

MIDWAY FIRE PROTECTION DISTRICT
FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2020

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2022

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2020



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 25, 2021

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.

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.

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, 2019. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2020 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.

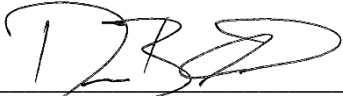
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the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

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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, 2020, 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, 2022.

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

Valuation Date Applicable to Fiscal Year Ending	10/1/2020 <u>9/30/2022</u>	10/1/2019 <u>9/30/2021</u>
Minimum Required Contribution % of Projected Annual Payroll	30.7%	27.5%
Member Contributions (Est.) % of Projected Annual Payroll	10.0%	10.0%
District And State Required Contribution % of Projected Annual Payroll	20.7%	17.5%
State Contribution (Est.) ¹ % of Projected Annual Payroll	\$127,731 6.5%	\$127,731 6.5%
District Required Contribution ² % of Projected Annual Payroll	14.2%	11.0%

¹ Represents the amount received in calendar 2020. 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, 2022, is 20.7% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 14.2% 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, 2019 actuarial valuation report. The increase is attributable to net unfavorable plan experience. The increase was offset in part by District contributions made in excess of the required amount and the assumption change described on the following page.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an average salary increase of 15.22% which exceeded the 5.87% assumption and an investment return of 6.59% (Actuarial Asset Basis) which fell short of the 7.00% assumption. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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.

There have been no method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	32	32	28
Service Retirees	2	2	2
DROP Retirees	0	0	0
Beneficiaries	0	0	0
Disability Retirees	1	1	1
Terminated Vested	<u>8</u>	<u>8</u>	<u>6</u>
 Total	 43	 43	 37
 Total Annual Payroll	 \$1,955,829	 \$1,955,829	 \$1,546,251
Payroll Under Assumed Ret. Age	1,955,829	1,955,829	1,546,251
 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	14,479
Terminated Vested	54,885	54,885	17,796
 B. Assets			
Actuarial Value (AVA) ¹	7,566,852	7,566,852	6,699,165
Market Value (MVA) ¹	7,494,228	7,494,228	6,623,697
 C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	9,041,104	9,144,573	7,411,532
Disability Benefits	174,241	164,313	114,711
Death Benefits	65,229	93,064	70,130
Vested Benefits	1,671,411	1,683,185	1,569,655
Refund of Contributions	91,858	91,767	51,715
Service Retirees	357,940	362,446	364,613
DROP Retirees ¹	0	0	0
Beneficiaries	0	0	0
Disability Retirees	170,872	161,779	162,894
Terminated Vested	401,534	404,227	113,266
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
 Total	 11,974,189	 12,105,354	 9,858,516

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	15,940,930	15,906,836	12,734,854
Present Value of Future Member Contributions	1,594,093	1,590,684	1,273,485
Total Normal Cost	540,746	558,033	383,605
Present Value of Future Normal Costs (EAN)	3,621,738	3,657,812	2,853,792
Accrued Liability (Retirement)	6,245,949	6,322,955	5,227,102
Accrued Liability (Disability)	70,953	67,816	56,656
Accrued Liability (Death)	35,718	50,511	43,578
Accrued Liability (Vesting)	1,057,188	1,065,514	1,026,921
Accrued Liability (Refunds)	12,297	12,294	9,694
Accrued Liability (Inactives) ¹	930,346	928,452	640,773
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	8,352,451	8,447,542	7,004,724
Total Actuarial Accrued Liability (Aggregate)	7,566,852	7,566,852	6,699,165
Unfunded Actuarial Accrued Liability (UAAL)	0	0	0
Funded Ratio (AVA / EAN AL)	90.6%	89.6%	95.6%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	930,346	928,452	640,773
Actives	2,303,385	2,346,955	2,012,780
Member Contributions	<u>1,221,209</u>	<u>1,221,209</u>	<u>1,106,528</u>
Total	4,454,940	4,496,616	3,760,081
Non-vested Accrued Benefits	<u>447,664</u>	<u>451,477</u>	<u>338,226</u>
Total Present Value			
Accrued Benefits (PVAB)	4,902,604	4,948,093	4,098,307
Funded Ratio (MVA / PVAB)	152.9%	151.5%	161.6%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(45,489)	0	
Plan Experience	0	605,858	
Benefits Paid	0	(41,501)	
Interest	0	285,429	
Other	<u>0</u>	<u>0</u>	
Total	(45,489)	849,786	

	New Assump	Old Assump	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<u>9/30/2021</u>

E. Pension Cost

Normal Cost (with interest)			
% of Total Annual Payroll ²	28.6	29.5	25.7
Expenses (with interest)			
% of Total Annual Payroll ²	2.1	2.1	1.8
Payment Required to Amortize Unfunded Actuarial Accrued Liability (as of 10/1/2020, with interest)			
% of Total Annual Payroll ²	0.0	0.0	0.0
Minimum Required Contribution			
% of Total Annual Payroll ²	30.7	31.6	27.5
Expected Member Contributions			
% of Total Annual Payroll ²	10.0	10.0	10.0
Expected District and State Contribution			
% of Total Annual Payroll ²	20.7	21.6	17.5

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
Total Required Contribution	443,540
District and State Requirement	270,956
Actual Contributions Made:	
Members (excluding buyback)	172,584
District	197,864
State	<u>127,731</u>
Total	498,179

G. Net Actuarial (Gain)/Loss

N/A

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2020 and 9/30/2019.

² Contributions developed as of 10/1/2020 are expressed as a percentage of total annual payroll at 10/1/2020 of \$1,955,829.

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

	<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	9/30/2020	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%
Year Ended	9/30/2016	2.73%	5.70%

(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	9/30/2020	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	9/30/2016	8.00%	8.00%	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.



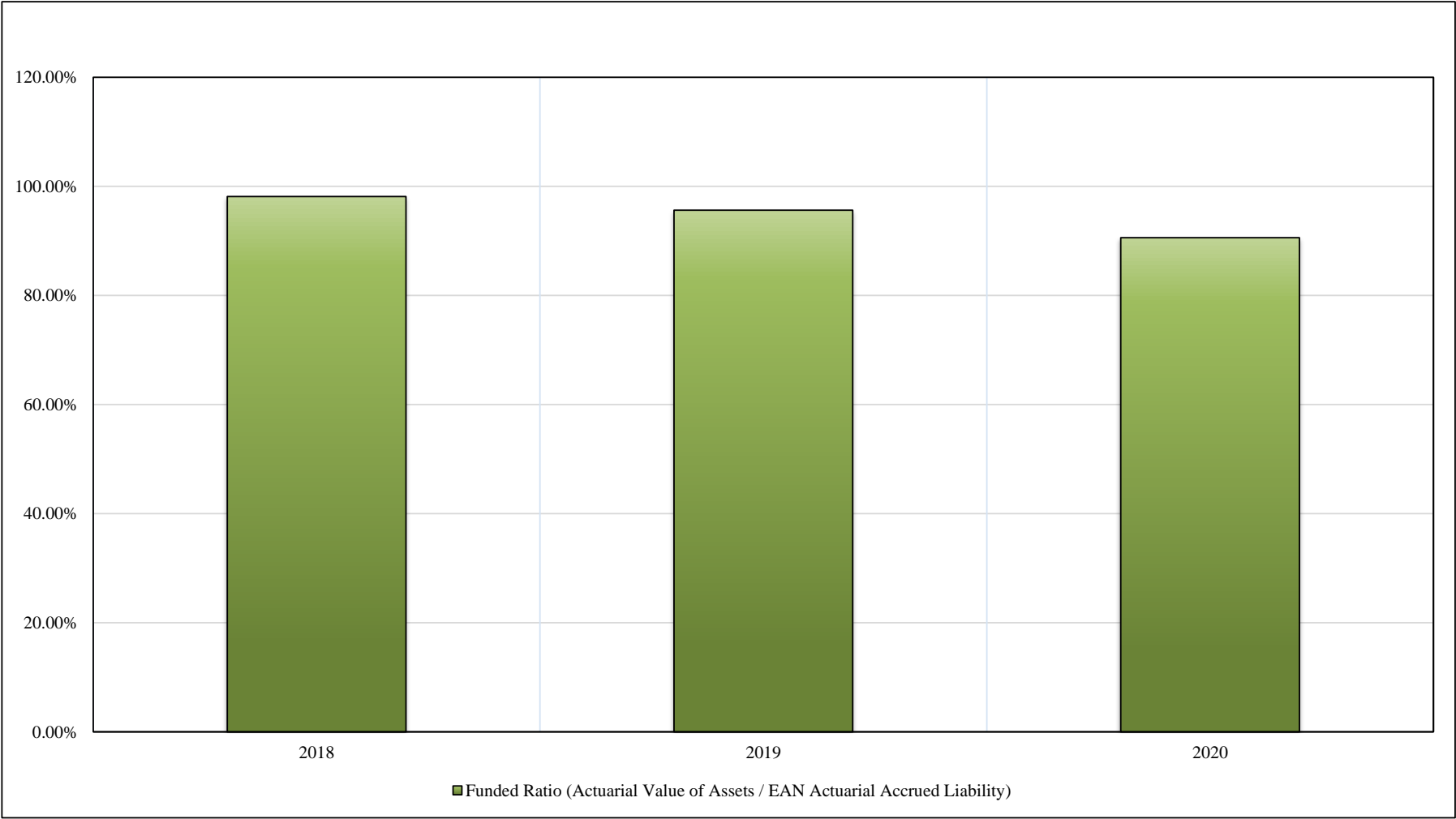
Drew D. Ballard, EA, MAAA
Enrolled Actuary #20-8193

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. Prior year assumption: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: PubS.H-2010 (Below Median) for Employees, set forward one year. Prior year assumption: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Beneficiary Lives:

Female: PubG.H-2010 (Below Median) for Healthy Retirees. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

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

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

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

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

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

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

\$39,750 annually, based on the average of actual expenses incurred in the prior two fiscal years.

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% of disabilities are assumed to be service-incurred.

Termination Rate

Assumed rates of termination are displayed below:

% Terminating During the Year	
<u>Service</u>	<u>Rate</u>
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.

GLOSSARY

Actuarial Value of Assets 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.

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.

Market Value of Assets 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

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

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

Total Required Contribution 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.

- 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 1050.0% on October 1, 2011 to 640.0% on October 1, 2020, 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 11.1%. 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 90.6% on October 1, 2020.
- 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, 2020. 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>	<u>10/1/2016</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Support Ratio</u>				
Total Actives	21	27	28	32
Total Inactives ¹	2	3	4	5
Actives / Inactives ¹	1050.0%	900.0%	700.0%	640.0%
<u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	1,752,004	4,150,214	6,623,697	7,494,228
Total Annual Payroll	923,852	1,285,657	1,546,251	1,955,829
MVA / Total Annual Payroll	189.6%	322.8%	428.4%	383.2%
<u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	N/A	374,087	640,773	930,346
Total Accrued Liability (EAN)	N/A	4,344,886	7,004,724	8,352,451
Inactive AL / Total AL	N/A	8.6%	9.1%	11.1%
<u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	N/A	4,150,214	6,699,165	7,566,852
Total Accrued Liability (EAN)	N/A	4,344,886	7,004,724	8,352,451
AVA / Total Accrued Liability (EAN)	N/A	95.5%	95.6%	90.6%
<u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	214,529	188,984	377,419	412,465
Market Value of Assets (MVA)	1,752,004	4,150,214	6,623,697	7,494,228
Ratio	12.2%	4.6%	5.7%	5.5%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0.00
Receivables:	
State Contributions	1,792.43
Total Receivable	1,792.43
Investments:	
FL Municipal Investment Trust	7,492,435.73
Total Investments	7,492,435.73
Total Assets	7,494,228.16
<u>LIABILITIES</u>	
Total Liabilities	0.00
NET POSITION RESTRICTED FOR PENSIONS	7,494,228.16

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:		
Member	172,583.72	
Buy-Back	1,650.00	
District	197,863.76	
State	127,730.66	
 Total Contributions		 499,828.14
Investment Income:		
Net Increase in Fair Value of Investments	458,065.59	
Less Investment Expense ¹	(12,965.68)	
 Net Investment Income		 445,099.91
 Total Additions		 944,928.05
 <u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	41,500.99	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
 Total Distributions		 41,500.99
 Administrative Expense		 32,896.00
 Total Deductions		 74,396.99
 Net Increase in Net Position		 870,531.06
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		6,623,697.10
 End of the Year		 7,494,228.16

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

ACTUARIAL ASSET VALUATION
September 30, 2020

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				
		2020	2021	2022	2023	2024
09/30/2019	(94,335)	(56,601)	(37,734)	(18,867)	0	0
09/30/2020	(20,029)	(16,023)	(12,017)	(8,011)	(4,005)	0
Total		(72,624)	(49,751)	(26,878)	(4,005)	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, 09/30/2019	6,623,697
Contributions Less Benefit Payments & Expenses	412,465
Expected Investment Earnings*	478,095
Actual Investment Earnings	458,066
2020 Actuarial Investment Gain/(Loss)	<u>(20,029)</u>

*Expected Investment Earnings = $0.07 * (6,623,697 + 0.5 * 412,465)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2020	7,494,228
(2) Gains/(Losses) Not Yet Recognized	<u>(72,624)</u>
(3) Actuarial Value of Assets, 09/30/2020, (1) - (2)	7,566,852
(A) 09/30/2019 Actuarial Assets:	6,699,165
(I) Investment Income:	
1. Increase in Fair Value of Investments	458,066
2. Change in Actuarial Value	<u>(2,844)</u>
Total	455,222
(B) 09/30/2020 Actuarial Assets:	7,566,852
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	6.59%
Market Value of Assets Rate of Return:	6.71%
10/01/2020 Limited Actuarial Assets:	7,566,852
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(28,156)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2020
 Actuarial Asset Basis

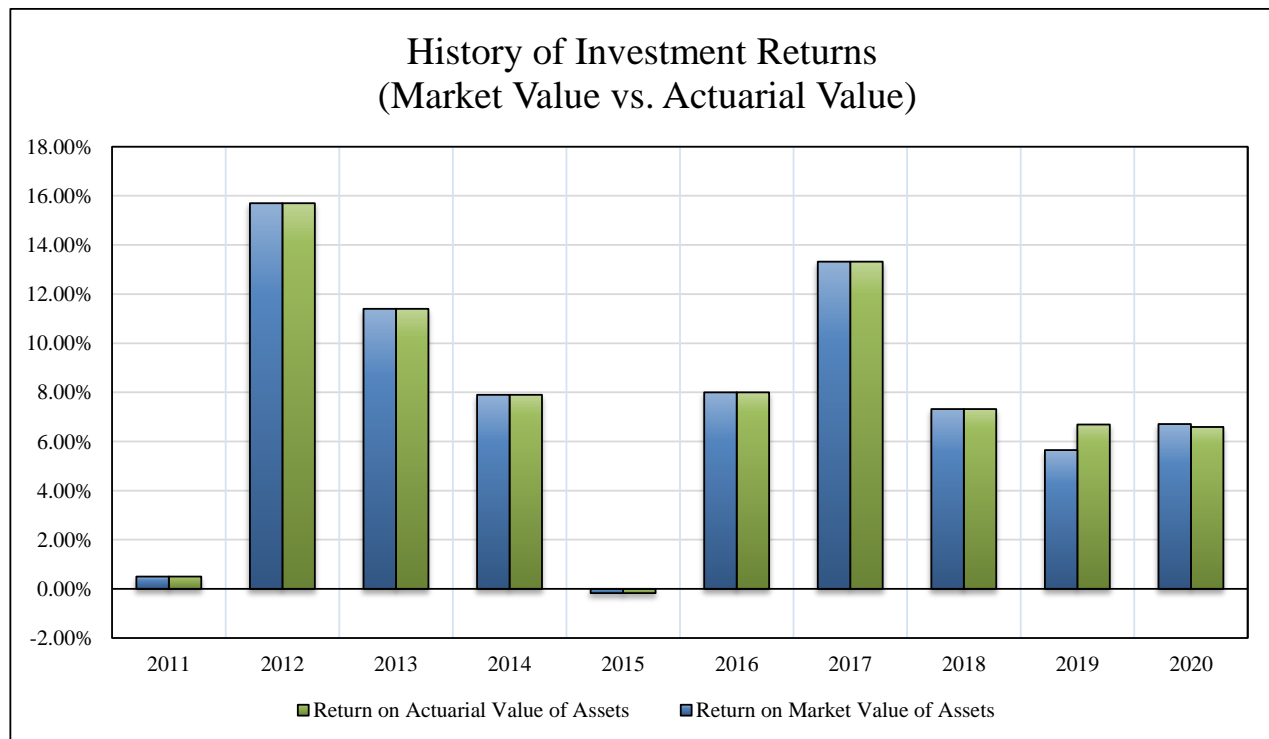
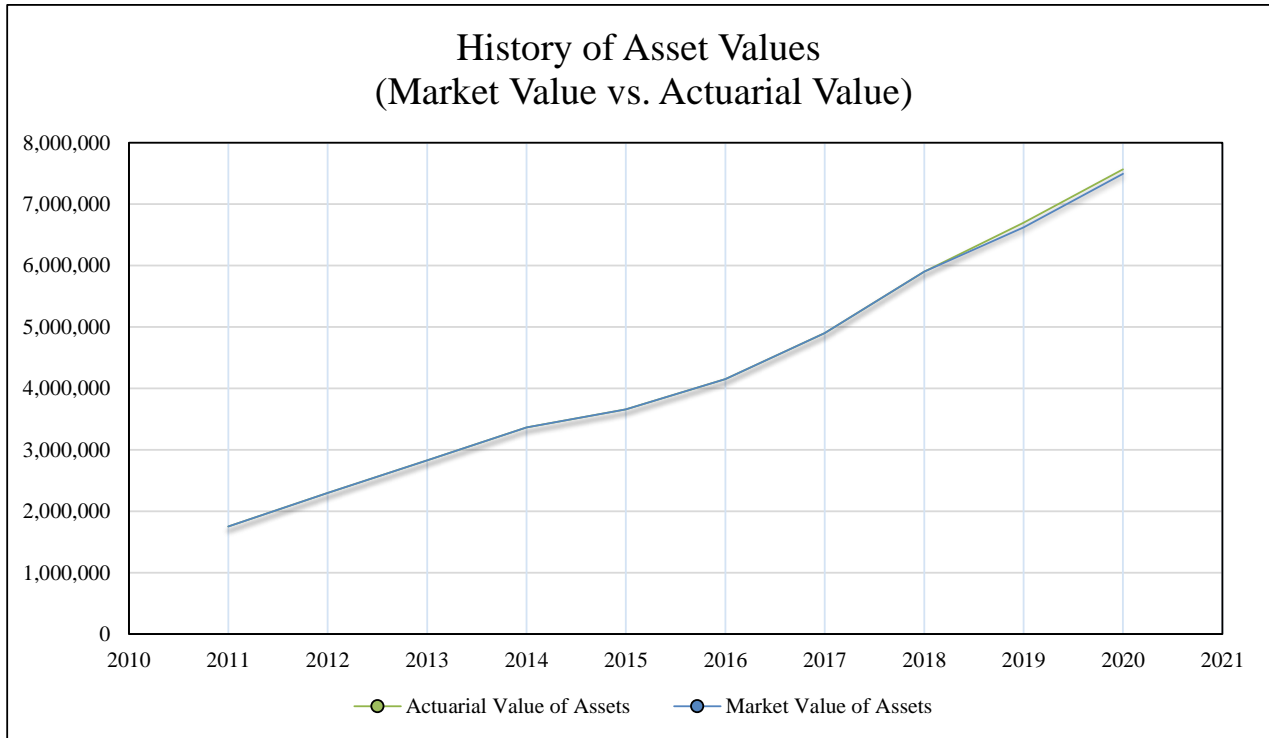
REVENUES

Contributions:		
Member	172,583.72	
Buy-Back	1,650.00	
District	197,863.76	
State	127,730.66	
 Total Contributions		 499,828.14
Earnings from Investments:		
Net Increase in Fair Value of Investments	458,065.59	
Change in Actuarial Value	(2,844.00)	
 Total Earnings and Investment Gains		 455,221.59
 EXPENDITURES		
Distributions to Members:		
Benefit Payments	41,500.99	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
 Total Distributions		 41,500.99
Expenses:		
Investment related ¹	12,965.68	
Administrative	32,896.00	
 Total Expenses		 45,861.68
 Change in Net Assets for the Year		 867,687.06
 Net Assets Beginning of the Year		 6,699,165.10
 Net Assets End of the Year ²		 7,566,852.16

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

²Net Assets may be limited for actuarial consideration.

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Actives</u>				
Number	N/A	27	28	32
Average Current Age	N/A	37.9	39.1	39.5
Average Age at Employment	N/A	27.4	28.5	29.8
Average Past Service	N/A	10.5	10.6	9.7
Average Annual Salary	N/A	\$52,801	\$55,223	\$61,120
<u>Service Retirees</u>				
Number	N/A	2	2	2
Average Current Age	N/A	54.8	55.8	56.8
Average Annual Benefit	N/A	\$13,472	\$13,472	\$13,472
<u>DROP Retirees</u>				
Number	N/A	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
<u>Beneficiaries</u>				
Number	N/A	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
<u>Disability Retirees</u>				
Number	N/A	0	1	1
Average Current Age	N/A	N/A	42.6	43.6
Average Annual Benefit	N/A	N/A	\$14,479	\$14,479
<u>Terminated Vested</u>				
Number	N/A	4	6	8
Average Current Age ¹	N/A	41.6	34.9	39.7
Average Annual Benefit ¹	N/A	\$12,828	\$17,796	\$27,443

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	2		1									3
30 - 34			1	1		2	1					5
35 - 39	2					1		1				4
40 - 44	1	1					2	6				10
45 - 49						2	3	2				7
50 - 54	1								1			2
55 - 59												0
60 - 64												0
65+												0
Total	6	1	2	1	1	5	6	9	1	0	0	32

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	28
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
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	26
h. New entrants	<u>6</u>
i. Total active life participants in valuation	<u>32</u>

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	1	1	5	9
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	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	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	2	6	11

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, 2020

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0
Receivables:	
State Contributions	1,792
Total Receivable	1,792
Investments:	
FL Municipal Investment Trust	7,492,436
Total Investments	7,492,436
Total Assets	7,494,228
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	7,494,228

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:

Member	172,584	
Buy-Back	1,650	
District	197,864	
State	127,730	
 Total Contributions		 499,828
 Investment Income:		
Net Increase in Fair Value of Investments	458,066	
Interest & Dividends	0	
Less Investment Expense ¹	(12,966)	
 Net Investment Income		 445,100
 Total Additions		 944,928

DEDUCTIONS

Distributions to Members:

Benefit Payments	41,501	
Refunds of Member Contributions	0	
 Total Distributions		 41,501
 Administrative Expense		 32,896
 Total Deductions		 74,397
 Net Increase in Net Position		 870,531
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		6,623,697
 End of the Year		 7,494,228

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

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2020)

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, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	6
Active Plan Members	28
	37
	37

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 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, 2020:

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, 2020, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 6.59 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, 2020 is \$0.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2020 were as follows:

Total Pension Liability	\$ 7,556,171
Plan Fiduciary Net Position	\$ (7,494,228)
Sponsor's Net Pension Liability	<u>\$ 61,943</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	99.18%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2019 updated to September 30, 2020 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, 2019 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 2020 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.

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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, 2020 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return¹</u>
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%

¹ 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.

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Sponsor's Net Pension Liability	\$ 1,313,126	\$ 61,943	\$ (966,321)

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

	<u>09/30/2020</u>	<u>09/30/2019</u>
Total Pension Liability		
Service Cost	368,177	339,987
Interest	487,164	431,520
Changes of benefit terms	-	(1,230)
Differences between Expected and Actual Experience	211,294	-
Changes of assumptions	(82,672)	-
Contributions - Buy Back	1,650	31,850
Benefit Payments, including Refunds of Employee Contributions	(41,501)	(31,770)
Net Change in Total Pension Liability	<u>944,112</u>	<u>770,357</u>
Total Pension Liability - Beginning	<u>6,612,059</u>	<u>5,841,702</u>
Total Pension Liability - Ending (a)	<u>\$ 7,556,171</u>	<u>\$ 6,612,059</u>
Plan Fiduciary Net Position		
Contributions - Employer	197,864	139,050
Contributions - State	127,730	124,987
Contributions - Employee	172,584	146,939
Contributions - Buy Back	1,650	31,850
Net Investment Income	445,100	332,427
Benefit Payments, including Refunds of Employee Contributions	(41,501)	(31,770)
Administrative Expense	(32,896)	(21,708)
Net Change in Plan Fiduciary Net Position	<u>870,531</u>	<u>721,775</u>
Plan Fiduciary Net Position - Beginning	<u>6,623,697</u>	<u>5,901,922</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 7,494,228</u>	<u>\$ 6,623,697</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 61,943</u>	<u>\$ (11,638)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	99.18%	100.18%
Covered Payroll	\$ 1,725,837	\$ 1,469,395
Net Pension Liability as a percentage of Covered Payroll	3.59%	-0.79%

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.

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

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
09/30/2020	\$ 270,956	\$ 325,594	\$ (54,638)	\$ 1,725,837	18.87%
09/30/2019	\$ 213,062	\$ 264,037	\$ (50,975)	\$ 1,469,395	17.97%

Notes to Schedule

Valuation Date: 10/01/2018

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, 2018 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 Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2020	6.59%
09/30/2019	5.50%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2020)

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, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	6
Active Plan Members	28
	37
	37

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 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, 2020.

The measurement period for the pension expense was October 1, 2019 to September 30, 2020.

The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2020.

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, 2019 updated to September 30, 2020 using the following actuarial assumptions:

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

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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, 2019 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 2020 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, 2020 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
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%	

¹ 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)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2019	\$ 6,612,059	\$ 6,623,697	\$ (11,638)
Changes for a Year:			
Service Cost	368,177	-	368,177
Interest	487,164	-	487,164
Differences between Expected and Actual Experience	211,294	-	211,294
Changes of assumptions	(82,672)	-	(82,672)
Changes of benefit terms	-	-	-
Contributions - Employer	-	197,864	(197,864)
Contributions - State	-	127,730	(127,730)
Contributions - Employee	-	172,584	(172,584)
Contributions - Buy Back	1,650	1,650	-
Net Investment Income	-	445,100	(445,100)
Benefit Payments, including Refunds of Employee Contributions	(41,501)	(41,501)	-
Administrative Expense	-	(32,896)	32,896
Net Changes	944,112	870,531	73,581
Balances at September 30, 2020	\$ 7,556,171	\$ 7,494,228	\$ 61,943

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 1,313,126	\$ 61,943	\$ (966,321)

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, 2020**

For the year ended September 30, 2020, the Sponsor will recognize a Pension Expense of \$301,910.

On September 30, 2020, 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	581,295	46,698
Changes of assumptions	36,370	70,860
Net difference between Projected and Actual Earnings on Pension Plan investments	29,272	-
Total	\$ 646,937	\$ 117,558

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:				
2021		\$		70,515
2022		\$		122,316
2023		\$		123,460
2024		\$		104,593
2025		\$		97,903
Thereafter		\$		10,592

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

	09/30/2020	09/30/2019
Total Pension Liability		
Service Cost	368,177	339,987
Interest	487,164	431,520
Changes of benefit terms	-	(1,230)
Differences between Expected and Actual Experience	211,294	-
Changes of assumptions	(82,672)	-
Contributions - Buy Back	1,650	31,850
Benefit Payments, including Refunds of Employee Contributions	(41,501)	(31,770)
Net Change in Total Pension Liability	944,112	770,357
Total Pension Liability - Beginning	6,612,059	5,841,702
Total Pension Liability - Ending (a)	<u>\$ 7,556,171</u>	<u>\$ 6,612,059</u>
Plan Fiduciary Net Position		
Contributions - Employer	197,864	139,050
Contributions - State	127,730	124,987
Contributions - Employee	172,584	146,939
Contributions - Buy Back	1,650	31,850
Net Investment Income	445,100	332,427
Benefit Payments, including Refunds of Employee Contributions	(41,501)	(31,770)
Administrative Expense	(32,896)	(21,708)
Net Change in Plan Fiduciary Net Position	870,531	721,775
Plan Fiduciary Net Position - Beginning	6,623,697	5,901,922
Plan Fiduciary Net Position - Ending (b)	<u>\$ 7,494,228</u>	<u>\$ 6,623,697</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 61,943</u>	<u>\$ (11,638)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	99.18%	100.18%
Covered Payroll	\$ 1,725,837	\$ 1,469,395
Net Pension Liability as a percentage of Covered Payroll	3.59%	-0.79%

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.

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

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
09/30/2020	\$ 270,956	\$ 325,594	\$ (54,638)	\$ 1,725,837	18.87%
09/30/2019	\$ 213,062	\$ 264,037	\$ (50,975)	\$ 1,469,395	17.97%

Notes to Schedule

Valuation Date: 10/01/2018

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, 2018 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, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (11,638)	\$ 167,220	\$ 599,334	\$ -
Total Pension Liability Factors:				
Service Cost	368,177	-	-	368,177
Interest	487,164	-	-	487,164
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	1,650	-	-	1,650
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	211,294	-	211,294	-
Current year amortization of experience difference	-	(7,783)	(110,221)	102,438
Change in assumptions about future economic or demographic factors or other inputs	(82,672)	82,672	-	-
Current year amortization of change in assumptions	-	(11,812)	(7,274)	(4,538)
Benefit Payments, including Refunds of Employee Contributions	(41,501)	-	-	-
Net change	<u>944,112</u>	<u>63,077</u>	<u>93,799</u>	<u>954,891</u>
Plan Fiduciary Net Position:				
Contributions - Employer	197,864	-	-	-
Contributions - State	127,730	-	-	-
Contributions - Employee	172,584	-	-	(172,584)
Contributions - Buy Back	1,650	-	-	(1,650)
Projected Net Investment Income	478,549	-	-	(478,549)
Difference between projected and actual earnings on Pension Plan investments	(33,449)	-	33,449	-
Current year amortization	-	(58,650)	(25,556)	(33,094)
Benefit Payments, including Refunds of Employee Contributions	(41,501)	-	-	-
Administrative Expenses	(32,896)	-	-	32,896
Net change	<u>870,531</u>	<u>(58,650)</u>	<u>7,893</u>	<u>(652,981)</u>
Ending Balance	<u>\$ 61,943</u>	<u>\$ 171,647</u>	<u>\$ 701,026</u>	<u>\$ 301,910</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)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2020	\$ 33,449	5	\$ 6,689	\$ 6,690	\$ 6,690	\$ 6,690	\$ 6,690	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 94,335	5	\$ 18,867	\$ 18,867	\$ 18,867	\$ 18,867	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (5,718)	5	\$ (1,144)	\$ (1,144)	\$ (1,144)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (259,004)	5	\$ (51,801)	\$ (51,801)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (28,525)	5	\$ (5,705)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (33,094)	\$ (27,388)	\$ 24,413	\$ 25,557	\$ 6,690	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2020	\$ (82,672)	7	\$ (11,812)	\$ (11,810)	\$ (11,810)	\$ (11,810)	\$ (11,810)	\$ (11,810)	\$ (11,810)	\$ -	\$ -	\$ -
2016	\$ 72,738	10	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ 7,274	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (4,538)	\$ (4,536)	\$ (4,536)	\$ (4,536)	\$ (4,536)	\$ (4,536)	\$ (11,810)	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between		Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Expected and Actual Experience												
2020	\$	211,294	7	\$ 30,184	\$ 30,185	\$ 30,185	\$ 30,185	\$ 30,185	\$ 30,185	\$ 30,185	\$ -	\$ -	\$ -
2018	\$	114,265	8	\$ 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)	\$ -	\$ -	\$ -
2016	\$	657,537	10	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ 65,754	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense				\$ 102,438	\$ 102,439	\$ 102,439	\$ 102,439	\$ 102,439	\$ 102,439	\$ 22,402	\$ -	\$ -	\$ -