions		596,959.93
Earnings from Investments:		
Unrealized Gain (Loss)	1,462,665.39	
Change in Actuarial Value	(758,819.00)	
Change in Actuariar Value	(758,819.00)	
Total Earnings and Investment Gains		703,846.39
	EXPENDITURES	
Distributions to Members:		
Benefit Payments	41,423.16	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		41,423.16
Expenses:		
Investment related <sup>1</sup>	15,689.36	
Administrative		
Administrative	21,646.00	
Total Expenses		37,335.36
Change in Net Assets for the Year		1,222,047.80
Net Assets Beginning of the Year		7,566,852.16
Net Assets End of the Year <sup>2</sup>		8,788,899.96

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



# STATISTICAL DATA

	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>	10/1/2021
Actives				
Number	27	28	32	37
Average Current Age	37.9	39.1	39.5	39.5
Average Age at Employment	27.4	28.5	29.8	29.9
Average Past Service	10.5	10.6	9.7	9.6
Average Annual Salary	\$52,801	\$55,223	\$61,120	\$61,669
Service Retirees				
Number	2	2	2	2
Average Current Age	54.8	55.8	56.8	57.8
Average Annual Benefit	\$13,472	\$13,472	\$13,472	\$13,472
DROP Retirees				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
Beneficiaries				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
Disability Retirees				
Number	0	1	1	1
Average Current Age	N/A	42.6	43.6	44.6
Average Annual Benefit	N/A	\$14,479	\$14,479	\$14,479
Terminated Vested				
Number	4	6	8	8
Average Current Age <sup>1</sup>	41.6	34.9	39.7	44.6
Average Annual Benefit <sup>1</sup>	\$12,828	\$17,796	\$27,443	\$37,089

<sup>1</sup> The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

# AGE AND SERVICE DISTRIBUTION

# PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24												0
25 - 29	1					1						2
30 - 34	2	2		1	1	1						7
35 - 39	2	2				2		3				9
40 - 44		1	1					6				8
45 - 49						1		6				7
50 - 54		1				1	1		1			4
55 - 59												0
60 - 64												0
65+												0
Total	5	6	1	1	1	6	1	15	1	0	0	37

# VALUATION PARTICIPANT RECONCILIATION

32

### 1. Active lives

a. Number in prior valuation 10/1/2020

•	
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(1)
iii. Refund of member contributions or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	31
h. New entrants	6
i. Total active life participants in valuation	37

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	2	0	0	1	2	6	11
Retired	0	0	0	0	0	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	1	1
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0	0
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	(1)	0	(1)
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	2	0	0	1	1	7	11

### SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	All regular full-time firefighters become Members as a condition of employment.
Credited Service	Total number of years and fractional parts of years of continuous employment as a firefighter.
Compensation	Base pay plus educational incentive.
Average Final Compensation (AFC)	Average Compensation during the best five years of the last ten years of Credited Service.
Retirement Age	
Normal	The earlier of 1) Age 55 and 10 years of Credited Service, and 2) 25 years of Credited Service, regardless of age.
Early	Age 50 and 10 years of Credited Service.
Retirement Benefits	
Normal	3.00% of AFC for each year of Credited Service prior to October 1, 2017 plus 4.00% of AFC for each year of Credited Service on and after October 1, 2017, subject to a maximum of 100% of AFC.
Early	Same as Normal Retirement, reduced 3.00% per year of retirement before age 55.
Delayed	Benefit continues to accrue.
Normal Form	Ten Year Certain and Life Annuity with other options available.
Termination Benefits	
Vesting	100% after 10 years of Credited Service.
Benefit	Accrued pension benefit for vested members. Non- vested members will receive a refund of accumulated contributions.
Disability Retirement	
Eligibility	All Members are eligible for service connected disability benefits. Ten years of Credited Service is required for non-service connected disability benefits.
Benefit	Accrued pension benefit (42% of AFC minimum if service connected).

Death Benefits (Pre-Retirement)	Upon the death of a Member with at least ten years of Credited Service, the Beneficiary will receive a monthly income, payable in the form of a ten year certain annuity in an amount equal to the accrued Normal Retirement Benefit.			
Contributions				
Employees	10.00% of Compensation.			
State	Premium tax refund per Chapter 175.			
District	Remaining amount necessary according to State Laws			
<u>Share Plan</u>	Pursuant to Chapter 2015-39, Laws of Florida, a supplemental benefit component for special benefits exists but is currently not funded as the District and Membership mutually consented to allow the District use of all future State Monies.			
DROP				
Eligibility	Satisfaction of Normal Retirement Age.			
Permissible Participation Period	Not to exceed a maximum of sixty (60) months.			
Interest Crediting	Equal to the actual net-of-fees return earned by the Fund, subject to applicable administrative fees.			

# GASB 67

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2021

ASSETS	MARKET VALUE
Total Cash and Equivalents	0
Total Receivable	0
Investments: FL Municipal Investment Trust	9,475,095
Total Investments	9,475,095
Total Assets	9,475,095
<u>LIABILITIES</u>	
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	9,475,095

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2021 Market Value Basis

### **ADDITIONS**

Contributions:		
Member	208,825	
Buy-Back	4,915	
District	230,000	
State	153,220	
Total Contributions		596,960
Investment Income:		
Net Increase in Fair Value of Investments	1,462,665	
Interest & Dividends	0	
Less Investment Expense <sup>1</sup>	(15,689)	
Net Investment Income		1,446,976
Total Additions		2,043,936
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	41,423	
Refunds of Member Contributions	0	
Total Distributions		41,423
Administrative Expense		21,646
Total Deductions		63,069
Net Increase in Net Position		1,980,867
NET POSITION RESTRICTED FOR PENSIONS Beginning of the Year		7,494,228
End of the Year		9,475,095

<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, 2021)

### Plan Administration

The Midway Fire District Firefighters' Pension Trust Fund is a single employer defined benefit pension plan administered by a Board of Trustees which acts as the administrator of the Plan. The Board consists of five Trustees each serving a two-year term. Two Trustees are individuals residing within the jurisdiction of the District who are appointed by the District. Two other Trustees are full-time Firefighters who are elected by active Firefighters of the District. The fifth Trustee is selected by the other four Trustees and appointed, as a ministerial act, by the District.

Plan Membership as of October 1	1, 2020	÷
---------------------------------	---------	---

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	32
	43

#### **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 Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

#### Contributions

Employees: 10% of Compensation. State: Premium tax refund per Chapter 175. District: Remaining amount necessary according to State Laws.

#### Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2021:

Asset Class	Target Allocation
Core Bonds	15.0%
Core Plus	15.0%
US Large Cap Equity	25.0%
US Small Cap Equity	14.0%
Non - US Equity	21.0%
Core Real Estate	10.0%
Total	100.0%

#### 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, 2021, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 19.01 percent.

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

### Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement Age.

Permissible Participation Period: Not to exceed a maximum of sixty (60) months.

Interest Crediting: Equal to the actual net-of-fees return earned by the Fund, subject to applicable administrative fees. The DROP balance as September 30, 2021 is \$0.

# NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2021 were as follows:

Total Pension Liability	\$ 9,186,106
Plan Fiduciary Net Position	\$ (9,475,095)
Sponsor's Net Pension Liability	\$ (288,989)
Plan Fiduciary Net Position as a percentage of Total Pension Liability	 103.15%

#### Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2020 updated to September 30, 2021 using the following actuarial assumptions:

Inflation	2.92%
Salary Increases	Service based
Discount Rate	7.00%
Investment Rate of Return	7.00%

#### Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year. *Mortality Rate Healthy Retiree Lives:*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.

Mortality Rate Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018. 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, 2020 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

The date of the most recent experience study for which significant assumptions are based upon is not available.

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 2021 the inflation rate assumption of the investment advisor was 2.8%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

# GASB 67

	Long Term Expected Real Rate of
Asset Class	Return <sup>1</sup>
Core Bonds	2.6%
Core Plus	2.9%
US Large Cap Equity	7.2%
US Small Cap Equity	8.4%
Non - US Equity	8.2%
Core Real Estate	6.7%

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, 2021 are summarized in the following table:

<sup>1</sup> Source: Florida League of Cities

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 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					
	19	∕₀ Decrease	Dis	scount Rate	1	% Increase
	6.00%		7.00%		8.00%	
Sponsor's Net Pension Liability	\$	1,193,469	\$	(288,989)	\$	(1,508,739)

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

	0	9/30/2021	0	9/30/2020
Total Pension Liability				
Service Cost		462,959		368,177
Interest		559,889		487,164
Changes of benefit terms		-		-
Differences between Expected and Actual Experience		643,595		211,294
Changes of assumptions		-		(82,672)
Contributions - Buy Back		4,915		1,650
Benefit Payments, including Refunds of Employee Contributions		(41,423)		(41,501)
Net Change in Total Pension Liability		1,629,935		944,112
Total Pension Liability - Beginning		7,556,171		6,612,059
Total Pension Liability - Ending (a)	\$	9,186,106	\$	7,556,171
Plan Fiduciary Net Position				
Contributions - Employer		230,000		197,864
Contributions - State		153,220		127,730
Contributions - Employee		208,825		172,584
Contributions - Buy Back		4,915		1,650
Net Investment Income		1,446,976		445,100
Benefit Payments, including Refunds of Employee Contributions		(41,423)		(41,501)
Administrative Expense		(21,646)		(32,896)
Net Change in Plan Fiduciary Net Position		1,980,867		870,531
Plan Fiduciary Net Position - Beginning		7,494,228		6,623,697
Plan Fiduciary Net Position - Ending (b)	\$	9,475,095	\$	7,494,228
Net Pension Liability - Ending (a) - (b)	\$	(288,989)	\$	61,943
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		103.15%		99.18%
Covered Payroll Net Pension Liability as a percentage of Covered Payroll	\$	2,088,249 -13.84%	\$	1,725,837 3.59%

### Notes to Schedule:

### Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

### SCHEDULE OF CONTRIBUTIONS Last 2 Fiscal Years

				ntributions relation to					Contributions
	A	ctuarially	the.	Actuarially	Co	ntribution			as a percentage
	De	etermined	De	etermined	D	eficiency		Covered	of Covered
Fiscal Year Ended	Co	ntribution	Co	Contributions		tions (Excess)		Payroll	Payroll
09/30/2021 09/30/2020	\$ \$	365,443 270,956	\$ \$	383,220 325,594	\$ \$	(17,777) (54,638)	\$ \$	2,088,249 1,725,837	18.35% 18.87%

Notes to Schedule

Valuation Date:

10/01/2019

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, 2019 Actuarial Valuation for Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

# SCHEDULE OF INVESTMENT RETURNS Last 2 Fiscal Years

Fiscal Year EndedAnnual Money-Weighted Rate of Return09/30/2021Net of Investment Expense09/30/20206.59%

# NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

### Plan Description

The Midway Fire District Firefighters' Pension Trust Fund is a single employer defined benefit pension plan administered by a Board of Trustees which acts as the administrator of the Plan. The Board consists of five Trustees each serving a two-year term. Two Trustees are individuals residing within the jurisdiction of the District who are appointed by the District. Two other Trustees are full-time Firefighters who are elected by active Firefighters of the District. The fifth Trustee is selected by the other four Trustees and Each person employed by the Midway Fire District Fire Department as a full-time Firefighter becomes a member of the Plan as a condition of his/her employment. All certified Firefighters are therefore eligible for all plan benefits as outlined in the plan document and by applicable law.

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

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	32
	43

### 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 Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

### Contributions

Employees: 10% of Compensation. State: Premium tax refund per Chapter 175. District: Remaining amount necessary according to State Laws.

Net Pension Liability

The measurement date is September 30, 2021. The measurement period for the pension expense was October 1, 2020 to September 30, 2021. The reporting period is October 1, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of September 30, 2021. 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, 2021 using the following actuarial assumptions:

Inflation	2.92%
Salary Increases	Service based
Discount Rate	7.00%
Investment Rate of Return	7.00%

### GASB 68

Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.
Male: PubS.H-2010 (Below Median) for Employees, set forward one year.
Mortality Rate Healthy Retiree Lives:
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.
Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year.
Mortality Rate Disabled Lives:
80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates are projected generationally with Mortality Improvement Scale MP-2018. 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, 2020 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

The date of the most recent experience study for which significant assumptions are based upon is not available.

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 2021 the inflation rate assumption of the investment advisor was 2.8%.

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, 2021 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Core Bonds	15.0%	2.6%
Core Plus	15.0%	2.9%
US Large Cap Equity	25.0%	7.2%
US Small Cap Equity	14.0%	8.4%
Non - US Equity	21.0%	8.2%
Core Real Estate	10.0%	6.7%
Total	100.0%	

<sup>1</sup> Source: Florida League of Cities

### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 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)						
	Тс	otal Pension	Pla	an Fiduciary	1	Net Pension	
		Liability	N	let Position		Liability	
		(a)		(b)		(a)-(b)	
Balances at September 30, 2020	\$	7,556,171	\$	7,494,228	\$	61,943	
Changes for a Year:							
Service Cost		462,959		-		462,959	
Interest		559,889		-		559,889	
Differences between Expected and Actual Experience		643,595		-		643,595	
Changes of assumptions		-		-		-	
Changes of benefit terms		-		-		-	
Contributions - Employer		-		230,000		(230,000)	
Contributions - State		-		153,220		(153,220)	
Contributions - Employee		-		208,825		(208,825)	
Contributions - Buy Back		4,915		4,915		-	
Net Investment Income		-		1,446,976		(1,446,976)	
Benefit Payments, including Refunds of Employee Contributions		(41,423)		(41,423)		-	
Administrative Expense		-		(21,646)		21,646	
Net Changes		1,629,935		1,980,867		(350,932)	
Balances at September 30, 2021	\$	9,186,106	\$	9,475,095	\$	(288,989)	

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

	Current Discount						
	1% Decrease			Rate		% Increase	
	6.00%			7.00%	8.00%		
Sponsor's Net Pension Liability	\$	1,193,469	\$	(288,989)	\$	(1,508,739)	

Pension Plan Fiduciary Net Position.

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

## PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS FISCAL YEAR END SEPTEMBER 30, 2021

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$274,107. On September 30, 2021, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	C	Deferred Dutflows of Resources	Iı	Deferred nflows of Resources
Differences between Expected and Actual Experience		1,022,725		38,915
Changes of assumptions		29,096		59,050
Net difference between Projected and Actual Earnings on Pension Plan investments		-		666,296
Total	\$	1,051,821	\$	764,261

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:	
2022	\$ 33,519
2023	\$ 34,663
2024	\$ 15,796
2025	\$ 9,106
2026	\$ 102,534
Thereafter	\$ 91,942

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

	C	9/30/2021	0	9/30/2020
Total Pension Liability				
Service Cost		462,959		368,177
Interest		559,889		487,164
Changes of benefit terms		-		-
Differences between Expected and Actual Experience		643,595		211,294
Changes of assumptions		-		(82,672)
Contributions - Buy Back		4,915		1,650
Benefit Payments, including Refunds of Employee Contributions		(41,423)		(41,501)
Net Change in Total Pension Liability		1,629,935		944,112
Total Pension Liability - Beginning		7,556,171		6,612,059
Total Pension Liability - Ending (a)	\$	9,186,106	\$	7,556,171
Plan Fiduciary Net Position		220.000		105 064
Contributions - Employer		230,000		197,864
Contributions - State		153,220		127,730
Contributions - Employee		208,825		172,584
Contributions - Buy Back		4,915		1,650
Net Investment Income		1,446,976		445,100
Benefit Payments, including Refunds of Employee Contributions		(41,423)		(41,501)
Administrative Expense		(21,646)		(32,896)
Net Change in Plan Fiduciary Net Position		1,980,867		870,531
Plan Fiduciary Net Position - Beginning		7,494,228		6,623,697
Plan Fiduciary Net Position - Ending (b)	\$	9,475,095	\$	7,494,228
Net Pension Liability - Ending (a) - (b)	\$	(288,989)	\$	61,943
Not relision Elability - Eliding (a) - (b)	Φ	(200,909)	¢	01,945
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		103.15%		99.18%
Covered Payroll	\$	2,088,249	\$	1,725,837
Net Pension Liability as a percentage of Covered Payroll		-13.84%		3.59%

### Notes to Schedule:

### Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

### SCHEDULE OF CONTRIBUTIONS Last 2 Fiscal Years

	Contributions in								Contributions
	relation to the								as a
	Ac	ctuarially	A	ctuarially	Co	ontribution			percentage of
	De	termined	De	etermined	D	eficiency		Covered	Covered
Fiscal Year Ended	Co	ntribution	n Contributions		(Excess)			Payroll	Payroll
09/30/2021	\$	365,443	\$	383,220	\$	(17,777)	\$	2,088,249	18.35%
09/30/2020	\$	270,956	\$	325,594	\$	(54,638)	\$	1,725,837	18.87%

Notes to Schedule

Valuation Date:

10/01/2019

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, 2019 Actuarial Valuation for Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

# COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 61,943	\$ 171,647	\$ 701,026	\$ -
Total Pension Liability Factors:				
Service Cost	462,959	-	-	462,959
Interest	559,889	-	-	559,889
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	4,915	-	-	4,915
Differences between Expected and Actual Experience with				
regard to economic or demographic assumptions	643,595	-	643,595	-
Current year amortization of experience difference	-	(7,783)	(202,165)	194,382
Change in assumptions about future economic or				
demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	(11,810)	(7,274)	(4,536)
Benefit Payments, including Refunds of Employee				
Contributions	(41,423)			
Net change	1,629,935	(19,593)	434,156	1,217,609
Plan Fiduciary Net Position:				
Contributions - Employer	230,000	-	-	-
Contributions - State	153,220	-	-	-
Contributions - Employee	208,825	-	-	(208,825)
Contributions - Buy Back	4,915	-	-	(4,915)
Projected Net Investment Income	543,282	-	-	(543,282)
Difference between projected and actual earnings on				
Pension Plan investments	903,694	903,694	-	-
Current year amortization	-	(233,683)	(25,557)	(208,126)
Benefit Payments, including Refunds of Employee				
Contributions	(41,423)	-	-	-
Administrative Expenses	(21,646)			21,646
Net change	1,980,867	670,011	(25,557)	(943,502)
Ending Balance	\$ (288,989)	\$ 822,065	\$ 1,109,625	\$ 274,107

# 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

0	·	ı	ı	ı	ı	ı
2030	S	S	S	S	S	S
2029	'	ı	ı	I	'	
	، ج	ı ج	ı ج	' S	۰ ج	•
2028	S	s	s	S	\$	S
2027	'	ı	ı	'	'	'
	s S	۰ ج	۰ ج	' S	, S	s S
2026	÷~	÷	÷	÷	<del>S</del>	÷~
2025	(180,739) §	1	1		1	(180.739) §
2024	(180,739) \$	6,690 \$	۰ ج	۰ ۲	۶ ۲	(174.049) \$
2023	180,739) \$	6,690 \$	18,867 \$	۰ ج	۰ ج	(155.182) \$
2022 2	(180,739) \$ (	6,690 \$	18,867 \$	(1,144) \$	\$	(156.326) \$ (
2021	(180,738) \$	6,690 \$	18,867 \$	(1,144) \$	(51,801) \$	\$ (208.126) \$
Recognition Period (Years)	5 \$	5 \$	5 \$	5 \$	5	I
Differences Between Plan Year Projected and Actual Recognition Ending Earnings Period (Years	(903,694)	33,449	94,335	(5,718)	(259,004)	Net Increase (Decrease) in Pension Expense
Differ Projec	S	S	S	S	S	se (Decre
Plan Year Ending	2021	2020	2019	2018	2017	Net Increas

# AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

		1
2030		
	• •	÷
2029		
50	<del>\$</del> \$	÷
×		'
2028	<del>6</del> 6	∽
	1 1	1
2027		
	10) \$ - \$	10) \$
2026	(11,810) 5	(11,8
	) \$ 5 \$	<b>\$</b> (9
2025	(11,810) 7,274	\$ (4,536) \$ (
7	(11,810) \$ (11,810) \$ 7,274 \$ 7,274 \$	S
24	11,810) 7,274	(4,536) \$
2024		\$
~	11,810) \$ 7,274 \$	,536)
2023	$\sim$	(4
	11,810) \$ 7,274 \$	36) \$
2022	(11,8 7,2	(4,5
	0) \$ 5	<b>(9</b>
2021	(11,810 7,274	(4,536)
(1	<del>\$</del> \$	÷
uition Years)		
Recognition Period (Years)	7 10	oense
Pę	72) 38	on Exp
tions	(82,672) 72,738	n Pensi
Changes of Assumptions		ease) i
- 4	<del>8</del> 8	s (Decr
Plan Year Ending	2020 2016	let Increase (Decrease) in Pension Expense
Plaı En	0 0	Net ]

# AMORTIZATION SCHEDULE - EXPERIENCE

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

Differences Between																		
_	Plan Year Expected and Actual Recognition																	
P	Period (Years)	5	2021		2022	2023		2024		2025	2(	2026	20	2027	2028	2029	2030	
	5	÷	91.943	S	91.942 \$	91.942	s 2	91.942	S	91,942	ج	91.942 \$	-	91.942 \$		S	Ś	'
211,294	5	- <b>6</b>	30,185	\$	30,185 \$	30,185	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	30,185	\$	30,185		30,185 \$		· •	'	~ ~	, <del>S</del>	ı
114,265	8	Ş	14,283	Ś	14,283 \$	14,28	~	14,283	S	14,283	S	* '		•	'	s	s S	'
(77,830)	10 \$	Ş	(7,783)	Ś	(7,783) \$	(7,78)	3) \$	(7,783)	\$	(7,783)	S	(7,783) \$		ı S	'	÷	ŝ	•
657,537	10 \$	Ş	65,754 5	S	65,754 \$	65,754	4 3	65,754	S	65,754	S	÷		۰ ج	'	\$	۰ ج	'
n Ext	Net Increase (Decrease) in Pension Expense	\$ 1	194,382 5	Ś	194,381 \$	194,381	- \$	194,381	÷	194,381	\$ 1	14,344 \$		91,942 \$	1	÷	•	'