

MIDWAY FIRE PROTECTION DISTRICT
FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2021

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS



April 3, 2020

Board of Trustees

Midway Fire Protection District Pension Fund

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. 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.

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, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 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:



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

By:



Amanda M. Brown, ASA, MAAA

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Midway Fire Protection District Firefighters' Pension Fund, performed as of October 1, 2019, 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, 2021.

The contribution requirements, compared with those set forth in the October 1, 2019 actuarial impact statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2019 <u>9/30/2021</u>	10/1/2018 <u>9/30/2020</u>
Minimum Required Contribution		
% of Projected Annual Payroll	27.5%	25.7%
Member Contributions (Est.)		
% of Projected Annual Payroll	10.0%	10.0%
District And State Required Contribution		
% of Projected Annual Payroll	17.5%	15.7%
State Contribution (Est.) ¹	\$124,987	\$124,987
% of Projected Annual Payroll	8.1%	8.1%
District Required Contribution ²		
% of Projected Annual Payroll	9.4%	7.6%

¹ Represents the amount received in calendar 2019. 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.

² The required contribution from the combination of District and State sources for the year ending September 30, 2021, is 17.5% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 9.4% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received.

The Minimum Required Contribution reflects an increase compared to the results determined in the October 1, 2019 actuarial impact statement. Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included an average salary increase of 6.61% which exceeded the 5.96% assumption, less turnover than expected, and a vested terminated member commencing a disability retirement. There were no significant sources of favorable plan experience to offset these increases.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Chapter 2019-21, Laws of Florida was signed into effect granting certain disability benefits to firefighters participating in an employer-sponsored retirement plan. Effective July 1, 2019, "the retirement plan must consider the firefighter totally and permanently disabled in the line of duty if he or she meets the retirement plan's definition of totally and permanently disabled due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer." For this purpose, "cancer" is as defined in Section 112.1816(1), Florida Statutes.

Please note that the benefit changes only relate to the disability benefits for the Pension Fund and do not provide for other additional benefits that are provided for in Florida Statutes Section 112.1816.

Actuarial Assumption/Method Changes

Effective October 1, 2019, the asset valuation method is such that all assets are valued at market value with an adjustment to uniformly spread investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

There have been no additional changes in actuarial assumptions or methods since the prior valuation other than an increase in the expected percentage of disabilities that are in line-of-duty, as a result of the plan change described above.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Method <u>10/1/2019</u>	Old Method <u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data			
Actives	28	28	27
Service Retirees	2	2	2
DROP Retirees	0	0	0
Beneficiaries	0	0	0
Disability Retirees	1	1	0
Terminated Vested	<u>6</u>	<u>6</u>	<u>4</u>
Total	37	37	33
Total Annual Payroll	\$1,546,251	\$1,546,251	\$1,425,639
Payroll Under Assumed Ret. Age	1,546,251	1,546,251	1,425,639
Annual Rate of Payments to:			
Service Retirees	26,944	26,944	26,944
DROP Retirees	0	0	0
Beneficiaries	0	0	0
Disability Retirees	14,479	14,479	0
Terminated Vested	17,796	17,796	12,828
B. Assets			
Actuarial Value (AVA) ¹	6,699,165	6,623,697	5,901,922
Market Value (MVA) ¹	6,623,697	6,623,697	5,901,922
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	7,411,532	7,411,532	6,551,672
Disability Benefits	114,711	114,711	92,939
Death Benefits	70,130	70,130	54,224
Vested Benefits	1,569,655	1,569,655	1,568,911
Refund of Contributions	51,715	51,715	39,222
Service Retirees	364,613	364,613	366,659
DROP Retirees ¹	0	0	0
Beneficiaries	0	0	0
Disability Retirees	162,894	162,894	0
Terminated Vested	113,266	113,266	78,359
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total	9,858,516	9,858,516	8,751,986

C. Liabilities - (Continued)	New Method <u>10/1/2019</u>	Old Method <u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	12,734,854	12,734,854	12,170,885
Present Value of Future Member Contributions	1,273,485	1,273,485	1,217,089
Total Normal Cost	383,605	392,768	333,843
Present Value of Future Normal Costs (EAN)	2,853,792	2,853,792	2,738,413
Accrued Liability (Retirement)	5,227,102	5,227,102	4,487,361
Accrued Liability (Disability)	56,656	56,656	45,776
Accrued Liability (Death)	43,578	43,578	33,580
Accrued Liability (Vesting)	1,026,921	1,026,921	993,906
Accrued Liability (Refunds)	9,694	9,694	7,932
Accrued Liability (Inactives) ¹	640,773	640,773	445,018
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	7,004,724	7,004,724	6,013,573
Total Actuarial Accrued Liability (Aggregate)	6,699,165	6,623,697	5,901,922
Unfunded Actuarial Accrued Liability (UAAL)	0	0	0
Funded Ratio (AVA / EAN AL)	95.6%	94.6%	98.1%

D. Actuarial Present Value of Accrued Benefits	New Method <u>10/1/2019</u>	Old Method <u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	640,773	640,773	445,018
Actives	2,012,780	2,012,780	1,689,402
Member Contributions	<u>1,106,528</u>	<u>1,106,528</u>	<u>959,884</u>
Total	3,760,081	3,760,081	3,094,304
Non-vested Accrued Benefits	<u>338,226</u>	<u>338,226</u>	<u>273,633</u>
Total Present Value			
Accrued Benefits (PVAB)	4,098,307	4,098,307	3,367,937
Funded Ratio (MVA / PVAB)	161.6%	161.6%	175.2%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	0	0	
Plan Experience	0	527,496	
Benefits Paid	0	(31,770)	
Interest	0	234,644	
Other	<u>0</u>	<u>0</u>	
Total	0	730,370	

Valuation Date	New Method 10/1/2019	Old Method 10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2021</u>	<u>9/30/2020</u>

E. Pension Cost

Normal Cost (with interest) % of Total Annual Payroll ²	25.7	26.3	24.2
Expenses (with interest) % of Total Annual Payroll ²	1.8	1.8	1.5
Payment Required to Amortize Unfunded Actuarial Accrued Liability (as of 10/1/2019, with interest) % of Total Annual Payroll ²	0.0	0.0	0.0
Minimum Required Contribution % of Total Annual Payroll ²	27.5	28.1	25.7
Expected Member Contributions % of Total Annual Payroll ²	10.0	10.0	10.0
Expected District and State Contribution % of Total Annual Payroll ²	17.5	18.1	15.7

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
Total Required Contribution	360,002
District and State Requirement	213,062
Actual Contributions Made:	
Members (excluding buyback)	146,939
District	139,050
State	<u>124,987</u>
Total	410,976

G. Net Actuarial (Gain)/Loss

N/A

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2019 and 9/30/2018.

² Contributions developed as of 10/1/2019 are expressed as a percentage of total annual payroll at 10/1/2019 of \$1,546,251.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
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N/A – Aggregate Actuarial Cost Method

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

		<u>Actual</u>	<u>Assumed</u>
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%
Year Ended	9/30/2016	2.73%	5.70%
Year Ended	9/30/2015	7.05%	6.11%

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

		<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended	9/30/2019	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	9/30/2016	8.00%	8.00%	7.00%
Year Ended	9/30/2015	-0.17%	-0.17%	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, 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

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

The above 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, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

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.

Expenses

\$27,156 annually, based on the average of actual expenses incurred in the prior two fiscal years. Previously, the actual expense in the prior fiscal year was used. Using a two-year average results in a less volatile estimate than the prior method.

Salary Increases

Assumed salary increases are displayed below:

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

Retirement Age

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.

Disability Rate

Sample disability rates are displayed below:

% Becoming Disabled During the 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% (previously 75%) of disabilities are assumed to be service-incurred.

Termination Rate

Assumed rates of termination are displayed below:

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

Funding Method

Aggregate Actuarial Cost Method.

Asset 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. (Prior Year: Fair Market Value)

GLOSSARY

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

Normal (Current Year's) Cost Rate 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.
- (a) 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 Payroll Under Assumed Retirement Age as of the valuation date.

Payroll Under Assumed Retirement Age is the annual rate of pay for all Members who are not subject to a 100% probability of retirement as of the valuation date.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Total Annual Payroll is the annual rate of pay as of the valuation date of all covered Members.

Total Required Contribution is equal to the Normal Cost plus Administrative Expenses with an adjustment for assumed interest and salary increase components.

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.

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

Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 900.0% on October 1, 2016 to 700.0% on October 1, 2019.
- 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 9.1%. 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 95.6% on October 1, 2019.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and expenses) to the Market Value of Assets, increased from 4.6% on October 1, 2016 to 5.7% on October 1, 2019. The current Net Cash Flow Ratio of 5.7% 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>10/1/2016</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>			
Total Actives	27	27	28
Total Inactives ¹	3	3	4
Actives / Inactives ¹	900.0%	900.0%	700.0%
 <u>Asset Volatility Ratio</u>			
Market Value of Assets (MVA)	4,150,214	5,901,922	6,623,697
Total Annual Payroll	1,285,657	1,425,639	1,546,251
MVA / Total Annual Payroll	322.8%	414.0%	428.4%
 <u>Accrued Liability (AL) Ratio</u>			
Inactive Accrued Liability	374,087	445,018	640,773
Total Accrued Liability (EAN)	4,344,886	6,013,573	7,004,724
Inactive AL / Total AL	8.6%	7.4%	9.1%
 <u>Funded Ratio</u>			
Actuarial Value of Assets (AVA)	4,150,214	5,901,922	6,699,165
Total Accrued Liability (EAN)	4,344,886	6,013,573	7,004,724
AVA / Total Accrued Liability (EAN)	95.5%	98.1%	95.6%
 <u>Net Cash Flow Ratio</u>			
Net Cash Flow ²	188,984	621,531	377,419
Market Value of Assets (MVA)	4,150,214	5,901,922	6,623,697
Ratio	4.6%	10.5%	5.7%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0.00
Receivables:	
Member Contributions in Transit	5,454.12
Member Buy-Back Contributions	50.00
District Contributions in Transit	10,500.00
Total Receivable	16,004.12
Investments:	
FL Municipal Investment Trust	6,607,692.98
Total Investments	6,607,692.98
Total Assets	6,623,697.10
<u>LIABILITIES</u>	
Total Liabilities	0.00
NET POSITION RESTRICTED FOR PENSIONS	6,623,697.10

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Member	146,939.49	
Buy-Back	31,850.00	
District	139,050.00	
State	124,986.90	
Total Contributions		442,826.39
Investment Income:		
Net Increase in Fair Value of Investments	344,356.34	
Less Investment Expense ¹	(11,929.51)	
Net Investment Income		332,426.83
Total Additions		775,253.22

DEDUCTIONS

Distributions to Members:

Benefit Payments	31,770.28	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		31,770.28
Administrative Expense		21,707.89
Total Deductions		53,478.17
Net Increase in Net Position		721,775.05

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	5,901,922.05
End of the Year	6,623,697.10

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION

September 30, 2019

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 Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2019	2020	2021	2022	2023
09/30/2019	(94,335)	(75,468)	(56,601)	(37,734)	(18,867)	0
Total		(75,468)	(56,601)	(37,734)	(18,867)	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, 09/30/2018	5,901,922
Contributions Less Benefit Payments & Admin Expenses	389,348
Expected Investment Earnings*	426,762
Actual Net Investment Earnings	332,427
2019 Actuarial Investment Gain/(Loss)	<u>(94,335)</u>

*Expected Investment Earnings = $0.07 * (5,901,922 + 0.5 * 389,348)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2019	6,623,697
(2) Gains/(Losses) Not Yet Recognized	<u>(75,468)</u>
(3) Actuarial Value of Assets, 09/30/2019, (1) - (2)	6,699,165
(A) 09/30/2018 Actuarial Assets:	5,901,922
(I) Net Investment Income:	
1. Net Increase in Fair Value of Investments	344,356
2. Change in Actuarial Value	75,468
3. Investment Expenses	<u>(11,930)</u>
Total	407,895
(B) 09/30/2019 Actuarial Assets:	6,699,165
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	6.69%
Market Value of Assets Rate of Return:	5.65%
10/01/2019 Limited Actuarial Assets:	6,699,165
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(18,867)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2019
Actuarial Asset Basis

REVENUES

Contributions:		
Member	146,939.49	
Buy-Back	31,850.00	
District	139,050.00	
State	124,986.90	
Total Contributions		442,826.39
Earnings from Investments:		
Net Increase in Fair Value of Investments	344,356.34	
Change in Actuarial Value	75,468.05	
Total Earnings and Investment Gains		419,824.39
EXPENDITURES		
Distributions to Members:		
Benefit Payments	31,770.28	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		31,770.28
Expenses:		
Investment related ¹	11,929.51	
Administrative	21,707.89	
Total Expenses		33,637.40
Change in Net Assets for the Year		797,243.10
Net Assets Beginning of the Year		5,901,922.00
Net Assets End of the Year ²		6,699,165.10

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives</u>			
Number	27	27	28
Average Current Age	36.8	37.9	39.1
Average Age at Employment	27.6	27.4	28.5
Average Past Service	9.2	10.5	10.6
Average Annual Salary	\$47,617	\$52,801	\$55,223
<u>Service Retirees</u>			
Number	2	2	2
Average Current Age	52.8	54.8	55.8
Average Annual Benefit	\$13,472	\$13,472	\$13,472
<u>DROP Retirees</u>			
Number	0	0	0
Average Current Age	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A
<u>Beneficiaries</u>			
Number	0	0	0
Average Current Age	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A
<u>Disability Retirees</u>			
Number	0	0	1
Average Current Age	N/A	N/A	42.6
Average Annual Benefit	N/A	N/A	\$14,479
<u>Terminated Vested</u>			
Number	1	4	6
Average Current Age ¹	N/A	41.6	34.9
Average Annual Benefit ¹	N/A	\$12,828	\$17,796

¹ Excludes 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				1								1
25 - 29		1				1						2
30 - 34		1	1			1	1					4
35 - 39	1					1	3	2				7
40 - 44	1						3	4				8
45 - 49					1	1	2	1				5
50 - 54								1				1
55 - 59												0
60 - 64												0
65+												0
Total	2	2	1	1	1	4	9	8	0	0	0	28

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	27
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	0
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	0
g. Continuing participants	26
h. New entrants	<u>2</u>
i. Total active life participants in valuation	28

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	2	0	0	0	1	3	6
Retired	0	0	0	0	0	0	0
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	1	0	1
Vested (Due Refund)	0	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	2	2
Death, With Survivor	0	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0	0
Disabled	0	0	0	1	(1)	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
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	5	9

SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	All regular full-time firefighters become Members as a condition of employment.
<u>Credited Service</u>	Total number of years and fractional parts of years of continuous employment as a firefighter.
<u>Compensation</u>	Base pay plus educational incentive.
<u>Average Final Compensation (AFC)</u>	Average Compensation during the best five years of the last ten years of Credited Service.
<u>Retirement Age</u>	
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.
<u>Retirement Benefits</u>	
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.
<u>Termination Benefits</u>	
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.
<u>Disability Retirement</u>	
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.

Share Plan

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.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0
Receivables:	
Member Contributions in Transit	5,454
Member Buy-Back Contributions	50
District Contributions in Transit	10,500
Total Receivable	16,004
Investments:	
FL Municipal Investment Trust	6,607,693
Total Investments	6,607,693
Total Assets	6,623,697
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	6,623,697

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Member	146,939
Buy-Back	31,850
District	139,050
State	124,987

Total Contributions	442,826
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Investment Income:

Net Increase in Fair Value of Investments	344,356
Interest & Dividends	0
Less Investment Expense ¹	(11,929)

Net Investment Income	332,427
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Total Additions	775,253
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DEDUCTIONS

Distributions to Members:

Benefit Payments	31,770
Refunds of Member Contributions	0

Total Distributions	31,770
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Administrative Expense	21,708
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Total Deductions	53,478
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Net Increase in Net Position	721,775
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	5,901,922
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End of the Year	6,623,697
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	2
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	27
	33

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

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, 2019:

Asset Class	Target Allocation
Core Bonds	15.0%
Core Plus	15.0%
US Large Cap Equity	34.0%
US Small Cap Equity	11.0%
Non - US Equity	15.0%
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, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 5.50 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, 2019 is \$0.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2019 were as follows:

Total Pension Liability	\$ 6,612,059
Plan Fiduciary Net Position	\$ (6,623,697)
Sponsor's Net Pension Liability	<u>\$ (11,638)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	100.18%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 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: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The above 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, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 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, 2019 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Core Bonds	1.6%
Core Plus	2.1%
US Large Cap Equity	4.6%
US Small Cap Equity	5.5%
Non - US Equity	6.7%
Core Real Estate	5.0%

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.

	1% Decrease	Current	1% Increase
	6.00%	Discount Rate	8.00%
		7.00%	
Sponsor's Net Pension Liability	\$ 1,151,321	\$ (11,638)	\$ (957,970)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	339,987	317,536	279,487
Interest	431,520	356,943	319,753
Changes of benefit terms	(1,230)	-	590,445
Differences between Expected and Actual Experience	-	114,265	(77,830)
Changes of assumptions	-	-	-
Contributions - Buy Back	31,850	284,781	-
Benefit Payments, including Refunds of Employee Contributions	(31,770)	(26,944)	(29,403)
Net Change in Total Pension Liability	770,357	1,046,581	1,082,452
Total Pension Liability - Beginning	5,841,702	4,795,121	3,712,669
Total Pension Liability - Ending (a)	<u>\$ 6,612,059</u>	<u>\$ 5,841,702</u>	<u>\$ 4,795,121</u>
Plan Fiduciary Net Position			
Contributions - Employer	139,050	125,148	50,000
Contributions - State	124,987	123,752	116,395
Contributions - Employee	146,939	135,470	65,070
Contributions - Buy Back	31,850	284,781	-
Net Investment Income	332,427	370,773	556,257
Benefit Payments, including Refunds of Employee Contributions	(31,770)	(26,944)	(29,403)
Administrative Expense	(21,708)	(10,046)	(9,545)
Net Change in Plan Fiduciary Net Position	721,775	1,002,934	748,774
Plan Fiduciary Net Position - Beginning	5,901,922	4,898,988	4,150,214
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,623,697</u>	<u>\$ 5,901,922</u>	<u>\$ 4,898,988</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (11,638)</u>	<u>\$ (60,220)</u>	<u>\$ (103,867)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	100.18%	101.03%	102.17%
Covered Payroll	\$ 1,469,395	\$ 1,354,698	\$ 1,301,400
Net Pension Liability as a percentage of Covered Payroll	-0.79%	-4.45%	-7.98%

Notes to Schedule:

Changes of benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

For measurement date 09/30/2017, amounts reported as changes of benefit terms resulted from the following changes:

- Effective October 1, 2017, the plan became a Chapter 175 "Local Law" plan.
- Implementation of a Deferred Retirement Option Program (DROP).
- Implementation of a provision allowing firefighters to purchase up to 5-years of prior military or firefighter service.
- The benefit accrual rate was increased from 3.00% to 4.00% per year of service earned on and after October 1, 2017.
- The requirements for Normal Retirement eligibility were amended to the earlier of 25 years of service, regardless of age, and the attainment of age 55 with 10 years of service.
- The member contribution rate was increased from 5.0% to 10.0%, effective October 1, 2017.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	217,690	N/A	193,505
Interest	195,649	N/A	169,188
Changes of benefit terms	-	N/A	-
Differences between Expected and Actual Experience	657,537	N/A	-
Changes of assumptions	72,738	N/A	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(16,483)	N/A	(1,249)
Net Change in Total Pension Liability	1,127,131	N/A	361,444
Total Pension Liability - Beginning	2,585,538	N/A	2,224,094
Total Pension Liability - Ending (a)	<u>\$ 3,712,669</u>	<u>N/A</u>	<u>\$ 2,585,538</u>
Plan Fiduciary Net Position			
Contributions - Employer	20,946	82,027	69,356
Contributions - State	140,062	175,557	186,648
Contributions - Employee	59,138	58,443	53,377
Contributions - Buy Back	-	-	-
Net Investment Income	291,707	(13,092)	235,028
Benefit Payments, including Refunds of Employee Contributions	(16,483)	-	(1,249)
Administrative Expense	(6,122)	(7,236)	(5,207)
Net Change in Plan Fiduciary Net Position	489,248	295,699	537,953
Plan Fiduciary Net Position - Beginning	3,660,966	3,365,267	2,827,314
Plan Fiduciary Net Position - Ending (b)	<u>\$ 4,150,214</u>	<u>\$ 3,660,966</u>	<u>\$ 3,365,267</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (437,545)</u>	<u>N/A</u>	<u>\$ (779,729)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	111.79%	N/A	130.16%
Covered Payroll	\$ 1,182,767	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	-36.99%	N/A	N/A

Notes to Schedule:

Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.92%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 213,062	\$ 264,037	\$ (50,975)	\$ 1,469,395	17.97%
09/30/2018	\$ 196,431	\$ 248,900	\$ (52,469)	\$ 1,354,698	18.37%
09/30/2017	\$ 101,509	\$ 166,395	\$ (64,886)	\$ 1,301,400	12.79%
09/30/2016	\$ 90,874	\$ 161,008	\$ (70,134)	\$ 1,182,767	13.61%
09/30/2015	\$ 237,279	\$ 257,584	\$ (20,305)	N/A	N/A
09/30/2014	\$ 216,710	\$ 256,004	\$ (39,294)	N/A	N/A

Notes to Schedule

Valuation Date: 10/01/2016

Actuarially determined contribution rates are calculated as of October 1, three years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Aggregate Actuarial Cost Method.

Mortality Rate: *Healthy Lives:*

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2015 FRS actuarial valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate: 7.0% per year compounded annually, gross of investment related expenses.

Retirement Age: 10.0% per year eligible for Early Retirement. 10.0% per year eligible for Normal Retirement (with 100% at Age 52 with 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.

Disability Rate:	% Becoming Disabled During	
	Age	the Year
	20	0.03%
	30	0.04%
	40	0.07%
	50	0.18%

Termination Rate:	Service	% Terminating During the Year
	0-2 Years	15.0%
	3+ Years	5.0%

GASB 67

Salary Increases:

Years of Service	Salary Increase
0	10.0%
1	8.0%
2-4	7.0%
5+	5.5%

Payroll Growth Assumption:

None.

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	5.50%
09/30/2018	7.10%
09/30/2017	13.24%
09/30/2016	8.00%
09/30/2015	7.89%
09/30/2014	7.89%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

General Information about the Pension Plan

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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	2
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	4
Active Plan Members	27
	33

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Midway Fire Protection District Firefighters' Pension Fund prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

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, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2019.

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, 2018 updated to September 30, 2019 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: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The above 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, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

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 2019 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, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Core Bonds	15.0%	1.6%
Core Plus	15.0%	2.1%
US Large Cap Equity	34.0%	4.6%
US Small Cap Equity	11.0%	5.5%
Non - US Equity	15.0%	6.7%
Core Real Estate	10.0%	5.0%
Total	100.0%	

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)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Balances at September 30, 2018	\$ 5,841,702	\$ 5,901,922	\$ (60,220)
Changes for a Year:			
Service Cost	339,987	-	339,987
Interest	431,520	-	431,520
Differences between Expected and Actual Experience	-	-	-
Changes of assumptions	-	-	-
Changes of benefit terms	(1,230)	-	(1,230)
Contributions - Employer	-	139,050	(139,050)
Contributions - State	-	124,987	(124,987)
Contributions - Employee	-	146,939	(146,939)
Contributions - Buy Back	31,850	31,850	-
Net Investment Income	-	332,427	(332,427)
Benefit Payments, including Refunds of Employee Contributions	(31,770)	(31,770)	-
Administrative Expense	-	(21,708)	21,708
Net Changes	770,357	721,775	48,582
Balances at September 30, 2019	\$ 6,612,059	\$ 6,623,697	\$ (11,638)

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

	Current Discount		
	1% Decrease 6.00%	Rate 7.00%	1% Increase 8.00%
Sponsor's Net Pension Liability	\$ 1,151,321	\$ (11,638)	\$ (957,970)

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, 2019

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$252,726.

On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	480,222	54,481
Changes of assumptions	43,644	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	37,271
Total	<u>\$ 523,866</u>	<u>\$ 91,752</u>

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:

2020	\$ 39,745
2021	\$ 45,450
2022	\$ 97,251
2023	\$ 98,395
2024	\$ 79,528
Thereafter	\$ 71,745

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	339,987	317,536	279,487
Interest	431,520	356,943	319,753
Changes of benefit terms	(1,230)	-	590,445
Differences between Expected and Actual Experience	-	114,265	(77,830)
Changes of assumptions	-	-	-
Contributions - Buy Back	31,850	284,781	-
Benefit Payments, including Refunds of Employee Contributions	(31,770)	(26,944)	(29,403)
Net Change in Total Pension Liability	770,357	1,046,581	1,082,452
Total Pension Liability - Beginning	5,841,702	4,795,121	3,712,669
Total Pension Liability - Ending (a)	<u>\$ 6,612,059</u>	<u>\$ 5,841,702</u>	<u>\$ 4,795,121</u>
Plan Fiduciary Net Position			
Contributions - Employer	139,050	125,148	50,000
Contributions - State	124,987	123,752	116,395
Contributions - Employee	146,939	135,470	65,070
Contributions - Buy Back	31,850	284,781	-
Net Investment Income	332,427	370,773	556,257
Benefit Payments, including Refunds of Employee Contributions	(31,770)	(26,944)	(29,403)
Administrative Expense	(21,708)	(10,046)	(9,545)
Net Change in Plan Fiduciary Net Position	721,775	1,002,934	748,774
Plan Fiduciary Net Position - Beginning	5,901,922	4,898,988	4,150,214
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,623,697</u>	<u>\$ 5,901,922</u>	<u>\$ 4,898,988</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (11,638)</u>	<u>\$ (60,220)</u>	<u>\$ (103,867)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	100.18%	101.03%	102.17%
Covered Payroll	\$ 1,469,395	\$ 1,354,698	\$ 1,301,400
Net Pension Liability as a percentage of Covered Payroll	-0.79%	-4.45%	-7.98%

Notes to Schedule:*Changes of benefit terms:*

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

For measurement date 09/30/2017, amounts reported as changes of benefit terms resulted from the following changes:

- Effective October 1, 2017, the plan became a Chapter 175 "Local Law" plan.
- Implementation of a Deferred Retirement Option Program (DROP).
- Implementation of a provision allowing firefighters to purchase up to 5-years of prior military or firefighter service.
- The benefit accrual rate was increased from 3.00% to 4.00% per year of service earned on and after October 1, 2017.
- The requirements for Normal Retirement eligibility were amended to the earlier of 25 years of service, regardless of age, and the attainment of age 55 with 10 years of service.
- The member contribution rate was increased from 5.0% to 10.0%, effective October 1, 2017.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2016	09/30/2015	09/30/2014
Total Pension Liability			
Service Cost	217,690	N/A	193,505
Interest	195,649	N/A	169,188
Changes of benefit terms	-	N/A	-
Differences between Expected and Actual Experience	657,537	N/A	-
Changes of assumptions	72,738	N/A	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(16,483)	N/A	(1,249)
Net Change in Total Pension Liability	1,127,131	N/A	361,444
Total Pension Liability - Beginning	2,585,538	N/A	2,224,094
Total Pension Liability - Ending (a)	<u>\$ 3,712,669</u>	<u>N/A</u>	<u>\$ 2,585,538</u>
Plan Fiduciary Net Position			
Contributions - Employer	20,946	82,027	69,356
Contributions - State	140,062	175,557	186,648
Contributions - Employee	59,138	58,443	53,377
Contributions - Buy Back	-	-	-
Net Investment Income	291,707	(13,092)	235,028
Benefit Payments, including Refunds of Employee Contributions	(16,483)	-	(1,249)
Administrative Expense	(6,122)	(7,236)	(5,207)
Net Change in Plan Fiduciary Net Position	489,248	295,699	537,953
Plan Fiduciary Net Position - Beginning	3,660,966	3,365,267	2,827,314
Plan Fiduciary Net Position - Ending (b)	<u>\$ 4,150,214</u>	<u>\$ 3,660,966</u>	<u>\$ 3,365,267</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (437,545)</u>	<u>N/A</u>	<u>\$ (779,729)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	111.79%	N/A	130.16%
Covered Payroll	\$ 1,182,767	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	-36.99%	N/A	N/A

Notes to Schedule:*Changes of assumptions:*

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.92%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 213,062	\$ 264,037	\$ (50,975)	\$ 1,469,395	17.97%
09/30/2018	\$ 196,431	\$ 248,900	\$ (52,469)	\$ 1,354,698	18.37%
09/30/2017	\$ 101,509	\$ 166,395	\$ (64,886)	\$ 1,301,400	12.79%
09/30/2016	\$ 90,874	\$ 161,008	\$ (70,134)	\$ 1,182,767	13.61%
09/30/2015	\$ 237,279	\$ 257,584	\$ (20,305)	N/A	N/A
09/30/2014	\$ 216,710	\$ 256,004	\$ (39,294)	N/A	N/A

Notes to Schedule

Valuation Date: 10/01/2016

Actuarially determined contribution rates are calculated as of October 1, three years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Aggregate Actuarial Cost Method.

Mortality Rate: *Healthy Lives:*

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2015 FRS actuarial valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate: 7.0% per year compounded annually, gross of investment related expenses.

Retirement Age: 10.0% per year eligible for Early Retirement. 10.0% per year eligible for Normal Retirement (with 100% at Age 52 with 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.

Disability Rate: % Becoming Disabled During the

Age	Year
20	0.03%
30	0.04%
40	0.07%
50	0.18%

Termination Rate: % Terminating During the Year

Service	Year
0-2 Years	15.0%
3+ Years	5.0%

Salary Increases:	Years of	
	Service	Salary Increase
	0	10.0%
	1	8.0%
	2-4	7.0%
Salary Increases:	5+	5.5%
	Years of	
	Service	Salary Increase
	0	10.0%
	1	8.0%
Payroll Growth Assumption:	2-4	7.0%
	5+	5.5%
	None.	

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (60,220)	\$ 238,956	\$ 611,177	\$ -
Total Pension Liability Factors:				
Service Cost	339,987	-	-	339,987
Interest	431,520	-	-	431,520
Changes in benefit terms	(1,230)	-	-	(1,230)
Contributions - Buy Back	31,850	-	-	31,850
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	-	-	-	-
Current year amortization of experience difference	-	(7,783)	(80,037)	72,254
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(7,274)	7,274
Benefit Payments, including Refunds of Employee Contributions	(31,770)	-	-	-
Net change	<u>770,357</u>	<u>(7,783)</u>	<u>(87,311)</u>	<u>881,655</u>
Plan Fiduciary Net Position:				
Contributions - Employer	139,050	-	-	-
Contributions - State	124,987	-	-	-
Contributions - Employee	146,939	-	-	(146,939)
Contributions - Buy Back	31,850	-	-	(31,850)
Projected Net Investment Income	426,762	-	-	(426,762)
Difference between projected and actual earnings on Pension Plan investments	(94,335)	-	94,335	-
Current year amortization	-	(63,953)	(18,867)	(45,086)
Benefit Payments, including Refunds of Employee Contributions	(31,770)	-	-	-
Administrative Expenses	(21,708)	-	-	21,708
Net change	<u>721,775</u>	<u>(63,953)</u>	<u>75,468</u>	<u>(628,929)</u>
Ending Balance	<u>\$ (11,638)</u>	<u>\$ 167,220</u>	<u>\$ 599,334</u>	<u>\$ 252,726</u>

AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 94,335	5	\$ 18,867	\$ 18,867	\$ 18,867	\$ 18,867	\$ 18,867	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (5,718)	5	\$ (1,144)	\$ (1,144)	\$ (1,144)	\$ (1,144)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (259,004)	5	\$ (51,801)	\$ (51,801)	\$ (51,801)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (28,525)	5	\$ (5,705)	\$ (5,705)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ (26,514)	5	\$ (5,303)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (45,086)	\$ (39,783)	\$ (34,078)	\$ 17,723	\$ 18,867	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions													
Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2016	\$ 72,738	10	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience														
Differences Between			Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Plan Year Ending	Expected	Actual Experience												
2018	\$	114,265	8	\$ 14,283	\$ 14,283	\$ 14,283	\$ 14,283	\$ 14,283	\$ 14,283	\$ 14,283	\$ -	\$ -	\$ -	\$ -
2017	\$	(77,830)	10	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ (7,783)	\$ -	\$ -	\$ -
2016	\$	657,537	10	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense				\$ 72,254	\$ 72,254	\$ 72,254	\$ 72,254	\$ 72,254	\$ 72,254	\$ 72,254	\$ (7,783)	\$ -	\$ -	\$ -