

CITY OF FORT MEADE
POLICE OFFICERS' RETIREMENT PLAN
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 30, 2020

Board of Trustees
City of Fort Meade
Police Officers' Pension Board

Re: City of Fort Meade Police Officers' 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 Police Officers' 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 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the 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.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

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

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Fort Meade, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' 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,

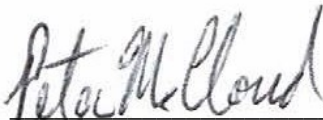
Foster & Foster, Inc.

By:



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778

By:



Peter McCloud, FSA, EA
Enrolled Actuary #17-6101

DHL/Ike

Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	6
	c. Comparative Summary of Principal Valuation Results	7
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	13
	b. Detailed Actuarial (Gain)/Loss Analysis	14
	c. Actuarial Assumptions and Methods	15
	d. Glossary	17
	e. Discussion of Risk	18
III	Trust Fund	21
IV	Member Statistics	
	a. Statistical Data	26
	b. Valuation Participant Reconciliation	27
V	Summary of Current Plan	28
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	30

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Fort Meade Police Officers' Retirement Plan, performed as of October 1, 2019, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2020.

The contribution requirements, compared with those set forth in the October 1, 2018 actuarial valuation report (as developed by Southern Actuarial Services), are as follows:

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2019</u>
Minimum Required Contribution	\$26,973	\$32,551

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 assumed rates of mortality were changed to match those used by the Florida Retirement System for special risk employees in their July 1, 2018 valuation report. The October 1, 2018 valuation report for the Fort Meade Police Officers' Retirement Plan disclosed rates from the RP-2000 Blue Collar Mortality Table with generational improvements utilizing Scale BB.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	0	0
Service Retirees	6	6
Beneficiaries	1	1
Disability Retirees	0	0
Terminated Vested	<u>4</u>	<u>4</u>
 Total	 11	 11
 Total Annual Payroll	 \$0	 \$0
Payroll Under Assumed Ret. Age	0	0
Annual Rate of Payments to:		
Service Retirees	97,257	97,257
Beneficiaries	14,418	14,418
Disability Retirees	0	0
Terminated Vested	38,613	38,613
B. Assets		
Actuarial Value (AVA)	1,194,781	1,204,372
Market Value (MVA)	1,205,619	1,231,929
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	0	0
Disability Benefits	0	0
Death Benefits	0	0
Vested Benefits	0	0
Refund of Contributions	0	0
Service Retirees	869,828	900,994
Beneficiaries	130,364	131,982
Disability Retirees	0	0
Terminated Vested	<u>304,429</u>	<u>291,433</u>
 Total	 1,304,621	 1,324,409

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	0	0
Present Value of Future Member Contributions	0	0
Normal Cost (Retirement)	0	0
Normal Cost (Disability)	0	0
Normal Cost (Death)	0	0
Normal Cost (Vesting)	0	0
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	0	0
Present Value of Future Normal Costs	0	0
Accrued Liability (Retirement)	0	0
Accrued Liability (Disability)	0	0
Accrued Liability (Death)	0	0
Accrued Liability (Vesting)	0	0
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	<u>1,304,621</u>	<u>1,324,409</u>
Total Actuarial Accrued Liability (EAN AL)	1,304,621	1,324,409
Unfunded Actuarial Accrued Liability (UAAL)	109,840	166,291
Funded Ratio (AVA / EAN AL)	91.6%	90.9%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives	1,304,621	1,324,409
Actives	0	0
Member Contributions	<u>0</u>	<u>0</u>
Total	1,304,621	1,324,409
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value Accrued Benefits (PVAB)	1,304,621	1,324,409
Funded Ratio (MVA / PVAB)	92.4%	93.0%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	3,087	
Benefits Paid	(111,675)	
Interest	88,800	
Other	<u>0</u>	
Total	(19,788)	

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

E. Pension Cost

Normal Cost ¹	\$0	\$0
Administrative Expenses ¹	13,455	13,703
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2019) ¹	13,518	18,848
Minimum Required Contribution	26,973	32,551
Expected Member Contributions ¹	0	0
Expected City and State Contribution	26,973	32,551

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
City and State Requirement	32,551
Actual Contributions Made:	
Members (excluding buyback)	0
City	32,551
State	<u>0</u>
Total	32,551

G. Net Actuarial (Gain)/Loss (47,999)

¹ Contributions developed as of 10/1/2019 displayed above include an interest adjustment 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>
2019	109,840
2020	103,554
2021	96,828
2024	73,689
2028	34,543
2030	10,620
2034	0

I. 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended	9/30/2019	4.98%	6.53%	7.00%
Year Ended	9/30/2018	7.55%	7.67%	7.50%
Year Ended	9/30/2017	13.56%	8.78%	7.50%
Year Ended	9/30/2016	8.25%	9.43%	7.50%
Year Ended	9/30/2015	0.30%	8.27%	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.



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778

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, 2018	\$166,291
(2) Sponsor Normal Cost developed as of October 1, 2018	0
(3) Expected administrative expenses for the year ended September 30, 2019	13,138
(4) Expected interest on (1), (2) and (3)	12,100
(5) Sponsor contributions to the System during the year ended September 30, 2019	32,551
(6) Expected interest on (5)	1,139
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	157,839
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(47,999)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2019	109,840

<u>Type of</u> <u>Base</u>	<u>Date</u> <u>Established</u>	<u>Years</u> <u>Remaining</u>	<u>10/1/2019</u> <u>Amount</u>	<u>Amortization</u> <u>Amount</u>
Initial	10/1/2016	12	103,328	12,158
Amendment	10/1/2017	13	475	53
Assumption	10/1/2018	14	54,036	5,775
Actuarial Gain	10/1/2019	15	<u>(47,999)</u>	<u>(4,925)</u>
			109,840	13,061

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2018	\$166,291
(2) Expected UAAL as of October 1, 2019	157,839
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	5,429
Inactive Mortality	21,321
Change in Actuary	(60,783)
Other	<u>(13,966)</u>
Increase in UAAL due to (Gain)/Loss	(47,999)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2019	\$109,840

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

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

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

Healthy Inactive Lives:

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

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

Disabled Lives:

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

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

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.00% per year compounded annually, 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.

Actuarial Asset Method

The Actuarial Value of Assets reflects a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in over a five-year period.

Administrative Expenses

\$13,000 annually, based on the estimated average of actual expenses incurred in the prior two fiscal years.

Funding Method

Entry Age Normal Actuarial Cost Method.

Amortization Method

New components of the UAAL are amortized as a level dollar over 15 years.

GLOSSARY

Total Annual Payroll – Not applicable.

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

Normal (Current Year's) Cost – Not applicable.

Individual Entry Age Normal Actuarial Cost Method (Level Dollar Amortization) is the method used to determine required contributions under the Plan. The actuarial accrued liability for inactive participants is the present value of future benefits.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

Minimum Required Contribution is equal to an amount sufficient to amortize the Unfunded Accrued Liability over no more than 15 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 current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. 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.
- **Mortality**: Actuarial results calculate a liability based on the likelihood of mortality and the financial consequence of death or survival in any given year for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as death at one of various possible ages). Once the outcome is known (e.g. the participant dies or survives) 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, from an actuarial perspective.

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 is 0%, indicating the plan is comprised entirely of inactive participants.
- 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 100.0%. 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, is 91.6% as of October 1, 2019.
- The current Net Cash Flow Ratio of -7.1% 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>Support Ratio</u>		
Total Actives	0	0
Total Inactives	11	11
Actives / Inactives	0.0%	0.0%
 <u>Asset Volatility Ratio</u>		
Market Value of Assets (MVA)	1,231,929	1,205,619
Total Annual Payroll	0	0
MVA / Total Annual Payroll	N/A	N/A
 <u>Accrued Liability (AL) Ratio</u>		
Inactive Accrued Liability	1,324,409	1,304,621
Total Accrued Liability (EAN)	1,324,409	1,304,621
Inactive AL / Total AL	100.0%	100.0%
 <u>Funded Ratio</u>		
Actuarial Value of Assets (AVA)	1,204,372	1,194,781
Total Accrued Liability (EAN)	1,324,409	1,304,621
AVA / Total Accrued Liability (EAN)	90.9%	91.6%
 <u>Net Cash Flow Ratio</u>		
Net Cash Flow ¹	(83,980)	(85,475)
Market Value of Assets (MVA)	1,231,929	1,205,619
Ratio	-6.8%	-7.1%

¹ Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Cash	10,853.49
Total Cash and Equivalents	10,853.49
Total Receivable	0.00
Investments:	
Pooled/Common/Commingled Funds:	
Fixed Income	346,105.41
Equity	732,006.91
Real Estate	116,976.39
Total Investments	1,195,088.71
Total Assets	1,205,942.20
 <u>LIABILITIES</u>	
Payables:	
Administrative Expenses	322.85
Total Liabilities	322.85
 NET POSITION RESTRICTED FOR PENSIONS	 1,205,619.35

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

ADDITIONS

Contributions:		
City	32,551.00	
Total Contributions		32,551.00
Investment Income:		
Net Increase in Fair Value of Investments	61,536.82	
Less Investment Expense ¹	(2,371.04)	
Net Investment Income		59,165.78
Total Additions		91,716.78
<u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	111,675.24	
Total Distributions		111,675.24
Administrative Expense		6,351.38
Total Deductions		118,026.62
Net Increase in Net Position		(26,309.84)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		1,231,929.19
End of the Year		1,205,619.35

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

ACTUARIAL ASSET VALUATION
September 30, 2019

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

Plan Year Ending	Gain/Loss	<u>Gains/(Losses) Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2019	2020	2021	2022	2023
09/30/2015	(92,450)	0	0	0	0	0
09/30/2016	8,901	1,781	0	0	0	0
09/30/2017	70,130	28,052	14,026	0	0	0
09/30/2018	511	307	205	103	0	0
09/30/2019	(24,128)	(19,302)	(14,476)	(9,650)	(4,824)	0
Total		10,838	(245)	(9,547)	(4,824)	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, 09/30/2018	1,231,929
Contributions Less Benefit Payments & Admin Expenses	(85,476)
Expected Investment Earnings*	83,294
Actual Net Investment Earnings	59,166
2019 Actuarial Investment Gain/(Loss)	<u>(24,128)</u>

*Expected Investment Earnings = $0.07 * 1,231,929 - 85,476 * [(1 + 0.07)^{0.5} - 1]$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2019	1,205,619
(2) Gain/(Loss) Not Yet Recognized	10,838
(3) Actuarial Value of Assets, 09/30/2019, (1) - (2)	<u>1,194,781</u>
(A) 09/30/2018 Actuarial Assets:	1,204,372
(I) Net Investment Income:	
1. Net Increase in Fair Value of Investments	61,537
2. Change in Actuarial Value	16,719
3. Investment Expenses	(2,371)
Total	<u>75,885</u>
(B) 09/30/2019 Actuarial Assets:	1,194,781
Actuarial Asset Rate of Return = $2I/(A+B-I)$:	6.53%
Market Value of Assets Rate of Return:	4.98%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(5,429)
10/01/2019 Limited Actuarial Assets:	1,194,781

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

REVENUES

Contributions:		
City	32,551.00	
Total Contributions		32,551.00
Earnings from Investments:		
Net Increase in Fair Value of Investments	61,536.82	
Change in Actuarial Value	16,719.19	
Total Earnings and Investment Gains		78,256.01

EXPENDITURES

Distributions to Members:		
Benefit Payments	111,675.24	
Total Distributions		111,675.24
Expenses:		
Investment related ¹	2,371.04	
Administrative	6,351.38	
Total Expenses		8,722.42
Change in Net Assets for the Year		(9,590.65)
Net Assets Beginning of the Year		1,204,372.00
Net Assets End of the Year ²		1,194,781.35

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

²Net Assets may be limited for actuarial consideration.

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2019

(1) Required City and State Contributions	\$32,551.00
(2) Less Allowable State Contribution	<u>0.00</u>
(3) Required City Contribution for Fiscal 2019	32,551.00
(4) Less 2018 Prepaid Contribution	0.00
(5) Less Actual City Contributions	<u>(32,551.00)</u>
(6) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2019	\$0.00

STATISTICAL DATA

	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Service Retirees</u>		
Number	6	6
Average Current Age	70.7	71.7
Average Annual Benefit	\$16,210	\$16,210
<u>Beneficiaries</u>		
Number	1	1
Average Current Age	72.6	73.6
Average Annual Benefit	\$14,418	\$14,418
<u>Disability Retirees</u>		
Number	0	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A
<u>Terminated Vested</u>		
Number	4	4
Average Current Age	53.6	54.6
Average Annual Benefit	\$9,653	\$9,653

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	0
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 distribution re	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	0
g. New entrants	<u>0</u>
h. Total active life participants in valuation	0

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

	Service Retirees, Vested Receiving	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	6	1	0	4	0	11
Retired	0	0	0	0	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	6	1	0	4	0	11

SUMMARY OF CURRENT PLAN

(Historical reference only – There are no current participating members)

CREDITED SERVICE

Years and fractional parts of years of service (to the nearest month) with the City as a Police Officer.

COMPENSATION

Total compensation actually paid to a member including overtime, payment for accrued vacation and longevity but excluding bonuses (other than longevity bonuses).

AVERAGE MONTHLY EARNINGS

Average monthly compensation during the last 5 years of Credited Service prior to termination or retirement.

NORMAL RETIREMENT

Eligibility

Earlier of: a) Age 55 and 30 years of Credited Service, b) Age 60 and 10 years of Credited Service, or c) the completion of 40 years of Credited Service, regardless of age. Additionally, members hired between the ages of 55 and 60 may retire at age 65.

Benefit Amount

1.75 % of Average Monthly Earnings for each year of Credited Service.

Form of Benefit

10 year certain and life thereafter (options available).

EARLY RETIREMENT

Eligibility

Age 50 and 10 years of Credited Service.

Benefit Amount

Accrued benefit, reduced 5% per year for commencement prior to age 60.

DISABILITY

Eligibility

a. Non-Service Incurred: 10 years of Credited Service.
b. Service Incurred: Covered from Date of Employment
c. Total and permanent disability as determined by the Board of Trustees.

Benefit Amount

Service-Incurred

Accrued Benefit, but not less than 30% of the pay in effect as of the date of disability.

Non Service-Incurred

Accrued Benefit.

Form of Benefit

Single life annuity.

PRE-RETIREMENT DEATH

Benefit Amount

Surviving Spouse

Actuarial equivalent of 75% of the member's vested accrued benefit, payable as a lump sum as soon as possible following the member's death. If the member dies while employed after attaining Normal Retirement eligibility, the survivor benefit is determined as if the member had retired under the 66 2/3% annuity option immediately prior to death.

VESTING (TERMINATION)

10 years or more

Accrued benefit payable at age 50 or later, on a reduced basis if to commence prior to Normal Retirement Date.

CONTRIBUTIONS

Premium Tax

None.

Member

None.

City

Annual amount necessary for payment of Normal (current year's) Cost, amortization of the Unfunded Actuarial Accrued Liability, and reimbursement of the plan's administrative expenses.

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 Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 17,278	1	\$ 17,278	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 17,278	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -