## CITY OF MIRAMAR FIREFIGHTERS' RETIREMENT PLAN

# **Required Supplementary Information**

Under GASB No. 67

Fiscal Year October 1, 2018 through September 30, 2019

DuLaney and Company, Inc. Actuarial Services

## **TABLE OF CONTENTS**

	Net Pension Liability of the City	2-3
Schedule I	Schedule of Changes in the City's Net Pension Liability	1-5
Schedule II	Schedule of Contributions by Employer	6
Schedule III	Schedule of Investment Returns	7
	Notes to Required Supplementary Information	10
	Financial Statements 11-	12

## Page 2 Disclosures Related to the City of Miramar Firefighters' Retirement Plan - GASB 67

## Net Pension Liability of the City

The components of the net pension liability of the City at September 30, 2019 were as follows:

	2019
Total pension liability	\$ 221,836,909
Plan fiduciary net position	 (167,276,400)
City net pension liability	\$ 54,560,509

Plan fiduciary net position as a percentage of total pension liability 75.41%

#### Actuarial Assumptions

The total pension liability at September 30, 2019 was determined using an actuarial valuation as of October 1, 2018, with update procedures used to roll forward the total pension liability to September 30, 2019. The actuarial valuation used the following actuarial assumptions:

Inflation	2.50%
Projected salary increases	6.00%
Investment rate of return	7.50% compounded annually, net of pension plan investment expense, including inflation.

#### Mortality

<u>Pre-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Combined Healthy with White Collar Adjustment, Scale BB
Male Non-Disabled: RP2000 Generational, 10% Combined Healthy with White Collar Adjustment / 90% Combined Healthy with Blue Collar Adjustment, Scale BB
<u>Post-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, Scale BB
Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar, Scale BB
Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB
<u>Pre-Retirement & Post-Retirement:</u>
Female Disabled: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale
Male Disabled: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

### Page 3 Disclosures Related to the City of Miramar Firefighters' Retirement Plan - GASB 67

#### Discount Rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that Trust member contributions will be made at the current contribution rates and that contributions from the City will be made at statutorily required rates, actuarially determined. Based on those assumptions, the Trust's fiduciary net position was projected to be available to make all projected future benefit payments of current Trust members. Therefore, the long term expected rate of return on pension Trust investments was applied to all periods of projected benefit payments to determine the total pension liability.

#### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the City using the discount rate of 7.50%, as well as what the employer net pension liability would if it were calculated using a discount rate that is 1-percentage-point lower (6.50 percent) or 1-percentage-point higher (8.50 percent) than the current rate:

		City Net Pension Liability Current							
	1	1% Decrease (6.50%)		scount Rate (7.50%)	1% Increase (8.50%)				
September 30, 2019	\$	117,293,953	\$	54,560,509	\$	12,353,095			

## Page 4 Disclosures Related to the City of Miramar Firefighters' Retirement Plan - GASB 67

Schedule I

Schedule of Changes in the City's Net Pension Liability

	9/30/2019	9/30/2018	9/30/2017	9/30/2016
Total Pension Liability				
Service Cost	\$ 3,203,460	3,006,856	2,811,233	2,676,320
Interest	15,632,010	14,338,805	13,043,840	11,873,785
Changes of benefit terms	-	-	-	-
Difference Between Expected and Actual Experience	4,029,717	3,940,516	1,384,702	(16,192)
Changes of Assumptions	15,583,668	2,989,821	2,502,214	6,154,581
Benefit Payments. including Refunds of Member Contributions	(4,443,793)	(4,886,434)	(5,417,407)	(3,361,511)
Net Change in Total Pension Liability	34,005,062	19,389,564	14,324,582	17,326,983
Total Pension Liability-Beginning	187,831,847	168,442,283	154,117,701	136,790,718
Total Pension Liability-Ending	221,836,909	187,831,847	168,442,283	154,117,701
Plan Fiduciary Net Position				
Contributions - Employer	6,289,566	6,888,087	5,871,432	4,944,586
Contributions - State	1,070,720	989,693	966,694	990,464
Contributions - Member	1,336,596	2,777,837	3,724,060	1,268,018
Net Investment Income	6,129,591	13,833,470	15,252,940	9,476,199
Benefit Payments. including Refunds of Member Contributions	(4,443,793)	(4,886,434)	(5,417,407)	(3,361,511)
Administrative Expense Other	(180,930)	(174,259)	(199,195)	(191,933)
Net Change in Plan Fiduciary Net Position	10,201,750	19,428,394	20,198,524	13,125,823
Plan Fiduciary Net Position - Beginning	157,074,650	137,646,256	117,447,732	104,321,909
Plan Fiduciary Net Position - Ending	\$ 167,276,400	\$ 157,074,650	\$ 137,646,256	\$ 117,447,732
City's Net Pension Liability	\$ 54,560,509	\$ 30,757,197	\$ 30,796,027	\$ 36,669,969
Total Pension Liability	\$ 221,836,909	187,831,847	168,442,283	154,117,701
Plan Fiduciary Net Position	167,276,400	157,074,650	137,646,256	117,447,732
City's net pension liability	\$ 54,560,509	\$ 30,757,197	\$ 30,796,027	\$ 36,669,969
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	75.41%	83.63%	81.72%	76.21%
Covered-Employee Payroll	\$ 11,034,456	11,648,795	11,443,779	11,226,760
City's Net Pension Liability as a Percentage of Covered-Employee Payroll	494.46%	264.04%	269.11%	326.63%

\* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

## Page 5 Disclosures Related to the City of Miramar Firefighters' Retirement Plan - GASB 67

#### Schedule I (continued two)

#### Schedule of Changes in the City's Net Pension Liability

	9/30/2015		9/30/2014	
Total Pension Liability				
Service Cost	2,551,281	\$	1,961,023	
Interest	10,841,607		10,192,417	
Changes of benefit terms	-		-	
Difference Between Expected and Actual Experience	(933,871)		-	
Changes of Assumptions	14,871,846		-	
Benefit Payments. including Refunds of Member Contributions	(3,198,410)		(3,076,805)	
Net Change in Total Pension Liability	24,132,453		9,076,635	
Total Pension Liability-Beginning	112,658,265		103,581,630	
Total Pension Liability-Ending	136,790,718		112,658,265	
Plan Fiduciary Net Position				
Contributions - Employer	4,909,366		4,637,629	
Contributions - State	981,731		1,124,210	
Contributions - Member	1,158,659		1,068,264	
Net Investment Income	246,290		10,211,465	
Benefit Payments. including Refunds of Member Contributions	(3,198,410)		(3,076,805)	
Administrative Expense	(165,198)		(151,048)	
Other	-	-		
Net Change in Plan Fiduciary Net Position	3,932,438		13,813,715	
Plan Fiduciary Net Position - Beginning	100,389,471		86,575,756	
Plan Fiduciary Net Position - Ending	\$ 104,321,909		\$100,389,471	
City's Net Pension Liability	\$ 32,468,809		\$12,268,794	
Total Pension Liability	136,790,718	\$	112,658,265	
Plan Fiduciary Net Position	104,321,909		100,389,471	
City's net pension liability	\$ 32,468,809		\$12,268,794	
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	76.26%		89.11%	
Covered-Employee Payroll	11,575,085	\$	11,317,117	
City's Net Pension Liability as a Percentage of Covered- Employee Payroll	280.51%		108.41%	

## Schedule II

## Schedule of Contributions by Employer

A studielly, determined contribution	¢	<b>2019</b> 6,289,566	¢	<b>2018</b> 6,888,087	\$	<b>2017</b> 5,871,432	\$	<b>2016</b> 5,150,913	\$	<b>2015</b> 5,107,415
Actuarially determined contribution	φ	0,289,300	φ	0,000,007	φ	3,871,432	φ	5,150,915	φ	5,107,415
Contributions in relation to the actuarially determined contribution		6,289,566		6,888,087		5,871,432		5,150,913		5,115,693
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$	-	\$	(8,278)
Covered-employee payroll	\$	11,034,456	\$	11,648,795	\$	11,443,779	\$	11,226,760	\$	11,317,117
Contributions as a percentage of covered-employee payroll		57.0%		59.1%		51.3%		45.9%		45.2%
		2014		2013		2012		2011		2010
Actuarially determined contribution	\$	4,843,956	\$	4,228,032	\$	3,871,266	\$	3,617,946	\$	3,263,701
Contributions in relation to the actuarially determined <u>contribution</u>		4,843,956		4,228,032		3,871,266		3,617,946		3,263,701
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$	-	\$	-
Covered-employee payroll	\$	10,685,982	\$	10,480,991	\$	10,034,385	\$	10,174,202	\$	10,126,283
Contributions as a percentage of covered-employee payroll		45.3%		40.3%		38.6%		35.6%		32.2%

#### Schedule III

## Schedule of Investment Returns For the Year Ended September 30, 2019

Annual money-weighted rate of return, net of investment expense:

<b>2019</b> 3.8%	<b>2018</b> 9.9%	<b>2017</b> 12.5%	<b>2016</b> 9.1%	<b>2015</b> 0.4%
5.870	9.970	12.370	9.170	0.470
2014	2013	2012	2011	2010
12.0%	19.9%	20.9%	(1.8%)	9.8%

The annualized compounded return is 9.4%.

## Notes to Required Supplementary Information

## Method and assumptions used in calculations of the City's actuarially determined contributions

The actuarially determined contribution rates in the schedule of the City's contributions are calculated as of October 1, 2017. Unless otherwise noted above, the following actuarial methods and assumptions were used to determine contribution rates reported in the Schedule of the City's contributions.

1. <u>Mortality</u>:

<u>Pre-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Combined Healthy with White Collar Adjustment, Scale BB
Male Non-Disabled: RP2000 Generational, 10% Combined Healthy with White Collar Adjustment / 90% Combined Healthy with Blue Collar Adjustment, Scale BB
<u>Post-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, Scale BB
Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar, Scale BB
Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB
<u>Pre-Retirement & Post-Retirement:</u>
Female Disabled: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale
Male Disabled: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

2. <u>Interest to be Earned by Fund</u>:

7.50%, compounded annually.

3. <u>Allowances for Expenses or Contingencies</u>:

Administrative expenses estimated to be \$174,259 for the 2018/2019 plan year.

4. Employee Withdrawal Rates:

The following are illustrative withdrawal rates assumed:

Age	Withdrawal Rates Per 1,000 Employees
20	140.0
25	110.6
30	65.8
35	32.2
40	16.8
45	9.8
50	0.0

#### Page 9 Disclosures Related to the City of Miramar Firefighters' Retirement Plan - GASB 67

### Notes to Required Supplementary Information (continued two)

## 5. Disability Rates:

The assumed disability rates are illustrated by the following example rates:

Age	Disability Rates Per 1,000 Employees
20	2.0
25	2.0
30	3.6
35	4.6
40	6.0
45	10.2
50	20.0
55 & over	0.0

In addition, 80% of disabilities assumed to be service incurred and 20% assumed to be non-service incurred.

## 6. <u>Salary Increase Factors</u>:

Current salaries are assumed to increase due to merit and longevity at 6.00% per year for the first six (6) years of service and 1.00% per year thereafter. Furthermore, salaries are assumed to have an additional increase equal to the increase in the Consumer Price Index.

### 7. <u>Rates of Retirement:</u>

The following are the retirement rates assumed for the participants eligible for retirement / DROP:

-	ith 10 – 24 years ervice	Participants with at least 25 years of service
	Percentage	Percentage
Age	Retirement	Retirement
Less than 50	0%	100%
50	1%	100%
51 to 54	2%	100%
55 to 59	50%	100%
60 & over	100%	100%

## Notes to Required Supplementary Information (continued three)

8. <u>Asset Valuation Method</u>:

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over five (5) years, and then subtracting the total smoothed difference from the market value of assets. This method was adopted effective October 1, 2011. The resulting value would then be limited to between 80% and 120% of market value.

9. <u>Cost Methods</u>:

Entry Age Normal Method

10. <u>Marriage Assumptions</u>:

85% of active participants are assumed married, with husbands three (3) years older than wives.

11. Deferred Retirement Option Plan (DROP) Elections Assumptions:

75% of those assumed to take normal retirement benefits are assumed to participate in the DROP, with the assumed length of participation of five (5) years.

12. Consumer Price Index Increase Assumption:

The Consumer Price Index is assumed to increase by 3.00% annually.

- 13. Changes from Most Recent Actuarial Valuation:
  - 1. The assumed interest to be earned by the Fund was changed from 8.15% to 7.50%, net of investment expenses, per annum.
  - 2. The assumed administrative expenses were changed from \$199,195 to \$174,259 for the plan/fiscal year.
  - 3. The annual payroll growth assumption was changed from 1.78% to 1.21%, to reflect actual experience for the prior ten (10) years.
  - 4. The actuarial cost method was changed to entry age normal cost method.

# CITY OF MIRAMAR FIREFIGHTERS RETIREMENT PLAN

#### STATEMENT OF FIDUCIARY NET POSITION

#### SEPTEMBER 30, 2019 (WITH COMPARATIVE TOTALS AS OF SEPTEMBER 30, 2018)

	<u>2019</u>	<u>2018</u>
ASSETS		
CASH	\$ 764,947	\$ 555,378
<b>RECEIVABLES:</b>		
Chapter 175 contributions receivable	1,070,720	989,693
Accounts receivable - sale of investments	114,724	678,368
Accrued investment income	151,332	166,418
TOTAL RECEIVABLES	1,336,776	1,834,479
PREPAID EXPENSE	6,810	5,400
INVESTMENTS, AT FAIR VALUE:		
Equity securities	122,691,362	108,833,664
Certificates of deposit	2,984,913	1,070,861
Fixed income international bonds	765,011	554,434
Collateralized mortgage obligations	1,126,117	1,192,875
Government securities	10,148,194	10,412,137
Asset backed securities	1,351,614	1,080,095
Corporate bonds	7,241,993	6,517,849
Real estate funds	7,893,269	15,173,266
Timber funds	5,174,217	5,275,864
Money market funds	6,639,996	5,539,785
TOTAL INVESTMENTS, AT FAIR VALUE	166,016,686	155,650,830
TOTAL ASSETS	168,125,219	158,046,087
LIABILITIES		
ACCOUNTS PAYABLE	116,779	111,316
ACCOUNTS PAYABLE - PURCHASE OF INVESTMENTS	732,040	860,121
TOTAL LIABILITIES	848,819	971,437
NET POSITION RESTRICTED FOR PEN	NSIONS	
NET POSITION RESTRICTED FOR PENSIONS:		
Net position restricted for defined benefits	167,276,400	124,732,829
Net position restricted for DROP benefits		18,222,523
Net assets held in trust for share benefits		14,119,298
TOTAL NET POSITION RESTRICTED FOR PENSIONS	\$ 167,276,400	\$ 157,074,650

The accompanying notes are an integral part of these financial statements.

# CITY OF MIRAMAR FIREFIGHTERS RETIREMENT PLAN

#### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

#### YEAR ENDED SEPTEMBER 30, 2019 (WITH COMPARATIVE TOTALS FOR YEAR ENDED SEPTEMBER 30, 2018)

		<u>2019</u>	<u>2018</u>
ADDITIONS:			
Contributions:			
Employer	\$	6,289,566	\$ 6,888,087
Employee		1,296,385	1,985,058
Chapter 175		1,070,720	989,693
Permissive service credit		40,211	 792,779
Total contributions		8,696,882	 10,655,617
Investment income:			
Net appreciation in fair value of investments		3,566,554	12,359,721
Interest and dividend income		3,171,505	 2,016,215
Total investment income		6,738,059	14,375,936
Less: investment expenses		611,167	 546,651
Net investment income		6,126,892	 13,829,285
Other income		2,699	 4,185
TOTAL ADDITIONS		14,826,473	 24,489,087
DEDUCTIONS:			
Benefit payments		3,945,276	3,617,947
DROP distributions		343,196	490,216
Share plan distributions		155,321	778,271
Administrative expenses		180,930	 174,259
TOTAL DEDUCTIONS		4,624,723	 5,060,693
NET INCREASE IN NET POSITION			
RESTRICTED FOR PENSIONS		10,201,750	19,428,394
NET POSITION RESTRICTED FOR			
PENSIONS - BEGINNING	1	57,074,650	 137,646,256
NET POSITION RESTRICTED FOR			
PENSIONS - ENDING	\$ 1	67,276,400	\$ 157,074,650