

CITY OF FORT MEADE  
FIREFIGHTERS' RETIREMENT PLAN

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2021

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

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



**FOSTER & FOSTER**  
ACTUARIES AND CONSULTANTS

February 18, 2022

Board of Trustees  
City of Fort Meade  
Firefighters' Pension Board

Re: City of Fort Meade FireFighters' Retirement Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Fort Meade FireFighters' Retirement Plan. 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 City of Fort Meade, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding and accounting rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2020. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2021 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.


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


To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Fort Meade, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the FireFighters' Retirement Plan. 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:   
\_\_\_\_\_  
Douglas H. Lozen, EA, MAAA  
Enrolled Actuary #20-7778

By:   
\_\_\_\_\_  
Kevin H. Peng, ASA, EA, MAAA  
Enrolled Actuary #20-7783

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Enclosures

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## SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Fort Meade FireFighters' Retirement Plan, performed as of October 1, 2021, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2022.

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

Valuation Date	10/1/2021	10/1/2020
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2021</u>
Minimum Required Contribution <sup>1</sup>	\$24,239	\$21,561

<sup>1</sup> Please note that the City has access to a prepaid contribution of \$3,332.32 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2022.

As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the October 1, 2020 actuarial valuation. This is attributable to an increase in the level of administrative expenses and a reduction in the investment return assumption. These increases were partially offset by net favorable actuarial experience described in the next paragraph.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. The primary sources of actuarial gain included an average decrease in pensionable earnings of more than 18% and a 9.86% investment return (Actuarial Asset Basis, net of fees), exceeding the 7.00% assumption.

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

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

### Actuarial Assumption/Method Changes

In conjunction with this valuation of the plan, the investment return assumption is lowered from 7.00% to 6.75%.

# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2021</u>	Old Assump <u>10/1/2021</u>	<u>10/1/2020</u>
A. Participant Data			
Actives	14	14	12
Service Retirees	8	8	7
Beneficiaries	2	2	2
Disability Retirees	0	0	0
Terminated Vested	<u>7</u>	<u>7</u>	<u>8</u>
Total	31	31	29
Total Annual Payroll	\$86,715	\$86,715	\$91,042
Payroll Under Assumed Ret. Age	80,442	80,442	91,042
Annual Rate of Payments to:			
Service Retirees	19,978	19,978	18,503
Beneficiaries	6,662	6,662	6,662
Disability Retirees	0	0	0
Terminated Vested	7,829	7,829	10,778
B. Assets			
Actuarial Value (AVA)	416,975	416,975	398,850
Market Value (MVA)	450,491	450,491	396,092
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	215,849	205,726	203,284
Disability Benefits	10,844	10,317	10,447
Death Benefits	1,615	1,569	1,843
Vested Benefits	4,488	4,148	4,561
Refund of Contributions	0	0	0
Service Retirees	161,853	159,252	145,526
Beneficiaries	46,445	45,868	47,781
Disability Retirees	0	0	0
Terminated Vested	<u>57,207</u>	<u>55,269</u>	<u>68,155</u>
Total	498,301	482,149	481,597



C. Liabilities - (Continued)	New Assump <u>10/1/2021</u>	Old Assump <u>10/1/2021</u>	<u>10/1/2020</u>
Present Value of Future Salaries	864,204	847,481	928,304
Present Value of Future Member Contributions	0	0	0
Total Normal Cost	3,789	3,248	4,947
Present Value of Future Normal Costs (EAN)	85,078	78,595	82,290
Accrued Liability (Retirement)	142,639	138,256	131,992
Accrued Liability (Disability)	2,880	2,793	3,570
Accrued Liability (Death)	691	685	877
Accrued Liability (Vesting)	1,508	1,431	1,406
Accrued Liability (Refunds)	0	0	0
Accrued Liability (Inactives)	<u>265,505</u>	<u>260,389</u>	<u>261,462</u>
Total Actuarial Accrued Liability (EAN AL)	413,223	403,554	399,307
Total Actuarial Accrued Liability (FIL)	457,599	447,930	431,154
Unfunded Actuarial Accrued Liability (UAAL)	40,624	30,955	32,304
Funded Ratio (AVA / EAN AL)	100.9%	103.3%	99.9%
Funded Ratio (AVA / FIL AL)	91.1%	93.1%	92.5%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2021</u>	Old Assump <u>10/1/2021</u>	<u>10/1/2020</u>
Vested Accrued Benefits			
Inactives	265,505	260,389	261,462
Actives	114,908	111,568	96,684
Member Contributions	<u>0</u>	<u>0</u>	<u>0</u>
Total	380,413	371,957	358,146
Non-vested Accrued Benefits	<u>18,440</u>	<u>17,629</u>	<u>16,864</u>
Total Present Value			
Accrued Benefits (PVAB)	398,853	389,586	375,010
Funded Ratio (MVA / PVAB)	112.9%	115.6%	105.6%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	9,267	0	
Plan Experience	0	15,516	
Benefits Paid	0	(26,271)	
Interest	0	25,331	
Other	<u>0</u>	<u>0</u>	
Total	9,267	14,576	

	New Assump	Old Assump	
Valuation Date	10/1/2021	10/1/2021	10/1/2020
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 <sup>1</sup>	\$3,917	\$3,362	\$5,120
Administrative Expenses <sup>1</sup>	16,804	16,824	13,550
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2021) <sup>1</sup>	3,518	2,835	2,891
Minimum Required Contribution	24,239	23,021	21,561
Expected Member Contributions <sup>1</sup>	0	0	0
Expected City and State Contribution	24,239	23,021	21,561

F. Past Contributions

Plan Years Ending:	<u>9/30/2021</u>
City and State Requirement	21,561
Actual Contributions Made:	
City	21,561
State	<u>0</u>
Total	21,561

G. Net Actuarial (Gain)/Loss N/A

<sup>1</sup> Contributions developed as of 10/1/2021 displayed above includes an interest adjustment to account for the timing of sponsor contributions.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2021	40,624
2022	39,734
2023	38,784
2030	30,762
2037	20,249
2044	6,730
2051	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2021	-18.36%	3.00%
Year Ended 9/30/2020	13.93%	3.00%
Year Ended 9/30/2019	6.03%	3.00%
Year Ended 9/30/2018	-10.74%	3.00%
Year Ended 9/30/2017	17.46%	3.00%

(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 9/30/2021	19.31%	9.86%	7.00%
Year Ended 9/30/2020	6.24%	7.61%	7.00%
Year Ended 9/30/2019	5.12%	6.48%	7.00%
Year Ended 9/30/2018	7.42%	7.58%	7.50%
Year Ended 9/30/2017	13.14%	8.55%	7.50%

## 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.



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

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

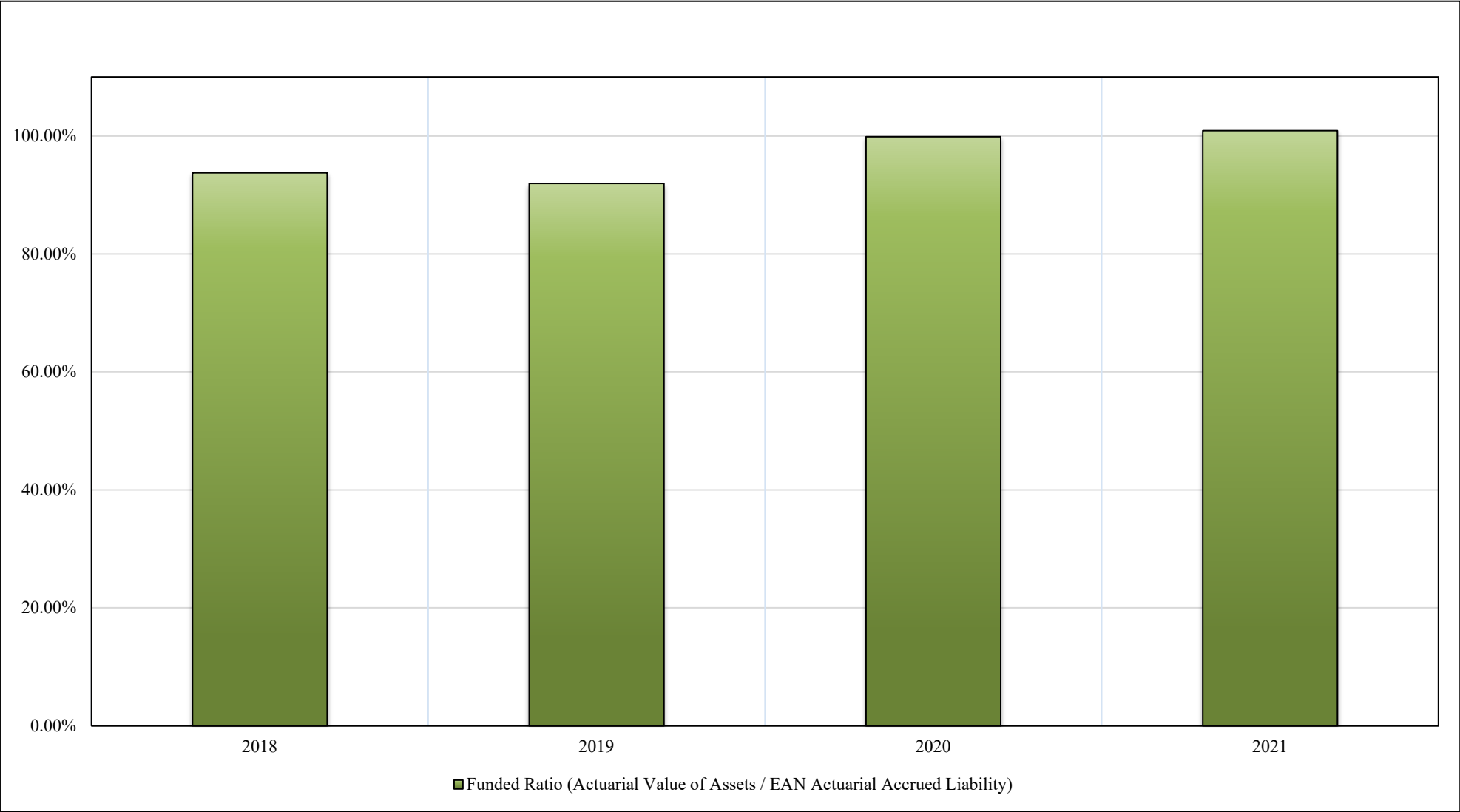
Mr. Steve Bardin  
Municipal Police and Fire  
Pension Trust Funds  
Division of Retirement  
Post Office Box 3010  
Tallahassee, FL 32315-3010

# RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2020	\$32,304
(2)	Sponsor Normal Cost developed as of October 1, 2020	4,947
(3)	Expected administrative expenses for the year ended September 30, 2021	13,092
(4)	Expected interest on (1), (2) and (3)	3,066
(5)	Sponsor contributions to the System during the year ended September 30, 2021	21,561
(6)	Expected interest on (5)	893
(7)	Unfunded Actuarial Accrued Liability as of September 30, 2021 (1)+(2)+(3)+(4)-(5)-(6)	30,955
(8)	Change to UAAL due to Assumption Change	9,669
(9)	Unfunded Actuarial Accrued Liability as of October 1, 2021	40,624

Type of Base	Date Established	Years Remaining	10/1/2021 Amount	Amortization Amount
Prior Base #1		7	1,803	311
Prior Base #2		19	7,341	653
Assump Change	10/1/2016	25	14,954	1,175
Benefits Change	10/1/2017	26	2,078	161
Assump Change	10/1/2018	27	19,030	1,452
Assump Change	10/1/2020	29	(14,251)	(1,061)
Assump Change	10/1/2021	30	9,669	712
			<u>40,624</u>	<u>3,403</u>

HISTORY OF FUNDING PROGRESS



## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Active Lives:*

**Female:** PubS.H-2010 for Employees, set forward one year.

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

#### *Healthy Retiree Lives:*

**Female:** PubS.H-2010 for Healthy Retirees, set forward one year.

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

#### *Beneficiary Lives:*

**Female:** PubG.H-2010 (Below Median) for Healthy Retirees.

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

#### *Disabled Lives:*

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

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

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

### Interest Rate

6.75% (prior year 7.00%) per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

### Salary Increases

3.00% per year.

### Payroll Growth

None.



<u>Administrative Expenses</u>	\$16,255 annually, based on the average of actual expenses incurred in the prior two fiscal years.
<u>Amortization Method</u>	New UAAL amortization bases are amortized over 30 years.
<u>Retirement Age</u>	100% retirement is assumed at the earliest of: (a) any age with 40 years of service; (b) age 55 with 30 years of service; (c) age 60 with 10 years of service; or (d) age 65.
<u>Disability Rate</u>	See sample rates below. It is assumed that 100% of disablements are service related.
<u>Termination Rate</u>	See sample rates below.
<u>Marriage assumption</u>	100% assumed married with spouse's same age as member
<u>Actuarial Asset Method</u>	All assets are valued at market value with an adjustment made 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.
<u>Funding Method</u>	Frozen Entry Age Actuarial Cost Method. A half-year interest load is utilized, based on the valuation assumption for investment return.

<u>% Terminating During the Year</u>			<u>% Becoming Disabled During the Year</u>		
Age	Male	Female	Age	Male	Female
20	7.4%	12.4%	20	0.03%	0.03%
25	4.9%	7.4%	25	0.04%	0.05%
30	3.4%	4.9%	30	0.05%	0.08%
35	2.4%	3.4%	35	0.07%	0.14%
40	1.3%	2.4%	40	0.12%	0.21%
45	0.7%	1.3%	45	0.20%	0.32%
50	0.0%	0.7%	50	0.36%	0.53%
55	0.0%	0.0%	55	0.72%	0.95%
			60	1.26%	1.16%
			65	1.75%	1.36%

## 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.

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 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, less the Unfunded Actuarial Accrued Liability (UAAL).
- (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.

Frozen Entry Age 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) and the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is reconciled each valuation with charges and credits as follows:

- (a) Charges: the Normal Cost for the prior year, in addition to interest (at the prior year valuation assumption) on the Normal Cost and prior year's UAAL balance.
- (b) Credits: Sponsor contributions with interest at the prior year valuation assumption.

New UAAL bases will be created only for changes in methods, assumptions, or benefits. Actuarial gains and losses are funded as part of the Normal Cost.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of 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 financial impact on the plan's normal cost of the experience differing from assumptions; this gain or loss is spread over a period of time determined by the average future working lifetime of the current active membership as of the valuation date. 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 normal cost 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 88.2% on October 1, 2018 to 82.4% on October 1, 2021, indicating 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 64.3%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less 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 increased from 93.8% on October 1, 2018 to 100.9% on October 1, 2021.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from -1.9% on October 1, 2018 to -4.6% on October 1, 2021. The current Net Cash Flow Ratio of -4.6% indicates that contributions are not currently covering 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>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>	<u>10/1/2021</u>
<u>Support Ratio</u>				
Total Actives	15	13	12	14
Total Inactives	17	17	17	17
Actives / Inactives	88.2%	76.5%	70.6%	82.4%
<u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	403,020	396,759	396,092	450,491
Total Annual Payroll	69,778	84,004	91,042	86,715
MVA / Total Annual Payroll	577.6%	472.3%	435.1%	519.5%
<u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	272,705	287,600	261,462	265,505
Total Accrued Liability (EAN)	421,848	429,073	399,307	413,223
Inactive AL / Total AL	64.6%	67.0%	65.5%	64.3%
<u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	395,523	394,559	398,850	416,975
Total Accrued Liability (EAN)	421,848	429,073	399,307	413,223
AVA / Total Accrued Liability (EAN)	93.8%	92.0%	99.9%	100.9%
<u>Net Cash Flow Ratio</u>				
Net Cash Flow <sup>1</sup>	(7,528)	(25,889)	(25,096)	(20,560)
Market Value of Assets (MVA)	403,020	396,759	396,092	450,491
Ratio	-1.9%	-6.5%	-6.3%	-4.6%

<sup>1</sup> Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2021

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Cash	3,197.76
Total Cash and Equivalents	3,197.76
Total Receivable	0.00
Investments:	
Pooled/Common/Commingled Funds:	
Fixed Income	142,985.75
Equity	272,266.79
Real Estate	38,373.17
Total Investments	453,625.71
Total Assets	456,823.47
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	3,000.00
Prepaid City Contribution	3,332.32
Total Liabilities	6,332.32
NET POSITION RESTRICTED FOR PENSIONS	450,491.15

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

ADDITIONS

Contributions:

City	21,561.00	
------	-----------	--

Total Contributions		21,561.00
---------------------	--	-----------

Investment Income:

Net Increase in Fair Value of Investments	75,829.78	
---	-----------	--

Less Investment Expense <sup>1</sup>	(870.64)	
--------------------------------------	----------	--

Net Investment Income		74,959.14
-----------------------	--	-----------

Total Additions		96,520.14
-----------------	--	-----------

DEDUCTIONS

Distributions to Members:

Benefit Payments	26,271.09	
------------------	-----------	--

Lump Sum DROP Distributions	0.00	
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Total Distributions		26,271.09
---------------------	--	-----------

Administrative Expense		15,849.60
------------------------	--	-----------

Total Deductions		42,120.69
------------------	--	-----------

Net Increase in Net Position		54,399.45
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		396,091.70
-----------------------	--	------------

End of the Year		450,491.15
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<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION  
September 30, 2021

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

Plan Year Ending	Gain/Loss	<u>Gains/(Losses) Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2021	2022	2023	2024	2025
09/30/2017	19,733	0	0	0	0	0
09/30/2018	(313)	(61)	0	0	0	0
09/30/2019	(7,286)	(2,915)	(1,458)	0	0	0
09/30/2020	(2,759)	(1,655)	(1,103)	(551)	0	0
09/30/2021	47,684	38,147	28,610	19,073	9,536	0
Total		33,516	26,049	18,522	9,536	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2020	400,058
Contributions Less Benefit Payments & Admin Expenses	(21,194)
Expected Investment Earnings*	27,275
Actual Net Investment Earnings	74,959
2021 Actuarial Investment Gain/(Loss)	<u>47,684</u>

\*Expected Investment Earnings =  $0.07 * 400,058 - 21,194 * [(1 + 0.07)^{0.5} - 1]$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2021	450,491
(2) Gain/(Loss) Not Yet Recognized	33,516
(3) Actuarial Value of Assets, 09/30/2021, (1) - (2)	<u>416,975</u>
(A) 09/30/2020 Actuarial Assets, including Prepaid Contributions:	402,816
(I) Net Investment Income:	
1. Net Increase in Fair Value of Investments	75,830
2. Change in Actuarial Value	(36,274)
3. Investment Expenses	(871)
Total	<u>38,685</u>
(B) 09/30/2021 Actuarial Assets, including Prepaid Contributions:	420,307
Actuarial Asset Rate of Return = $2I/(A+B-I)$ :	9.86%
Market Value of Assets Rate of Return:	19.31%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	11,230
10/01/2021 Limited Actuarial Assets (not including Prepaid):	416,975

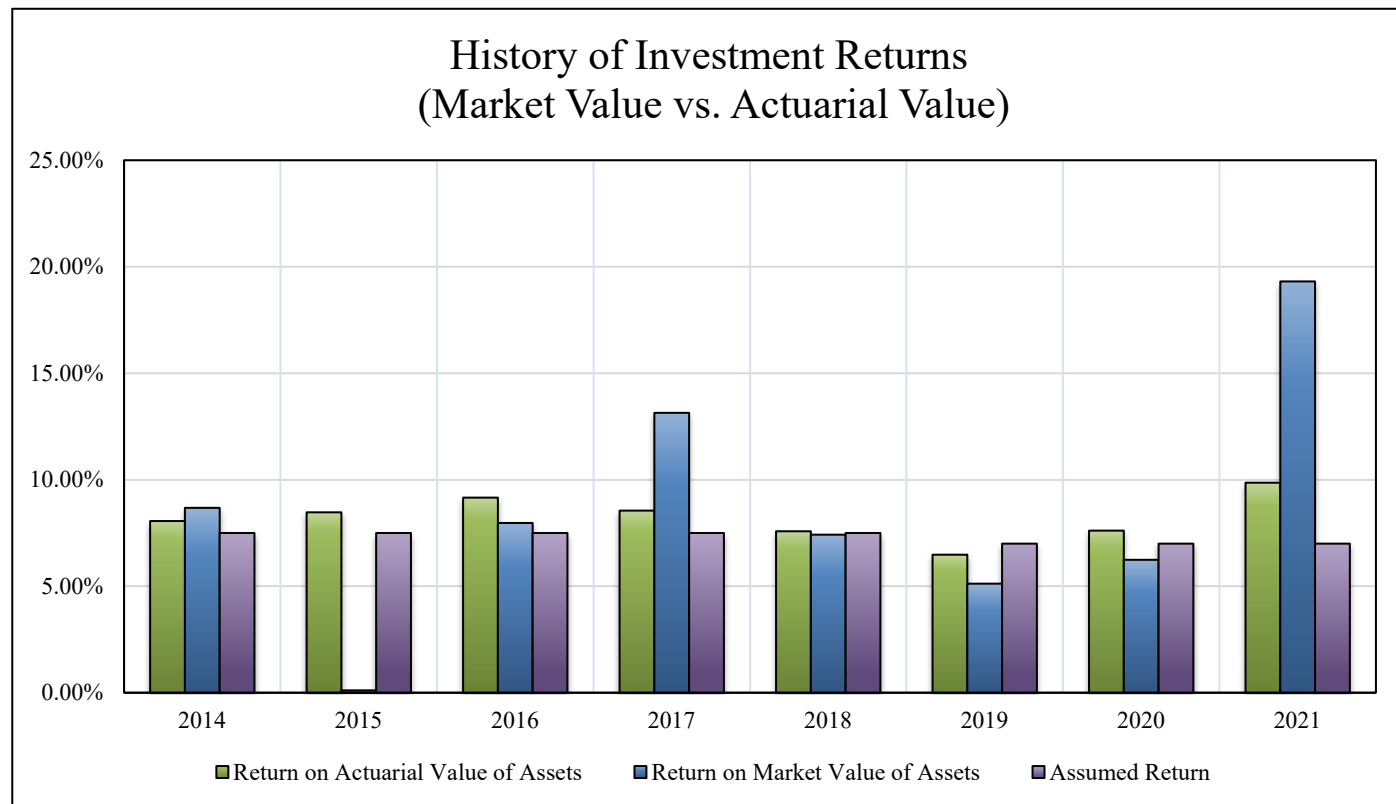
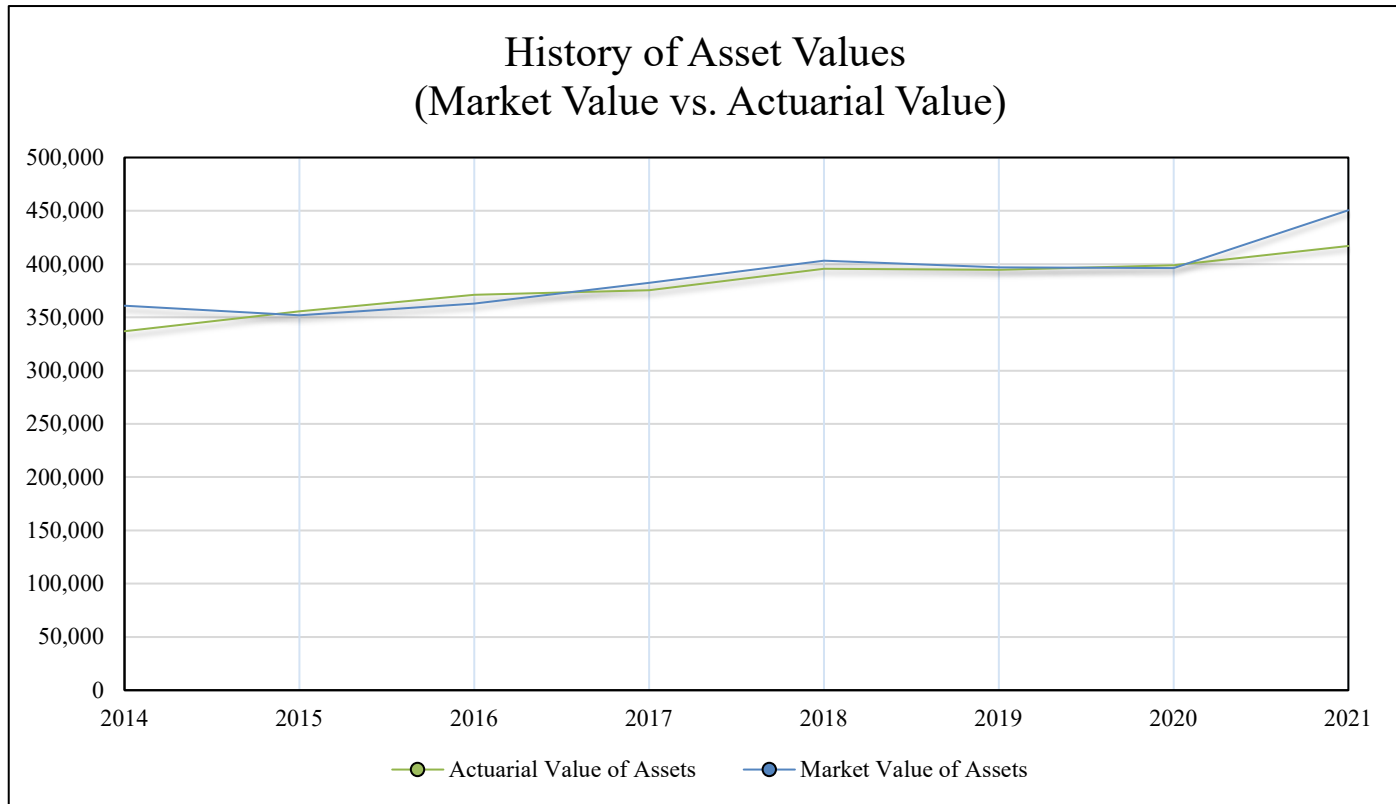


## REVENUES

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION  
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2021

(1) Required City and State Contributions	\$21,561.00
(2) Less Allowable State Contribution	<u>0.00</u>
(3) Required City Contribution for Fiscal 2021	21,561.00
(4) Less 2020 Prepaid Contribution	(3,966.22)
(5) Less Actual City Contributions	<u>(20,927.10)</u>
(6) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2021	(\$3,332.32)

## HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



## STATISTICAL DATA

	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>	<u>10/1/2021</u>
<u>Actives</u>				
Number	15	13	12	14
Average Current Age	39.7	38.1	37.3	38.0
Average Age at Employment	29.7	29.4	28.5	29.6
Average Past Service	10.0	8.7	8.8	8.4
Average Annual Salary	\$4,652	\$6,462	\$7,587	\$6,194
<u>Service Retirees</u>				
Number	8	8	7	8
Average Current Age	74.6	75.6	73.4	71.4
Average Annual Benefit	\$3,648	\$3,361	\$2,643	\$2,497
<u>Beneficiaries</u>				
Number	0	0	2	2
Average Current Age	N/A	N/A	79.6	80.6
Average Annual Benefit	N/A	N/A	\$3,331	\$3,331
<u>Disability Retirees</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Terminated Vested</u>				
Number	9	9	8	7
Average Current Age	49.6	51.0	50.8	51.8
Average Annual Benefit	\$794	\$1,209	\$1,347	\$1,118

## 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
30 - 34	1		1			3						5
35 - 39				2								2
40 - 44	1							1				2
45 - 49												0
50 - 54						1						1
55 - 59										1	1	2
60 - 64												0
65+												0
Total	2	0	3	2	0	4	0	1	0	1	1	14

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2020	12
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distributio	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	12
g. New entrants	<u>2</u>
h. Total active life participants in valuation	14

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity) <u>Annuit</u>	Vested (Due Refund) <u>Refund</u>	<u>Total</u>
a. Number prior valuation	7	2	0	8	0	17
Retired	1	0	0	(1)	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	8	2	0	7	0	17

## SUMMARY OF CURRENT PLAN

<u>Plan Effective Date</u>	January 1, 1969.
<u>Participation Requirement</u>	All full-time firefighters of the City of Fort Meade, Florida participate in the plan as of the first day of the month.
<u>Credited Service</u>	The elapsed time from the participant's date of hire until his date of termination, retirement, or death, calculated to the nearest full month.
<u>Compensation</u>	Total cash remuneration, including overtime and payments for accrued vacation and longevity, but excluding bonuses; annual compensation in excess of \$200,000 (as indexed) is excluded in accordance with Internal Revenue Code (IRC) §401(a)(17).
<u>Average Final Compensation</u>	Average of the last 5 years of compensation paid preceding termination of employment.
<u>Normal Retirement</u>	
Eligibility	The earlier of: 1) Age 65, or 2) Age 60 and 10 years of Credited Service, or 3) Age 55 and 30 years of Credited Service, or 4) 40 years of Credited Service, regardless of age.
Benefit Amount	1.75% of Average Final Compensation times Credited Service.
Form of Benefit	Ten Year Certain and Life thereafter (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 years of Credited Service.
Benefit Amount	Accrued benefit, reduced 5% for each year prior to age 60.

### Disability

Eligibility	Total and permanent as determined by the commission. Coverage from date of employment for service incurred disabilities; 10 years of Credited Service required for non-service.
Benefit Amount	
Service Incurred	Accrued benefit (1.75% rate), but not less than 30% of Compensation in effect at the time of disability.
Non-service Incurred	Accrued benefit (1.75% rate).
Duration	Benefit commences on first day of the month following establishment of disability. Benefits are paid for life with 120 months guaranteed, or, if earlier, until recovery (as determined by the commission).

### Pre-Retirement Death

Eligibility	Coverage from date of employment.
Benefit Amount	
Death prior to Normal Retirement Date	Spouse will receive a single lump sum payment equal to the actuarially equivalent value of 75% of the participant's vested accrued benefit.
Death on or after Normal Retirement Date	Spouse will receive 66½% of the participant's accrued 66½% joint and contingent annuity payable for life. Alternatively, his spouse may choose to receive the 75% lump sum benefit that is payable in the case of a pre- retirement death prior to reaching Normal Retirement Age.

<u>Post-Retirement Death</u>	According to option selected, if any.
------------------------------	---------------------------------------

### Vesting (Termination)

Eligibility	10 years or more of Credited Service.
Benefit Amount	Accrued benefit (1.75% rate) payable at the Member's election, on his otherwise Early or Normal Retirement Date.



STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2021

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Cash	3,198
Total Cash and Equivalents	3,198
Total Receivable	0
Investments:	
Pooled/Common/Commingled Funds:	
Fixed Income	142,985
Equity	272,267
Real Estate	38,373
Total Investments	453,625
Total Assets	456,823
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	3,000
Total Liabilities	3,000
NET POSITION RESTRICTED FOR PENSIONS	453,823

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

ADDITIONS

## Contributions:

City	20,927	
------	--------	--

Total Contributions		20,927
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## Investment Income:

Net Increase in Fair Value of Investments	75,830	
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Interest & Dividends	0	
----------------------	---	--

Less Investment Expense <sup>1</sup>	(871)	
--------------------------------------	-------	--

Net Investment Income		74,959
-----------------------	--	--------

Total Additions		95,886
-----------------	--	--------

DEDUCTIONS

## Distributions to Members:

Benefit Payments	26,271	
------------------	--------	--

Total Distributions		26,271
---------------------	--	--------

Administrative Expense		15,850
------------------------	--	--------

Total Deductions		42,121
------------------	--	--------

Net Increase in Net Position		53,765
------------------------------	--	--------

## NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		400,058
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End of the Year		453,823
-----------------	--	---------

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

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

### *Plan Administration*

The Plan is a single-employer defined benefit pension plan administered by the City of Fort Meade. The five-member City Commission serves as the Board of Trustees.

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

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	9
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	12
	29

### *Benefits Provided*

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

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Fort Meade Firefighters' Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

### *Contributions*

Amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.

### *Investment Policy:*

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

Asset Class	Target Allocation
US Large Cap Equity	25.00%
US Small Cap Equity	14.00%
Non-US Equity	21.00%
Core Bonds	15.00%
Core Plus	15.00%
Core Real Estate	10.00%
Total	100.00%

### *Concentrations:*

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

### *Rate of Return:*

For the year ended September 30, 2021, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 19.31 percent.

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

## NET PENSION LIABILITY OF THE SPONSOR

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

Total Pension Liability	\$ 418,188
Plan Fiduciary Net Position	\$ (453,823)
Sponsor's Net Pension Liability	<u>\$ (35,635)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	108.52%

*Actuarial Assumptions:*

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

Inflation	2.92%
Salary Increases	3.00%
Discount Rate	6.75%
Investment Rate of Return	6.75%

*Mortality Rate Healthy Active Lives:*

Female: PubS.H-2010 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.

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. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was unknown.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2021 the inflation rate assumption of the investment advisor was 2.80%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2021 are summarized in the following table:

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

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

*Discount Rate:*  
The Discount Rate used to measure the Total Pension Liability was 6.75 percent.  
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	<div>1% Decrease</div> <div>5.75%</div>	<div>Current</div> <div>Discount Rate</div> <div>6.75%</div>	<div>1% Increase</div> <div>7.75%</div>
Sponsor's Net Pension Liability	\$ 11,358	\$ (35,635)	\$ (75,036)

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

Measurement Date	09/30/2021	09/30/2020
Total Pension Liability		
Service Cost	8,226	7,192
Interest	28,944	28,463
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(20,427)	16,335
Changes of assumptions	9,317	(18,627)
Benefit Payments, including Refunds of Employee Contributions	(26,271)	(28,770)
Net Change in Total Pension Liability	(211)	4,593
Total Pension Liability - Beginning	418,399	413,806
Total Pension Liability - Ending (a)	<u>\$ 418,188</u>	<u>\$ 418,399</u>
Plan Fiduciary Net Position		
Contributions - Employer	20,927	20,334
Net Investment Income	74,959	24,428
Benefit Payments, including Refunds of Employee Contributions	(26,271)	(28,770)
Administrative Expense	(15,850)	(16,659)
Net Change in Plan Fiduciary Net Position	53,765	(667)
Plan Fiduciary Net Position - Beginning	400,058	400,725
Plan Fiduciary Net Position - Ending (b)	<u>\$ 453,823</u>	<u>\$ 400,058</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (35,635)</u>	<u>\$ 18,341</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	108.52%	95.62%
Covered Payroll	\$ 75,284	\$ 89,240
Net Pension Liability as a percentage of Covered Payroll	-47.33%	20.55%

**Notes to Schedule:***Changes of assumptions:*

For measurement date 09/30/2021, the investment rate of return was lowered from 7.00% to 6.75%, net of investment related expenses.

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 the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar 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
09/30/2021	\$ 21,561	\$ 20,927	\$ 634	\$ 75,284	27.80%
09/30/2020	\$ 20,334	\$ 20,334	\$ -	\$ 89,240	22.79%

#### Notes to Schedule

Valuation Date: 10/01/2020

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Fort Meade Firefighters' Retirement Plan 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
09/30/2021	19.31%
09/30/2020	6.24%



## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

### *Plan Description*

The Plan is a single-employer defined benefit pension plan administered by the City of Fort Meade. The five-member City Commission serves as the Board of Trustees.

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

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	9
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	8
Active Plan Members	12
	<u>29</u>

### *Benefits Provided*

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

A summary of the benefit provisions can be found in the October 1, 2020 Actuarial Valuation Report for the City of Fort Meade Firefighters' Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

### *Contributions*

Amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.

### *Net Pension Liability*

The measurement date is September 30, 2021.

The measurement period for the expense was October 1, 2020 to September 30, 2021.

The reporting period is October 1, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of September 30, 2021.

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

### *Actuarial Assumptions:*

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

Inflation	2.92%
Salary Increases	3.00%
Discount Rate	6.75%
Investment Rate of Return	6.75%

*Mortality Rate Healthy Active Lives:*

Female: PubS.H-2010 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.

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. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was unknown.

The Long-Term Expected Rate of Return on Pension Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, Net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2021 the inflation rate assumption of the investment advisor was 2.80%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2021 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return <sup>1</sup>
US Large Cap Equity	25.00%	7.20%
US Small Cap Equity	14.00%	8.40%
Non-US Equity	21.00%	8.20%
Core Bonds	15.00%	2.60%
Core Plus	15.00%	2.90%
Core Real Estate	10.00%	6.70%
Total	100.00%	

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

*Discount Rate:*

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

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

## CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2020	\$ 418,399	\$ 400,058	\$ 18,341
Changes for a Year:			
Service Cost	8,226	-	8,226
Interest	28,944	-	28,944
Differences between Expected and Actual Experience	(20,427)	-	(20,427)
Changes of assumptions	9,317	-	9,317
Changes of benefit terms	-	-	-
Contributions - Employer	-	20,927	(20,927)
Net Investment Income	-	74,959	(74,959)
Benefit Payments, including Refunds of Employee Contributions	(26,271)	(26,271)	-
Administrative Expense	-	(15,850)	15,850
Net Changes	(211)	53,765	(53,976)
Balances at September 30, 2021	\$ 418,188	\$ 453,823	\$ (35,635)

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.75%	6.75%	7.75%
Sponsor's Net Pension Liability	\$ 11,358	\$ (35,635)	\$ (75,036)

*Pension Plan Fiduciary Net Position.*

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

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

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$17,272. On September 30, 2021, 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	12,622	57,174
Changes of assumptions	17,944	13,305
Net difference between Projected and Actual Earnings on Pension Plan investments	-	33,908
Total	\$ 30,566	\$ 104,387

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

Year ended September 30:	
2022	\$ (6,689)
2023	\$ (17,105)
2024	\$ (18,564)
2025	\$ (19,113)
2026	\$ (9,574)
Thereafter	\$ (2,776)

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

Measurement Date	09/30/2021	09/30/2020
Total Pension Liability		
Service Cost	8,226	7,192
Interest	28,944	28,463
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(20,427)	16,335
Changes of assumptions	9,317	(18,627)
Benefit Payments, including Refunds of Employee Contributions	(26,271)	(28,770)
Net Change in Total Pension Liability	(211)	4,593
Total Pension Liability - Beginning	418,399	413,806
Total Pension Liability - Ending (a)	<u>\$ 418,188</u>	<u>\$ 418,399</u>
Plan Fiduciary Net Position		
Contributions - Employer	20,927	20,334
Net Investment Income	74,959	24,428
Benefit Payments, including Refunds of Employee Contributions	(26,271)	(28,770)
Administrative Expense	(15,850)	(16,659)
Net Change in Plan Fiduciary Net Position	53,765	(667)
Plan Fiduciary Net Position - Beginning	400,058	400,725
Plan Fiduciary Net Position - Ending (b)	<u>\$ 453,823</u>	<u>\$ 400,058</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (35,635)</u>	<u>\$ 18,341</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	108.52%	95.62%
Covered Payroll	\$ 75,284	\$ 89,240
Net Pension Liability as a percentage of Covered Payroll	-47.33%	20.55%

**Notes to Schedule:***Changes of assumptions:*

For measurement date 09/30/2021, the investment rate of return was lowered from 7.00% to 6.75%, net of investment related expenses.

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 the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar 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
09/30/2021	\$ 21,561	\$ 20,927	\$ 634	\$ 75,284	27.80%
09/30/2020	\$ 20,334	\$ 20,334	\$ -	\$ 89,240	22.79%

#### Notes to Schedule

Valuation Date: 10/01/2020

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Fort Meade Firefighters' Retirement Plan prepared by Foster & Foster Actuaries and Consultants.

## EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

**COMPONENTS OF PENSION EXPENSE**  
FISCAL YEAR SEPTEMBER 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 18,341	\$ 61,911	\$ 38,411	\$ -
Total Pension Liability Factors:				
Service Cost	8,226	-	-	8,226
Interest	28,944	-	-	28,944
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(20,427)	20,427	-	-
Current year amortization of experience difference	-	(10,661)	(3,514)	(7,147)
Change in assumptions about future economic or demographic factors or other inputs	9,317	-	9,317	-
Current year amortization of change in assumptions	-	(2,661)	(13,465)	10,804
Benefit Payments, including Refunds of Employee Contributions	(26,271)	-	-	-
Net change	(211)	7,105	(7,662)	40,827
Plan Fiduciary Net Position:				
Contributions - Employer	20,927	-	-	-
Projected Net Investment Income	27,262	-	-	(27,262)
Difference between projected and actual earnings on Pension Plan investments	47,697	47,697	-	-
Current year amortization	-	(14,151)	(2,008)	(12,143)
Benefit Payments, including Refunds of Employee Contributions	(26,271)	-	-	-
Administrative Expenses	(15,850)	-	-	15,850
Net change	53,765	33,546	(2,008)	(23,555)
Ending Balance	\$ (35,635)	\$ 102,562	\$ 28,741	\$ 17,272



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)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2021	\$ (47,697)	5	\$ (9,541)	\$ (9,539)	\$ (9,539)	\$ (9,539)	\$ (9,539)	\$ -	\$ -	\$ -	\$ -	-
2020	\$ 2,744	5	\$ 549	\$ 549	\$ 549	\$ 549	\$ -	\$ -	\$ -	\$ -	\$ -	-
2019	\$ 7,297	5	\$ 1,459	\$ 1,459	\$ 1,459	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
2018	\$ (1,581)	5	\$ (316)	\$ (317)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
2017	\$ (21,466)	5	\$ (4,294)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Net Increase (Decrease) in Pension Expense			\$ (12,143)	\$ (7,848)	\$ (7,531)	\$ (8,990)	\$ (9,539)	\$ -	\$ -	\$ -	\$ -	-

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)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
2021	\$ 9,317	8	\$ 1,162	\$ 1,165	\$ 1,165	\$ 1,165	\$ 1,165	\$ 1,165	\$ 1,165	\$ 1,165	\$ -	\$ -		
2020	\$ (18,627)	7	\$ (2,661)	\$ (2,661)	\$ (2,661)	\$ (2,661)	\$ (2,661)	\$ (2,661)	\$ -	\$ -	\$ -	\$ -		
2017	\$ 20,001	4.25	\$ 1,177	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
2016	\$ 76,545	6.88	\$ 11,126	\$ 9,789	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Net Increase (Decrease) in Pension Expense			\$ 10,804	\$ 8,293	\$ (1,496)	\$ (1,496)	\$ (1,496)	\$ (1,496)	\$ 1,165	\$ 1,165	\$ -	\$ -		

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience													
Plan Year	Differences												
Ending	Between	Recognition											
	Expected and	Period (Years)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
	Actual												
	Experience												
2021	\$ (20,427)	8	\$ (2,556)	\$ (2,553)	\$ (2,553)	\$ (2,553)	\$ (2,553)	\$ (2,553)	\$ (2,553)	\$ (2,553)	\$ -	\$ -	
2020	\$ 16,335	7	\$ 2,334	\$ 2,334	\$ 2,334	\$ 2,334	\$ 2,334	\$ 2,334	\$ -	\$ -	\$ -	\$ -	
2019	\$ (62,870)	8	\$ (7,859)	\$ (7,859)	\$ (7,859)	\$ (7,859)	\$ (7,859)	\$ (7,859)	\$ -	\$ -	\$ -	\$ -	
2018	\$ (992)	4.03	\$ (246)	\$ (8)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2017	\$ 1,643	4.25	\$ 95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2016	\$ 7,462	6.88	\$ 1,085	\$ 952	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Increase (Decrease) in Pension Expense			\$ (7,147)	\$ (7,134)	\$ (8,078)	\$ (8,078)	\$ (8,078)	\$ (8,078)	\$ (2,553)	\$ (2,553)	\$ -	\$ -	