



CITY OF MIAMI

FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

2019 Annual Report





ADMINISTRATOR
Dania L. Orta

TRUSTEES
Ornel Cotera
Nelson Enriquez
Monica Fernandez
Thomas Gabriel
Sean MacDonald
Thomas Roell
Robert Suarez
Annette Valdivia

June 1, 2020

We hereby provide the Comprehensive Annual Financial Report for the City of Miami Fire Fighters' and Police Officers' Retirement Trust (FIPO) for fiscal year ended September 30, 2019.

Administration assumes full responsibility for the accuracy and reliability of the information including the completeness and fairness of the presentation. To provide a reasonable basis for these representations, Administration has established a comprehensive internal control framework that is designed to provide reasonable assurance of the safeguarding of assets against loss from unauthorized use or disposition and the adequate reliability of accounting records. Monitoring and evaluation of internal controls is a function that is maintained on an ongoing basis.

FIPO's financial statements have been audited by a firm of licensed certified public accountants in the State of Florida as required by State Statute. The goal of the Financial Audit was to provide reasonable assurance that the financial statements are free of material misstatement. The audit was conducted in accordance with US generally accepted auditing standards and the standards applicable to financial audits in Government Auditing Standards issued by the Comptroller of the United States. Our independent accounting firm, MARCUM, LLC, concluded that there was a reasonable basis for rendering an unqualified opinion that the financial statements for the fiscal year ended September 30, 2019, were fairly stated in conformity with US generally accepted accounting principles.

Sincerely,

Dania L. Orta
Administrator

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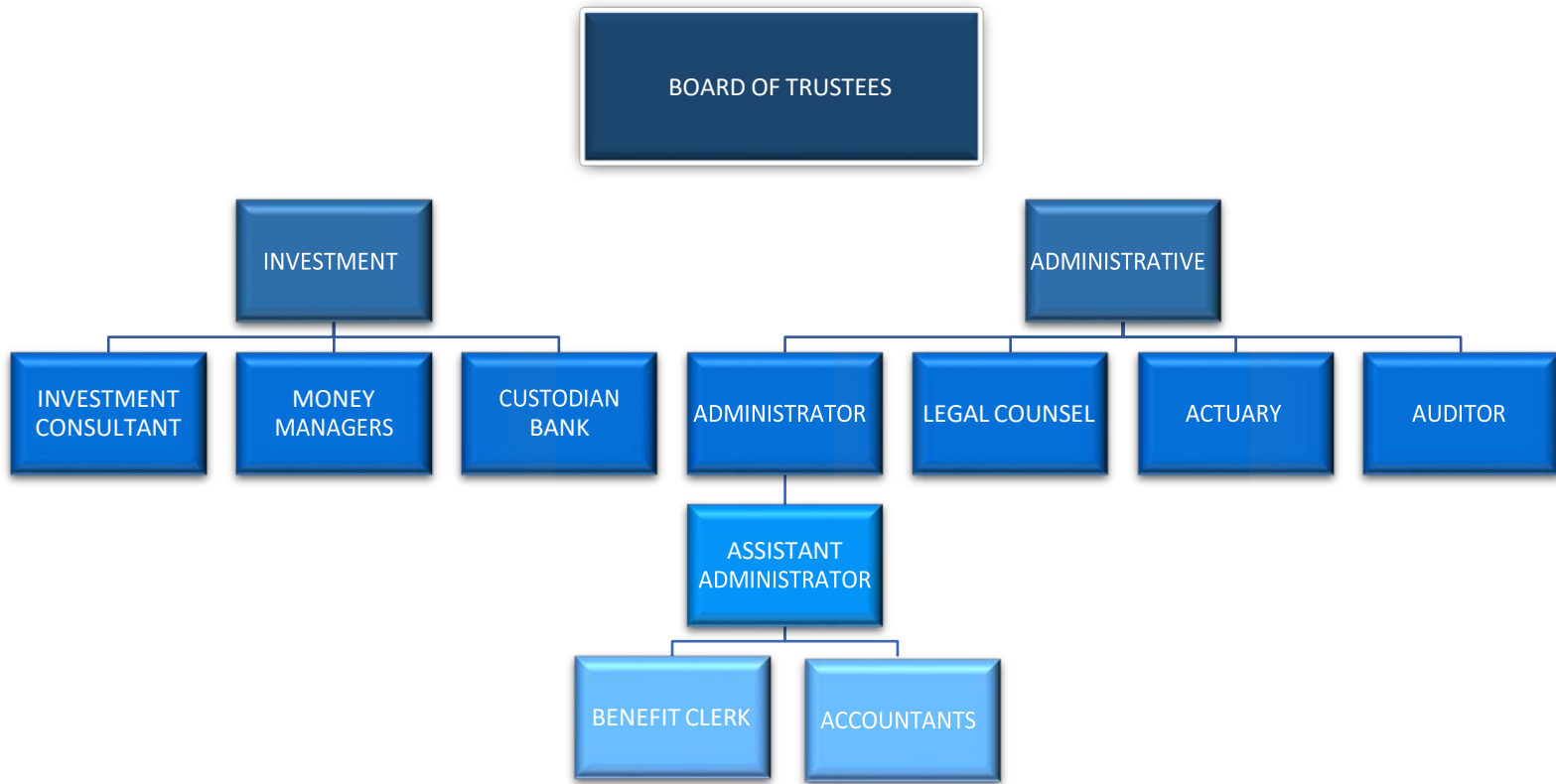
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I Introductory Section



Organizational Chart



BOARD OF TRUSTEES
AND
PERSONNEL OF THE RETIREMENT TRUST

AS OF SEPTEMBER 30, 2019

Chairman

Ornel Cotera – Appointed by
City Commission

Thomas Gabriel
Appointed by the City
Commission

Thomas Roell
Appointed by the City
Commission

Nelson Enriquez
Fire Captain
Elected by the Fire Fighters

Monica Fernandez
Appointed by the City
Commission

Robert Suarez
Fire Lieutenant
Elected by the Fire Fighters

Annette Valdivia
Police Sergeant
Elected by the Police Officers

Sean Mac Donald
Police Captain
Elected by the Police Officers

Melissa Fernandez-Stiers
Appointed by City Manager

Administrator
Dania L. Orta

Legal Advisor
Klausner, Kaufman, Jensen & Levinson

Medical Advisor
Cornell Lupu, MD

Consulting Actuary
Nyhart

Certified Public Accountants
Marcum LLP

Investment Managers

Adams Street
AXA Investments
Black Rock Invest. Managers
Barrow, Hanley, et al
Boston Partners
Catalyst Investment
Center Square
Champlain Asset Management
Coller Capital
Copper Rock Capital

Dodge & Cox
Eagle Asset Management
First Eagle
J.P. Morgan
Lexington Partners
Pacific Asset
Pantheon
S.L. Capital
Victory Capital
Wellington Management

Consultant
William Cottle, CFA, Milliman, Inc.

Custodian
Northern Trust Company



**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST**

On September 30, 2019, the City of Miami Fire Fighters' and Police Officers' Retirement Trust completed its eightieth year of operation.

Retirement benefits granted during the year represent annual benefits of \$4,525,977 and are as follows:

5	Service Retirements with annual benefits of	296,519
40	DROP Service Retirements with annual benefits of	4,121,817
6	Benefit Adjustments with annual benefits of	16,732
1	Service Incurred Disability with annual benefits of	57,903
1	Ordinary Death Early Retirement with annual benefits of	33,006

In addition, one beneficiary received an Ordinary Death Benefit of one half of a year's salary totaling \$28,351.

During the year, 57 pensioners of the Retirement Trust died. Of these, 39 had selected a pension which terminated at their death and 18 had selected an option that will continue to a beneficiary representing yearly benefits of \$317,296.

During the year ending September 30, 2019, the pension payroll totaled \$130,508,175, which is a decrease of 0.0693% when compared to the previous year's total payroll, and is broken down as follows:

<u>ANNUAL BENEFITS</u>		
1673	Service Retirements	114,225,478
98	DROP Service Retirements	9,066,044
32	Early Service Retirements	422,974
7	Ordinary Disability Retirements	95,876
115	Service/Accidental Disability Retirements	2,806,344
7	Accidental Death Retirements	184,133
9	Ordinary Death Early	273,212
245	Continuances	<u>3,434,114</u>
		130,508,175

Securities' gains and losses, Miscellaneous Income	45,282,319
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The various statements and schedules, which follow, reflect the activities of the system from the beginning as well as for the current year. An outline showing benefits and working procedures is also included.



II

Financial Section



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED
ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE
WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Trustees and Plan Administrator
City of Miami Fire Fighters' and Police Officers' Retirement Trust

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of City of Miami Fire Fighters' and Police Officers' Retirement Trust (the Trust), which collectively comprise the statement of fiduciary net position as of September 30, 2019, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated February 19, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Trust's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control. Accordingly, we do not express an opinion on the effectiveness of the Trust's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However material weaknesses may exist that have not been identified.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Trust's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Marcum LLP

Miami, FL
February 19, 2020



RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

Our discussion and analysis of the City of Miami Fire Fighters' and Police Officers' Retirement Trust (the Trust) financial performance provides an overview of the Trust's financial activities for the fiscal years ended September 30, 2019 and 2018. Please read it in conjunction with the Trust's financial statements which follow this discussion.

FINANCIAL HIGHLIGHTS

- The Trust assets exceeded its liabilities at the close of fiscal year ended 2019 and 2018 by \$1,561.2 million and \$1,566.7 million, respectively. The Trust's net position is held in trust to meet future benefit payments. The Trust experienced a decrease in fiduciary net position of \$5.5 million in 2019 and an increase of \$15.3 million in fiduciary net position in 2018 which resulted primarily from changes in the fair value of the Trust's investments, due to volatile financial markets.
- For the fiscal year ended September 30, 2019 the Trust received contributions totaling \$79 million and had a net investment income of \$73.9 million.

For the fiscal year ended September 30, 2018 the Trust received contributions totaling \$71.3 million and had a net investment income of \$102.3 million.

- For the fiscal year ended September 30, 2019 the Trust's deductions increased over the prior year from \$158.2 million to \$158.9 million or 0.5%. The increase can be mostly attributed to a larger number of active members severing employment and withdrawing their accumulated contributions, as well as the annual increase in the cost of living allowance (COLA II) given to retirees.

For the fiscal year ended September 30, 2018 the Trust's deductions, increased over the prior year from \$153.5 million to \$158.2 million or 3.1%. Most of this increase is attributable to increase pension benefits paid and distributions to retirees.

- For the year ended September 30, 2019, the total return of the portfolio was 5.39%. Actual net investment income was \$73.5 million in 2019 compared with \$101.6 million in 2018.
- For the year ended September 30, 2018, the total return of the portfolio was 7.48%. Actual net investment income was \$101.6 million in 2018 compared with \$136.4 million (as restated) in 2017.

OVERVIEW OF THE FINANCIAL STATEMENTS

The financial statements include the Statement of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position and Notes to the Financial Statements. The Trust also includes in this report additional information to supplement the financial statements.

The Trust presents required supplementary information, which provides historical trend information about the Trust.



THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Trust prepares its financial statements on the accrual basis of accounting and in accordance with accounting principles generally accepted in the United States of America. These statements provide information about the Trust's overall financial status.

DESCRIPTION OF THE FINANCIAL STATEMENTS

The Statement of Fiduciary Net Position presents information that includes all of the Trust's assets and liabilities, with the balance representing the net position restricted for pensions. It is a snapshot of the financial position of the Trust at that specific point in time and reflects the resources available to pay members, retirees and beneficiaries at that point in time.

The Statement of Changes in Fiduciary Net Position reports how the Trust's net position changed during the fiscal year. The additions and deductions to net position are summarized in these statements. The additions include contributions to the retirement plan from the employer (City) and members and net investment income, which include interest, dividends, investment expenses, and the net appreciation or depreciation in the fair value of investments. The deductions include benefit payments, refunds of member contributions, and administrative expenses.

The Notes to the Financial Statements are presented to provide the information necessary for a full understanding of the financial statements. They include additional information not readily evident in the statements themselves such as a description of the Trust, contributions, significant accounting policies, funding policy, and investment risk disclosure.

The Required Supplementary Information included in this report is required by the Governmental Accounting Standards Board. These schedules consist of information pertaining to the Plan's actuarial methods and assumptions and provide data on changes in the City's net pension liability, the City's contributions, and the Trust's investment returns.

Additional information is presented as part of the Supplementary Information. This section is not required but management has chosen to include it. It includes Schedules of Investment Expenses and Administrative Expenses. The Schedule of Investment Expenses presents the expenses incurred in managing and monitoring the investments of the Trust and include financial management, consultant, and custodial fees. The Schedule of Administrative Expenses presents the expenses incurred in the administration of the Trust.

FINANCIAL ANALYSIS

- Trust's total assets as of September 30, 2019, were \$1,689.2 million and were mostly comprised of cash and cash equivalents, investments and securities lending collateral. Total assets decreased \$28.6 million or -1.7% as compared to 2018.
- Trust's total assets as of September 30, 2018, were \$1,717.8 million and were mostly comprised of cash and cash equivalents, investments and securities lending collateral. Total assets increased \$33.6 million or 2.0% as compared to 2017.



THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

- Total liabilities as of September 30, 2019 were \$128.0 million and were mostly comprised of obligations under securities lending and payables for securities purchased. Total liabilities decreased \$23.1 million or 15.3% from the prior year primarily due to a decrease in obligations under securities lending.
- Total liabilities as of September 30, 2018 were \$151.1 million and were mostly comprised of obligations under securities lending and payables for securities purchased. Total liabilities decreased \$18.3 million or 13.8% from the prior year primarily due to a decrease in obligations under securities lending.
- Trust assets exceeded its liabilities at the close of fiscal year ended September 30, 2019 by \$1,561.2 million. Total fiduciary net position restricted for pensions decreased \$5.5 million or -0.3% from the previous year.
- Trust assets exceeded its liabilities at the close of fiscal year ended September 30, 2018 by \$1,566.7 million. Total fiduciary net position restricted for pensions increased \$15.3 million or 1.0% from the previous year.

Table 1 - Summary of Fiduciary Net Position
September 30,
(Dollar Amounts in Thousands)

	2019	2018	Increase (Decrease) Amount	Total Percentage Change
Assets				
Cash and cash equivalents	\$ 43,221	\$ 51,916	\$ (8,695)	-16.7%
Receivables	14,790	4,446	10,344	232.7%
Investments	1,514,508	1,515,955	(1,447)	-0.1%
Security lending collateral - invested	114,569	143,721	(29,152)	-20.3%
Property and equipment, net	2,095	1,744	351	20.1%
Total Assets	1,689,183	1,717,782	(28,599)	-1.7%
Liabilities				
Payables for securities purchased	9,591	6,128	3,463	56.5%
Accounts payable and other liabilities	3,815	1,251	2,564	205.0%
Obligations under securities lending	114,569	143,721	(29,152)	-20.3%
Total Liabilities	127,975	151,100	(23,125)	-15.3%
Net Position Restricted for Pension				
Benefits	\$ 1,561,208	\$ 1,566,682	\$ (5,474)	-0.3%



THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

ADDITIONS TO FIDUCIARY NET POSITION

The reserves needed to finance retirement benefits are accumulated through the collection of contributions from members and the City and through earnings on investments. Contributions and net investment income for fiscal years 2019 and 2018 totaled \$153.5 million and \$173.6 million, respectively. For the fiscal year ended September 30, 2019 total additions to plan fiduciary net position decreased by \$20.1 million or 11.6% from those of the prior year, due primarily to a decrease in net appreciation in fair value investments.

Actual results were:

- City contributions increased from the previous year by approximately \$5.7 million or 10.0% based on the actuarial valuation.
- Member contributions increased from the previous year by approximately \$2.1 million or 14.4%. This increase is primarily due to an increase in the number of active members.
- Net investment income decreased from the previous year by \$28.2 million or 27.6% as the funds performed less favorable compared to prior year.

For the fiscal year ended September 30, 2018 total additions to plan fiduciary net position decreased by \$29.3 million or 14.4% from those of the prior year (2017), due primarily to a decrease in net appreciation in fair value of investments.

Additions to Fiduciary Net Position
Years Ended September 30
(Dollar Amounts in Thousands)

			Increase (Decrease) Amount	Total Percentage Change
	2019	2018		
City contribution	\$ 62,695	\$ 57,000	\$ 5,695	10.0%
Member contributions	16,309	14,258	2,051	14.4%
Net investment income	73,863	102,062	(28,199)	-27.6%
Other income	605	234	371	158.5%
Total Additions	\$ 153,472	\$ 173,554	\$ (20,453)	-11.8%

DEDUCTIONS FROM FIDUCIARY NET POSITION

The primary expenses of the Trust include the payment of pension benefits to retired members and beneficiaries, cost of living allowance (COLA) payments to retired members and beneficiaries, refund of contributions to former members, and administrative expenses and depreciation. Total deductions for fiscal years ended 2019 and 2018 were \$158.9 million and \$158.2 million, an increase of 0.5% and 3.1%, respectively.



THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the fiscal year ended September 30, 2019, the payment of pension benefits to retirees and COLA payments increased by \$252 thousand or 1.3% from the previous year. The slight increase is due to COLA payments to retirees.

For the fiscal year ended September 30, 2019, the refund of contributions increased by \$453 thousand or 210.7% from the previous year. This increase is mostly due to an increase in terminations during the fiscal year.

For the fiscal year ended September 30, 2019, administrative expenses and depreciation increased by approximately \$19,000 or 0.9% from the previous year due mostly to an increase in building maintenance cost.

Deductions from Fiduciary Net Position Years Ended September 30 (Dollar Amounts in Thousands)

	2019	2018	Increase (Decrease) Amount	Total Percentage Change
Pension benefits paid	\$ 130,507	\$ 130,598	\$ (91)	-0.1%
Refund of contributions	668	215	453	210.7%
Cost of Living Allowance	25,623	25,280	343	1.4%
Administrative expenses and depreciation	2,148	2,129	19	0.9%
Total Additions	\$ 158,946	\$ 158,222	\$ 724	0.5%

CAPITAL ASSETS

As of September 30, 2019, the Trust's investment in capital assets totaled \$2.1 million (net of accumulated depreciation). This investment in capital assets includes land, building and equipment for administrative use. The appraised value of the Administration building is \$3,650,000 at September 30, 2019. An appraisal is performed on an annual basis for insurance and valuation purposes.

RETIREMENT SYSTEM AS A WHOLE

Management believes, and actuarial studies concur, that the Trust's fiduciary net position is in line to meet all its current obligations.



THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

MANAGEMENT'S DISCUSSION AND ANALYSIS

CONTACTING THE TRUST'S FINANCIAL MANAGEMENT

This financial report is designed to provide the Retirement Board, our membership, taxpayers, investors, and creditors with a general overview of the Trust's finances and to demonstrate the Trust's accountability for the money it receives and the money it dispenses. If you have any questions about this report or need additional financial information, they can be directed to Dania L. Orta, Administrator, City of Miami Fire Fighters' and Police Officers' Retirement Trust Fund, located at 1895 SW 3 Avenue, Miami FL, 33129.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

STATEMENT OF FIDUCIARY NET POSITION

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

	2019				2018			
	Membership and Benefit Account	Cost-of-Living Adjustment I Account	Cost-of-Living Adjustment II Account	Total	Membership and Benefit Account	Cost-of-Living Adjustment I Account	Cost-of-Living Adjustment II Account	Total
Assets								
Cash and cash equivalents	\$ 31,387,017	\$ 2,045,551	\$ 9,788,498	\$ 43,221,066	\$ 37,819,941	\$ 2,332,810	\$ 11,763,170	\$ 51,915,921
Investments, at Fair Value								
Debt securities, domestic	265,251,243	17,286,920	82,722,465	365,260,628	246,377,392	15,197,052	76,630,980	338,205,424
Debt securities, international	21,678,159	1,412,806	6,760,650	29,851,615	22,155,737	1,366,400	6,891,369	30,413,506
Equity investments, domestic	359,446,305	23,425,788	112,098,567	494,970,660	348,351,782	21,483,726	108,352,099	478,187,607
Equity investments, international	189,282,880	12,335,919	59,030,623	260,649,422	187,960,779	11,592,011	58,463,732	258,016,522
Private equity	126,378,443	8,236,320	39,412,959	174,027,722	114,254,657	7,046,370	35,538,019	156,839,046
Real estate	137,794,548	8,980,329	42,973,237	189,748,114	130,602,146	8,054,561	40,622,777	179,279,484
Absolute return	--	--	--	--	54,646,312	3,370,694	16,996,691	75,013,697
Total Investments	1,099,831,578	71,678,082	342,998,501	1,514,508,161	1,104,348,805	68,110,814	343,495,667	1,515,955,286
Securities Lending Cash Collateral Invested	83,199,351	5,422,257	25,946,928	114,568,536	104,698,329	6,457,008	32,565,597	143,720,934
Receivables								
Proceeds from securities sold	11,277,977.00	--	--	11,277,977	1,132,406	--	--	1,132,406
Accrued interest	3,511,794	--	--	3,511,794	3,313,626	--	--	3,313,626
Total Receivables	14,789,771	--	--	14,789,771	4,446,032	--	--	4,446,032
Property and Equipment, Net	1,521,755	99,176	474,581	2,095,512	1,270,155	78,346	395,057	1,743,558
Total Assets	1,230,729,472	79,245,066	379,208,508	1,689,183,046	1,252,583,262	76,978,978	388,219,491	1,717,781,731
Liabilities								
Payable for securities purchased	9,591,173	--	--	9,591,173	6,127,819	--	--	6,127,819
Accounts payable and other liabilities	3,814,775	--	--	3,814,775	1,250,602	--	--	1,250,602
Obligations under securities lending	83,199,350	5,422,257	25,946,929	114,568,536	104,698,329	6,457,008	32,565,597	143,720,934
Total Liabilities	96,605,298	5,422,257	25,946,929	127,974,484	112,076,750	6,457,008	32,565,597	151,099,355
Net Position Restricted for Pension Benefits	\$ 1,134,124,174	\$ 73,822,809	\$ 353,261,579	\$ 1,561,208,562	\$ 1,140,506,512	\$ 70,521,970	\$ 355,653,894	\$ 1,566,682,376

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



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

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

	2019				2018			
	Membership and Benefit Account	Cost-of-Living Adjustment I Account	Cost-of-Living Adjustment II Account	Total	Membership and Benefit Account	Cost-of-Living Adjustment I Account	Cost-of-Living Adjustment II Account	Total
Additions								
Contributions:								
City Members	\$ 56,030,260	\$ --	\$ 6,664,591	\$ 62,694,851	\$ 50,591,605	\$ --	\$ 6,408,261	\$ 56,999,866
	16,309,563	--	--	16,309,563	14,258,763	--	--	14,258,763
Total Contributions	72,339,823	--	6,664,591	79,004,414	64,850,368	--	6,408,261	71,258,629
Investment Income								
Net appreciation in fair value of investments	37,523,258	2,342,295	11,237,490	51,103,043	62,628,032	3,252,999	16,810,944	82,691,975
Interest	12,744,076	791,173	3,900,381	17,435,630	12,669,865	647,483	3,368,136	16,685,484
Dividends	7,669,494	476,164	2,349,204	10,494,862	7,276,134	372,642	1,935,952	9,584,728
	57,936,828	3,609,632	17,487,075	79,033,535	82,574,031	4,273,124	22,115,032	108,962,187
Less: investment expenses	(4,058,525)	(250,735)	(1,240,171)	(5,549,431)	(5,597,556)	(288,411)	(1,499,152)	(7,385,119)
Net Investment Income from Investing Activities	53,878,303	3,358,897	16,246,904	73,484,104	76,976,475	3,984,713	20,615,880	101,577,068
Securities Lending Activities								
Securities lending income	369,617	22,852	113,025	505,494	490,847	25,108	130,512	646,467
Securities lending fees	(92,331)	(5,708)	(28,234)	(126,273)	(122,629)	(6,273)	(32,606)	(161,508)
Net Income from Securities Lending Activities	277,286	17,144	84,791	379,221	368,218	18,835	97,906	484,959
Total Net Investment Income	54,155,589	3,376,041	16,331,695	73,863,325	77,344,693	4,003,548	20,713,786	102,062,027
Other	440,591	27,960	136,082	604,633	177,749	9,082	47,149	233,980
Total Additions	126,936,003	3,404,001	23,132,368	153,472,372	142,372,810	4,012,630	27,169,196	173,554,636
Deductions								
Pension benefits paid	130,508,175	--	--	130,508,175	130,598,647	--	--	130,598,647
Refund of contributions	667,508	--	--	667,508	214,654	--	--	214,654
COLA distributions to retirees	--	102,247	25,520,278	25,622,525	--	119,866	25,160,119	25,279,985
Depreciation expense	14,189	915	4,405	19,509	32,333	1,712	8,681	42,726
Administrative expenses	2,128,469	--	--	2,128,469	2,086,709	--	--	2,086,709
Total Deductions	133,318,341	103,162	25,524,683	158,946,186	132,932,343	121,578	25,168,800	158,222,721
Change in Net Position	(6,382,338)	3,300,839	(2,392,315)	(5,473,814)	9,440,467	3,891,052	2,000,396	15,331,915
Net Position Restricted for Pension Benefits								
Beginning of year	1,140,506,512	70,521,970	355,653,894	1,566,682,376	1,131,066,045	66,630,918	353,653,498	1,551,350,461
End of year	\$ 1,134,124,174	\$ 73,822,809	\$ 353,261,579	\$ 1,561,208,562	\$ 1,140,506,512	\$ 70,521,970	\$ 355,653,894	\$ 1,566,682,376

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



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN

ORGANIZATION

The City of Miami Fire Fighters' and Police Officers' Retirement Trust (the Trust) is a single-employer defined benefit pension plan established by the City of Miami, Florida (the City) pursuant to the provisions and requirements of Ordinance No. 10002 as amended. Since the Trust is sponsored by the City, the Trust is included as a pension trust fund in the City's comprehensive annual financial report as part of the City's financial reporting entity.

The Trust's governing board is made up of a Board of Trustees consisting of nine members:

- Four are elected by the City Commission of which 2 are retired members
- Four are elected by the Trust's members of which one is a retired member and three are active participants
- One is appointed by the City manager

The following brief description of the Trust is provided for general information purposes only. Participants should refer to the Trust document for more detailed and comprehensive information.

MEMBERSHIP

Participants are contributing police officers and firefighters with full-time status in the Police and Fire Department of the City of Miami, Florida.

Membership in the Trust consisted of the following as of October 1:

	2019	2018
Inactive plan members and beneficiaries currently receiving benefits	2,195	2,203
Inactive plan members entitled but not yet receiving benefits	23	15
Active plan members - vested	900	897
Active plan members - non-vested	1,103	1,101
Total Members	4,221	4,216



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN (CONTINUED)

MEMBER CONTRIBUTION

Members contribute a percentage of their base salaries on a bi-weekly basis. Prior to the agreement dated January 9, 1994, a 2% contribution was designated to the Cost-of-Living Adjustment I Account (COLA I account). Effective January 9, 1994, the Gates Agreement was resettled whereby this contribution percentage was decreased to 0% and a new Cost-of-Living Adjustment II Account (COLA II account) was created and funded by an actuarially determined percentage of the excess investment return (from other than COLA I account assets).

As of September 30, 2014, the member contribution for police officers hired prior to October 1, 2012 shall be 7% of earnable compensation. The member contribution for police officers hired on or after October 1, 2012 shall be 10% of earnable compensation.

As of September 30, 2014, the member contribution for fire fighters shall be 10% of earnable compensation.

During the years ended September 30, 2019 and 2018, approximately \$267,000 and \$475,000, respectively, is included as member contributions for the purchase of additional service years by members as provided for by the Trust.

FUNDING REQUIREMENTS

The City is to contribute such amounts as are necessary to maintain the actuarial soundness of the Trust and to provide the Trust with assets sufficient to meet the benefits to be paid to the participants. Contributions to the Trust are authorized pursuant to City of Miami Code Section 40.196 (a) and (b). Contributions to the COLA accounts are authorized pursuant to Section 40.204 of the City of Miami Code. The City's contributions to the Trust provide for non-investment expenses and normal costs of the Trust. The yield (interest, dividends, and net unrealized and realized gains and losses) on investments of the Trust serves to reduce/increase future contributions that would otherwise be required to provide for the defined level of benefits under the Trust.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN (CONTINUED)

PENSION BENEFITS

Members may elect to retire after 10 or more years of creditable service upon attainment of normal retirement age. Normal retirement pursuant to Section 40-203 of the City code shall be determined as follows:

Plan A

“For members employed on September 30, 2010, who as of that date have attained age 50 with ten or more years of creditable service or eligibility for Rule of 64 retirement for police officer members, or eligibility for rule of 68 retirement for firefighter members, the normal retirement age shall be 50 years of age with ten or more years of creditable service, or Rule of 64 retirement for police officer members, or Rule of 68 for firefighter members.”

Plan B

“For members employed on September 30, 2010, who as of that date have not attained age 50 with ten or more years of creditable service, or Rule of 64 retirement for police officer members, or Rule of 68 retirement for firefighter members, and member hired on or after October 1, 2010 shall be rule of 70 retirement with a minimum age of 50 and ten or more years of creditable service.”

Rule of 64, 68 and 70 shall mean a computation consisting of the sum of a member's age and length of creditable service, which sum shall permit normal service retirement upon the member's combined age and creditable service equaling at least 64, 68 and 70, respectively.

Members who were vested as of September 27, 2010, may elect to retire after 10 or more years of creditable service upon attainment of normal retirement age. A member entitled to a normal retirement shall receive a retirement allowance equal to 3% of the member's average final compensation multiplied by years of creditable service for the first 15 years of such creditable service, and 3½% of the member's average final compensation multiplied by years of creditable service exceeding 15 years. This benefit paid in monthly installments.

Members who were not vested as of September 27, 2010, may elect to retire upon reaching Rule of 70 with a minimum age of 50.

Effective September 30, 2010, for members who retire under normal service retirement or Rule of 70 retirement the retirement allowance shall not exceed the lesser of 100% of the member's average final compensation or an annual retirement allowance of \$100,000 as of retirement or DROP entry based on the normal form of benefit in effect on the date of retirement.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN (CONTINUED)

PENSION BENEFITS (CONTINUED)

Early retirement, disability, death and other benefits are also provided.

INVESTMENT POLICY

The Trust's investment policy is determined by the Board of Trustees and is implemented by investment managers. In addition, the Trust utilizes an investment advisor who monitors the investing activities. The investment policy of the Trust stipulates that the trustees shall, in acquiring, investing, reinvesting, exchanging, retaining, selling and maintaining property for the benefit of the Trust, exercise the judgment and care under the circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital. The trustees are authorized to acquire and retain various kinds of property, real, personal or mixed, and various types of investments specifically including, but not by way of limitation, bonds, debentures and other corporate obligations, and stocks, preferred or common, which persons of prudence, discretion and intelligence acquire or retain for their own account. The investment of funds shall be in a manner that is consistent with the applicable sections of the City Code as well as State and Federal laws within the allocation percentages established in the Trust's investment policy guidelines.

The investments are considered held by the Membership and Benefit Account and a share of the value of this account is allocated to each account based on a weighted average calculation performed each month to reflect each account's membership and benefit, COLA I and COLA II activity.

COLA ACCOUNTS

Effective January 9, 1994, the Trust entered into an agreement with the City of Miami with regards to the funding methods, member benefits, member contributions and retiree COLA. As of January 9, 1994, members no longer contribute to the original COLA account (COLA I), and a new COLA account (COLA II) was established.

The agreement included the following provisions:

- The funding method was changed to an aggregate method.
- Combining all accounts for investment purposes (membership and benefit, COLA I and COLA II).
- Retirees receive additional COLA benefits.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN (CONTINUED)

COLA ACCOUNTS (CONTINUED)

- Active members no longer contribute 2% of pretax earnings to fund the original retiree COLA account (COLA I account).

The COLA II account is funded annually by a percentage of the excess investment returns from other than COLA I account assets. The excess earnings contributed to the COLA II account will be used to fund a minimum annual payment of \$2,500,000, increasing by 4% compounded annually. To the extent necessary, the City will fund the portion of the minimum annual payment not funded by annual excess earnings no later than January 1 of the following year. During the years ended September 30, 2019 and 2018, approximately \$6,665,000 and \$6,408,000, respectively, was funded by the City. Benefits payable from the COLA accounts are computed in accordance with an actuarially based formula as defined in Section 40.204 of the City of Miami Code.

DEFERRED RETIREMENT OPTION PROGRAM (DROP)

Members who are eligible for service retirement or Rule of 64 or Rule of 68 after September 1998 may elect to enter the Deferred Retirement Option Program (DROP). Maximum participation in the DROP for firefighters shall be 54 full months and for police officers shall be 84 full months. A member's creditable service, accrued benefit and compensation calculation shall be frozen.

Upon commencement of participation in the DROP, the participant's contribution and the City's contribution to the Trust for that participant cease as the participant will not earn further creditable service for pension purposes.

Effective July 24, 2008, firefighter DROP participants may continue City employment for up to a maximum of 54 full months and police officers who elect DROP on May 8, 2008, or thereafter, may continue City employment for up to a maximum of 84 full months. No payment is made to or for the benefit of a DROP participant beyond that period. For persons electing participation in the DROP, an individual DROP account shall be created. Payment shall be made by the Trust into the member's DROP account in an amount equal to the regular monthly retirement benefit which the participant would have received had the participant separated from service and commenced receipt of pension benefits. Payments received by the participant in the DROP account are tax deferred. A series of investment vehicles which are established by the Board of Trustees are made available to DROP participants to choose from. Any losses, charges, or expenses incurred by the participant in their DROP account are not made up by the City or the Trust but shall be borne by the participant.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 1 – DESCRIPTION OF THE PLAN (CONTINUED)

DEFERRED RETIREMENT OPTION PROGRAM (DROP) (CONTINUED)

The DROP assets are held by an independent third party and therefore not a part of the Trust's Financial Statements. The DROP balance was \$145,476,800 and \$154,440,850, respectively, as of September 30, 2019 and 2018.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING

The Trust's financial statements are prepared using the accrual basis of accounting. Member contributions are recognized as revenues in the period in which contributions are due. City contributions are due when there is a formal commitment to provide amounts determined by an actuarial valuation. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment purchases and sales are recorded on a trade-date basis. Interest and other income are recorded as earned and dividend income is recorded as of the ex-dividend date.

CASH EQUIVALENTS

The Trust considers all highly liquid investments with short-term maturities, typically less than three months, to be cash equivalents.

INVESTMENTS

Investments are recorded at fair value in the statement of fiduciary net position. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Refer to Note 3 to the financial statements for more detail regarding the methods used to measure the fair value of investments.

Unrealized and realized gains and losses are presented as net appreciation in fair value of investments on the statement of changes in fiduciary net position. Purchases and sales of securities are reflected on a trade-date basis. Interest income is recognized as earned and dividend income is recorded as of the ex-dividend date. Realized gains and losses on the sale of investments are based on average cost identification method.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

INVESTMENTS (CONTINUED)

Given the inherent nature of investments it is reasonably possible that changes in the value of those investments will occur in the near term and that such changes could materially affect the amounts reported in the statement of fiduciary net position.

USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

PROPERTY AND EQUIPMENT, NET

Property and equipment (capital assets) are stated at cost and depreciated using the straight-line method over the estimated lives of the assets.

INCOME TAX STATUS

The Trust is tax-exempt under the Internal Revenue Code and, therefore, has recorded no income tax liability or expense.

RISK AND UNCERTAINTIES

Contributions to the Trust and the actuarial information included in the required supplementary information (RSI) are reported based on certain assumptions pertaining to the interest rates, inflation rates and member compensation and demographics. Due to the changing nature of these assumptions, it is at least reasonably possible that changes in these assumptions may occur in the near term and, due to the uncertainties inherent in settling assumptions, that the effect of such changes could be material to the financial statements.

RECLASSIFICATIONS

Certain amounts presented in the prior year data have been reclassified to be consistent with the current year's presentation.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES

CASH AND CASH EQUIVALENTS

Deposits are carried at cost and are included in cash and cash equivalents in the statement of fiduciary net position. Cash and cash equivalents include demand accounts and short-term investment funds (STIF). The cash is invested through daily sweeps of excess cash by the Trust's custodial bank into the custodial short-term (money market) commingled fund or invested in certificates of deposit, commercial paper, U.S. Treasury bills and repurchase agreements.

Cash and cash equivalents at September 30 consist of the following:

	<u>2019</u>
(Managed overdraft) deposits	\$ (150,816)
Invested cash and foreign currency	23,967,893
Short-term investments	<u>19,403,989</u>
Total	<u>\$ 43,221,066</u>

INVESTMENT AUTHORIZATION

The Board of Trustees holds the fiduciary responsibility for the Trust, and has adopted a policy to invest in several institutionally acceptable asset classes. Thus, the Trustees have set a reasonably diversified asset allocation in accordance with state statutes (including minimum and maximum allocations), which is expected to appropriately fund the Trust's liabilities and meet its basic investment objectives. The basis for such a target asset allocation is a study of the Trust's pension liabilities and reasonable, alternative investment portfolios.

These asset classes are domestic equity (large, mid and small capitalization), international equity (developed and emerging markets), domestic real estate (institutional quality properties either individually or in open-ended commingled funds, or in real estate investment trust securities portfolios), private equity funds, domestic fixed income, and short-term investments. Other asset classes may be added by the Trustees to its investment policy.

Investment in domestic equity securities shall be limited to those listed on a major U.S. stock exchange and limited to no more than 25.9% (at market value) of the Trust's total asset value, in accordance with the Trust's investment policy. Investments in stocks of foreign companies shall be limited to 16.8% of the value of the Trust's portfolio.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT AUTHORIZATION (CONTINUED)

Investments in core domestic fixed income securities shall be limited to 29.2% (at maturity) of the Trusts' total portfolio. The domestic fixed income portfolio shall be comprised of securities rated "BBB" or higher by nationally recognized rating agencies, preferably by Moodys' or Standard & Poors rating services. Investment in bank loans has also been authorized by the Trust. The goal of the bank loan allocation is to generate reasonable returns, while providing diversification relative to core and high yield fixed income managers. Proper portfolio diversification of bank loan portfolios is required, such that reasonable risk/reward expectations are maintained. Performance attribution is required, as is the case of domestic core and high yield fixed income managers. Additionally, investment in absolute return has been authorized by the Trust. The goal of the absolute return allocation is to protect against volatility. Proper diversification of absolute return portfolios is required, such that reasonable risk/reward expectations are maintained. Performance attribution is required, as is the case of domestic fixed income and equity managers. Derivative investments with allocation limits, may not represent more than 5% of the individual portfolio manager's assets managed for the Trust. Derivative investments with allocation limits in the aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets.

The Trust invests in various funds and investment vehicles which employ specific strategies and co-investments often outside the traditional asset classes. The most common investment categories for these funds include domestic and international real estate and private equity funds. The structure of these investments is generally a limited partnership or limited liability company and tend to be long-term and illiquid in nature. Global real estate investments and private equity allocation range is limited to 11.1% and 4%, respectively.

No single security can represent more than 5% of the market value of a portfolio at the time of purchase, and no single industry (based on Global Industry Classification System codes) can represent more than 15% of the market value of the account. These single security and single industry restrictions do not apply to U.S. Government and Agency bond holdings.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

TYPES OF INVESTMENTS

Florida Statutes and the Trust's investment policy authorize the Trustees to invest funds in various investments. The current target and actual allocation of these investments at market, per the performance analysis report, is as follows as of September 30:

Authorized Investments	2019	
	Target % of Portfolio	Actual % of Portfolio
Cash and cash equivalents	0.00%	2.77%
Domestic equities	25.90%	31.78%
Core domestic fixed income	29.20%	25.36%
International equities	16.80%	16.73%
Global real estate	11.10%	12.18%
Absolute return	13.00%	0.00%
Private equity	4.00%	11.17%
Total Authorized Investments	100.00%	100.00%

RATE OF RETURN

For the years ended September 30, 2019 and 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 5.39% and 7.48%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENTS

The table below shows the Trust's investments by type as of September 30:

	<u>2019</u>
Debt Securities, Domestic	
U.S. treasuries	\$ 45,452,102
U.S. agencies	115,178
Corporate bonds	127,234,292
Asset backed securities	6,658,617
Mortgage backed securities	91,435,855
High yield bond	<u>94,364,584</u>
Total Debt Securities, Domestic	<u>365,260,628</u>
Debt Securities, International	
International government bonds	2,701,130
Corporate bonds	<u>27,150,485</u>
Total Debt Securities, International	<u>29,851,615</u>
Equity securities, domestic	494,970,660
Equity securities, international	260,649,422
Private equity	174,027,722
Real estate equity	<u>189,748,114</u>
Total Investments	<u><u>\$ 1,514,508,161</u></u>

INTEREST RATE RISK

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates. As a means of limiting its exposure to interest rate risk, the Trust diversifies its investments by security type and institution, and limits holdings in any one type of investment with any one issuer with various durations of maturities.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INTEREST RATE RISK (CONTINUED)

Information about the sensitivity of the fair values of the Trust's investments to market interest rate fluctuations is provided by the following tables that show the distribution of the Trust's investments by maturity at September 30:

Investment Type	Fair Value	2019			
		Investment Maturities (In Years)			
		Less Than 1	1-5 Years	6-10 Years	More Than 10 Years
U.S. treasuries	\$ 45,452,102	\$ --	\$ 20,257,350	\$ 21,316,844	\$ 3,877,908
U.S. agencies	115,178	--	36,036	79,142	--
Corporate bonds	127,234,292	6,092,685	65,059,874	40,832,024	15,249,709
Asset backed securities	6,658,617	--	699,245	42,995	5,916,377
Mortgage backed securities	91,435,855	154	414,354	4,487,481	86,533,866
High yield bond	94,364,584	--	--	94,364,584	--
International fixed income	29,851,615	314,559	18,739,754	6,747,125	4,050,177
Total Fixed Income Securities	\$ 395,112,243	\$ 6,407,398	\$ 105,206,613	\$ 167,870,195	\$ 115,628,037
% of Fixed Income Portfolio	<u>100.00%</u>	<u>1.62%</u>	<u>26.63%</u>	<u>42.49%</u>	<u>29.26%</u>

CREDIT RISK

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. This risk is generally measured by the assignment of a rating by a nationally recognized statistical rating organization. The Trust's investment policy utilizes portfolio diversification in order to control this risk.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

CREDIT RISK (CONTINUED)

The following tables disclose credit ratings by investment type, at September 30, as applicable:

Investment	2019	
	Fair Value	Percentage of Portfolio
U.S. Government Guaranteed*	\$ 45,567,280	11.53%
Credit Risk Debt Securities		
AAA	93,422,650	23.64%
AA+	7,753,115	1.96%
AA	2,215,178	0.56%
AA-	5,330,170	1.35%
A+	10,950,041	2.77%
A	12,784,680	3.24%
A-	30,341,106	7.68%
BBB+	45,283,026	11.46%
BBB	38,072,769	9.64%
BBB-	7,695,686	1.95%
BB+	690,188	0.17%
Not rated	<u>95,006,354</u>	<u>24.05%</u>
Total Credit Risk Debt Securities	<u>349,544,963</u>	<u>88.47%</u>
Total Fixed Income Investments	<u>\$ 395,112,243</u>	<u>100.00%</u>

*Obligations are backed by the full faith and credit of the U.S. Government.

CONCENTRATION OF CREDIT RISK

The investment policy of the Trust contains limitations on the amount that can be invested in any one issuer as well as maximum portfolio allocation percentages. There were 3 individual investments that represent 5% or more of the fair value of the Trust's net position at September 30, 2019.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

CUSTODIAL CREDIT RISK

Deposits are exposed to custodial risk if they are uninsured and uncollateralized. Custodial risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Trust will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The Trust's deposits are covered by depository insurance or are collateralized by securities held with a financial institution in the Trust's name. The Trust is only exposed to custodial credit risk for uncollateralized cash and cash equivalents that are not covered by federal depository insurance.

Custodial risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Trust will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial risk if the securities are uninsured, are not registered in the name of the Trust, and are held either by the counterparty or the counterparty's trust department or agent but not in the Trust's name.

Consistent with the Trust's investment policy, the investments are held by Trust's custodial bank and registered in the Trust's name. All of the Trust's deposits are insured or collateralized by a financial institution separate from the Trust's depository financial institution.

The Trust participates in securities lending transactions, as lender, and the securities loaned in those circumstances are exposed to some degree of custodial credit risk. The Trust does require that its custodian maintain insurance to help protect against losses due to negligence, theft, and certain other events.

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of the investment or a deposit. The Trust may have exposure to foreign currency risk to the extent its investments contain non-U.S. dollar denominated holdings in foreign countries. All asset classes may hold non-U.S. securities, depending on portfolio guidelines. There is no requirement that this exposure to foreign currency be hedged through forward currency contracts, although the manager uses them in many cases.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

FOREIGN CURRENCY RISK (CONTINUED)

The Trust has exposure to foreign currency fluctuation as of September 30, as follows:

Currency	2019				
	Cash and Cash Equivalents	Equity	Fixed Income	Private Equity	Total
Australian Dollar	\$ --	\$ 2,225,694	\$ --	\$ --	\$ 2,225,694
Brazilian Real	3,327	587,762	--	--	591,089
British Pound Sterling	4	22,830,954	--	--	22,830,958
Canadian Dollar	--	8,496,106	--	--	8,496,106
Danish Krone	--	3,806,143	--	--	3,806,143
Euro	20,732	55,277,484	--	7,023,033	62,321,249
Hong Kong Dollar	--	17,536,683	--	--	17,536,683
Indonesian Rupiah	--	1,342,816	237,474	--	1,580,290
Japanese Yen	--	38,593,676	--	--	38,593,676
Malaysian ringgit	--	--	289,583	--	289,583
Mexican Peso	--	245,495	--	--	245,495
Norwegian Krone	--	1,055,055	--	--	1,055,055
Polish zloty	--	--	454,842	--	454,842
Singapore Dollar	--	3,955,467	932,048	--	4,887,515
South Korean Won	--	7,763,811	--	--	7,763,811
Swedish Krona	--	2,759,816	--	--	2,759,816
Swiss Franc	11,222	22,080,260	--	--	22,091,482
Taiwan Dollar	--	7,563,808	--	--	7,563,808
Other	--	2,688,617	36,750	--	2,725,367
Total	\$ 35,285	\$ 198,809,647	\$ 1,950,697	\$ 7,023,033	\$ 207,818,662

SECURITIES LENDING TRANSACTIONS

A retirement system is authorized by state statutes and board of trustees' policies to lend its investment securities. The lending is managed by the Trust's custodial bank. All loans can be terminated on demand by either the Trust or the borrowers, although the average term of loans is approximately 51 days, as of September 30, 2019. The custodial bank and its affiliates are prohibited from borrowing the Trust's securities.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

SECURITIES LENDING TRANSACTIONS (CONTINUED)

The agent lends the Trust's U.S. government and agency securities and domestic corporate fixed income and equity securities for securities or cash collateral at least 102 percent of the market value of the securities plus any accrued interest and international securities at least 105 percent of the market value of the securities plus any accrued interest. The securities lending contracts do not allow the Trust to pledge or sell any collateral securities unless the borrower defaults. Cash collateral is invested in the agent's collateral investment pool, whose share values are based on the amortized cost of the pool's investments. Investments are restricted to issuers with a credit rating A3 or A- or higher by Moody's or Standard & Poor's. At September 30, 2019, the pool had a weighted average term to maturity of 32 days.

The relationship between the maturities of the investment pool and the Trust's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the Trust cannot determine. There are policy restrictions by the custodial bank that limit the amount of securities that can be lent at one time or to one borrower.

Loaned securities continue to be classified as investment assets on the statement of fiduciary net position. Off balance sheet cash collateral is recorded as an asset with a corresponding liability. For lending agreements collateralized by securities, no accompanying asset or liability is recorded, since the Trust is not permitted to sell or re-pledge the associated collateral.

The following represents the balances relating to securities lending transactions at September 30:

Currency	2019		
	Market Value of Securities on Loan for Cash	Fair Value Cash Collateral Invested	Fair Value of Liabilities to Borrowers
Securities Lent			
Global equities	\$ 2,628,998	\$ 2,774,986	\$ 2,774,986
U.S. government and agency obligations	18,137,598	18,546,575	18,546,575
Domestic corporate stocks	71,166,460	72,843,374	72,843,374
Domestic corporate bonds	19,866,495	20,403,601	20,403,601
Total Securities Lent	<u>\$ 111,799,551</u>	<u>\$ 114,568,536</u>	<u>\$ 114,568,536</u>



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

SECURITIES LENDING TRANSACTIONS (CONTINUED)

The contract with the Trust's custodian requires the custodian to indemnify the Trust if the borrower fails to return the securities, due to the insolvency of a borrower, and the custodian has failed to live up to its contractual responsibilities relating to the lending of those securities. At year end, the Trust has no credit risk exposure to borrowers because the amounts of collateral held by the Trust exceed the amounts the borrowers owe the Trust.

There are no significant violations of legal or contractual provisions, no borrowers or lending agent default losses, and no recoveries of prior period losses during the year. There are no income distributions owing on securities lent.

INVESTMENT VALUATION

GASB Statement No. 72 establishes a hierarchal disclosure framework which prioritizes and ranks the level of market price observability used in measuring investments at fair value. Market price observability is impacted by a number of factors, including the type of investment and the specific characteristics of the investment. Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Investments with readily available actively traded quoted prices or for which fair value can be measured from actively traded quoted prices generally will have a higher degree of market price observability and lesser degree of judgment used in measuring fair value.

Investments measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 - Investments traded in an active market with available quoted prices for identical assets as of the reporting date.

Level 2 - Investments not traded on an active market but for which observable market inputs are available for an asset, either directly or indirectly, as of the reporting date.

Level 3 - Investments not traded in an active market and for which no significant observable market inputs are available as of the reporting date.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT VALUATION (CONTINUED)

The Trust has established a framework to consistently measure the fair value of the Trust's assets and liabilities in accordance with applicable accounting, legal, and regulatory guidance. This framework has been provided by establishing valuation policy and procedures that will provide reasonable assurance that assets and liabilities are carried at fair value. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Trust's assessment of the significance of a particular input to the fair value measurement requires judgment and considers factors specific to the investment.

Debt securities: Debt securities consist primarily of negotiable obligations of the U.S. government and U.S. government-sponsored agencies, corporations, securitized offerings backed by residential and commercial mortgages and foreign debt securities. These securities can typically be valued using the close or last traded price on a specific date (quoted prices in active markets). When quoted prices are not available, fair value is determined based on valuation models that use inputs that include market observable inputs. These inputs included recent trades, yields, price quotes, cash flows, maturity, credit ratings, and other assumptions based upon the specifics of the investment's type.

Equity securities: These include domestic and international equities. Domestic securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the fiscal year. Securities traded in the over-the counter market and listed securities for which no sale was reported on that date are valued at the last reported bid price. International equities are valued based upon quoted foreign market prices and translated into U.S. dollars at the exchange rate in effect at September 30, 2019. Securities which are not traded on a national security exchange are valued by the respective fund manager or other third parties based on yields currently available on comparable securities of issuers with similar credit ratings.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
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NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT VALUATION (CONTINUED)

Alternative investments: These investments pertain to private equity where no readily ascertainable market value exists. To value these investments, management, in consultation with the general partner and investment advisors, determines the fair values for the individual investments based upon the partnership's or limited liability company's most recent available financial information adjusted for cash flow activities through September 30, 2019. The estimated fair value of these investments may differ from values that would have been used had a ready market existed. The Trust also has investments which are measured at net asset value (NAV) based on their proportionate share of the value of the investments as determined by the fund manager and are valued according to methodologies which include pricing models, property valuations (appraisals), discounted cash flow models, and similar techniques. Investments measured at NAV as a practical expedient would be excluded from the fair value hierarchy because the valuation is not based on actual market inputs but rather is quantified using the investments' reported NAV as a matter of convenience.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT VALUATION (CONTINUED)

The following table summarizes the valuation of the Trust's investments in accordance with the above mentioned fair value hierarchy levels as of September 30:

Investment by Fair Value Level	September 30, 2019	Identical Assets (Level 1)	Inputs (Level 2)	Inputs (Level 3)
Debt Securities				
U.S. treasuries	\$ 45,452,102	\$ --	\$ 45,452,102	\$ --
U.S. agencies	115,178	--	115,178	--
Corporate bonds	154,384,776	--	154,384,776	--
Asset backed securities	6,658,617	--	6,658,617	--
Mortgage backed securities	91,435,855	--	91,435,855	--
International fixed income	2,701,130	--	2,701,130	--
Total Debt Securities	<u>300,747,658</u>	<u>--</u>	<u>300,747,658</u>	<u>--</u>
Equity Securities				
Domestic equities	316,428,602	316,428,602	--	--
International equities	234,280,865	234,280,865	--	--
Total Equity Securities	<u>550,709,467</u>	<u>550,709,467</u>	<u>--</u>	<u>--</u>
Alternative Investments				
Private equity	7,023,033	--	--	7,023,033
Total Alternative Investments	<u>7,023,033</u>	<u>--</u>	<u>--</u>	<u>7,023,033</u>
Total Investments by Fair Value Level	<u>858,480,158</u>	<u>\$ 550,709,467</u>	<u>\$ 300,747,658</u>	<u>\$ 7,023,033</u>
Investments Measured at Net Asset Value (NAV)				
Commingled domestic fixed income funds	94,364,584			
Commingled international equity funds	26,368,557			
Commingled domestic equity funds	178,542,059			
Real estate investment funds	189,748,114			
Venture capital private equity funds	167,004,689			
Total Investments Measured at NAV	<u>656,028,003</u>			
Total Investments	<u>\$ 1,514,508,161</u>			



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT VALUATION (CONTINUED)

The following tables summarize investments as of September 30, 2019 for which fair value is measuring using the net asset value per share, including their related unfunded commitments and redemption restrictions.

<u>Investments Measured at NAV</u>	<u>Investments Measured at NAV</u>			
	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled domestic fixed income funds (1)	\$ 94,364,584	\$ --	Daily	Same Day
Commingled international equity funds (2)	26,368,557	--	Daily	Same Day
Commingled domestic equity funds (3)	178,542,059	--	Daily	Same Day
Real estate investment funds (4)	189,748,114	--	Quarterly	45 days
Venture capital private equity funds (5)	<u>167,004,689</u>	<u>66,232,030</u>	N/A	N/A
Total Investments Measured at NAV	<u>\$ 656,028,003</u>	<u>\$ 66,232,030</u>		

1. Commingled domestic fixed income funds with established investment objectives to seek high income and capital growth by investing in U.S. high yield debt securities over a long-term period. These funds aim at hedging the foreign exchange risk resulting from the divergence between the reference currency of subfunds and the currency of share classes by using derivatives instruments.
2. Commingled international equity funds with globally diversified private equity programs that invest and seeks to measure the stocks representing the lowest 15% of float-adjusted market cap in key developed countries, excluding the U.S.
3. Commingled domestic equity funds which aim to pursue varying strategies in order to diversify risks and reduce volatility. These funds have a diversified portfolio of relative value and event driven hedge funds with a focus on U.S. holdings.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 3 – DEPOSIT AND INVESTMENT RISK DISCLOSURES (CONTINUED)

INVESTMENT VALUATION (CONTINUED)

4. Real estate investment funds are established for the purpose to acquire, own, hold for investment and ultimately dispose of investments in real estate. These funds strive to keep a diversified portfolio of income producing institutional properties throughout the US.
5. Venture capital private equity funds whose investment objective is investing primarily in private equity investments, including primary and secondary investments in private equity, infrastructure, and other private asset funds and co-investments in portfolio companies, although the allocation among those types of investments may vary from time to time.

NOTE 4 – OFF-BALANCE-SHEET COMMITMENTS

The Trust, in the normal course of business, enters into commitments with off-balance-sheet risk. The Trust adheres to the same credit policies, financial and administrative controls, and risk limiting and monitoring procedures for commitments as for on-balance-sheet investments. The majority of these future financial commitments are reported as part of the unfunded commitments for investments measured at NAV which are disclosed in Note 3 of the financial statements.

In addition to the unfunded commitments disclosed in Note 3, the Trust has future investment commitments outstanding for domestic and foreign private equity investments at September 30, 2019 of approximately \$15,000,000 and €1,580,000 (euros), respectively.

NOTE 5 – NET PENSION LIABILITY OF THE CITY

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

Total Pension Liability	\$ 2,229,656,108
Less: Plan fiduciary net position	<u>(1,561,208,562)</u>
Net Pension Liability	<u>\$ 668,447,546</u>
Plan Fiduciary Net Position as a % of the Total Pension Liability	70.02%



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 5 – NET PENSION LIABILITY OF THE CITY (CONTINUED)

SIGNIFICANT ACTUARIAL ASSUMPTIONS

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

Inflation	3.25%
Projected salary increases	1.5% for promotions plus salary merit scale
Projected COLAs	Amount varies annually with the adjustment on January 1st
Investment rate of return	7.34% compounded annually, net of pension plan investment expense, including inflation.

Mortality rates are calculated with the Florida Retirement System projected using scale BB for all healthy retirees. Disabled Mortality rates are not projected.

LONG-TERM EXPECT RATE OF RETURN

The long-term expected rate of return on 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 expense and inflation) are developed for each major asset class. 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 arithmetic real rates of return for each major asset class included in the Trust's target asset allocation as of September 30, 2019 (see the discussion of the Trust's investment policy) are summarized in the following table:

Asset Class	*Long-term Expected Real Rates of Return
Domestic Fixed Income	2.40%
Foreign Fixed Income	0.00%
Domestic Equities	5.40%
International Equities	5.80%
Real Estate	4.30%
Private Equity	7.00%
Cash	0.00%

* Real rates of return are net of the long-term inflation assumption of 3.25% for 2019.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 5 – NET PENSION LIABILITY OF THE CITY (CONTINUED)

DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.34%, for 2019. 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 7.34% for 2019, as well as what the employer net pension liability would if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease (6.34%)	Current Discount Rate (7.34%)	1% Increase (8.34%)
City's Net Pension Liability	<u>\$ 907,554,996</u>	<u>\$ 668,447,546</u>	<u>\$ 466,936,209</u>

NOTE 6 – PROPERTY AND EQUIPMENT

The property and equipment consist of:

	2019	Estimated Useful Lives
Land	\$ 760,865	N/A
Building	<u>1,666,306</u>	39 years
Less: accumulated depreciation	<u>(331,659)</u>	
Property and Equipment, Net	<u>\$ 2,095,512</u>	

The depreciation expense for year ended September 30, 2019 was \$19,509.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED SEPTEMBER 30, 2019

NOTE 7 – ADMINISTRATIVE EXPENSES REIMBURSEMENT

For the fiscal year ended September 30, 2019 administrative costs of the Trust in the amount of \$2,128,469 are funded by the City of Miami and are accounted for as a part of the actuarially determined minimum required contributions from the City and are reflected in contributions from the City in the accompanying statement of changes in fiduciary net position.

NOTE 8 – RETIREMENT PLAN FOR STAFF

The employees of the Trust participate in a separate plan sponsored by the City of Miami Fire Fighters' and Police Officers' Retirement Trust, which is a single-employer defined benefit pension plan. The employees' contribution is 7% of earnable compensation. Employee retirement contributions for the fiscal year ended September 30, 2019, totaled \$24,769.

The Trust, as employer, is to contribute such amounts as necessary to provide the Staff Plan with assets sufficient to meet the benefits to be paid to the participants. The employer contributions to the Plan for fiscal year ended September 30, 2019 were \$49,957.

NOTE 9 – LEGAL MATTERS

A suit was brought against the Trust in 2013 by a group of retirees claiming additional benefits. During the course of the litigation, all but one count was dismissed on sovereign immunity grounds. In September 2019, a final order of dismissal on the one remaining count was ordered by the Third District Court of Appeal, also on sovereign immunity grounds. A final judgment is pending entry by the trial court. The Trust is pursuing attorneys' fees and costs.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY AND RELATED RATIOS (UNAUDITED)

September 30,	2019	2018	2017 (Restated)*	2016	2015	2014
Total Pension Liability						
Service cost	\$ 30,947,329	\$ 27,965,925	\$ 26,279,333	\$ 21,625,163	\$ 19,203,823	\$ 17,233,272
Interest	152,192,907	149,244,425	146,548,443	156,265,650	156,479,438	155,338,970
Changes in benefit terms	55,386,337	--	122,641,436 (1)	--	9,453,429	--
Differences between expected and actual experience	32,027,954	21,728,074	15,553,948	12,725,721	(16,970,540)	(6,638,755)
Changes of assumptions	(5,024,797)	16,618,357	--	30,651,781	14,895,466	--
Benefit payments, including refunds of member contributions	<u>(156,798,207)</u>	<u>(156,093,286)</u>	<u>(151,375,376)</u>	<u>(166,203,470)</u>	<u>(165,535,327)</u>	<u>(139,860,276)</u>
Net Change in Total Pension Liability	108,731,523	59,463,495	159,647,784	55,064,845	17,526,289	26,073,211
Total Pension Liability - Beginning	2,120,924,585	2,184,102,526	2,222,547,481	2,167,482,636	2,149,956,347	2,123,883,136
Changes in benefit terms (1)	--	(122,641,436)	--	--	--	--
Restatement (2)	--	--	(198,092,739)	--	--	--
Total Pension Liability - Ending	<u>\$ 2,229,656,108</u>	<u>\$ 2,120,924,585</u>	<u>\$ 2,184,102,526</u>	<u>\$ 2,222,547,481</u>	<u>\$ 2,167,482,636</u>	<u>\$ 2,149,956,347</u>
Plan Fiduciary Net Position						
Contributions - employer	\$ 62,694,851	\$ 56,999,866	\$ 53,264,009	\$ 48,672,615	\$ 48,616,677	\$ 47,535,499
Contributions - member	16,309,563	14,258,763	13,206,378	12,082,805	9,317,231	9,462,569
Net investment income	73,863,324	102,296,007	136,351,212	132,946,827	35,844,550	132,696,604
Benefit payments, including refunds of member contributions	(156,798,207)	(156,093,286)	(151,375,376)	(166,203,470)	(165,537,888)	(139,860,276)
Administrative expense	(2,128,469)	(2,086,709)	(2,058,797)	(2,029,168)	(2,222,561)	(2,086,240)
Other	<u>585,124</u>	<u>(42,726)</u>	<u>(42,726)</u>	<u>(42,726)</u>	<u>(42,726)</u>	<u>989,372</u>
Net Change in Plan Fiduciary Net Position	(5,473,814)	15,331,915	49,344,700	25,426,883	(74,024,717)	48,737,528
Plan Fiduciary Net Position - Beginning	1,566,682,376	1,551,350,461	1,700,098,500	1,674,671,617	1,748,696,334	1,699,958,806
Restatement	--	--	(198,092,739)	--	--	--
Plan Fiduciary Net Position - Ending	<u>\$ 1,561,208,562</u>	<u>\$ 1,566,682,376</u>	<u>\$ 1,551,350,461</u>	<u>\$ 1,700,098,500</u>	<u>\$ 1,674,671,617</u>	<u>\$ 1,748,696,334</u>
Net Pension Liability - Ending	<u>\$ 668,447,546</u>	<u>\$ 554,242,209</u>	<u>\$ 632,752,065</u>	<u>\$ 522,448,981</u>	<u>\$ 492,811,019</u>	<u>\$ 401,260,013</u>

*Total pension liability and plan net fiduciary position restated for removal of DROP assets as of October 1, 2016.

(1) See "Total Pension Liability Adjustment" description in notes to required supplementary information.

(2) Restated for elimination of DROP assets and related activity. There was no effect on the City's net pension liability.

(3) Covered payroll is as of September 30, of the prior fiscal year.

(4) Covered payroll amounts were adjusted to reflect updated pay rates for members which were not finalized during the preparation of the GASB 67 report as of September 30, 2018.

This schedule is presented as required by accounting principles generally accepted in the United States of America, however, until a full 10-year trend is compiled, information is presented for those years available.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY AND RELATED RATIOS (UNAUDITED) (CONTINUED)

September 30,	2019	2018	2017 (Restated)*	2016	2015	2014
Total Pension Liability	\$ 2,229,656,108	\$ 2,120,924,585	\$ 2,184,102,526	\$ 2,222,547,481	\$ 2,167,482,636	\$ 2,149,956,347
Plan Fiduciary Net Position	<u>(1,561,208,562)</u>	<u>(1,566,682,376)</u>	<u>(1,551,350,461)</u>	<u>(1,700,098,500)</u>	<u>(1,674,671,617)</u>	<u>(1,748,696,334)</u>
City's Net Pension Liability	<u>\$ 668,447,546</u>	<u>\$ 554,242,209</u>	<u>\$ 632,752,065</u>	<u>\$ 522,448,981</u>	<u>\$ 492,811,019</u>	<u>\$ 401,260,013</u>
Plan Fiduciary Net Position as a Percentage of the Covered Payroll	70.02%	73.87%	71.03%	76.49%	77.26%	81.34%
Covered Payroll⁽³⁾	\$ 166,670,939 ⁽⁴⁾	\$ 141,497,840	\$ 133,083,231	\$ 106,278,376	\$ 93,705,765	\$ 85,222,842
City's Net Pension Liability as a Percentage of Covered Payroll	401.06%	391.70%	475.46%	491.59%	525.91%	470.84%
Total Payroll Including DROP Participants	\$ 176,975,203	\$ 159,787,486	\$ 153,785,532	\$ 133,966,173	\$ 127,786,644	\$ 124,563,050

This schedule is presented as required by accounting principles generally accepted in the United States of America, however, until a full 10-year trend is compiled, information is presented for those years available.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CITY CONTRIBUTIONS (UNAUDITED)

	2019	2018	2017	2016	2015
Actuarially Determined Contribution	\$ 62,694,851	\$ 56,999,866	\$ 53,264,009	\$ 48,672,615	\$ 48,616,677
Contributions in relation to the actuarially determined contribution	<u>62,694,851</u>	<u>56,999,866</u>	<u>53,264,009</u>	<u>48,672,615</u>	<u>48,616,677</u>
Contribution Deficiency (Excess)	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>
Covered Payroll ⁽¹⁾	\$ 168,059,448	\$ 166,670,939	\$ 141,497,840	\$ 133,083,231	\$ 106,278,378
Contributions as a Percentage of Covered Payroll	37.31%	34.20%	37.64%	36.57%	45.74%
	2014	2013	2012	2011	2010
Actuarially Determined Contribution	\$ 47,305,679	\$ 45,412,248	\$ 47,418,316	\$ 47,156,797	\$ 59,025,379
Contributions in relation to the actuarially determined contribution	<u>47,305,679</u>	<u>45,412,248</u>	<u>47,418,316</u>	<u>47,156,797</u>	<u>59,025,379</u>
Contribution Deficiency (Excess)	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>
Covered Payroll ⁽¹⁾	\$ 93,705,765	\$ 85,222,842	\$ 82,205,838	\$ 82,164,617	\$ 80,152,355
Contributions as a Percentage of Covered Payroll	50.48%	53.29%	57.68%	57.39%	73.64%

(1) Covered payroll is as of September 30, the fiscal year end date.



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

FOR THE YEAR ENDED SEPTEMBER 30, 2019

Total Pension Liability Adjustment. For the fiscal year 2017, the GASB Statement No. 67 and No. 68 report, the actuary included the impact of the full restoration of benefits under Supreme Court Ruling which increased both the total pension liability and pension expense by \$122.6 million. Since the restoration of benefits was under negotiation, the Board decided not to include the impact of the restoration of benefits in the October 1, 2017 funding valuation. As a result of this determination, in the September 30, 2018 GASB Statement No. 67 and No. 68 report, the actuary reduced the beginning pension liability by \$122.6 million. The pension liability reported by the actuary as of September 30, 2018 does not include any impact from this Supreme Court ruling. This matter was resolved.

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, one year prior to the end of the fiscal year in which contributions are reported. 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.

Valuation Date	October 1, 2017
Actuarial cost method	Aggregate Cost Method
Asset valuation method	20% Write-Up Method: Expected actuarial value and actual market value (net of pending transfers to the COLA fund)
Interest Rates	7.34% net of investment expenses
Inflation	3.25%
Projected salary increases	1.5% for promotions plus salary merit scale
Mortality Rates:	
Healthy	Florida Retirement System special risk mortality projected generationally with scale BB
Disabled	100% of the assumed deaths are expected to be ordinary deaths



CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT RETURNS

September 30,	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	5.39%	7.48%*	9.22%	9.70%	1.84%	8.60%

* Restated

This schedule is presented as required by accounting principles generally accepted in the United States of America, however, until a full 10-year trend is compiled, information is presented for those years available.



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

**SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT EXPENSES**

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

	2019	2018
Equities:		
Barrow Hanley	\$ 377,484	\$ 447,525
BGI/Black Rock	15,097	7,356
Boston Partners	228,223	376,913
Champlain Investments	466,305	518,947
Copper Rock	210,400	266,775
Jackson Square Partners	--	75,120
Eagle Asset Management	106,078	362,512
First Eagle	896,417	1,136,768
Center Square Partners	411,041	432,035
Total Equities	2,711,045	3,623,951
Fixed Income		
AXA U.S. High Yield	258,258	264,313
Barrow Hanley	281,498	345,756
Dodge & Cox	225,465	275,817
Munder Capital	175,919	139,655
Wellington International	797,036	1,013,976
Total Fixed Income	1,738,176	2,039,517
Real Estate		
Proxy Voting	8,000	10,000
J.P. Morgan	1,086,957	1,705,836
Total Real Estate	1,094,957	1,715,836
Other	5,253	5,815
Total Investment Expenses	\$ 5,549,431	\$ 7,385,119



**CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

**SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES**

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

	2019	2018
Personnel Services		
Salaries and payroll taxes	\$ 502,317	\$ 488,142
Fringe benefits	89,558	99,495
Total Personnel Services	591,875	587,637
Professional Services		
Actuarial	124,261	177,405
Audit	47,614	46,672
Consultant and custodial	654,315	494,265
Medical	200	6,253
Legal	71,238	188,171
Total Professional Services	897,628	912,766
Other		
Education and travel	68,761	31,023
Insurance	130,169	126,705
Office expense	178,241	179,257
Repair and maintenance	186,525	169,073
Retirement contribution	49,957	58,542
Utilities	25,313	21,706
Total Other	638,966	586,306
Total Administrative Expense	\$ 2,128,469	\$ 2,086,709



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED
ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE
WITH *GOVERNMENT AUDITING STANDARDS***

To the Board of Trustees and Plan Administrator
City of Miami Fire Fighters' and Police Officers' Retirement Trust

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of City of Miami Fire Fighters' and Police Officers' Retirement Trust (the Trust), which collectively comprise the statement of fiduciary net position as of September 30, 2019, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated February 19, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Trust's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control. Accordingly, we do not express an opinion on the effectiveness of the Trust's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However material weaknesses may exist that have not been identified.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Trust's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Marcum LLP

Miami, FL
February 19, 2020



III

Investment Section



INVESTMENT ANALYSIS
YEAR ENDED SEPTEMBER 30, 2019

	GENERAL FUND	COLA I	COLA II
BALANCE AS OF 10/01/2018	1,089,779,660	70,521,970	355,653,894
Additions: Purchases			
Short Term Investment	7		
Mutual Funds	16,734,332		
Private Equity	44,720,565		
Private Equity International	1,400,413		
Commercial Paper	1,031,274		
Commodity Ex Traded Fund International	2,899,897		
US Treasury Bonds	26,106,173		
US Treasury Bonds International	1,378,928		
US Treasury Notes	43,375,020		
Corporate Bonds	46,563,286		
Corporate Bonds International	6,584,012		
Domestic Equity	260,252,248		
International Equity	72,330,665		
Share of Assets Transferred	-	3,403,085	23,127,965
Share of Securities Transferred to COLA II	2,392,313		
	<u>525,769,133</u>	<u>3,403,085</u>	<u>23,127,965</u>
Deductions: Redemptions & Sale			
Mutual Funds	6,265,702		
Private Equity	27,111,569		
Private Equity International	1,820,733		
Commercial Paper	2,015,327		
Commodity Ex Traded Fund International	675,354		
US Treasury Bonds	15,886,235		
US Treasury Bonds International	1,591,124		
US Treasury Notes	37,826,156		
Corporate Bonds	109,306,526		
Corporate Bonds International	6,933,707		
Domestic Equity	243,469,196		
International Equity	71,922,309		
Share of Securities Transferred To COLA I	3,300,838	102,247	
Share of Securities Transferred To COLA II	-		25,520,278
	<u>528,124,775</u>	<u>102,247</u>	<u>25,520,278</u>
BALANCE AS OF 09/30/2019	1,087,424,018	73,822,808	353,261,581



As Of September 30, 2019

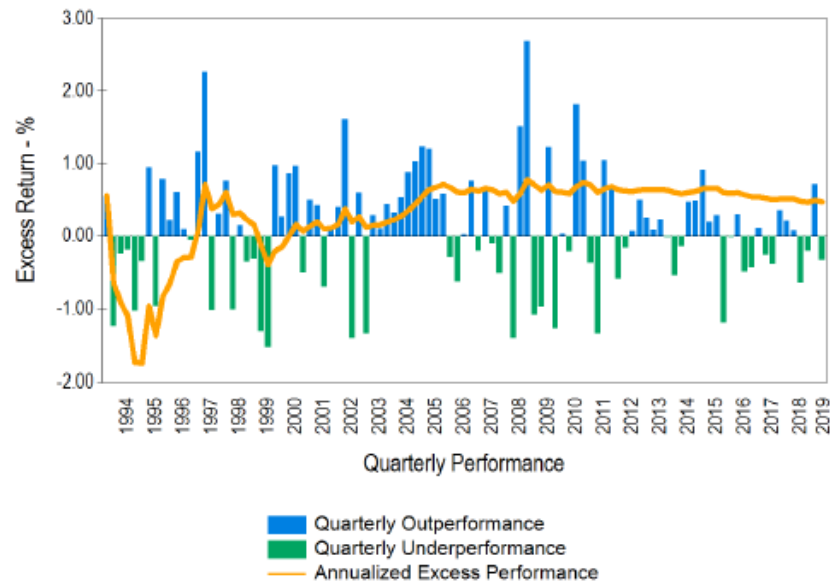
(in thousands)	Total Market Value	% of Portfolio	US Equity	Non-US Equity	US Fixed Income	Alternatives	Real Estate	Cash
Domestic Equity								
Large Cap Equity								
Barrow Hanley Large Value	\$144,610	9.2%	\$144,610					
BlackRock R1000 Growth Index	\$111,071	7.1%	\$111,071					
Mid Capitalization Equity								
Boston Partners	\$50,622	3.2%	\$50,622					
Champlain Mid Cap	\$24,214	1.5%	\$24,214					
Small Capitalization Equity								
Champlain Small Cap	\$62,475	4.0%	\$62,475					
Eagle Asset Management	\$30,781	2.0%	\$30,781					
International Equity								
First Eagle	\$127,015	8.1%		\$127,015				
Wellington IQG	\$144,312	9.2%		\$144,312				
Copper Rock	\$26,369	1.7%		\$26,369				
Core Fixed Income								
Barrow Hanley Enhanced Intern Credit	\$106,810	6.8%			\$106,810			
Dodge & Cox	\$106,207	6.8%			\$106,207			
Victory Capital	\$104,426	6.7%			\$104,426			
Bank Loans								
Pacific Asset Management	\$37,610	2.4%			\$37,610			
High Yield								
AXA High Yield	\$83,018	5.3%			\$83,018			
Real Estate								
JP Morgan Real Estate								
JP Morgan SPF	\$94,820	6.1%					\$94,820	
JP Morgan SSPF	\$32,765	2.1%					\$32,765	
Centersquare	\$62,162	4.0%					\$62,162	
Centersquare Value Fund III	\$13,488	0.9%					\$13,488	
Centersquare Value Fund IV	\$12,792	0.8%					\$12,792	
Retirement Office	\$3,150	0.2%					\$3,150	



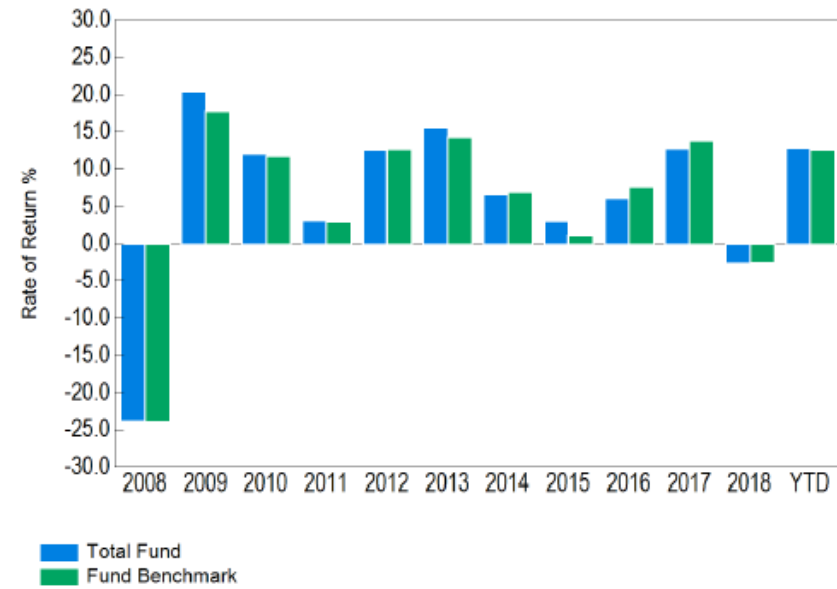
(in thousands)	Total Market Value	% of Portfolio	US Equity	Non-US Equity	US Fixed Income	Alternatives	Real Estate	Cash
Private Equity								
Adams Street 2012 GF	\$13,071	0.8%				\$13,071		
Adams Street VIF	\$2,146	0.1%				\$2,146		
Catalyst III	\$4,513	0.3%				\$4,513		
Catalyst IV	\$7,476	0.5%				\$7,476		
Coller Fund V	\$1,195	0.1%				\$1,195		
Coller Fund VI	\$5,079	0.3%				\$5,079		
Coller Fund VII	\$6,776	0.4%				\$6,776		
JP Morgan Private Equity	\$4,681	0.3%				\$4,681		
JP Morgan Global Fund V	\$11,221	0.7%				\$11,221		
JP Morgan Global Fund VI	\$6,107	0.4%				\$6,107		
JP Morgan Global VIII	\$1,225	0.1%				\$1,225		
Lexington Capital Partners	\$1,337	0.1%				\$1,337		
Lexington VIII	\$10,848	0.7%				\$10,848		
Pantheon Global	\$5,448	0.3%				\$5,448		
SL Capital	\$6,582	0.4%				\$6,582		
Infrastructure								
BlackRock GRP I	\$12,816	0.8%				\$12,816		
BlackRock GRPF II	\$12,835	0.8%				\$12,835		
Cash & Cash Alternatives								
BlackRock Liquid Policy Portfolio	\$67,398	4.3%						\$67,398
Main Account	\$5,886	0.4%						\$5,886
Total	\$1,565,360	100.0%	\$423,774	\$297,695	\$438,071	\$113,358	\$219,178	\$73,284
Percent of Total			27.1%	19.0%	28.0%	7.2%	14.0%	4.7%



Annualized Excess Performance



Return Summary
Ending September 30, 2019



Cumulative Performance Results Ending September 30, 2019

	3 Mo Rank	Fiscal YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	7 Yrs Rank	10 Yrs Rank	15 Yrs Rank	20 Yrs Rank	25 Yrs Rank	Inception	Inception Date										
Total Fund	1.3%	10	5.3%	16	5.3%	16	7.4%	73	6.8%	35	7.9%	48	8.5%	31	7.2%	22	6.6%	24	8.5%	16	8.1%	Jan-94
<i>Fund Benchmark</i>	1.6%	3	5.9%	8	5.9%	8	7.9%	56	6.8%	35	7.8%	48	8.3%	40	6.6%	64	5.9%	69	7.9%	44	7.6%	Jan-94

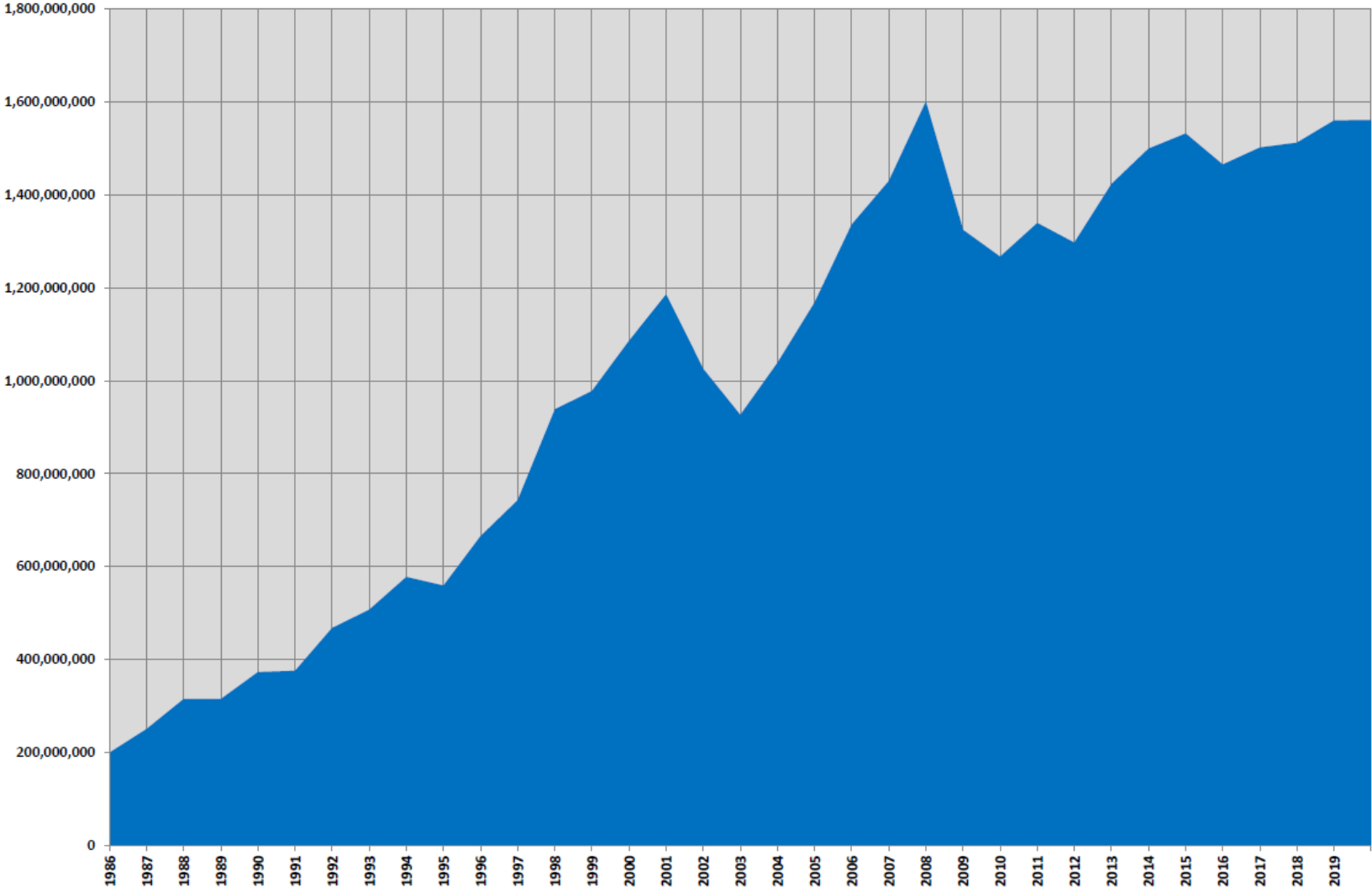
Calendar Year Performance

	2018	Rank	2017	Rank	2016	Rank	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	2010	Rank
Total Fund	-2.6%	15	12.7%	89	6.1%	90	3.0%	1	6.6%	30	15.5%	50	12.6%	46	3.1%	8	12.1%	66
<i>Fund Benchmark</i>	-2.5%	14	13.8%	77	7.6%	53	1.1%	16	6.9%	23	14.3%	64	12.7%	45	3.0%	9	11.7%	73



GROWTH OF THE FUND

FISCAL YEAR	MARKET VALUE
1985	199,345,728
1986	250,500,507
1987	314,887,130
1988	314,756,341
1989	372,898,432
1990	375,600,000
1991	467,717,640
1992	507,233,089
1993	577,531,203
1994	559,130,104
1995	665,309,481
1996	742,938,069
1997	938,525,274
1998	978,062,036
1999	1,086,034,187
2000	1,186,001,037
2001	1,025,439,757
2002	926,355,174
2003	1,038,797,014
2004	1,168,244,034
2005	1,336,399,433
2006	1,429,556,438
2007	1,600,810,429
2008	1,324,750,244
2009	1,267,128,720
2010	1,339,510,475
2011	1,297,169,271
2012	1,423,736,735
2013	1,499,777,038
2014	1,532,094,518
2015	1,465,540,603
2016	1,501,917,204
2017	1,512,620,055
2018	1,560,554,051
2019	1,561,208,562



IV

Actuarial Section



At the request of the plan sponsor, this report summarizes the City of Miami Fire Fighters' and Police Officers' Retirement Trust as of October 1, 2019. The purpose of this report is to communicate the following results of the valuation:

- Determine Funded Status; and
- Determine Recommended Contribution for the fiscal year October 1, 2020 through September 30, 2021.

This report has been prepared in accordance with the applicable Federal and State laws. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the plan administrator. Asset information has been provided to us by the plan administrator. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period);
and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

This actuarial valuation and/or cost determination 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.

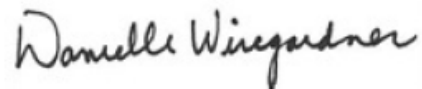


With respect to reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664 (1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

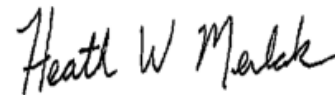
Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



Danielle Winegardner, FSA, EA, MAAA
Enrolled Actuary No. 20-08260



Heath W. Merlak, FSA, EA, MAAA
Enrolled Actuary No. 20-05967

April 8, 2020
Date

Copies of this Report are to be furnished to the Division of Retirement within 60 days of receipt from the actuary at the following addresses:

Mr. Steve Bardin
Benefits Administrator
Municipal Police Officers' &
Firefighters' Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

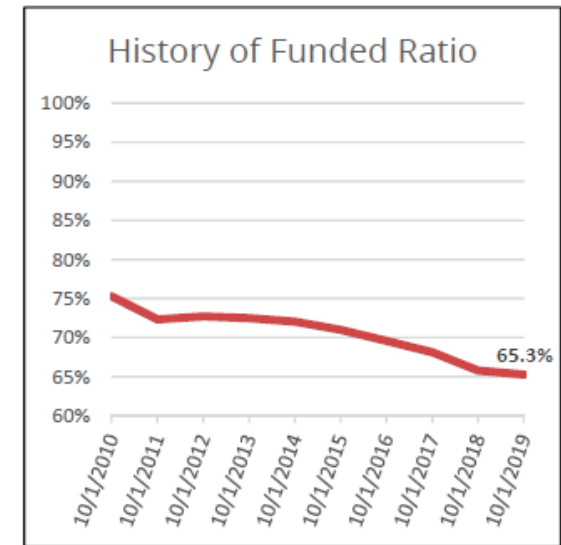
Mr. Keith Brinkman
Bureau Chief, Bureau of Local Retirement Systems
Florida Department of Management Services
Division of Retirement
Department of Management Services
P. O. Box 9000
Tallahassee, FL 32315-9000



Summary Results

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay.

	October 1, 2018	October 1, 2019
Funded Status Measures		
Accrued Liability	\$1,796,349,619	\$1,822,559,347
Actuarial Value of Assets	1,172,416,575	1,189,509,806
Unfunded Accrued Liability	\$623,933,044	\$633,049,541
Funded Percentage (AVA)	65.3%	65.3%
Funded percentage (MVA)	63.5%	63.0%
Cost Measures		
Recommended Contribution For Next Fiscal Year	\$60,633,239 ⁽¹⁾	\$62,773,727
Recommended Contribution (as a percentage of payroll)	36.4%	37.4%
Asset Performance		
Market Value of Assets (MVA)	\$1,140,506,121	\$1,149,117,960
Actuarial Value of Assets (AVA)	\$1,172,416,575	\$1,189,509,806
Actuarial Value/Market Value	102.8%	103.5%
Participant Information		
Active Participants	1,998	2,003
Terminated Vested Participants	15	22
Terminated, Due Refund	111	106
Retirees, Beneficiaries, and Disabled	2,120	2,072
DROP Participants	83	122
Total Participants	4,327	4,325
Valuation Payroll	\$166,670,939	\$168,059,448
Total Payroll	\$176,975,203	\$179,393,179



¹Does not include any contribution to the Stabilization Trust. Please see page 46 for more information.



Changes Since Prior Valuation and Key Notes

There have been no changes to the plan provisions since the last valuation.

The mortality assumption was updated to match the recent change to the Florida Retirement System (FRS) mortality tables. The 2018 FRS mortality tables were based on the RP-2000 mortality tables, with future mortality improvements reflected using mortality improvement Scale BB. The 2019 FRS mortality tables were based on the Pub-2010 Mortality Tables for public sector retirement plans and MP-2018 generational improvements. The tables were developed from data collected for 2008-2013. This change decreased the Plan accrued liability and the normal cost.

The administrative expense has decreased to \$2,181,634 from the prior year.



Five Year Valuation Summary

	10/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019
Funding					
Accrued Liability	\$1,616,131,503	\$1,654,140,143	\$1,705,061,093	\$1,796,349,619	\$1,822,559,347
Actuarial Value of Assets	\$1,147,334,950	\$1,150,653,520	\$1,161,585,161	\$1,172,416,575	\$1,189,509,806
Unfunded Actuarial Accrued Liability	\$468,796,553	\$503,486,623	\$543,475,932	\$623,933,044	\$633,049,541
Funded Percentage	71.0%	69.6%	68.1%	65.3%	65.3%
Actual Employer Contribution ¹	\$47,102,220	\$50,591,604	\$56,030,260	TBD	TBD
Recommended Contribution	\$47,102,220	\$50,591,604	\$56,030,260	\$60,633,239	\$62,773,727
Recommended Contribution (% of Pay)	44.3%	38.0%	39.6%	36.4%	37.4%
Interest Rate	7.42%	7.42%	7.42%	7.34%	7.34%
Expense Load Assumption	\$2,058,798	\$2,086,709	\$2,128,469	\$2,210,096	\$2,181,634
Rate of Return					
Actuarial Value of Assets	6.18%	6.51%	6.76%	6.66%	6.48%
Market Value of Assets	2.80%	8.42%	8.24%	6.90%	6.11%
Demographic Information					
Active Participants	1,650	1,869	1,943	1,998	2,003
Terminated Vested Participants	15	15	16	15	22
Terminated, Due Refund	N/A	N/A	97	111	106
Retirees, Beneficiaries, and Disabled	1,952	2,014	2,059	2,120	2,072
DROP Participants	278	191	129	83	122
Total Participants	3,895	4,089	4,244	4,327	4,325
Covered Payroll	\$106,278,378	\$133,083,231	\$141,497,840	\$166,670,939	\$168,059,448
Average Covered Pay	\$64,411	\$71,206	\$72,824	\$83,419	\$83,904

¹ Recommended contribution is for the following fiscal year (e.g., the October 1, 2019 recommended contribution will be made in the fiscal year beginning October 1, 2020 and will be documented in the October 1, 2021 valuation report).



Plan Maturity Measures – October 1, 2019

Each pension plan has a distinct life-cycle. New plans promise future benefits to active employees and then accumulate assets to pre-fund those benefits. As the plan matures, benefits are paid and the pre-funded assets begin to decumulate until ultimately, the plan pays out all benefits. A plan's maturity has a dramatic influence on how risks should be viewed. The following maturity measures illustrate where the City of Miami Fire Fighters' and Police Officers' Retirement Trust falls in its life-cycle.

Duration of Liabilities: 9.3

Duration is the most common measure of plan maturity. It is defined as the sensitivity of the liabilities to a change in the interest rate assumption. The metric also approximates the weighted average length of time, in years, until benefits are expected to be paid. A plan with high duration is, by definition, more sensitive to changes in interest rates. A plan with low duration is more susceptible to risk if asset performance deviates from expectations as there would be less time to make up for market losses in adverse market environments while more favorable environments could result in trapped surplus from gains. Conversely, high duration plans can often take on more risk when investing, and low duration plans are less sensitive to interest rate fluctuations.

Demographic Distribution - Ratio of Actively Accruing Participants to All Participants: 46.3%

A plan with a high ratio is more sensitive to fluctuations in salary (if a salary-based plan) and statutory changes. A plan with a low ratio is at higher risk from demographic experience. Such a plan should pay close attention to valuation assumptions as there will be less opportunity to realize future offsetting gains or losses when current experience deviates from assumptions. Plans with a low ratio also have limited opportunities to make alterations to plan design to affect future funded status.

Asset Leverage - Ratio of Payroll for Plan Participants to Market Value of Assets: 14.6%

Younger plans typically have a large payroll base from which to draw in order to fund the plan while mature plans often have a large pool of assets dedicated to providing benefits to a population primarily consisting of members no longer on payroll. Plans with low asset leverage will find it more difficult to address underfunding, as the contributions needed to make up the deficit will represent a higher percentage of payroll than for a plan with high asset leverage.

Benefit Payment Percentage - Ratio of Annual Benefit Payments to Market Value of Assets: 11.40%

As a plan enters its decumulation phase, a larger percentage of the pre-funded assets are paid out each year to retirees. A high percentage is not cause for alarm as long as the plan is nearly fully funded. However, such a plan is more sensitive to negative asset performance, especially if cash contributions are not an option to make up for losses.



Identification of Risks

The results presented in this report are shown as single point values. However, these values are derived using assumptions about future markets and demographic behavior. If actual experience deviates from our assumptions, the actual results for the plan will consequently deviate from those presented in this report. Therefore, it is critical to understand the risks facing this pension plan. The following table shows the risks we believe are most relevant to the City of Miami Fire Fighters' and Police Officers' Retirement Trust. The risks are generally ordered with those we believe to have the most significance at the top. Also shown are possible methods by which a more detailed assessment of the risk can be performed.

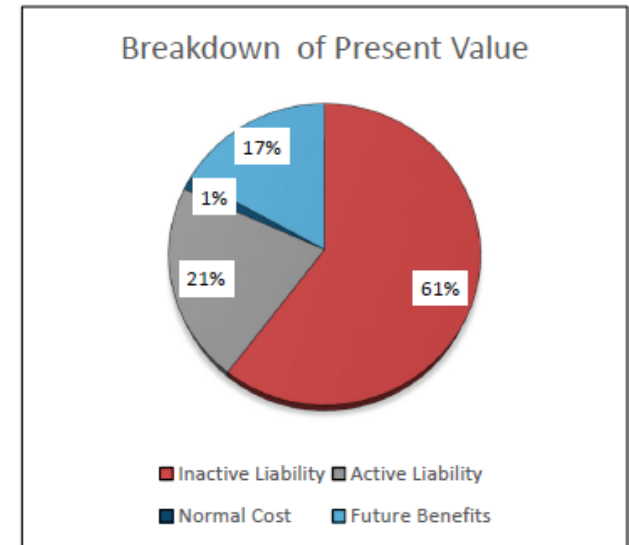
Type of Risk	Method to Assess Risk
Investment Return	Scenario Testing; Asset Liability Study
Demographic	Scenario Testing
Participant Longevity	Stress Testing; Scenario Testing
Early Retirement	Stress Testing; Scenario Testing



Present Value of Future Benefits

The Present Value of Future Benefits represents the current future benefits payable to the participant.

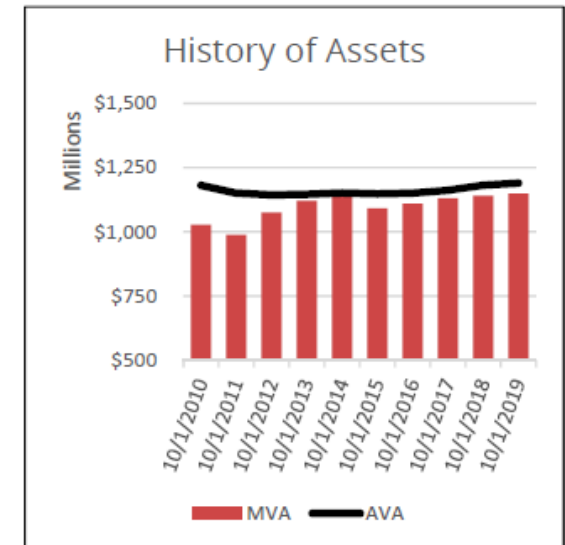
	October 1, 2019
Present Value of Future Benefits	
Active members	
Retirement	\$790,121,210
Disability	41,777,104
Death	11,657,697
Termination	36,699,188
Refund of contributions	4,016,711
Total active	\$884,271,910
Inactive members	
Retired members	\$1,158,241,909
DROP members	127,102,477
Beneficiaries	31,534,623
Disabled members	25,172,741
Terminated vested members	5,249,040
Total inactive	\$1,347,300,790
Total	\$2,231,572,700
Present value of future payrolls	\$2,478,236,384



Asset Information

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

	October 1, 2019
Market Value Reconciliation	
Market value of assets, beginning of prior year	\$1,140,506,121
Employer contributions (incl. discounted accrued items)	56,030,260
Member contributions	16,309,563
Investment income, net expenses	69,684,122
Benefit payments and refunds	(131,175,683)
Administrative expenses	(2,128,469)
Other expenses	(107,954)
Market value of asset, beginning of current year	\$1,149,117,960
Return on Market Value	6.11%
Actuarial value of assets	
Value at beginning of current year	\$1,189,509,806



Asset Information (continued)

Plan Assets are used to develop funded percentages and contribution requirements

October 1, 2019

1.	Expected actuarial value of assets	
	(a) Actuarial value of assets – beginning of prior year	\$1,172,416,575
	(b) City Contributions	56,030,260
	(c) Member Contributions	16,309,563
	(d) Benefits payments and refunds	(131,175,683)
	(e) Expected return	86,027,052
	(f) Expected actuarial value of assets – beginning of current year	\$1,199,607,767
2.	Market value of assets – beginning of current year	\$1,149,117,960
3.	Present value of COLA transfers	
	(a) Current year	\$0
	(b) Next year	0
	(c) Total	\$0
4.	Market value net COLA transfer [(2)-(3)]	\$1,149,117,960
5.	Amount subject to phase in [(4)-(1f)]	(\$50,489,807)
6.	Phase in of asset gain loss [(5)x20%]	(\$10,097,961)
7.	Preliminary actuarial value of assets – beginning of current year [(1f)+(6)]	\$1,189,509,806
8.	80% of Market value of assets	\$919,294,368
9.	120% of Market value of assets	\$1,378,941,552
10.	Adjusted actuarial value of assets	\$1,189,509,806
11.	Contribution surplus account balance	\$0
12.	Final actuarial value of assets – beginning of current year [(10)-(11)]	\$1,189,509,806
13.	Return on actuarial value of assets	6.48%



Reconciliation of Gain/Loss

October 1, 2019

Liability (gain)/loss

Present value of future benefits	\$2,203,102,647
Present value of employee contributions	(213,739,716)
Expected employee contribution	14,082,422
Benefit payments	(131,175,683)
Interest	142,323,980
Expected liability	\$2,014,593,650
Assumption change	(54,448,035)
Expected after changes	\$1,960,145,615
Actual liability	\$2,019,713,930
Liability (gain)/loss	\$59,568,315

Asset (gain)/loss

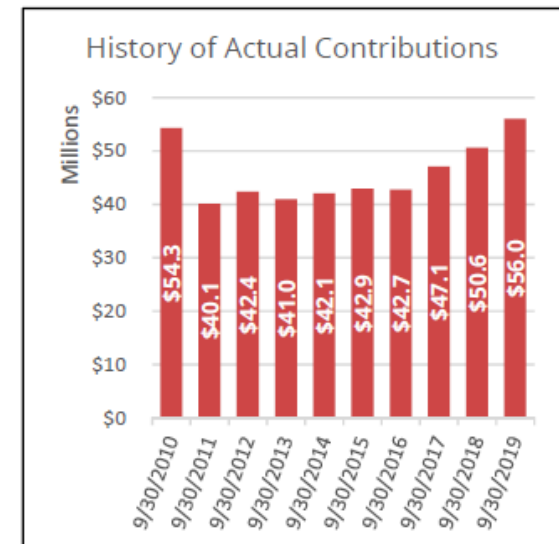
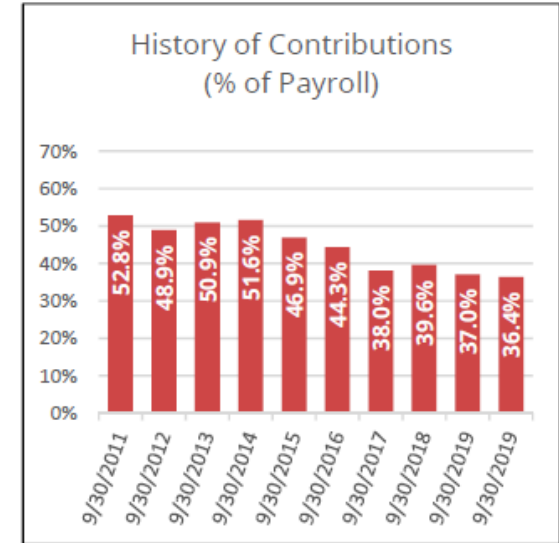
Actuarial value of assets, beginning of prior year	\$1,172,416,575
Contributions	72,339,823
Benefit payments and expenses	(131,175,683)
Expected Investment return	86,027,052
Expected actuarial value of assets, beginning of current year	\$1,199,607,767
Actual actuarial value of assets, beginning of current year	\$1,189,509,806
Asset (gain)/loss	\$10,097,961
Total (gain)/loss	\$69,666,276



Development of Recommended Contribution

The actuarial determined contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

	October 1, 2019
1. Present value of future benefits	\$2,231,572,700
2. Actuarial value of assets	1,189,509,806
3. Present value of future member contributions	211,858,770
4. Present value of future normal Cost [(1)-(2)-(3)]	\$830,204,124
5. Present value of future payroll	\$2,478,236,384
6. Normal cost accrual rate [(4)/(5)]	33.50%
7. Administrative expenses	\$2,181,634
8. Valuation payroll	\$168,059,448
9. Applicable interest	7.34%
10. Normal cost	\$58,481,206
11. Interest to estimated payment date	\$4,292,521
12. Total recommended contribution as of end of year [(10)+(11)] ⁽¹⁾	\$62,773,727
13. As a percentage of valuation payroll	37.35%
14. As a percentage of total payroll	34.99%



¹Does not include any contribution to the Stabilization Trust. Please see page 46 for more information.



Cost Method (CO)

Aggregate Cost Method.

Asset Valuation Method (CO)

20% Write-Up Method: Expected actuarial value of assets, adjusted by 20% of the difference between expected actuarial value and actual market value (net of pending transfers to the COLA Fund).

The result cannot be greater than 120% of market value or less than 80% of market value (net of pending COLA transfers).

Interest Rates (CO)

7.34% net of investment expenses

Support for the discount rate assumption has been provided in the experience study report dated December 2017

Annual Pay Increases (FE)

3.25% inflation and 1.5% for promotions and other increases plus salary merit scale below.

<u>Service</u>	<u>Police</u>	<u>Fire</u>
0-6	5.0%	5.0%
7	2.5%	5.0%
8-9	5.0%	5.0%
10-14	1.0%	0.0%
15-16	1.25%	2.5%
17-21	1.0%	1.0%
22+	0.0%	0.0%

The annual pay increases are based on a study of actual experience for the plan during 2015-2017. See the experience study report dated December 2017.

Expense and/or Contingency Loading (FE)

\$2,181,634.



Mortality Rates (CO)

Pre-Retirement: Pub-2010 Generational using scale MP-2018; Females, Headcount Weighted Safety Employee Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year.

Post-Retirement: Pub-2010 Generational using scale MP-2018; Females, Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year

Disabled: Pub-2010; Females, 80% Headcount Weighted General Disabled Retiree Female Table / 20% Headcount Weighted Safety Disabled Retiree Female Table; Males, 80% Headcount Weighted General Disabled Retiree Male Table / 20% Headcount Weighted Safety Disabled Retiree Male Table.

The mortality rate assumptions were set in accordance with the Florida Retirement System Valuation report dated December 2019. The board adopted the new mortality tables for the October 1, 2019 valuation.

Retirement Rates (FE)

If eligible for Retirement, the following decrements apply, based on service.

<u>Years of Service</u>	<u>Police %</u>	<u>Fire %</u>
<20	0	0
20	10	10
21-24	3	3
25-29	40	5
30-34	50	25
35	100	25
36		25
37		100

All Members are assumed to elect a 5-year BackDROP when they reach five years following first retirement eligibility.

The assumed retirement rates are based on a study of actual experience for the plan during 2015-2017. See the experience study report dated December 2017.



Disability Rates (FE)

100% of the disabilities are expected to be accidental with the following probabilities. No recovery is assumed.

<u>Age</u>	<u>Rates</u>
35	0.1425%
40	0.195%
45	0.400%
50	0.605%

The disability rates are based on a study of actual experience for the plan during 2015-2017. See the experience study report dated December 2017.

Withdrawal Rates (FE)

Based on Years of Creditable Service using the rates below

<u>Age</u>	<u><2</u>	<u>Between 2 to 5</u>	<u>5+</u>
30	3.60%	2.40%	1.92%
35	3.60%	2.40%	1.92%
40	2.70%	1.80%	1.44%
45	1.80%	1.20%	0.96%
50	0.00%	0.00%	0.00%

The withdrawal rates are based on a study of actual experience for the plan during 2015-2017. See the experience study report dated December 2017.

Marital Status and Ages

100% of Members are assumed to be married. Female spouses assumed to be 3 years younger than male spouses.

Compensated Absence Balance Transfers

No liabilities or costs are included for the provision to transfer compensated absence balances into FIPO to purchase additional creditable service, based on our understanding that assets will be transferred immediately prior to retirement to cover 100% of the liability for the additional service.

Withdrawal of Employee Contributions

It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement.

COLA

COLA benefits are assumed to increase as indicated in the COLA table; these are documented in a separate COLA report. No increase to the table is assumed to occur.



Changes Since Prior Report

The administrative expenses decreased to \$2,181,634.

The mortality rate assumptions were changed in accordance with the Florida Retirement System Valuation report dated December 2019.

FE indicates an assumption representing an estimate of future experience.

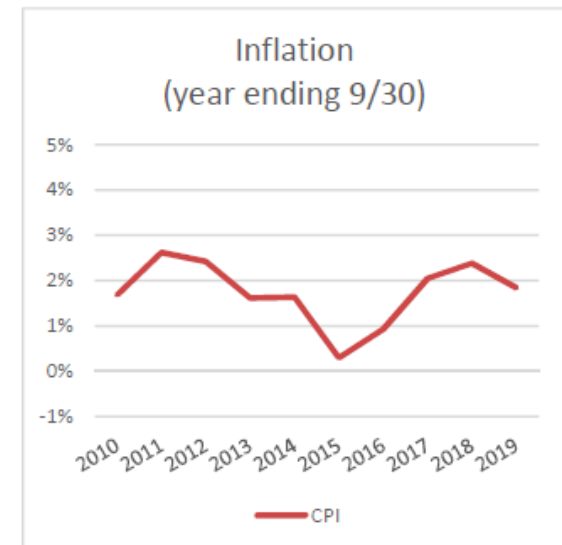
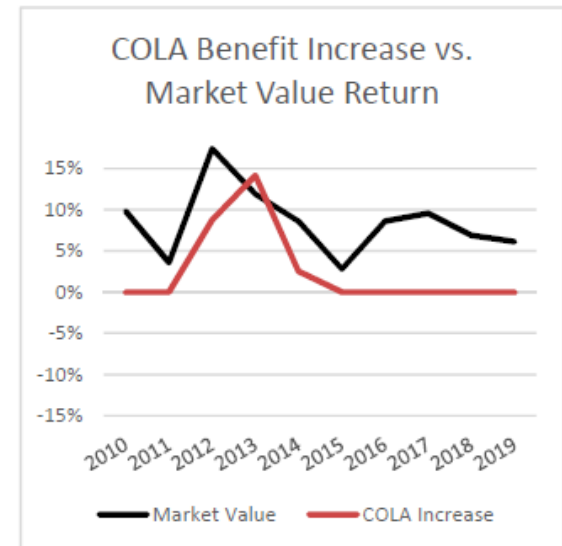
MO indicates an assumption representing an observation of estimates inherent to market data.

CO indicates an assumption representing a combination of an estimate of future experience and observations of market data.



Summary Results

	October 1, 2018	October 1, 2019
COLA Table Amount	\$1,670	\$1,670 [Proposed]
Asset Performance		
Market Value of Assets	\$1,140,506,121	\$1,149,117,960
Actuarial Value of Assets	\$1,172,416,575	\$1,189,509,806
Actuarial Asset Value Return	6.66%	6.48%
COLA Fund Asset Value Return	6.00%	1.20%
COLA Information		
Current COLA Assets	\$426,176,255	\$412,090,602
Future Contributions (discounted)	96,631,033	100,496,275
Assets for COLA	\$522,807,288	\$512,586,877
COLA Liability	\$440,222,258	\$447,248,968
Net Reserve	15.8%	12.7%
Target Reserve (20% of Asset Value)	\$104,561,458	\$102,517,375
Actual Reserve	\$82,585,030	\$65,337,909
Participant Information		
Active	1,998	2,003
Retirees and Beneficiaries	2,072	2,072
Disabled	130	121
Terminated Vesteds	14	13
Terminated, Due a Refund of Employee Contributions	112	115
Total	4,326	4,324



Changes Since Prior Valuation and Key Notes

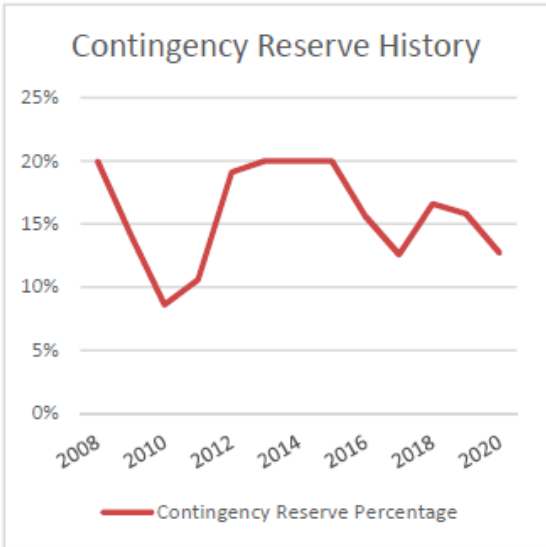
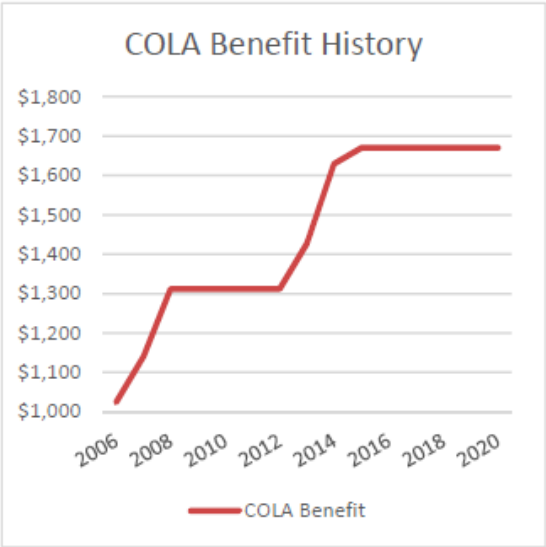
We recommend maintaining the COLA table at its current level (i.e. \$1,670) as of January 1, 2020. The contingency reserve is 12.7%, a decrease from the prior year’s 15.8%. A ten-year historical graph of the COLA table level and contingency reserve amount are below.

This report reflects the settlement agreements that were approved by the city commission in October 2018. Plan provisions have been partially restored to the provisions that existed prior to 10/1/2010 as follows:

- Retroactively restore and uncap the FIPO pension plan benefits that were in effect prior to September 27, 2010, for all bargaining unit members who were vested in that plan before September 27, 2010; and
- Retroactively grandfather the select group of retirees that the FIPO Trust began payment to in January 2018, and assume the ongoing obligations for payment to those retirees based on their pension plan benefits to those that were in effect prior to September 27, 2010.

The mortality assumption was updated to match a recent change to the Florida Retirement System mortality for special risk members’ pre-retirement mortality. The pre-retirement mortality was changed to apply the Combined Healthy tables rather than the Annuitant tables.

The withdrawal and disability assumptions were changed in accordance with the recent experience study dated December 2017.



Market Value Reconciliation

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

	September 30, 2019	
	Membership and Benefit Accounts	COLA Account
1. Market value – beginning of prior year	\$1,140,506,121	\$426,176,255
2. Book value – beginning of prior year	\$984,859,741	\$350,560,169
3. Income		
(a) City contributions	\$56,030,260	\$6,664,591
(b) Member contributions	16,309,563	0
(c) Other contributions	0	0
(d) Interest and dividends	20,688,675	7,241,816
(e) Net realized gains (losses)	24,265,659	8,564,862
(f) Securities lending income	374,604	121,915
(g) Rental and other income	446,467	158,166
(h) Income transfer	0	0
(i) Total	\$118,115,228	\$22,751,350
4. Disbursements		
(a) Benefit payments and refunds	\$131,175,683	\$25,622,524
(b) Custodial and investment expenses	4,148,392	1,448,312
(c) Administrative expense	2,128,469	0
(d) Other expense	0	0
(e) Securities lending fees	93,577	23,722
(f) Building depreciation	14,377	5,132
(g) Total	\$137,560,498	\$27,099,690
5. Book value – beginning of current year [(2)+(3i)-(4g)]	\$965,414,471	\$346,211,829
6. Net change in unrealized gains (losses)	\$28,057,109	(\$9,737,313)
7. Unrealized gains (losses)	\$183,703,489	\$65,878,773
8. Market value – beginning of current year [(1)+(3i)-(4g)+(6)]	\$1,149,117,960	\$412,090,602
9. Current year allocation to COLA II (discounted)	\$0	N/A
10. Net market value – beginning of current year	\$1,149,117,960	\$412,090,602



Membership and Benefits Cost-Of-Living Adjustment Account Summary

		September 30, 2019	
		Market	Book
1.	Investments		
	(a) Bill, bonds, notes	\$394,043,877	\$364,007,233
	(b) Domestic stocks	494,970,660	406,393,257
	(c) International stocks	249,461,359	209,504,493
	(d) Private equity	174,027,722	155,468,811
	(e) Money market fund and time deposit	12,256,675	11,300,087
	(f) Mutual fund	189,748,114	118,252,264
	(g) Real estate	2,095,512	2,095,512
	(h) Securities lending adjustment	0	0
	(i) Total investment	<u>\$1,516,603,919</u>	<u>\$1,267,021,657</u>
2.	Cash	\$43,220,820	\$43,220,820
3.	Receivables		
	(a) City contributions	\$0	\$0
	(b) Member contributions	0	0
	(c) Accounts receivable	6,732	6,732
	(d) Accrued interest and dividend	3,505,062	3,505,062
	(e) Securities sold	11,277,977	11,277,977
	(f) Total receivables	<u>\$14,789,771</u>	<u>\$14,789,771</u>
4.	Payables:		
	(a) Budget advance	\$0	\$0
	(b) Accrual expense	483,754	483,754
	(c) Transfer	0	0
	(d) Tax withheld	5,687	5,687
	(e) Accounts payable	3,325,334	3,325,334
	(f) Securities purchased	9,591,173	9,591,173
	(g) Total payables	<u>\$13,405,948</u>	<u>\$13,405,948</u>
5.	Total [(1i)+(2)+(3f)-(4g)]	\$1,561,208,562	\$1,311,626,300
6.	COLA account	\$412,090,602	\$346,211,829
7.	Current year COLA transfer	\$0	\$0
8.	Membership & benefits account [(5)-(6)-(7)]	\$1,149,117,960	\$965,414,471



Investment Results - Membership and Benefits Accounts

September 30, 2019

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
<u>Membership and Benefits Accounts</u>			
Interest	\$12,915,881	1.1%	1.4%
Dividends	7,772,794	0.7%	0.8%
Rental and Other Income, less Depreciation	432,090	0.0%	0.0%
Realized Gains	24,265,659	2.1%	2.5%
Securities Lending (Net)	281,027	0.0%	0.0%
Increase in Unrealized Gains	28,057,109	2.5%	2.9%
Custodial and Investment Expenses	(4,148,392)	(0.3%)	(0.3%)
	<u>\$69,576,168</u>	<u>6.1%</u>	<u>7.3%</u>



Investment Results - COLA I and II Accounts

September 30, 2019

COLA Accounts

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$4,519,749	1.1%	1.3%
Dividends	2,722,067	0.7%	0.8%
Rental and Other Income, less Depreciation	153,034	0.0%	0.0%
Realized Gains	8,564,862	2.1%	2.5%
Securities Lending (Net)	98,193	0.0%	0.0%
Increase in Unrealized Gains	(9,737,313)	(2.3%)	(2.9%)
Custodial and Investment Expenses	(1,448,312)	(0.4%)	(0.3%)
	<u>\$4,872,280</u>	<u>1.2%</u>	<u>1.4%</u>



GASB 5 – COLA Fund

Contributions required and contributions made

The funding policy provides for annual employer contributions from January 1, 1994. The amount of the contribution was \$2.5 million, beginning January 1, 1994, increasing 4% per year each year thereafter, and reduced (but not below zero) by any excess investment income transfer due on the same date.

The excess investment income transfer consists of a portion of gains due to investment return exceeding the 7.34 percent assumption

Analysis of funding progress

Fiscal Year	(1) Net Assets Available for Benefits ⁽¹⁾	(2) Pension Benefit Obligation ⁽²⁾	(3) Percent Funded	(4) Unfunded PBO (2)-(1)	(5) Annual Covered Payroll	(4)/(5)
	(\$)	(\$)	(%)	(\$)	(\$)	(%)
2010	311.8	315.6	99	3.8	80.2	5
2011	310.0	303.6	102	(6.4)	82.2	(8)
2012	350.3	312.6	112	(37.7)	82.2	(46)
2013	378.7	320.0	118	(58.7)	85.2	(69)
2014	394.6	371.0	106	(23.6)	93.7	(25)
2015	381.4	393.5	97	12.1	106.3	11
2016	392.9	420.5	93	27.6	133.1	21
2017	420.3	427.2	98	6.9	141.5	5
2018	426.2	440.2	97	14.0	148.9	9
2019	412.1	447.2	92	35.1	168.1	21

⁽¹⁾ Excluding future City minimum contributions

⁽²⁾ Excluding new increment and contingency reserves



GASB 5 – COLA Fund

Revenues and Expenses

Fiscal Year	Revenues by Source			Total (\$)
	Employee Contributions (\$)	Employer Contributions (\$)	Investment Income (\$)	
	2010	0	4,682,453	
2011	0	4,869,751	25,484,227	30,353,978
2012	0	5,064,541	21,399,142	26,463,683
2013	0	5,267,123	27,293,996	32,561,119
2014	0	5,477,808	30,812,622	36,290,430
2015	0	5,696,920	26,665,405	32,362,325
2016	0	5,924,797	13,261,430	19,186,227
2017	0	6,161,789	26,980,778	33,142,567
2018	0	6,408,261	19,212,430	25,620,691
2019	0	6,664,591	16,086,759	22,751,350

Expenses by Type

Fiscal Year	Expenses by Type			Total (\$)
	Benefits (\$)	Administrative Expenses (\$)	Refunds (\$)	
2010	17,236,918	1,164,379	0	18,401,297
2011	17,363,841	1,321,324	0	18,685,165
2012	17,747,481	1,456,098	421	19,204,000
2013	19,522,271	1,604,698	0	21,126,969
2014	22,188,409	1,483,762	0	23,672,171
2015	23,563,734	1,190,614	0	24,754,348
2016	24,344,325	1,286,086	0	25,630,411
2017	24,882,453	1,202,695	0	26,085,148
2018	25,279,985	1,758,350	0	27,038,335
2019	25,622,524	1,477,166	0	27,099,690



V

Statistical Section



**STATISTICAL DATA OF VARIOUS ACCOUNTS
JANUARY 1, 1994 THROUGH SEPTEMBER 30, 2019**

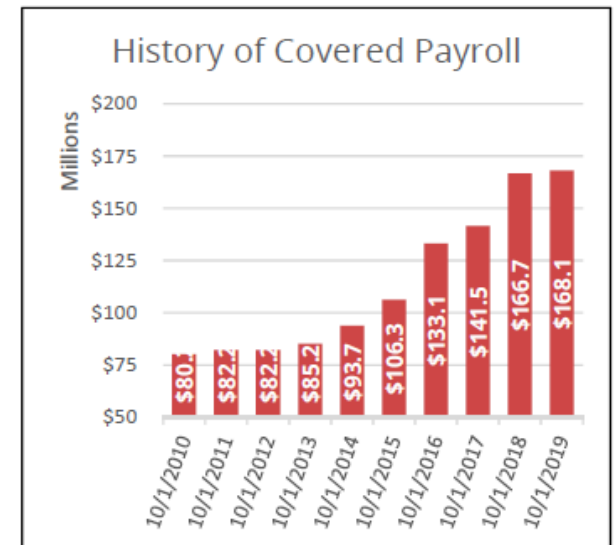
	GENERAL FUND	C. O. L. A. I	C. O. L. A. II
MEMBERSHIP ACCOUNT:			
ADD:			
Member Contributions:			
-After Tax	67,247,032		
-Pre tax	306,813,491	11,814,941	
-After Tax Contributions	-		
-Transferred from G.E.S.E.	17,210		
Interest:			
-Transfers from Benefit Account	126,814,524		
-Transfers on Withdrawals	385,365		
-Transfers from G.E.S.E	153,740		
	<u>501,431,362</u>	<u>11,814,941</u>	
DEDUCT:			
Refunds on:			
Leaving Service	21,779,132	944,800	
Additional Contributions	171,226		
Accidental Death	546,075	22,039	
Accidental Disability Retirements	1,982,443		
Option 6A	571,614		
Ordinary Death	2,153,437	62,320	
Transfers:			
After Tax from GESE	4,412,189		
Benefit Account	316,924,462	10,515,338	
Transfers to Accounts Payable	480,131		
Interest Withheld	379,887		
Interest	2,435,567		
	<u>351,836,163</u>	<u>11,544,496</u>	
Balance as of September 30, 2019	149,595,199	270,445	
BENEFIT ACCOUNT			
ADD:			
Contributions:			
City of Miami	1,052,787,048	2,042,899	69,414,542
Police Relief & Pension Fund	52,342	-	-
Fire Relief & Pension Fund	28,473	-	-
Members	697,822	-	-
Transfers from Membership Account	316,935,386	10,515,338	-
Amortization of Discounts	10,319,476	249,134	-
Dividends Received	270,791,656	6,295,180	41,878,600
Securities Lending Income	10,893,040	395,380	2,367,680
Excess Interest Transfer	-	-	288,194,062
Interest Income	689,084,047	18,258,910	74,127,845
Other Income	2,880,402	55,463	284,822
Corporate Action	3,531,936	121,737	732,147
Commission Recapture	609,058	19,821	122,431
Profit on Sale of Investments	1,286,407,570	39,526,833	205,778,929
Unrealized Profit on Sale of Investments	263,800,660	14,099,374	69,951,914
Unrealized Profit on Security Lending Collateral	1,960,433	71,299	525,304
Rental Income	2,033,256	64,133	434,448
Share of Earnings Income	-	1,170,581	-
	<u>3,912,812,605</u>	<u>92,886,082</u>	<u>753,812,724</u>
DEDUCT:			
Pension Paid			
- Fire	1,139,299,885	-	-
- Police	1,107,175,483	-	-
- General	7,034,700	-	-
- Former General pensioners assumed	276,624	-	-
- Pension Payments prior to 1966	989,022	-	-
Distributions	-	12,506,867	341,846,223
Lump Sum Payments to Beneficiaries	128,540	-	-
Death Benefits	1,301,017	-	-
Amortization of Premium	4,876,744	-	-
Corrections to Control	17,163,054	-	-
Income Expenses	96,676,697	3,076,781	17,871,552
Building Depreciation	554,154	21,415	130,553
Administrative Expense	19,139,788	-	-
Stiff Short Term Investment Fee	352,721	16,526	99,100
Securities Lending Fee	2,889,953	102,578	612,186
Other Expense	-	45,256	-
Loss on Sale of Investments	41,652,910	1,068,210	7,163,861
Unrealized Loss on Sale of Investments	61,838,567	2,718,374	32,827,667
Vested Rights Withdrawals	954,289	-	-
Transfers:			
Excess Interest Earnings	288,194,062	-	-
GESE-Benefit Account	5,378,420	-	-
GESE-Share of Earnings	5,251,212	-	-
Interest to Membership Account	126,879,512	-	-
Interest on Vested Rights Withdrawal	275,509	-	-
Overpayments (uncollectible)	769	-	-
	<u>2,928,283,631</u>	<u>19,556,008</u>	<u>400,551,143</u>
Balance as of September 30,2019	984,528,974	73,330,074	353,261,581



Demographic Information

The foundation of a reliable actuarial report is the member information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

	October 1, 2018	October 1, 2019
Member Counts		
Active Members	1,998	2,003
Retired Members	1,711	1,684
Beneficiaries	279	267
Disabled Members	130	121
Terminated Vested Members, due a Monthly Benefit	15	22
Terminated Members, Due a Refund of Employee Contributions	111	106
DROP Members	83	122
Total	4,327	4,325
Active Participant Demographics		
Average Age	36.4	36.8
Average Service	9.4	9.8
Average Compensation	\$83,419	\$83,904
Valuation Payroll	\$166,670,939	\$168,059,448
Total Payroll	\$176,975,203	\$179,393,179



Demographic Information (continued)

	October 1, 2018	October 1, 2019
Retired Member Statistics		
Average Age	65.3	66.0
Average Monthly Benefit	\$5,576	\$5,624
Beneficiary Statistics		
Average Age	77.7	77.4
Average Monthly Benefit	\$1,149	\$1,208
Disabled Member Statistics		
Average Age	71.9	72.3
Average Monthly Benefit	\$1,975	\$2,020
Terminated Member Statistics		
Average Age	38.1	38.7
Average Monthly Benefit for Participants due Monthly Benefit	\$2,566	\$1,911
Average Remaining Contributions for Participants Due a Refund	\$9,926	\$8,426
DROP Member Statistics		
Average Age	50.7	51.4
Average Monthly Benefit	\$6,383	\$7,137
Payroll	\$10,304,264	\$11,333,731



Participant Reconciliation

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
Prior Year	1,998	126	130	1,794	279	4,327
Active						
To Terminated Vested	(8)	8				
To Retired	(45)			45		
To Disabled	(1)		1			
To Refund	(16)					(16)
To Due Refund	(6)	6				
To Death	(1)					(1)
Terminated Vested						
To Retired						
To Refund		(9)				(9)
To Active	3	(3)				
Disabled						
To Death			(10)			(10)
Retired						
To Death				(33)		(33)
Survivor						
To Death					(33)	(33)
Additions	79				22	101
Removed					(1)	(1)
Current Year	2,003	128	121	1,806	267	4,325



VI

Plan Provisions Section



**OUTLINE OF PRINCIPAL BENEFIT PROVISIONS OF
THE CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

ORIGINAL ORDINANCE NO. 10002 ADOPTED JUNE 13, 1985

EARNABLE COMPENSATION:

Earnable compensation, shall mean an employee's base salary including pickup contributions, for all straight time hours worked, plus assignment pay and payments received for vacation and sick leave taken, jury duty, and death in the family leave taken. Earnable compensation shall not include overtime pay; payments for accrued sick leave, accrued vacation leave, or accrued compensatory leave; holiday pay; premium pay for holidays worked; the value of any employment benefits or non-monetary entitlements; or any other form of remuneration.

COVERED GROUP:

All fire fighters or police officers presently employed by the City as a fire fighter or police officer whether in the classified or unclassified service of the City.

EMPLOYEE CONTRIBUTIONS:

Effective the first full pay period following October 1, 1999, it shall be 7% of pre-tax earnable compensation. Effective the first full pay period following October 1, 2000, it shall be 7% of pre-tax earnable compensation or a percent equal to the City's contribution, whichever is less. Effective the first full pay period following October 1, 2008, for fire fighter members it will change from 7% to 8% of pre-tax earnable compensation. Effective the first full pay period following October 1, 2009, for fire fighter members it will change from 8% to 9% of pre-tax earnable compensation. Effective the first full pay period following October 1, 2010, for fire fighter members it will change from 9% to 10% of pre-tax earnable compensation. Effective the first full pay period following October 1, 2011, for police officer members who were hired prior to October 1, 2011, it will change from 7% to 10% of pre-tax earnable compensation. For police officer members who were hired on or after October 1, 2011 it will be 13% of pre-tax earnable compensation. Effective the full pay period following October 1, 2012, for police officer members who were hired prior to October 1, 2012, it will change from 10% to 7% of pre-tax earnable compensation. For police officer members who were hired on or after October 1, 2012, it will be 10% of pre-tax earnable compensation.

EMPLOYER CONTRIBUTIONS:

The City's annual fiscal contribution to the retirement system shall provide for the following (1) non-investment expenses of the retirement system, (2) normal costs of the retirement system.

NORMAL RETIREMENT AGE:

Age 50 for fire fighter members and Age 49 for police officer members.

SERVICE RETIREMENT:

The annual normal service retirement allowance, payable on a 40% Joint and Survivor basis will equal 3.0% of average final compensation per year of creditable service for the first 15 years of such creditable service and 3.5% of the average one-year compensation per year of creditable service after 15 years.



RULE OF 64 RULE OF 68 RETIREMENT RULE OF 70 RETIREMENT:

A member, in service, who has not withdrawn from active membership in the retirement system may elect service retirement on the basis of his or her combined age and creditable service equaling 64 or more. A fire fighter member, in service, who has not withdrawn from active membership in the retirement system and had not attained his/her 64 points as of October 1, 2009, may elect service retirement on the basis of his or her combined age and creditable service equaling 68 or more. As of October 1, 2010, a member in service who has not withdrawn from active membership in the retirement system may also elect service retirement on the basis of his or her combined age and creditable service equaling 70 or more.

Election to retire under Rule of 64, Rule of 68 or Rule of 70 shall be made by written application to the board. Application shall be executed not less than 10 nor more than 90 days subsequent to the date the member desires to be retired.

EARLY SERVICE RETIREMENT:

After 20 years of creditable service, accrued benefit actuarially adjusted for age.

DEFERRED RETIREMENT OPTION PROGRAM: (DROP)

A member who is eligible to retire under either Rule of 64, Rule of 68, Rule of 70 or Service retirement can elect to participate in the Deferred Retirement Option Program (DROP). The program allows the member to defer receipt of his retirement benefit into a "DROP" account while he/she continues to be employed by the Department. A police officer member can be in the DROP for a maximum of 7 years (84 months). A fire fighter member can be in the DROP for a maximum of 4 ½ years (54 months). Employees who had not attained normal retirement eligibility as of 1/1/2013 or were not vested as of 10/01/2010, and all employees hired on or after 1/1/2013 will not be eligible for the DROP.

BACK DEFERRED RETIREMENT OPTION PROGRAM:

Employees who had not attained normal retirement eligibility as of 1/1/2013 or were not vested as of 10/01/2010, and all employees hired on or after 1/1/2013, will be eligible for the backdrop option. Members who elect the backdrop shall receive a monthly benefit payable on the employee's actual retirement date based on the benefit the employee would have received if he/she had left city employment and retired on an earlier date. An eligible employee who elects the backdrop option will receive a lump sum payment equal to the accumulation of monthly retirement benefit payments he/she would have received during the period plus interest at the rate of 3% per year, compounded annually. An eligible employee may elect a minimum backdrop period of one year and a maximum backdrop period of up to seven years.

AVERAGE FINAL COMPENSATION:

Shall mean the annual earnable compensation of a member during either the last one (1) year or the highest one (1) year of membership service, whichever is greater.

CREDITABLE SERVICE:

Membership credit upon which a member's eligibility to receive benefits under the retirement system is based or upon which the amount of such benefits is determined.

LIMITATIONS ON BENEFITS:

A member's retirement allowances shall not exceed one hundred percent (100%) of the member's final average compensation for members retiring under Service Retirement Rule of 64 Retirement or Rule of 68 Retirement. Exceptions are, (1) members whose retirement allowances, prior to October 1, 1998, had already earned one hundred percent or greater, these members may continue to accrue pension benefits; (2) members whose retirement allowance exceeds one hundred percent as of October 1, 1998 due to the multiplier change, these members shall be capped at the new percentage. Monthly retirement allowance for members not eligible for Rule of 64 or Rule of 68 Retirement as of October 1, 2010, shall not exceed \$100,000.00 per year.



OPTIONAL ALLOWANCES:

Normal form (Option 6C) is joint and 40% contingent survivor. Option 1 is cash refund annuity, based on present value at retirement. Option 2 is joint and 100% survivor. Option 3 is joint and 50% contingent survivor. Option 4 is open option. Option 5 is determined by Board due to incapacity of member. Option 6A is withdrawal of employee contributions with credited interest; monthly benefit is half of normal level. Option 6B is an additional 5% with a 1 year certain. Option 6D is the base pension with a 10 year certain.

DISABILITY RETIREMENTS:

- A. Ordinary Disability
After 10 years of creditable service, if not otherwise eligible for normal retirement, and incurred while not in line of duty, a benefit payable for life consisting of the benefit rate times 90% of average final compensation times years of creditable service, if such retirement allowance exceeds 30% of average final compensation. Otherwise, a benefit of 30% of the member's average final compensation.

- B. Accidental Disability
Prior to age 60, incurred in line of duty. A benefit payable on a 40% joint and survivor basis of 66 2/3% of average or final compensation, whichever is larger.

DEATH BENEFIT:

- A. Ordinary Death Benefit
After 3 years of service, provided death is not accidentally incurred in line of duty, a lump sum payment of 50% of annual compensation received in year prior to death plus an additional lump sum payment of member's accumulated contributions with interest to date of death. Or in lieu thereof; if eligible for Early or Service retirement, and with 3 years of membership, automatic Option 6C, payable to spouse, as through retirement had occurred on date of death (40% payable)

- B. Accidental Death Benefit
Incurred in line of duty (or presumed to be in the line, i.e. heart), annual pension of 50% of average final compensation to spouse until death or remarriage or to children under 18, or to dependent parents for life. If none of such beneficiaries exist, the ordinary death benefit will be paid. Also, a lump sum payment of member's accumulated contributions with interest to date of death is paid in addition to the above payments.

VESTED RIGHTS BENEFIT:

After completion of 10 years of service, provided accumulated contributions are not withdrawn. A benefit based on service and average final compensation when employment is terminated. Benefit is deferred to minimum retirement age.

C.O.L.A. ACCOUNT:

The COLA I benefit was determined from available monies from an initial city contribution made from the trust funds excess interest earnings. These monies were allocated to the retiree population, according to unit values and distributed to each member according to his/her actuarial life expectancy, in level monthly lifetime payments. In addition to the above initial benefit, a yearly COLA I increase was financed by 2% of the active member's pension contributions.

This yearly increase was determined on the basis as the initial benefit and added to the monthly lifetime payments. As of January 9, 1994, the active employees ceased making the 2% pension contribution to the COLA I account, and the COLA I benefits were frozen as of that date. Beginning with 1994, in addition to the frozen COLA I benefit, a COLA II benefit was paid. The COLA II benefit is funded from the pension fund's annual excess investment return (other than COLA account assets). The methodology for determining the excess investment return and amounts available for the COLA II benefit are described in detail in Section 40-213 of the City of Miami Code. An actuarial table is developed yearly identifying the benefits due. This table is based upon full years of creditable



C.O.L.A. ACCOUNT: (continued)

service at retirement and full years retired as of April of the current year. For accidental death and accidental disability, years of service are defined as twenty-five (25) years, or actual creditable service if greater. Receipt of the COLA II benefit is based on the retiree reaching at least four (4) full years of retirement and fifty years of age. In case of accidental death, the beneficiary will be entitled to the COLA benefit on April 1st following the fiftieth anniversary of the employee's birth and the fourth anniversary of the employee's death. COLA benefits for a vested right retiree are based upon such retiree reaching at least four (4) full years of retirement after fifty (50) years of age. COLA benefits reflect the option selected at the time of retirement.

In addition, funding for COLA benefits for future employees hired during the remaining term of the amended final judgement, Gates vs. City of Miami, Circuit Court Case No. 77-9491 CA04, shall be defined and allocated through the remaining term of such final judgment.



ORDINANCES ADOPTED DURING FISCAL YEAR 2018/2019

DATE

ORDINANCE NUMBER

None

